

Perspectives on the implementation of pre-ETS services: Identification of barriers and facilitators to early career planning for youth with disabilities

Aliza Lambert^{a,*}, Susan McKelvey^b, Elizabeth Evans Getzel^b, Teresa Belluscio^c
and Christopher Parthemos^b

^a*Department of Psychiatric Rehabilitation and Counseling Professions, School of Health Professions, Rutgers University, Piscataway, NJ, USA*

^b*Rehabilitation Research and Training Center (RRTC) on Employment of Transition-Age Youth with Disabilities, Virginia Commonwealth University, Richmond, VA, USA*

^c*Human Development Institute, University of Kentucky, Lexington, KY, USA*

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Abstract.

BACKGROUND: There are differences between and within states in the delivery of Pre-Employment Transition Services (Pre-ETS) for students with significant disabilities early in their career planning process. This complicates the delivery of services for these youth with disabilities (YWD) and leaves gaps in communication between families, educators, and vocational rehabilitation (VR) counselors.

OBJECTIVE: To identify facilitators and barriers in the implementation of Pre-ETS to students with significant disabilities ages 14–16. Additionally, to gather data from rural, urban, and suburban areas spanning across two states to analyze the similarities and differences between these states.

METHODS: Researchers from Virginia and Kentucky conducted semi-structured interviews with 56 participants representing VR counselors providing Pre-ETS, educators, and families.

RESULTS: A majority of respondents stated that starting Pre-ETS with 14–16 year-olds provided numerous benefits. In both Virginia and Kentucky, educators and VR counselors expressed the need for more resources, particularly ongoing training for providing Pre-ETS to younger students in the transition process. Families recommended making activities meaningful and engaging by increasing job exploration and workplace readiness experiences.

CONCLUSION: The results of the study provide insight on the implementation of Pre-ETS activities in local communities across two states. Implications are discussed for providing Pre-ETS to students with significant disabilities early in their career planning process.

Keywords: Youth with disabilities (YWD), pre-employment transition services (Pre-ETS), vocational rehabilitation (VR), transition, career awareness, RRTC on Employment of Transition-Age Youth with Disabilities

*Address for correspondence: Aliza Lambert, Lecturer, Department of Psychiatric Rehabilitation and Counseling Professions,

School of Health Professions, Rutgers University, Piscataway, NJ, USA. E-mail: aliza.lambert@rutgers.edu.

1. Introduction

Providing career exploration experiences to students with disabilities early in their transition planning process offers opportunities to identify their interests, preferences, and potential career options. For students with significant disabilities, however, career exploration and workplace readiness activities are often limited (Lombardi et al., 2017; Monahan et al., 2018). Yet, career development, in particular early career and continuous career planning, is critical for all youth, including youth with disabilities (YWD) (Getzel et al., 2019; Wehmeyer et al., 2019). Providing multiple opportunities to explore potential career options can lead to helping these youth meet the demands of a continually changing economic and employment landscape (Savickas et al., 2009; Wehmeyer et al., 2019).

The Individuals with Disabilities Education Act (IDEA) has incorporated employment preparation into its stated purpose to improve the career preparation and transition process for students with disabilities. Additionally, to increase and expand career and employment preparation in collaboration with education, the Workforce Innovation and Opportunity Act (WIOA) of 2014 established new workforce initiatives for VR agencies. This Act requires the delivery of Pre-ETS by providing access and information to help YWD as young as 14 with career decision making opportunities to achieve a greater rate of competitive integrated employment. As a result, the role of VR has increased in the transition process, which is particularly important since earlier and increased involvement of VR in transition is linked with improved postschool outcomes for YWD (Burgess & Cimera, 2014).

Despite the increased attention paid to the transition from school to adulthood for YWD (Bouck, 2013; Carter et al., 2011, 2012; Ju et al., 2018; Haber et al., 2016; Wehman, 2013), significant gaps remain in their education and employment compared to youth in the general population. Recent longitudinal data (Lipscomb et al., 2017) reveal that students with an Individualized Education Program (IEP) are less likely to plan or take steps to obtain employment or postsecondary education than their peers without an IEP.

The data on employment and postsecondary participation of YWD reflect a critical need for services that prepare for that transition. The youth labor force participation rate, a measure of employment among those of working age, which also includes those

actively seeking employment, is 22.5% for YWD ages 16 to 19 and 34.2% for youth without disabilities (ODEP, 2020). This gap widens for YWD ages 20 to 24 to 44.3% compared to 70.6% for those without disabilities (ODEP, 2020). These statistics show convincingly that the gap in outcomes between youth with and without disabilities continues to grow. Even more distressing, a recent finding shows that people with disabilities are underrepresented in 16 of the 20 fastest-growing occupations, and overrepresented in 17 of the top 20 fastest declining occupations (U.S. Department of Labor, 2018).

