Report of the State of the Science Conference

on Improving Employment Outcomes for Individuals

who are Blind or Visually Impaired

April 9-10, 2014

Bethesda, Maryland

Presented by The National Research & Training Center on Blindness & Low Vision

The National Research and Training Center (NRTC) on Blindness and Low Vision at Mississippi State University is in the fourth year of our five year Rehabilitation Research and Training Center on Employment Outcomes for Individuals who are Blind or Visually Impaired (RRTC) grant. This grant focuses on exploring six areas related to employment for this population. The information presented at the conference represents the emerging findings related to these areas of investigation: the barrier of transportation to employment, effects of mentoring on successful employment for recent college graduates, vocational rehabilitation (VR) agency interactions with employers and attitudes of employers, competitive employment outcomes of SSDI recipients, accessibility of office equipment, and best practices in the Randolph Sheppard Business Enterprise Program. The NRTC sponsored a State of the Science conference as a first step in the dissemination plan related to the research results of these RRTC projects.

The National Council of State Agencies for the Blind (NCSAB) conference attracts many of the state commissioners and directors of vocational rehabilitation programs for the blind/visually impaired. This is considered to be the audience that can most influence policy and practice. Thus, permission was requested and granted for the State of the Science conference to be included as a facet of the larger NCSAB conference. Special thanks to NCSAB, the National Institute on Disability and Rehabilitation Research (NIDRR), and the National Industries for the Blind (NIB) for co-sponsoring this event. The program for the conference was formatted to be as interactive as possible. Two primary methods were used to allow for interaction: clickers and panel discussions. Clickers are electronic remotes that allow each participant to answer questions during the presentation and results are immediately displayed. Each 30 minute research presentation was interspersed with clicker questions related to the presentation topic, to allow for audience participation during each presentation. [In the following summaries of research presentations, each clicker question is presented along with audience results.] Clickers were also used to collect evaluation data (which was not displayed to the audience). Following each presentation there was a panel discussion. The panels consisted of VR administrators, practitioners, and consumers. The purpose of the panels was to discuss the utility of the findings to VR practice, and panels were presented with questions associated with each presentation.

Attendees were welcomed by representatives from NCSAB, CSAVR, John Tschida, Director of NIDRR, and Michele McDonnall, Director of the NRTC.

Achieving Success through Inclusion, Equity, Opportunity, and Research
Janet LaBreck, RSA Commissioner

Ms. LeBreck reminded participants that times are changing; we need to use research to build the case for what we do. Data that is collected can help to provide the evidence and accountability required to continue services. Even though statistics are not the most interesting they are important to explain why we need specially trained staff, funding for new programs, and continuation of funding for what works. Providing substantial evidence is not just necessary, but required if services are to continue to improve.

Ms. LaBreck finished with a personal story. When she was a VR consumer she requested a pair of special low vision glasses, which were a new technology at the time. Her VR counselor denied the expenditure saying that they do not fund things because they are "trendy." Since Ms. LaBreck felt the glasses would be helpful, she requested an appeal. She asked the vendor of the glasses to provide her with research that would explain how the glasses would help someone with her condition. She also talked with her ophthalmologist and family doctors, asking them to provide letters of medical necessity. Armed with this information she went to her appeal meeting. The agency approved payment for the glasses. They also offered her a job as a client advocate.

Employment Statistics about the Population with Vision Difficulties
Matthew Brault, U.S. Census Bureau

Statistics were shared from two surveys: the Survey of Income and Program Participation (SIPP) and the American Community survey (ACS). A limitation of these surveys is that the margins of error are quite high, since persons with vision difficulties make up only 2% of the population. The unemployment rate, labor force participation, and numbers of persons living in and near poverty level was discussed. The employment rate in 2012 was 36.9% and the labor force participation rate was 44.8%. Only 23.4% of the population worked full-time during the entire year in 2012. This percentage ranged from 22.8 to 24.4% in the preceding three years. Those with difficulty seeing have higher levels of unemployment compared to the general population, ranging from 8 to 9.7 points higher in the past four years. There are significant differences in the labor force participation and unemployment rates for the population across the country. A color coded map illustrated these differences by counties. More than half of the population is living in poverty or near poor. The percentages in these categories have risen over the past four years.

