# A state comparison of vocational rehabilitation support of youth with intellectual disabilities' participation in postsecondary education

Meg Grigal\*, Alberto Migliore and Debra Hart

Institute for Community Inclusion, University of Massachusetts, Boston, MA, USA

Revised/Accepted January 2014

**Abstract**. In this study a secondary data analysis was conducted using the Rehabilitation Services Administration's 911 dataset. The findings provide an update on the role of Vocational Rehabilitation in promoting participation in postsecondary education for individuals with intellectual disabilities, by providing data that focuses on youth with intellectual disabilities in comparison with youth with other disabilities, and by highlighting differences across states nationwide (i.e., postsecondary education status upon exiting the VR system). Overall, this study showed that state VR programs play an important role in assisting youth with intellectual disabilities. Findings indicated that youth with intellectual disabilities were substantially less likely to participate in postsecondary education while in the VR system compared to youth with other disabilities, their participation varied substantially across states, and participation remained static, nationally, between 2006–2010, despite positive trends in several state VR programs.

Keywords: Postsecondary education, students with intellectual disability, state Vocational Rehabilitation programs, participation rates

#### 1. Introduction

There is keen interest by the president, policy makers, family members, and employers nationwide in creating greater access to a higher education for all youth as a path to integrated competitive employment. Enrollment in postsecondary education (PSE) increased by 38% between 1999 and 2009—from 14.8 to 20.4 million—and is expected to grow another 14% by 2020 (Snyder & Dillow, 2011). However enrollment in PSE for youth with disabilities is less prevalent, with 60% of youth without disabilities enrolled in postsecondary education after high school, and only 39% of youth with disabilities and only 28% of youth with intellectual disabilities (ID) enrolled in postsecondary education (Sanford et al., 2011).

The connection between higher education and employment for people with disabilities is a growing area of study. Given the recent emphasis in expanding PSE opportunities for students with ID in legislation and funding (HEOA, 2008), it becomes more important than ever to identify how students with ID are or are not supported to access postsecondary education and if their experience differs substantially from those with other disabilities.

Some funding sources for postsecondary education for people with disabilities include federal student financial aid, National Service Segal Education grants, Medicaid waiver dollars, Supplemental Security

<sup>\*</sup>Address for correspondence: Meg Grigal, Ph.D., Senior Research Fellow, Institute for Community Inclusion, University of Massachusetts, 100 Morrissey Boulevard, Boston, MA 02125-3393, USA. Tel.: +1 410 419 4345; Fax: +1 617 287 4352; E-mail: Meg.grigal@umb.edu.

Income (SSI) and Plan for Achieving Self-Support (PASS), state funds, Individuals with Disabilities Education Act funds, private funds, or other federal grant programs (Griffin, McMillan, & Hodapp, 2010; Grigal, Hart, & Weir, 2011). Yet, when these resources have been exhausted, the Vocational Rehabilitation (VR) program stands out as an important funding source for postsecondary education. The primary goal of any vocational rehabilitation program is to engage people with disabilities in paid employment (Szymanski & Parker, 2003). There are a wide array of services that can be used to attain that goal including assessment, counseling and guidance, referrals, job-related services, job retention services, follow-up and follow-along services.

A recent study (Raue & Lewis, 2011) found that 41% of postsecondary education institutions reported collaborating with state VR programs either to a moderate or to a major extent. Another study that focused on youth with disabilities exiting the VR program between 1985-2000 showed that about 30% of these youth received postsecondary education services (Gilmore & Bose, 2005). For people with disabilities, the importance of enrolling in and completing a postsecondary educational program is magnified in relation to employment outcomes and earnings (Gilmore, Schuster, Zafft, & Hart, 2001). The number of transition-age youth who received college or university training services increased from 24,767 in FY 2004 to 25,385 in FY 2008 (OSERS, 2010). Of all transition-age youth served, 21.8 % received postsecondary education. In FY 2008, of all eligible individuals whose service records were closed after receiving VR services and who received postsecondary education, 50.2% were transition-age youth (OSERS, 2010). Youth who exited the VR program after receiving postsecondary education services reported weekly wages of \$325, compared to \$238 reported by their peers who did not receive any postsecondary education services (Gilmore et al., 2001). Although this study cannot prove a causal relationship between postsecondary education and earnings, it suggests that postsecondary education may be a path to employment for a range of students with disabilities.