Pre-Employment Transition Services (Pre-ETS) are designed to fulfill the requirements of WIOA to assist YWD in the transition to employment. There are five required areas of focus in providing Pre-ETS, including job exploration counseling, work-based learning experiences, counseling on postsecondary education programs, workplace readiness training, and instruction in self-advocacy (WIOA, 2014). In the implementation of Pre-ETS, significant collaboration is required between educators and VR services (Carter et al., 2020). While educators view this collaboration, and Pre-ETS in general, as a significant benefit for YWD (Carter et al., 2021), there have been inconsistencies in how these services are administered. One of the most significant inconsistencies lies in the availability of these services for students aged 14–16. Although WIOA mandates the provision of Pre-ETS to this group, some educators have expressed feelings that these services are best suited for older or more mature students (Awsumb et al., 2020; Carter et al., 2021; Miller et al., 2018). As for the preparation of VR counselors to provide Pre-ETS, a study conducted by Neubert and colleagues (2018) found that counselors rated all of the Pre-ETS activities as important, but rated their preparation to perform these services significantly lower. Given the barriers faced by YWD in long-term planning, and the crucial significance of career planning in successfully transitioning to employment, it is critical to direct attention toward consistent implementation of these services, and toward which factors facilitate or impede that implementation.

1.1. Purpose of the present study

The purpose of this study was to obtain insight regarding the implementation of Pre-ETS services at the local service delivery level in two states. In particular, the study collected data on services to students with significant disabilities ages 14–16.

The researchers defined students with significant disabilities as individuals who meet the VR definition and will require long-term supports for competitive integrated employment. Interview questions focused on specific Pre-ETS services (job exploration, workplace readiness, and work-based learning experiences) known to be particularly relevant for students with disabilities in their early career awareness and transition planning processes. The study included three stakeholder groups: families and their children 14 to 16 years of age, education personnel providing special education and/or transition services, and VR counselors involved in implementing Pre-ETS services. The following research questions guided this study:

- RQ1. What are the barriers and facilitators to providing services on job exploration, workplace readiness and community work-based learning to students 14–16 with significant disabilities?
- RQ2. What are the job exploration, workplace readiness, and community work-based learning resource needs reported by 14–16-year-olds with significant disabilities and their families?
- RQ3. What are the resource needs for Pre-ETS counselors to facilitate job exploration, workplace readiness and community work-based learning with 14–16 year-olds with significant disabilities?

2. Method

2.1. Sample selection

The original sample for the study was in Virginia. Members of the research team were providing Pre-ETS services in Virginia school districts. Through its long history of transition work in the state, the study team had established strong relationships with the state VR and education agencies, as well as with local VR offices and school districts. In Virginia, the state VR agency sent information to counselors providing Pre-ETS services about the study and contact information on how to participate. Families were recruited through a family network of the University's Center for Excellence in Developmental Disabilities (UCEDD). Recruitment contacts to educators were made by email and phone through school district contacts that the study team had through their work in the state. Outreach focused on educators in

Table 1
Number of interviews conducted in Virginia and Kentucky

	Virginia	Kentucky
Families	10	8
VR counselors/DARS	7	10
School staff	11	10
Total	28	28

the field of special education and transition. Subsequently, the team decided to broaden their study and asked researchers at the University of Kentucky to collaborate because of geographic proximity and similar demographics. The University of Kentucky also has a history of working with its state and local VR and education agencies. In Kentucky, the state VR agency assisted in identifying counselors for the study. Recruitment of educators and families was conducted through multiple means. For example, the states' regional Educational Cooperative Directors of Special Education along with other transition related organizations distributed study information. Consumer and advocacy organizations (e.g., The ARC, Council on Developmental Disabilities) were also enlisted to recruit participants.

Non-probability representative sampling was used in conducting interviews with a minimum of two counselors from each of the VR service regions across the states of Virginia and Kentucky to administer a comprehensive interview regarding the barriers and facilitators to the provision of effective Pre-ETS services. In addition, a minimum of two students with significant disabilities aged 14–16, their families, and educators were chosen from each of the state's VR regions to interview (students and their families had the option of attending the interview together or students could decline being part of the interview). The regions allow for a variety of perspectives from varying socio-economic, racial, and ethnic backgrounds, as well as suburban, urban, and rural representation. Table 1 provides the total number of interviews conducted, delineated by respondent group.

2.2. Interview process

The interviews were conducted for the purpose of identifying strategies to address barriers and facilitators for providing Pre-ETS activities, as well as the knowledge translation (KT) strategies that VR counselors prefer (only VR counselors were asked these specific questions) as the first phase of a five-year study. The questions were on specific Pre-ETS activities of job exploration, workplace readiness, and