VR Agency – Employer Interaction Practices
Michele McDonnall

Research Summary
Negative employer attitudes are considered one of the most significant barriers to employment for people who are blind or visually impaired. The interactions VR agency personnel have with employers are considered an important way to potentially address this barrier. Every time an interaction occurs, this represents an opportunity to change employers' negative attitudes. This study involved four major research activities: (a) collecting information from VR agencies about what they are doing in terms of interacting with businesses, (b) evaluating the association between VR agency practices and consumer employment outcomes, (c) evaluating the association between VR agency practices and employer attitudes and knowledge, and (d) conducting interviews with VR agencies that are successful at interacting with businesses.

The first step in the research process was to determine what VR agencies are doing in terms of interacting with employers; this was accomplished by surveys with VR agencies. Administrators

and staff (counselors and business relations [BR] staff) from separate and combined agencies were invited to participate. The surveys included scales to measure use of the Business Relations Model (BRM), or dual customer approach, at the agency level and the individual (staff) level.

> *Clicker Question:* Do you believe that your agency's efforts in terms of interacting with businesses have a positive effect on your consumers' employment outcomes?
> Large effect (35.4%)
> Moderate effect (52.3%)
> Small effect (9.2%)
> No effect (0%)
> Don't know (3.1%)

To determine whether VR agency-employer interactions are related to consumer employment outcomes, participant responses from the VR surveys were combined with RSA-911 data. Two years of data was analyzed separately, based on the time frame of the study (fiscal years 2010 and 2011), and analyses were conducted separately with administrator responses and staff responses. The outcome was competitive employment (dichotomous) and the primary predictor variables were measures of use of the BRM and use of blindness-specific techniques with businesses (three activities, based on prior NRTC research). Several control variables were included, to account for factors known to be related to employment outcomes of consumers (state-level labor force data and consumer characteristics).

Results indicated that administrator variables were not consistently related to consumer employment, but some staff variables were consistently related to consumer employment. Results differed for staff, based on their position. Consumers in agencies with counselors who use more BRM practices are more likely to be closed in competitive employment. Consumers in agencies with BR staff who use more blindness-specific techniques with businesses are more likely to be closed in competitive employment.

The next major data collection activity was to measure employer attitudes towards blind and visually impaired people as employees and their knowledge about how they would perform typical job tasks. We conducted interviews with 160 randomly identified employers in the four states, plus completed interviews with 37 VR employer contacts. Employers in our sample had a wide range of attitudes, with an actual score range of 6 to 65 (possible range of 0 to 66), with a mean of 34.68 (SD=14.16). Employers were asked if they knew how blind employees could perform five job tasks. They were not very knowledgeable: more than two-thirds of the employers (67%) could not correctly identify ways to accomplish any of the tasks and only 23.4% could identify a way to accomplish one of the five tasks. The data was used to develop a multiple regression model predicting employer attitudes.

Clicker Question: Which of the following factors was most related to employer attitudes?
Having a personal relationship with someone B/VI (39.2%)
Having hired someone B/VI in the past (35.4%)
Communication with VR agency (12.7%)
Knowledge about how B/VI perform job tasks (12.7%)

The last three options in the clicker question were significantly related to employer attitudes, all at a similar level. Factors not associated with employer attitudes were having a personal relationship with someone who is B/VI, having worked with someone B/VI, and being in a Human Resources position. The three significant factors tended to occur together (were correlated), but each significant factor was important by itself, above and beyond the others. An important message for VR personnel is that those interactions they have with employers are associated with better employer attitudes.

The final major research activity was conducting 55 interviews with administrators, counselors, BR staff, and business partners of four agencies who are successful at business relations. Key findings in the areas of Barriers, Facilitators, and Strategies for interacting with employers were presented.

Clicker Question: What was the most commonly mentioned barrier to interacting with businesses reported by counselors?
Don't know how to do this (14.8%)
Don't feel comfortable doing this (39.5%)
Don't have the time to do this (45.7%)

Lack of time was the most commonly mentioned barrier by counselors, although this was mentioned more by counselors from some agencies than others. Lack of comfort or confidence was also commonly mentioned as a barrier. Administrators from 3 of the 4 agencies reported lack of time and lack of comfort and/or confidence (especially in new counselors) as problems. Some common facilitators mentioned were: having a personality for it, prior experience in business or sales, knowledge about blindness accommodations, and opportunities to interact with businesses in a neutral setting. Some strategies suggested for agencies to consider were: use of personal networks, use of counseling skills with employers, establishing a personal relationship with an employer with ongoing contact, and utilizing job retention cases to establish an ongoing relationship.