By building academic, soft and social skills, postsecondary education is critical for finding and retaining jobs for individuals with ID that satisfy their aspirations and pay better wages (Getzel & Wehman, 2005; Grigal & Hart, 2010a,b). Even in absence of earning diplomas, people exposed to postsecondary education are more likely to find jobs that pay better wages compared to their peers who did not have any postsecondary education experiences (Carnevale & Desrochers, 2003; Leonhardt, 2011; Marcotte, Bailey, Borkoski, & Kienzl, 2005). Findings show that youth who exited the VR program after receiving postsecondary education services reported higher weekly wages compared to their peers who did not receive any postsecondary education services (Gilmore et al., 2001; Migliore, Butterworth, & Hart, 2009). Though a limited number of studies exist, researchers are beginning to document the connection between PSE and improved integrated paid employment outcomes for students with ID.

#### 1.1. What mitigates VR support of PSE?

Previous studies have indicated that 12.7% of VR consumers ages 16–25 receive postsecondary education and training (National Council on Disability, 2008). Across states, the rate varies from under 5% (Virginia, New Hampshire, Colorado) to over 25% (Utah, Arkansas, West Virginia, Nebraska, New Mexico) (National Council on Disability, 2008). The National Council on Disability (NCD) 2008 report indicates that VR agencies as a whole have steadily increased the percentage of consumers in this age range for whom service funds are being directed to postsecondary education, a very positive trend given the documented financial benefits of higher education on earning potential.

Current literature is rich with studies related to postsecondary education for youth with disabilities (Shaw, Madaus, & Dukes, 2010). Most of this literature focuses on students with the disabilities most prevelent in college attendees (e.g., learning and physical disabilities, mental health challenges). There is much less of a focus on youth with ID. In particular, current literature is lacking research focused on the role of the VR program in promoting postsecondary education for students with intellectual disabilities. Given the importance of the VR program as a source of funding and supports, a better understanding of the VR program's role in promoting postsecondary education is critical for professionals and policymakers who determine which postsecondary education options should be available to youth with ID and other disabilities.

The purpose of this study was to report on the participation rates and postsecondary education outcomes of youth with ID who exited the VR program in recent years. This study addressed the following research questions: (1) During their time in the VR program, to what extent did youth with ID participate in postsecondary education, compared to youth with other types of disabilities? (2) Which states reported a

higher percentage of youth with ID who participated in postsecondary education? And (3) what trends were evident in the postsecondary education participation for students with disability between 2006–2010?

# 2. Method

The research design of this study was descriptive, using secondary data analysis. This section describes the source of the data and variables investigated, the population studied, and data analysis methods that were conducted.

#### 2.1. Data source and variables

Data for this study were from the RSA-911 dataset, an administrative database developed and maintained by the Rehabilitation Services Administration (RSA), U.S. Department of Education. This dataset includes approximately 150 variables that describe the demographic characteristics, services received, and outcomes of people with any type of disability who exited the VR program in any given fiscal year, ending September 30th. The dataset—stripped of the personal identifiable information—is available for research purposes to any organizations that request it and sign a confidentiality agreement (Bruyère & Houtenville, 2006; Stapleton, Wittenburg, & Thornton, 2009).

The main outcome variable investigated in this study was participation in postsecondary education. Postsecondary education participation was defined as exiting the VR program with one of the following educational statuses: (a) Post-secondary education, no degree, (b) Associate's degree or Vocational/Technical Certificate, (c) Bachelor's degree and (d) Master's or higher degree. In addition, we examined demographic variables such as gender, race, ethnicity, disability benefits, and education at application.

#### 2.2. Population

This study focused on youth with ID who did not have any postsecondary education at application, were 16–26 years old at application, received VR services, and exited the VR program (50 states and DC) during the five years between fiscal year 2006–2010. People with ID were defined as persons whose VR case records showed 'mental retardation' as the primary obstacle to employment. In fiscal year 2010, a total of 42,532 people with ID (7%) and 532,332 people with other disabilities (93%) exited the VR program. There were also people for whom the primary disability was not reported, bringing the total number of people who exited the VR program to 602,814 in 2010.