Table 2
Participant demographics

		Virginia	Kentucky
Families	Age of student	15.5	18.5
	Gender	5 male, 5 female	5 male, 3 female
	Primary disability	<i>n</i> = 5 autism, <i>n</i> = 1 generalized anxiety, <i>n</i> = 1 hard of hearing, and <i>n</i> = 2 not listed	<i>n</i> = 1 other health impairment, <i>n</i> = 2 autism, <i>n</i> = 1 learning disability, <i>n</i> = 3 intellectual disability, and <i>n</i> = 1 multiple disabilities
	Referred to DARS	<i>n</i> = 2 referred, <i>n</i> = 7 not referred, and <i>n</i> = 1 not sure	<i>n</i> = 3 referred and <i>n</i> = 5 not referred
VR counselors/DARS	Years of experience (average)	7.4 years	12 years
	VR region	<i>n</i> = 2 Capitol, <i>n</i> = 1 Northern, <i>n</i> = 2 Southwest, <i>n</i> = 1 Hampton Roads, and <i>n</i> = 1 New River	<i>n</i> = 2 East, <i>n</i> = 1 North, <i>n</i> = 2 South, <i>n</i> = 2 Central, <i>n</i> = 1 East Jefferson, and <i>n</i> = 1 West
Teachers	Job title	<i>n</i> = 10 Special Education Teacher and <i>n</i> = 1 Transition Specialist	<i>n</i> = 5 Special Education Teacher, <i>n</i> = 2 Service Providers, <i>n</i> = 1 Pre-ETS Transition Specialist, and <i>n</i> = 1 Special Education Cooperative Transition Consultant
	VR region	<i>n</i> = 1 Capitol, <i>n</i> = 2 Northern, <i>n</i> = 2 Southwest, <i>n</i> = 4 Hampton Roads, and <i>n</i> = 2 New River	<i>n</i> = 2 East, <i>n</i> = 2 South, <i>n</i> = 2 Central, <i>n</i> = 2 East Jefferson, and <i>n</i> = 2 West

work-based learning experiences, as these were the focus of the research study. Demographic information was also collected. A representative sample of students and their families, educators, and VR counselors participated in the interviews. Questions were developed prior to COVID-19; however, some participants naturally discussed the impact of COVID-19 on Pre-ETS service provision. The study team, drawing on years of experience in the provision of VR and educational services, worked as a group to develop the questions through initial brainstorming sessions, then refined the protocol into its finished form. The team reviewed the overall research questions and goals for the three-phased study, using those as the foundation for the interviews.

The interviewers followed a semi-structured logic - they asked all of the questions, but could ask follow-up or clarifying questions if needed (Adams, 2015). If an interviewer felt that a question was answered previously, he or she had the flexibility to not ask that question again. However, the staff conducting the interviews generally followed the structure of the questions as written. Interviews lasted approximately 30 minutes. This process was thorough and in-depth, yet somewhat informal to encourage a relationship between interviewer and respondent. Prior to conducting the interviews, interviewers were trained, and they received an introductory script to read to each participant to ensure consistency across all interviews. For the Virginia interviews, two study staff

members were assigned to each stakeholder group; in Kentucky, one staff member conducted all of the interviews. Interviews with all participants in Virginia were conducted during the summer of 2020, whereas Kentucky's were conducted in late 2020 and early 2021.

Some of the questions were consistent across the three groups, and some were specific to a single group. For example, family members were asked the age of their child and whether or not they had received Pre-ETS information and who provided it. They were also asked if their child received job exploration counseling, workplace readiness training, and/or work-based learning experiences, and who provided those services. Educators were asked to describe their understanding of Pre-ETS, as well as what services were provided to their students with significant disabilities, and also who provided those services. In addition, educators were asked to talk about their collaboration with their local VR agency. VR counselors were asked about their experience in providing services to YWD 14–16 years of age, and ideas on knowledge translation activities that would be helpful when providing services to younger students. Both VR counselors and families were asked to describe the benefits of Pre-ETS for this age group and what strategies would be most effective in providing services. All groups were asked about the challenges in providing services to students with disabilities 14–16, what additional resources are needed,

and all were given opportunities to provide any additional comments that might not have been covered during the interview.

2.3. Human subjects protection

The lead university's Institutional Review Board (IRB) approved interview procedures, including questions and email scripts, prior to researchers making any contact with potential participants. Because the study was developed prior to COVID-19, the original plan was to allow the respondents the choice of participating by phone or in person. After travel and in-person meetings were halted due to the pandemic, families were contacted by study staff via email and given the option to conduct interviews by phone or Zoom. A majority of participants chose to participate by phone. A log was created of the interviews conducted to ensure representation of all regions across both states.

YWD were included in the interviews (they were never interviewed alone) and were informed they did not have to answer any questions. Whether or not students participated varied - in Virginia, seven students attended the interviews and four students participated in Kentucky. Most family interviews were completed with only one parent present. All participants were advised that they could skip answering any questions. Verbal consent and assent were obtained and logged for each interview. The consent log was kept separately from the interview notes. Names were not recorded on any of the interview documents. For added participant protection, interviews were not recorded; however, some quotes were captured in the interviewers' notes.

2.4. Data analysis

A member of the research team compiled all of the responses into one document, with Virginia and Kentucky responses clearly separated to be able to see any differences between the two states. Since the interview questions were developed after a thorough review of the literature by the subject-matter experts on the study team, some themes were developed a priori. Thematic analysis as defined by Nowell et al. (2017) was used because of its flexibility. All responses were summarized and separated by each stakeholder group and state. Based on the review of the literature, the research team knew that barriers as well as benefits exist to providing career preparation services to younger students. The interviews were

conducted to determine if any challenges or benefits of providing or receiving Pre-ETS were perceived to be different between the three groups interviewed (families, VR counselors, and educators). Although the interviews were tailored to each of the three groups, the topics of barriers, benefits, and resources were included across all interview protocols.