Clicker Question: Would your agency be interested in staff training based on the results of this study, including how to reframe the way they view employer interactions?
Yes, I think my staff could benefit from training. (94.3%)
No, I don't think my staff need this type of training. (5.7%)

Key Points:
1. There was little support for a relationship between what is done at the agency level (e.g., policy in terms of interacting with businesses) and employment outcomes for consumers.
2. How VR staff interact with businesses was associated with employment outcomes for consumers:
    a. Using techniques consistent with the BRM was important for counselors
    b. Using blindness-specific techniques was important for BR staff
3. Two factors related to more positive employer attitudes were having communicated with the VR agency and knowledge about how blind or visually impaired people perform work tasks – the first is one that VR staff have control over and the second is something that VR staff can directly influence.
4. Helping counselors reframe the way they think of employer interactions, to focus on using counseling skills to develop a personal relationship with them rather than a sales approach, may be of benefit.

Panel Discussion
Panelists:
Kathy West-Evans, CSAVR
Juanita Barker, TexasDARS
Bobby Druesedow, Texas DARS
Brian Charlson, Caroll Center for the Blind

Please discuss how these findings could be applied in practice by VR agencies.

Employers seemed to have gotten a lot of their knowledge from having hired/worked with people who are blind. Our agency could use the work experiences (e.g., paid, unpaid, internships, volunteer) that we offer consumers to begin to form that relationship with the business, and create the possibility of full time jobs.

The biggest thing that we need to improve on, is that we could and should make more use of contacts from job retention cases and do more follow-up with those businesses where consumers are placed. Each year our staff are provided with a list of where consumers went to work, but we are not doing enough follow-up with these businesses. Follow-up should include not only checking on how the consumer is doing, but trying to meet other needs of the business. That is a big area that we need to improve in, and that is probably true across the country.

I want to emphasize the point that businesses are made up of people, and everyone in the VR system is here because they're good at working with people. Businesses say "I just don't know what I don't know" and that is an opening to develop a relationship, to develop the trust. When you look at the barriers, if you understand their needs, and you understand what they feel are the barriers – and those are the attitudinal barriers that are huge. If you have a relationship with them and they trust you, they are going to tell

you. VR is in a great position to help businesses, and we're not bringing disability, we're bringing talent. It's the way that we interact with them, and help them get over the barriers, and a lot it is fear-based, attitudinal barriers. Helping them understand how to solve accessibility issues, and that you are there to help them with it, and help the business build a strategic plan so they can fully utilize your talent (your consumers).

I want to remind you that when you speak of retention, and going back to those same companies, you already have the inside track with that consumer who works there. They should be a part of building that relationship with the business.

How have you made the dual customer approach, or Business Relations Model, a part of your agency's culture? (Asked of Texas DARS panel members)

For years we have been providing a 2-week training for all of our staff on employer interactions. The first week is in their office and the second week is in Austin, TX and this is done during their first year of employment. It is crucial that they understand the importance of going out and interacting with businesses, and that this is every bit as important as interacting with consumers. Mentors are also used to train new staff.

We keep encouraging them. Management support is such an integral part of having this type of culture. We cannot ever stop developing new relationships. We have a new endeavor that involves gathering data on businesses within the state to determine where the jobs are, what businesses we need to be targeting, and what jobs we need to be training our consumers for. We need to have consumers who can do the work that our business partners need.

We have specific standards and tasks for annual evaluation that include employer contacts. They are expected to do a certain number of business relations contacts.

We survey businesses to determine whether we are meeting their needs. We recognize our businesses annually: staff nominate businesses who we've worked with, and that helps to keep that relationship going.

We have regular meetings in our regions to strategize locations for potential business development. We have worked closely with Kathy (West-Evans) and the NET. We revised our training, and came up with regional plans to increase business relationships, which increases employment outcomes for consumers.

We have a new initiative with the goal of increasing weekly average earnings for consumers. It involves five subprojects, including working with state and local governments and private businesses to anticipate job openings so that trained individuals can be ready.