The study also focused on people without any postsecondary education at application because the purpose of this study was precisely to investigate the participation rate in postsecondary education while in the VR program. Almost all people with ID did not have any postsecondary education experience at application (98%). Moreover, the study focused on people between 16–26 years of age, as this is a common age range for transition aged youth (IDEA, 2004; National Collaborative on Workforce and Disability, 2005). In 2010, over half of the people with ID were 16-26 years old (65%). Finally, the study included only people who received VR services because it is only through actively serving people that the VR program can influence their transition experiences. The majority of people with ID received VR services (66% in 2010). Reasons for people not receiving services included lack of eligibility, lack of collaboration, or contact information no longer available. The final population for this study included 108,188 eligible youth, of whom 17,478 were youth with ID (16%) and 90,720 were youth with other disabilities (84%).

#### 2.3. Data analysis

Data analysis included transforming and recoding variables and then running frequencies and percentages. To increase the accuracy of state-level comparisons, the analysis was limited to states that reported at least 100 eligible youth with ID in each of the years between 2006-2010. This is because a small change in the number of youth reporting postsecondary education participation can have a disproportionally larger effect in states that reported few eligible youth with ID (e.g., Alaska reported 23 and Wyoming reported 34). The minimum number of required eligible youth with ID was set at 100 because a percentage is defined as the number of cases of interest out of 100 available cases. Thirty-two state VR programs reported at least 100 eligible youth in each of the years between 2006 and 2010, and were therefore included in the data analysis<sup>1</sup>.

To compare postsecondary education participation across states, we looked at participation rates that were

<sup>&</sup>lt;sup>1</sup> AL, CA, CO, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, MS, NC, NE, NJ, NY, OH, OK, OR, PA, SC, TN, TX, VA, WA, WI, WV.

one standard deviation either below or above average. This criterion is based on the theory of probability, which states that in a normal distribution the majority (68%) of cases fall within one standard deviation below or above the average (Harris, 1998). Finally, a Pearson coefficient of correlation was computed to assess the correlation between the postsecondary education participation of youth with ID and the corresponding figures reported for youth with other disabilities. All analyses were carried out using IBM SPSS 18.

# 3. Results

The main findings included the following: (a) Youth with ID were substantially less likely to participate in postsecondary education compared to youth with other disabilities; (b) The postsecondary education participation varied substantially across states; and (c) At the national level, postsecondary education participation remained static between 2006 – 2010, despite positive trends in several states. The next sections describe these findings and the demographic characteristics of the eligible youth.

#### 3.1. Comparison across disability

Overall a substantially lower percentage of youth with ID exited state VR programs reporting post-

secondary education participation (4%) compared to youth with other disabilities (23%), during the period 2006–2010 (Medium effect size; Cohen's h = 0.60). Of the youth with ID who reported postsecondary education participation, slightly more than half reported postsecondary education without a degree (57%) and the remaining reported associate's degree, vocational certificate, or technical certificate (41%), or bachelor's degree (2%). Similarly, slightly more than half of the youth with other disabilities attended postsecondary education without gaining a degree (54%), followed by youth who gained an associate degree, a vocational certificate, or a technical certificate (28%), or bachelor's degree or higher (18%).

It is noteworthy that the percentage of youth with ID who participated in postsecondary education was strongly correlated with the statistics reported for youth with other disabilities (Pearson coefficient = 0.85). Therefore 72% of variance in postsecondary education participation of youth with ID was explained by the variance of postsecondary education participation of youth with other disabilities and vice versa.

#### 3.2. Comparisons across states

The postsecondary education participation of youth with ID varied substantially across states (see Fig. 1). Several states reported close to zero percent of youth with ID who exited VR after gaining postsecondary

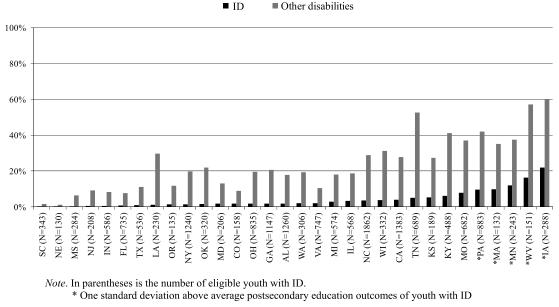


Fig. 1. Average percentage of youth reporting postsecondary education participation: 2006–10.