Preliminary findings were discussed during research team meetings both during and after completion of the interviews. The themes developed prior to data collection emerged as expected during analysis. Project staff identified two research team members to analyze and summarize the data. The two analysts examined the data separately and identified themes (in addition to those identified a priori through the literature). Each group of respondents (VR counselors, educators, and families) and the two states were examined separately. This allowed the researchers to see the themes emerge among the three groups, and to identify any major differences between Virginia and Kentucky. After discussion among the study team, the decision was made to conduct a second analysis of the data, which included another researcher. It was determined that this was needed to minimize researcher bias since two of the analysts participated in conducting the interviews and this additional researcher did not.

3. Results

The results were analyzed and five key themes emerged from the interviews.

3.1. *RQ1. What are the barriers and facilitators to providing services on job exploration, workplace readiness and community work-based learning to students 14–16 with significant disabilities?*

3.1.1. *Increased exposure and access to businesses*

A prominent barrier to providing services was exposure to real life experiences in the community, in particular at business sites. Even though all stakeholder groups expressed a need for more community work-based learning experiences, the actual process of providing them to 14–16 year-old students with significant disabilities was a challenge. A suggested facilitator to providing these experiences was earlier, continuous, and increased exposure. The consensus across the three groups was that this was crucial to assisting YWD to plan for their futures.

Transportation also emerged as a prominent theme (and in fact was one of the most frequently mentioned barriers). The respondents described this in three key ways. First, the expense of providing transportation was particularly noted in rural areas, making it inaccessible for community experiences. Second, different policies exist among VR agencies and school districts, leading to confusion and conflict surrounding providing transportation. Third was the ability to access vehicles that were viable for transporting students. These three combined challenges significantly impacted the ability of students with significant disabilities to have opportunities to access businesses.

Another theme that emerged was the lack of available time in students' schedules for Pre-ETS. This restraint resulted in decreased opportunities for Pre-ETS and a recurring challenge for VR counselors and educators. Students' academic schedules made finding the time to provide these services a challenge. Additionally, stakeholders expressed that VR counselors, educators, and YWD were overextended, making it difficult to both find and utilize time effectively, particularly when that meant taking a student from the classroom. Time restraints also meant that getting into the community and making meaningful experiences were limited and challenging. Even though time was clearly a restriction, stakeholders preferred that students received services more often and for a longer period (some counselors and educators stated that services were provided on average for 30 minutes, about once per month; some were even less).

Finally, all stakeholder groups indicated that COVID-19 has had a profound effect on providing services, particularly with going out into the community due to imposed restrictions on businesses. Providing community work-based learning experiences were discontinued until statewide restrictions were lifted. In addition, access to transportation became even more of an issue.

3.1.1.1. Stakeholder perspectives on increased exposure and access to businesses: VR counselors and educators expressed having difficulty in finding enough opportunities for YWD, in part due to either being in a very small, rural community, or company policies that restricted allowing younger students to enter their businesses for tours or observations. When students were unable to enter a business due to age restrictions, educators commented that they had to work within the school to develop opportunities. Even though VR counselors and educators expressed

this difficulty, both emphasized the importance of building business contacts to enable YWD to gain insight about careers and the necessary work related skills. Families also expressed difficulty in making up missed experiences. For example, if a student was absent a day Pre-ETS activities were offered, there were often limited alternatives.

3.1.2. Collaboration among VR counselors, families, and educators

Increased collaboration emerged as an overarching theme among all stakeholder groups. This was evident as respondents shared that Pre-ETS activities were beneficial to YWD, and that starting earlier would provide a significant impact on students' career planning. When determining critical aspects of collaboration, effective communication was a recurring theme.

3.1.2.1. Stakeholder perspectives on collaboration: Although all respondents emphasized the need for more effective communication, reasons for this varied. For example, the most commonly cited concern for both educators and VR counselors, particularly in Virginia, was encouraging more family involvement. Both stakeholder groups specifically noted this concern in regard to the enrollment process for Pre-ETS. However, family respondents expressed a need for more information to understand how to increase their collaboration and on the services provided through Pre-ETS.

VR counselors in Kentucky expressed a concern that Pre-ETS activities needed to be better aligned with students' education plans. VR counselors wanted to see more collaboration to ensure that services provided through Pre-ETS were not overlapping with other services students could receive through education. It is worth noting that at the time of the interviews, Kentucky was going through a reorganization of services and delegation of providers. This may have contributed to a greater emphasis by these counselors on collaboration to ensure that educational plans aligned with Pre-ETS activities since they can be offered through a number of different providers. Educators in Kentucky emphasized the need for more communication with VR counselors, and family members would like to see earlier involvement with Pre-ETS experiences so their son or daughter can choose high school classes based on their interests and strengths. Family members also expressed a desire to be more involved in the Pre-ETS process.

3.2. *RQ2. What are the job exploration, workplace readiness, and community work-based learning resource needs reported by 14–16-year-olds with significant disabilities and their families?*

3.2.1. *Implementation strategies for early career awareness*

Though this research question focuses on the perceptions of the students and families, the consensus across all respondent groups was that starting Pre-ETS with 14–16 year-old students with significant disabilities provided several benefits. All stakeholders believed that obtaining realistic expectations about future career opportunities once students (and families) were aware of their strengths and interests were critical. This would encourage students to start thinking about the future and planning their high school coursework. Starting early would also give them time to explore their career goals, giving them exposure to careers and possibilities, and developing areas to build on through their IEP goals. Starting earlier would enable VR counselors to build trust with and customize services for each individual while also engaging the families in the process and allowing them to be highly involved. Another benefit identified by respondents was that students would have time to build relationships with adults, allowing them to further develop the necessary social and self-advocacy skills needed in the workplace.