Other disabilities

ID

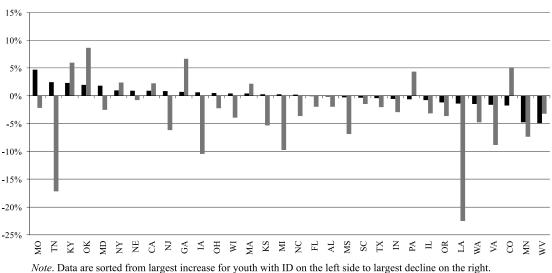


Fig. 2. Percentage change of youth reporting participation in postsecondary education in 2010 compared to 2006.

education experiences, whereas five states reported at least one standard deviation above average figures: Massachusetts (10%), Pennsylvania (10%), Minnesota (12%), West Virginia (16%), and Iowa (22%). Participation in postsecondary education was substantially different across states in the case of youth with other disabilities as well: from 1% in Nebraska to 60% in Iowa. Five states reported at least one standard deviation above average figures: Kentucky (41%), Pennsylvania (42%), Tennessee (53%), West Virginia (57%), and Iowa (60%). In contrast, five other states reported figures that were at least one standard deviation below the average: Nebraska (1%), South Carolina (2%), Mississippi (6%), Florida (8%), and Indiana (8%).

#### 3.3. Comparison across years

The overall percentage of youth with ID who reported participation in postsecondary education remained about the same from 2006-2010. At the state level, however, 17 states reported increases in postsecondary education participation. These increases, however, were offset by declining participation in the remaining 15 states leading to an overall national static trend. Missouri stood out reporting a 5% increase in participation whereas both West Virginia and Minnesota reported a 5% decrease (see Fig. 2).

Regarding youth with other disabilities, eight states reported increased percentages of youth who participated in postsecondary education, with Oklahoma reporting the largest increase (9%). Most states (24 out of 32), however, reported declining figures, with Louisiana and Tennessee reporting the greatest declines (-23% and -17%). Overall, at the national level, participation of youth with other disabilities in postsecondary education decreased by 3%.

#### 3.4. Demographic characteristics

Table 1 summarizes the demographic characteristics of eligible youth as reported for the year 2010. The majority of youth with ID were male and most were white and non-Hispanic. About half of the youth with ID received Social Security and Medicare or Medicaid benefits at application. Only a minority of youth with ID were high school graduates (receiving a diploma or a GED), but about a third had a special education certificate of completion or attendance at application. Compared to youth with other types of disabilities, youth with ID were less likely to be of white race, more likely to receive disability benefits, and more likely to have participated in special education. These differences corresponded to a small to medium effect size h (Cohen, 1988).

	Intellectual Disability		Other Disability		Total	
	Ν	%	N	%	N	%
Gender						
Male	9,928	57%	55,926	62%	65,854	61%
Female	7,540	43%	34,794	38%	42,334	39%
Total	17,468	100%	90,720	100%	108,188	100%
Race						
White	10,406	60%	68,248	75%	78,654	73%*
Black	6,565	38%	20,096	22%	26,661	25%
Other	497	3%	2,374	3%	2,871	3%
Total	17,468	100%	90,718	100%	108,186	100%
Ethnicity						
Not Hispanic	15,988	92%	80,388	89%	96,376	89%
Hispanic	1,480	8%	10,331	11%	11,811	11%
Total	17,468	100%	90,719	100%	108,187	100%
Received SSI/SSDI at application						
Yes	7,730	45%	16,530	18%	24,260	23%**
No	9,630	55%	73,506	82%	83,136	77%
Total	17,360	100%	90,036	100%	107,396	100%
Had Medicare/Medicaid at application						
Yes	9,068	52%	26,588	30%	35,656	33%*
No	8,329	48%	63,351	70%	71,680	67%
Total	17,397	100%	89,939	100%	107,336	100%
Education at application						
No formal schooling	22	0%	115	0%	137	0%
Elementary education	304	2%	1,560	2%	1,864	2%
Secondary education, no diploma	8,959	51%	47,905	53%	56,864	53%
Special education certificate	5,160	30%	12,448	14%	17,608	16%*
HS graduate or certificate	3,023	17%	28,692	32%	31,715	29%*
Total	17,468	100%	90,720	100%	108,188	100%

Table 1 Demographic characteristics of eligible youth - FY 2010

Note. \*=Small effect size h; \*\*=Medium effect size h (Cohen, 1988).