There were respondents across all stakeholder groups who expressed concerns that 14 may be too early to begin career awareness activities. However, other respondents emphasized solutions of providing transition activities and instruction to younger students that are engaging and meaningful. This included students leading activities, engaging in activities that piqued their interests, and starting earlier to create opportunities for multiple experiences. Stakeholders believed it was important that there should not be a lapse in time between what students learned in school and experiences out in the community.

When discussing the benefits of Pre-ETS, the word “repetition” came up across all groups. Respondents believed that repetition and consistency were necessary to the success of students with significant disabilities. Repetition was also emphasized as a challenge to providing services because of interruptions to activities due to lack of staffing and COVID-19, both of which were discussed within other themes.

3.3. *RQ3. What are the resource needs for Pre-ETS counselors to facilitate job exploration, workplace readiness and community work-based learning with 14–16 year-olds with significant disabilities?*

3.3.1. *Information on implementation of Pre-ETS*

A primary concern across all stakeholder groups was the need for more resources and ongoing professional development and training. In some cases, respondents did not provide examples of specific resources needed, but others did. For example, one frequent statement was the need for additional VR staff to fully implement Pre-ETS activities. In fact, one respondent cited the lack of staffing as the biggest limitation to providing these services. Additionally, all respondent groups highlighted the need for more funding of Pre-ETS activities.

3.4. *Stakeholder perspectives on implementation of Pre-ETS*

3.4.1. *Resource needs*

VR counselors, primarily in Kentucky, emphasized a need for development of resources that were readily available to local VR counselors on their state’s policies for providing Pre-ETS, and especially when revisions to those policies occurred. These VR counselors stressed the need to learn about changes in policies and be a part of the conversation surrounding these changes. As noted previously, Kentucky interviews were conducted during the time of an organizational restructure and may have contributed to the focus of these VR counselors on the policies surrounding the delivery of Pre-ETS activities.

On the other hand, family members in both states expressed a need for additional information and involvement in the Pre-ETS process. This was stressed as an existing barrier and revealed the need for continued resources surrounding their involvement. When families had access to the specific information provided to them, they believed their son or daughter greatly benefited.

3.4.2. *Professional development/training needs*

Another theme surrounding resources related to facilitating job exploration, workplace readiness, and work-based learning was the need for further professional development and training. It was unanimous across stakeholder groups that a significant gap existed, whether through formal training or informal

communications surrounding Pre-ETS. Additionally, stakeholder groups wanted a better understanding of each other's roles. In particular, VR counselors wanted to know more about classroom management and lesson planning by educators, and educators and families expressed interest in knowing exactly what types of Pre-ETS activities are offered.

3.4.2.1. Stakeholder perspectives on professional development and training needs: Educators and VR counselors expressed the need for specific and targeted training on providing services to students with moderate and significant disabilities. Both stakeholder groups shared that they searched for materials on their own to meet their needs. Educators and VR counselors also emphasized the need for training surrounding working with younger students with significant disabilities in the career planning process. As previously mentioned, all of the stakeholders wanted to know which services each other provides, however, educators and VR counselors particularly stressed this in regards to one another. When asked about the different types of training they would like to see, responses varied. Many educators and VR counselors would like to have in-person training so they can network and collaborate with others, whereas some would like online training, or a recorded webinar that they can refer to on their own time.

Families expressed a need for educators and VR counselors trained on how to work with youth with significant disabilities. Some families were more specific on areas of training when working with students (e.g., mobility issues, non-verbal).

Due to COVID-19, any training offered during this time moved to virtual platforms. Educators and VR counselors particularly commented on the availability of virtual training, yet they stressed the benefits of in-person delivery where there was more interaction with colleagues and an opportunity to build relationships.

4. Discussion

States are continuing to create policies and procedures to implement Pre-ETS activities since WIOA authorization in 2014 and the release of regulations in 2016 (Carlson et al., 2020; Taylor et al., 2021). Further study of state and local implementation of Pre-ETS is needed to learn about implementation practices and student outcomes because states are revising their approaches as more is learned about

the implementation of these services (Carlson et al., 2020; Carter et al., 2021; Miller et al., 2018; Neubert et al., 2018). WIOA, and specifically Pre-ETS services, offers education and VR agencies greater opportunities to collaborate on serving students with significant disabilities at an earlier age to develop their interests, preferences, and potential careers (Carter et al., 2020; Neubert et al., 2018; Roux et al., 2019).

The importance of career planning for students with significant disabilities in the transition planning process cannot be overstated, and it is one of several evidence-based practices to achieve successful postschool outcomes (Morningstar et al., 2017; Test et al., 2009; Wehmeyer et al., 2019). However, Lombardi and colleagues (2017) found that career related activities are not fully integrated into the IEP. Within the context of what we know thus far about the implementation of Pre-ETS and what we have learned over the years of the need for early career planning, this study sought to gain a better understanding of the implementation of Pre-ETS at the local level in two states and the barriers and facilitators of providing early career planning activities.