#### 4. Discussion

Higher education has been repeatedly linked to higher employment rates and earnings for adults in the United States (Bureau of Labor Statistics, 2011). As people with disabilities in general, and in particular, people with ID continue to be plagued by sustained high rates of unemployment, it is not surprising that postsecondary education has become an area of interest and study. One essential stakeholder group in the arena of acquiring and sustaining employment for people with disabilities is this country's state VR Program. In 2009, the National Council on Disability conducted a study confirming that participation in postsecondary education and training for students with disabilities resulted in better postsecondary outcomes, and documenting VR's support of youth pursuing postsecondary education and training opportunities.

The purpose of the current study was to identify and compare the participation rate and postsecondary education outcomes of youth with ID and other disabilities who exited the VR program and determine if any trends related to the participation rate were apparent in different states in recent years. This study showed that state VR programs are playing a role in assisting youth with disabilities, and to a lesser extent youth with ID, to participate in postsecondary education. State VR programs reported that up to 20% of youth with ID were in postsecondary education while receiving VR services compared to 60% of youth with other disabilities. Overall, the findings from our study are consistent with the literature showing that VR is a possible funding source for supporting youth with disabilities in acquiring a postsecondary education (Gilmore & Bose, 2005; Hart, Mele-McCarthy, Pasternack, Zimbrich, & Parker, 2004; Raue & Lewis, 2011; Sanford et al., 2011).

# 4.1. Postsecondary education experience of youth with ID and other types of disabilities

Youth with ID are exiting the VR program with postsecondary education outcomes, but at a substantially lower rate than those with other disabilities. The outcomes achieved by both groups are similar with slightly more than half of youth with ID and other disabilities exiting postsecondary education without a degree. More youth with other disabilities acquired a bachelor's degree than did youth with ID. The strong correlation between the variance in the outcomes of the two groups is worthy of further exploration.

It might be argued that some VR programs reported greater postsecondary education outcomes for youth with ID due to overrepresentation of youth with less supports needs-e.g., learning disabilities-within the group of youth with ID. This hypothesis, however, is not consistent with the high correlation between postsecondary education outcomes across the two disability groups. If overrepresentation of youth with lower support needs within the group of youth with ID was a major factor in the postsecondary education outcomes for youth with ID, these state VR programs should have reported similar postsecondary education outcomes across the two disability groups. As Fig. 1 shows, however, state VR programs that reported higher percentages of youth with ID in postsecondary education also reported higher percentages of youth with other disabilities in postsecondary education.

The findings also showed that more youth with ID received disability benefits, attended special education, and did not receive postsecondary education services, compared to youth with other disabilities. One interpretation of these findings could be that receiving disability benefits and attending special education were indicators of higher support needs and therefore more costly and / or the individual was deemed inappropriate for postsecondary education. Another interpretation, however, might be that the individual is concerned with losing his/her disability benefits. In order to receive disability benefits, applicants must prove that they lack essential skills that would allow them to become economically self-sufficient. Therefore, people with disabilities who receive disability benefits are often advised to refrain from engaging in any activity that might help them to become self-sufficient such as, in the case of this study, participating in postsecondary education (Stapleton et al., 2009). Regardless, if indeed receiving disability benefits and having attended special education were proxy for higher support needs, this group of youth should receive more support services, not less.

Overall, these findings indicate that state VR programs' policies and practices around supporting youth with ID in postsecondary education were likely the main factors that led to greater participation in postsecondary education of both disability groups. Based on these findings, and given the importance of postsecondary education in career development, VR programs with lower participation rates in postsecondary education may benefit from re-reexamining their policies and practices around supporting youth with disabilities in postsecondary education to determine if changes are needed.

# 4.2. State level trends

State level analysis revealed substantial variations across states for both the group of youth with ID-close-to-zero to 22%-and the group of youth with other disabilities -1%-60%. To some extent, variations across states are expected because states have different interpretation of VR policy regarding support of PSE in addition to many socio-economic and cultural variations. Moreover, variations across states in postsecondary education outcomes were also described in Gilmore and Bose (2005) and Gilmore et al. (2001). At the same time, some state VR programs stood out: Pennsylvania, Massachusetts, Minnesota, West Virginia, and Iowa reported at least 10% of youth with ID participating in postsecondary education compared to only 1% or less reported by 10 state VR programs. That is a tenfold or larger participation rate. West Virginia and Iowa reported particularly high percentages (16% and 22%), equivalent to more than two standard deviations above average.

A number of states including South Carolina, Kentucky, California, Ohio, and Hawaii have recently developed pilot programs or have written articulation agreements related to the provision of VR services to support access to PSE for students with ID (Bailey, 2012; Thacker & Sheppard-Jones, 2011). The state of Florida VR program sought and received guidance from RSA on the use of VR funds to support students with ID in college-based dual enrollment programs in that state (Rutledge, personal communication, 2011). Such agreements and policies may impact future state trends, but may not prove to be generalizable as each reflect their own state partnerships and resources.

Another element that might impact state VR program support of postsecondary education is funding equity. In 2009 the Government Accountability Office (GAO) concluded that the VR funding formula uses imprecise measures of state needs and resources and thus does not equitably distribute funds among the states (GAO, 2009). Costs for providing services and the proportion of people with disabilities are not accounted for in the current formula. Future researchers may wish to explore whether the states that demonstrated the highest and lowest percentage of PSE outcomes differed substantially in their state VR budgets.

# 4.3. Trends over time

Although during the five years examined postsecondary education participation of youth with ID remained static at the national level, at the state level results were mixed; about half of state VR programs reported an increase of youth with ID who participated in postsecondary education. This finding is important because it confirms that a number of state VR programs have maintained a focus on supporting youth with ID in pursuing their postsecondary education goals. As shown in Fig. 2, however, the increases were modest for most states, whereas almost half of the states reported declines in postsecondary education outcomes. This indicates that the state VR policies and practices around postsecondary education for youth with ID are not likely to trigger any major change in postsecondary education outcomes in the coming years, at the national level.

# 4.4. Engaging VR counselors in the transition process

In a study conducted in 2007 by The Study Group, one of the most commonly reported barriers to effective transition was that local education agencies (i.e., schools) did not effectively engage VR agency personnel in the planning and provision of transition services for transition-age youth. The difficulty of having VR pay for specific vocational services while eligible transition-age youth were attending high school (e.g., job coaches, assessment, establishing communitybased work experiences, or providing transportation) was also reported by this study. In 2011, a secondary analysis of the NLTS-2 data documented that VR personnel participation in transition planning is low for both students with ID (23%) and students with other disabilities (32%). Further confirming the need for VR participation in the transition process is a recent study by the Center on Transition to Employment that identified the need for interagency collaboration, of which VR is a critical partner, that was associated with effective tranistion to paid integrated employment (Fabian & Luecking, 2012). These challenges and need for VR counselor participation are likely to have impacted the state trends observed in this current study for both groups of youth.

#### 5. Limitations and strengths

Although secondary data is an important source of information, readers should be aware that it limits the breadth of a study to the available variables. For instance, for the scope of this study it would have been informative to know whether postsecondary education was a goal in the youth's individual plans for employment. Such a variable would have helped to discern if the lack of a postsecondary education outcomes was an intended or unintended outcome. Another important piece of information that is lacking is the role of other local agencies in supporting youth with ID in postsecondary education. Some state VR programs may have reported lower postsecondary education outcomes because youth interested in pursuing postsecondary education in these states were directed to support services other than the VR program. The nature of secondary data analysis, however, limits the analysis to a set of variables that may not include all those variables that would make a study more comprehensive.

Another limitation, specific to the RSA911 dataset, was that this dataset was developed for administrative, not research purposes. Therefore, data are not necessarily collected following rigorous scientific standards. For instance, some of the variables are not narrowly defined, giving counselors room for subjective interpretation. The definition of disability, for instance, is based on undefined records available to the counselor at the time of the eligibility determination. Moreover, the meaning of participation in postsecondary education is difficult to determine when not supported by documentation.

Readers should also be aware that the descriptive research design of this study poses limits to the nature of recommendations that can be made. This research design serves the goal of describing the role of state VR programs in helping youth participate in postsecondary education. It does not, however, serve the goal of understanding specific strategies that, if implemented, would improve postsecondary education outcomes.

# 6. Implications

Based on the findings of this study, there is a need for clear guidance on Federal and state levels regarding the use of VR funds to support PSE for all students, and in particular for students with ID when necessary. The wide variability observed in this study is likely attributed to many factors, but one of those factors is state and local level interpretation of Federal policy language. This misinterpretation leads VR personnel to believe that the VR program, for the most part, does not permit use of VR funds or resources to support access to postsecondary education for students with disabilities let alone students with ID. Often, if VR does provide funding for postsecondary education they require students to be degree seeking/matriculating, to maintain a certain GPA, and to take a certain number of credits/courses per semester. These type of policies significantly restrict participation of students with ID in postsecondary education because these students often are not degree seeking or matriculating students, they frequently audit 1-2 courses a semester, and are in noncredit bearing or continuing education courses. State VR programs that are funding access to postsecondary education for students with ID are often states that have other initiatives that are supporting access to higher education for students with ID such as model demonstration programs and other pilot programs.