The findings from this study illustrate continuing issues in the provision of career planning and employment preparation. Stakeholders expressed challenges that included transportation for community work-based learning experiences (expressed more in rural areas), the lack of businesses for students to access these experiences, and students' school schedules not allowing enough time for career preparation activities. Similar concerns were raised in recent studies (e.g., Awsumb et al., 2020; Carter et al., 2021). Although several findings emerged from our study, there are a few of particular note. First, across both states, all stakeholders felt that early career awareness and employment preparation skills for students with significant disabilities were critical for transition planning. All groups cited several benefits of this early exposure. These included building long-term relationships with VR; identifying students' strengths and capabilities helping to determine high school courses and future career goals; and providing opportunities for students to engage in activities over time to build in repetition and practice of essential skills for employment.

Yet, when asked if students with significant disabilities 14–16 years of age were participating in these Pre-ETS activities, most respondents indicated it was limited or not at all. It remains troubling that some respondents believe 14 years of age was too young

to begin this process. Cited reasons for this crossed all stakeholder groups and included maturity issues creating difficulties in engaging younger students in career activities or knowing what careers they would like to pursue and a belief that their career choices were unrealistic. Respondents also expressed the issues with business policies restricting onsite experiences for younger students. These views on early career planning can further delay the necessary career and employment preparations needed by students with significant disabilities. Other previous studies have reported similar findings. For example, Pre-ETS providers and educators (Awsumb et al., 2020; Carter et al., 2021) identified student motivation as a barrier to employment. Miller and colleagues (2018) found in their study that VR counselors believed that work based learning experiences seemed most appropriate for students 16 and older. It is increasingly important that students with disabilities, including students with significant disabilities, obtain the career development and employment preparation that enables them to adapt and meet the changing demands in a global economy (Wehmeyer et al., 2019).

Second, collaboration in implementing Pre-ETS among the three stakeholder groups was a predominant theme. One primary issue of concern for both VR counselors and educators was conflicting and confusing policies between their two agencies, which created barriers to implementation of Pre-ETS, particularly when providing community work-based learning experiences. In addition to the consensus on the need for collaboration, there was some variation by stakeholder group. From a VR perspective, collaboration with educators was critical to ensure that services provided through Pre-ETS aligned with the students' IEP and were not overlapping with what the schools provided. VR counselors in Kentucky expressed this more frequently, which could be a result of the fact that, at the time of the interviews, the state was going through a reorganization of services and delegation of providers that may have contributed to the focus of their comments. From the educators' perspective, they were in need of more information on the Pre-ETS activities available to communicate more clearly with students and their families. They also expressed that VR counselors need more resources and information to better align services with those provided through education agencies.

Family respondents identified that the lack of information on Pre-ETS hindered their ability to collaborate. They also expressed a need to be an active partner in the process of identifying Pre-ETS

activities and their implementation. Families stated that when they understood the services and had access to them, their son or daughter greatly benefitted.

Within the context of WIOA and the studies conducted over the last few years (e.g., Awsumb et al., 2020; Carter et al., 2021; Miller et al., 2018; Neubert et al., 2018), collaboration, as in this study, was a recurring theme. Roux and colleagues (2019) emphasized the need to educate and engage employers as part of the collaboration process. Input from all stakeholders is important. Families and students are also key for understanding of what worked or did not and why.

There are tremendous possibilities for collaboration for enhanced services between WIOA and IDEA. Models of collaboration exist (Carter et al., 2021) and continued research is needed as states continue to work on implementing WIOA. Yet, we know from this study and others that policies and procedures could potentially limit this collaboration. A study conducted on collaboration between VR and education in transition planning concluded that VR counselors and educators rated collaboration practices as important. However, the feasibility of improving these practices was rated lower due to resources needed to improve collaboration requiring administrative approval and funding (Taylor et al., 2016). It will be important to research the policies and practices of implementing Pre-ETS in the states to obtain insight on what leads to effective collaboration and student outcomes.

Third, there was little variation of stakeholder perspectives for more resources/training, and implementation strategies for early career awareness. Each of the groups expressed the need for more resources to enable their state to implement Pre-ETS on a wider scale. As for professional development and training, responses focused on the lack of information and training around Pre-ETS, and the need for more targeted training working with students with moderate to significant disabilities. Families also agreed with the need for providers to obtain this type of training.

Although some specific suggestions were offered on how ongoing professional development/ training could be implemented, the consensus from the three groups was a need for a better understanding of what services are provided through schools and VR, and better communication among these groups to provide services to younger students with significant disabilities. Ensuring that families /YWD are actively engaged in this process and able to input on their experiences is also important (Schutz, 2021).

The need for additional resources and ongoing training are raised across the literature on the current implementation of Pre-ETS and the perspectives of various stakeholders, in particular VR counselors and educators (e.g., Carter et al., 2021; Neubert et al., 2018).