Then there is a need for state VR programs to disseminate their policies and practices regarding support for postsecondary education and share these broadly with both institutes of higher education and local and state education agencies. Collaboration between VR programs and local postsecondary education institutions may also benefit VR programs through the use of employment-related services and connections that postsecondary education institutions have developed with the community on behalf of their students (Lindstrom, Flannery, Benz, Olszewski, & Slovic, 2009; Rumrill, 2001). State VR programs that reported lower percentages of youth with ID and with other disabilities in postsecondary education may also benefit from an examination of their current policies to determine if those policies are prohibiting participation in postsecondary education.

Finally, there is a need for more research. First, it would be useful to investigate the reasons for the differences in postsecondary education participation and outcomes across state VR programs and across disability groups. Knowing more about these factors would be helpful in identifying more focused recommendations for improvement at the state level. Second, there is a need for research to investigate the differences between youth who participated in postsecondary education and youth who did not participate in postsecondary education. Findings that address this question would help better adjust the services needed by those youth at risk of being excluded from postsecondary education. Finally, investigating the higher performing state VR programs would help identify promising practices that could be transferred to state VR programs that reported lower participation rates.

#### 7. Final thoughts

Postsecondary education is a vital component in career development and expanding earning potential over a lifetime, whether one has a disability or not. As the central goal of state VR programs is to engage people with disabilites in employment, the critical role that postsecondary education plays toward achieving this goal cannot be overlooked. This study showed that the VR program can and does play an important role in helping youth with ID and other disabilities participate in postsecondary education. However, more needs to be done to make the path to postsecondary education a road more frequently traveled for all youth with disabilities.

#### Acknowledgments

This study was supported by a grant from the National Institute of Disability Rehabilitation Research, grant number: CFDA #H133A80042.

#### References

- Bailey, D. (2012). Life learning is for everyone: The true story of how South Carolina came to be a leader in providing opportunities for postsecondary education to young adults with intellectual disabilities: IUniverse.
- Bruyere, S. M., & Houtenville, A. J. (2006). The use of statistics from national data sources to information rehabilitation program planning, evaluation, and advocacy. *Rehabilitation Counseling Bulletin*, 50(1), 46–58.
- Bureau of Labor Statistics. (2011). *Employment Projections Data Table*. U.S. Bureau of Labor Statistics Office of Occupational Statistics and Employment Projections, Washington, DC. Retrieved from: http://www.bls.gov/emp/ep\_chart\_001.htm
- Carnevale, A. P., & Desrochers, D. M. (2003). Standards for what? The economic roots of K-16 reform. Princeton, NJ: Educational Testing Service.
- Getzel, E. E., & Wehman, P. (2005). Going to college: Expanding opportunities for people with disabilities. Baltimore, MD: Paul H. Brookes Publishing Co.
- Gilmore, D. S., & Bose, J. (2005). Trends in postsecondary education: Participation within the vocational rehabilitation system. *Journal* of Vocational Rehabilitation, 22(1), 33–40.
- Gilmore, D., Schuster, J., Zafft, C., & Hart, D. (2001). Postsecondary education services and employment outcomes within the voca-

tional rehabilitation system. *Disability Studies Quarterly*, 21(1), 78–93.

- Griffin, M. M., McMillan, E. D., & Hodapp, R. M. (2010). Family perspectives on post-secondary education for students with intellectual disabilities. *Education and Training in Autism and Developmental Disabilities*, 45(3), 339–346.
- Grigal, M., & Hart, D. (2010a). Critical components for planning and implementing dual enrollment and other postsecondary education experiences. In M. Grigal & D. Hart (Eds.). *Think college: Postsecondary education options for students with intellectual disabilities* (pp. 229-258). Baltimore, MD : Paul H. Brookes Publishing Co.
- Grigal, M. & Hart, D. (2010b). What's the point? A reflection about the purpose and outcomes of college for students with intellectual disabilities. Think College Insight Brief, Issue No. 2. Boston, MA: University of Massachusetts Boston, Institute for Community Inclusion.
- Grigal, M., Hart, D., & Weir, C. (2011). Framing the future: A standards-based conceptual framework for research and practice in inclusive higher education. Think College Insight Brief, Issue No. 10. Boston, MA: University of Massachusetts Boston, Institute for Community Inclusion.
- Harris, M. B. (1998) *Basic Statistics for Behavioral Science Research* (2nd Edition). Boston, MA: Allyn & Bacon.
- Hart, D., Mele-McCarthy, J., Pasternack, R. H., Zimbrich, K. & Parker, D. R. (2004). Community college: A pathway to success for youth with learning, cognitive, and intellectual disabilities in secondary settings. *Education and Training in Developmental Disabilities*, 39(1), 54–66.
- Higher Education Opportunity Act (HEOA) of 2008, Pub. L. No. 110-315 §122 STAT. 3078 (2008).
- Individuals With Disabilities Education Act, 20 U.S.C.  $\S1400$  (2004).
- Leonhardt, D. (2011). Why college brings a huge return. *Economix. The New York Times.* Retrieved from http://economix.blogs. nytimes.com/2011/06/25/why-college-brings-a-huge-return/?\_ php=true&\_type=blogs&\_r=0
- Lindstrom, L. E., Flannery, K. B., Benz, M. R., Olszewski, B., & Slovic, R. (2009). Building employment training partnerships between vocational rehabilitation and community colleges. *Rehabilitation Counseling Bulletin*, 52(3), 189–201.
- Marcotte, D. E., Bailey, T., Borkoski, C., & Kienzl, G. S. (2005). The returns of a community college education: Evidence from the national education longitudinal survey. *Educational Evaluation* and Policy Analysis, 27(2), 157–175.
- National Collaborative on Workforce and Disability/Youth (2005). Guideposts for Success (2nd Ed.). Washington, DC. Retrieved from http://www.ncwd-youth.info/sites/default/files/Guidepostsfor-Success-(English).pdf

- National Council on Disability (2008). *The rehabilitation act: Outcomes for transition-aged youth.* Washington, DC: Author.
- OSERS (2010). OSERS Transition Data Fact Sheet. U.S. Department of Education. Retrieved from http://www.wsti.org/ wstidata/resources/transition-datasheet-2010\_1342811103.pdf
- Raue, K., & Lewis, L. (2011). Students with disabilities at degreegranting postsecondary institutions (NCES 2011-018). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Rumrill, P. D., Jr. (2001). Introduction to special issue on postsecondary education and disability. *Journal of Vocational Rehabilitation*, 16(3-4), 143-144.
- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A.-M., & Shaver, D. (2011). The post-high school outcomes of young adults with disabilities up to 6 years after high school. Key findings from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011-3004). Menlo Park, CA: SRI International. Retrieved from http://ies.ed.gov/ncser/pubs/20113004/pdf/20113004.pdf
- Shaw, S. F., Madaus, J. W., & Dukes, L. (Eds.). (2010). Preparing students with disabilities for college: A practical guide for transition planning. Baltimore, MD: Paul H. Brookes Publishing Co.
- Snyder, T. D., & Dillow, S. A. (2011). Digest of education statistics 2010 (NCES 2011-015). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Stapleton, D. C., Wittenburg, D. C., & Thornton, C. (2009). Program participants. In A. J. Houtenville, D. C. Stapleton, R. R. Weathers II, & R. V. Burkhauser (Eds.), *Counting working-age people with disabilities: What current data tell us and options for improvement* (pp. 299-351). Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.
- Szymanski, E. M., & Parker, R. (2003). Work and disability: Issues and strategies in career counseling and job placement (2nd ed.). Austin, TX: Pro-Ed.
- Thacker, J., & Sheppard-Jones, K. (2011). Research brief: Higher education for students with intellectual disabilities: A Study of KY OVR counselors. Lexington, KY: University of Kentucky, Human Development Institute. Retrieved from http://www.hdi.uky.edu/ SF/Files/ ResearchBrief\_Summer2011.pdf
- The Study Group. (2007) An assessment of transition policies and practices in state vocational rehabilitation agencies. Retrieved from http://www.vrtransitionstudy.org/docs/VR\_Report\_9.06.07. pdf
- U.S. Government Accountability Office (GAO) (2010). Higher education and disability education needs a coordinated approach to improve its assistance to schools in supporting students. Washington, DC: Report to the Chairman, Committee on Education and Labor, House of Representatives.

194

Copyright of Journal of Vocational Rehabilitation is the property of IOS Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.