4.1. Limitations

Several limitations of this study bear mentioning. First, the purpose of the study was to gather information on the implementation of Pre-ETS at the local level in two states. The interview respondents were individuals who volunteered to participate in the interviews. Even though the study was able to obtain enough respondents to represent all regions in each state, the results of the study cannot be generalized to stakeholder groups in other states. Second, the study included some families and students who were outside of the 14–16 age range. As a result, the implementation of Pre-ETS did not occur during their educational experience.

Finally, the study provides a picture of implementation at a given point in time. The implementation of Pre-ETS services continues to change as states learn more about effective strategies and practices for their delivery of these services. The study was conducted at a time when services were significantly limited due to Covid-19. Therefore, some of the findings around communication, collaboration, and the delivery of services may have been impacted by the disruption of services and limited communication among the stakeholder groups due to the unusual circumstances surrounding the pandemic.

4.2. Implications

This study provides a snapshot of the experiences of VR counselors, educators, and families/students in the implementation of Pre-ETS. The interviews were conducted during the height of Covid-19, but the respondents were able to provide insights on the barriers and facilitators inherent in implementing Pre-ETS in their local communities. As continuing research and demonstration of effective practices emerge, it is important that all stakeholder voices are included. This includes families, YWD, businesses, VR and education. During the interviews, some VR and educator respondents expressed the need for more family involvement in the Pre-ETS process. Yet, family members expressed a need to understand Pre-ETS and the services provided. It is important that

continued efforts are made to increase communication and collaboration among all stakeholders, and especially with families/YWD as implementation of Pre-ETS continues (Schutz et al., 2021).

The results of the study reveal the facilitators and challenges in implementing Pre-ETS activities to provide early career related services to students with significant disabilities who are in need of long-term employment supports. Focusing on transition age youth (14 and up) provides insight on the experiences of providing these services to a specific population served through both VR and education. Several researchers have indicated the need to take a closer look at specific disability populations receiving Pre-ETS as a means to understand the practices and strategies used (e.g., Roux et al., 2019; Taylor et al., 2021; Carter et al., 2021). By looking at a younger group of YWD, we were able to obtain a preliminary view of the provision of Pre-ETS to this population. Future research and practice are needed related to Pre-ETS activities and student outcomes to dispel the perception that 14 might be too young to provide career related services. This perception crossed all stakeholder groups in this study. The perception of student maturation also was a finding in other Pre-ETS related research studies (e.g., Awsum et al., 2020; Carter et al., 2021). This is particularly troubling when we know that students with low incidence disabilities are less prepared for their postschool transition (Lipscomb et al., 2017). The potential to serve these younger students through WIOA and IDEA offers pathways to overcome the discouraging employment outcomes of these students. Siperstein and colleagues (2013) concluded that if new methods are not implemented to increase the participation of students with disabilities (in particular students with intellectual and developmental disabilities) in the labor market, improvement in their employment outcomes will continue to remain low. Providing early career preparation services through both education and VR, raising the expectations of YWD, family members, and service providers could be the much-needed steps in the right direction.

5. Conclusion

The results of this study are an initial step to gaining a better understanding of the expressed benefits and challenges of providing Pre-ETS in local communities across two states. Although there were some

differences in respondents' perceptions, there was general agreement from a majority of respondents that formed the five central themes of the results: access to businesses, collaboration, implementation strategies for early career awareness, and information needs on Pre-ETS implementation. The inclusion of key stakeholders including families/YWD, VR counselors and educators each provided their unique perspectives on the themes that emerged through the interviews. As we learn more about how states are structuring their delivery of Pre-ETS, these stakeholder voices, along with employers, are a critical part in the development and implementation of career-related activities for all transition age youth, but importantly, younger students with significant disabilities seeking to fulfill their career aspirations.

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Conflict of interest

The authors report no conflict of interest.

Ethics statement

The study was approved by the Institutional Review Boards of Virginia Commonwealth University (IRB HM20018178) and the University of Kentucky (#58916).

Informed consent

All participants provided informed consent prior to their participation in the study.

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References

- Adams, W. (2015). Conducting Semi-Structured Interviews. In K. Newcomer, H. Hatry, & J. Wholey (Eds.), *Handbook of practical program evaluation: Fourth edition* (pp. 492-505). Jossey-Bass. <https://doi.org/10.1002/9781119171386.ch19>.
- Awsumb, J., Carter, E. W., Schutz, M. A., & McMillan, E. D. (2020). Perspectives of Pre-Employment Transition Services providers on preparing youth with disabilities for employment. *Journal of Vocational Rehabilitation, 53*(2), 205-218.
- Bouck, E. C. (2013). High stakes? Considering students with mild intellectual disability in accountability systems. *Education and Training in Autism and Developmental Disabilities, 48*(3), 320-331. <https://www.jstor.org/stable/23880990>
- Burgess, S., & Cimera, R. E. (2014). Employment outcomes of transition-aged adults with autism spectrum disorders: A state of the states report. *American Journal on Intellectual and Developmental Disabilities, 119*(1), 64-83. <https://doi.org/10.1352/1944-7558-119.1.64>
- Carlson, S. R., Thompson, J. R., & Monahan, J. (2020). An analysis of state Pre-Employment Transition Services policies. *Journal of Vocational Rehabilitation, 52*(1) 43-59. <https://doi.org/10.3233/JVR-191059>
- Carter, E. W., Austin, D., & Trainor, A. A. (2011). Factors associated with the early work experiences of adolescents with severe disabilities. *Intellectual and Developmental Disabilities, 49*(4), 233-247. <https://doi.org/10.1352/1934-9556-49.4.233>
- Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of disability policy studies, 23*(1), 50-63. <https://doi.org/10.1177/1044207311414680>
- Carter, E. W., Awsumb, J. M., Schutz, M. A., & McMillan, E. D. (2021). Preparing youth for the world of work: Educator perspectives on pre-employment transition services. *Career Development and Transition for Exceptional Individuals, 44*(3), 161-173.
- Getzel, E. E., Averill, J., Holland, L. & St.John, K. (2019). College and career readiness. In P. Wehman & J. Kregel (Eds.). *Functional curriculum for elementary and secondary students with special needs*. Austin, TX: Pro-Ed.
- Haber, M. G., Mazzotti, V. L., Mustain, A. L., Rowe, D. A., Bartholomew, A. L., Test, D. W., & Fowler, C. H. (2016). What works, when, for whom, and with whom: A meta-analytic review of predictors of postsecondary success for students with disabilities. *Research of Educational Research, 86*(1), 123-162.
- Ju, S., Zhang, D., & Landmark, L. J. (2018). Culturally and linguistically diverse family involvement in transition planning: A research synthesis. *Journal of Special Education Leadership, 31*(1), 13-26.

- Lipscomb, S., Hamison, J., Liu Albert, Y., Burghardt, J., Johnson, D. R., & Thurlow, M. (2017). Preparing for Life after High School: The Characteristics and Experiences of Youth in Special Education. Findings from the National Longitudinal Transition Study 2012. Volume 2: Comparisons across Disability Groups. Full Report. NCEE 2017-4018. National Center for Education Evaluation and Regional Assistance.
- Lombardi, A. R., Kern, L., Flannery, B., & Doren B. (2017). Is college and career readiness adequately addressed in annual and postsecondary goals? *Journal of Policy Studies*, 28(3), 150-161.
- Miller, R., Sevak, P., & Honeycutt, T. (2018). State vocational rehabilitation agencies' early implementation experiences with pre-employment transition services. Retrieved from: <https://vrpracticesand youth.org>
- Monahan, J., Lombardi, A., & Madaus, J. (2018). Promoting college and career readiness: Practical strategies for the classroom. *Teaching Exceptional Children*, 51(2), 144-154. <https://doi.org/10.1177/0040059918802579>
- Morningstar, M., Zagona, A. L., Uyanik, H., Xie, J., & Mahal, S. (2017). Implementing college and career readiness: Critical dimensions for youth with severe disabilities. *Research and Practice for Persons with Severe Disabilities*, 42(3), 187-204. <https://doi.org/10.1177%2F1540796917711439>
- Neubert, D. A., Luecking, R. G., & Fabian, E. S. (2018). Transition practices of vocational rehabilitation counselors serving students and youth with disabilities. *Rehabilitation Research, Policy, and Education*, 32(1), 54-65.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1), 1-13 <https://doi.org/10.1177/1609406917733847>
- Roux, A. M., Garfield, T., & Shattuck, P. T. (2019). Employment policy and autism: Analysis of state Workforce Innovation and Opportunity Act (WIOA) implementation plans. *Journal of Vocational Rehabilitation*, 51(3), 285-298.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J.-P., Duarte, M. E., Guichard, J., & van Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75(3), 239-250.
- Schutz, M. A., Awsumb, J. M., Carter, E. W., & McMillian, E. D. (2021). Parent perspectives on Pre-Employment Transition Services for youth with disabilities. *Rehabilitation Counseling Bulletin*, 1-13. <https://doi.org/10.1177%2F2165143421993027>
- Taylor, D. L., Morgan, R. L., & Callow-Heusser, C. A. (2016). A survey of vocational rehabilitation counselors and special education teachers on collaboration in transition planning. *Journal of Vocational Rehabilitation*, 44(2), 163-173.
- Taylor, J. P., Whittenburg, H. N., Rooney-Kron, M., Gokita, T., Lau, S. J., Thoma, C. A., & Scott, L. A. (2021). Implementation of Pre-Employment Transition Services: A content analysis of Workforce Innovation and Opportunity Act state plans. *Career Development and Transition for Exceptional Individuals*, 1-11. <https://doi.org/10.1177/2165143421993027>
- Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Korterling, L., & Kohler, P. (2009). Evidence based secondary transition predictors for improving post-school outcomes for students with disabilities. *Career Development for Exceptional Individuals*, 32(3), 160-181.
- Wehman, P. (2013). Transition from school to work: where are we and where do we need to go?. *Career Development and Transition for Exceptional Individuals*, 36(1), 58-66. <https://doi.org/10.1177/1044207313518071>
- Wehmeyer, M. L., Nota, L., Soresi, S., Shogren, K. A., Morningstar, M. E., Ferrari, L., Sgaramella, T. M., & DiMaggio, I. (2019). A crisis in career development: Life designing and implications for transition. *Career Development and Transition for Exceptional Individuals*, 42(3), 179-187.
- Workforce Innovation and Opportunity Act of 2014, 29 U.S.C. §3101 et seq. (2014).