What advice do you have for agencies who want to bring their practices more in line with the Business Relations Model?

> First, make sure everyone in the agency understands that employment is not an afterthought in the VR process, but don't just think "jobs," think "careers." Talking about careers with consumers should happen at the beginning of the process.
>
> It is important to make a good match (between consumer and job/business) and to be there for the long run. It's not job development that we want (placing one person in one job), we want long-term relationships. Every person we bring to a business adds value and talent.
>
> Business relations is really about trust and understanding. If you understand the business, you can bring that understanding into your planning with a consumer, and you can help build a career for the person.
>
> We have the largest talent pool of people with disabilities and we have the largest team of experts. Look at business as a partner in this process, not an enemy. We bring the solutions and the talent, we're not marketing disability.

Evaluation
> *Clicker Question:* Was the information applicable?
> Very applicable (82.1%)
> Somewhat applicable (12.8%)
> Not very applicable (2.6%)
> Doesn't relate to what I do (2.6%)

Accessibility in the Modern Workplace

Darren Burton, Director AFB TECH

Research Summary

A poll was conducted to determine which pieces of office equipment posed the most accessibility barriers in the workplace. Computers and software were not included, as it is already known that many barriers exist and they are specific to certain occupations. Efforts were made to make sure that the devices chosen for testing were generic to most office settings. The two devices identified were a Voice over Internet Phone (VoIP) interface telephone system and the multi-function document center. Modern office telephones have a visual display and use soft keys which are not easily accessed by the visually impaired or blind user. The multi-function document centers have a touch screen interface. This interface is difficult or totally inaccessible to the user with vision loss.

Four multi-function document centers that claim to have accessibility features were tested: Lexmark, Canon, Ricoh, and Xerox. Of these, Lexmark and Canon had the most accessible interfaces. Lexmark was most successful, as their interface is web based and can be accessed

via a regular computer. This allows access with screen readers, braille displays, and portable devices like smart phones and accessible electronic note takers that have internet access. In addition, the touch screen interface is larger than most, text can be enlarged, and colors reversed for low vision access. Canon's "Voice Guidance Kit" features can be accessed through the tactile keypad using the numeric keypad as arrows to move through options on the screen. In addition, one can use their voice to activate features, but this is more time consuming. Minimal contrast change is available for low vision users. Ricoh "Access Module" offers software for accessibility, but the company does not support the software which is produced by a subsidiary in Europe. Once the software is installed it worked with JAWS and NVDA, but not Window Eyes. It has built in large text, and will also work with ZoomText. Xerox "Copier Assistant" worked only on older Windows operating systems, those that are no longer supported by Microsoft.

> *Clicker Question:* Canon's Voice Guidance Kit Costs $1,800. Would $1,800 be a reasonable cost to provide an accessible interface?
> Yes (51%)
> No (49%)

Seven VoIP systems are being tested: (PC) Accessaphone, VT Go-508, (iOS) Linphone, 3CX, (Android) Linphone, Zoiper, and (OSX) Telephone. The Accessaphone and VT GO-508 were found to be fully accessible. The cost to make the Accessaphone accessible was $1,500 per seat. The iOS products were mostly accessible, and the Linphone is open source, so the lab at AFB is working to make it more accessible. The Android products were less accessible, but this may be due to lack of accessibility on the Android platform. The final product, Telephone, is fully accessible but only allows for making and receiving calls, with no extra functions.

> *Clicker Question:* The Accessaphone costs $1,500 per seat for accessibility. Would $1,500 be a reasonable cost to provide an accessible phone?
> Yes (46%)
> No (54%)

Key Points
1. The Lexmark multi-function document center was found to be most accessible for users who are blind and visually impaired.
2. The Accessaphone was found to be a good option (in desk phones) for accessibility for a Voice over Internet Phone (VoIP) interface.

Panel Discussion
> *Panelists:*
> *Kathy West-Evans, CSAVR*
> *Juanita Barker, TexasDARS*
> *Bobby Druesedow, Texas DARS*
> *Brian Charlson, Carroll Center for the Blind*

What would employer reactions be to the costs related to providing accessible equipment?

I'm totally blind so I'm not reading faces, but you can still feel it in the room when that blank face goes up there. I don't want to commit one way or the other as to who is going to pay the bill. My experience at least to this point has been that employers would love to hear VR say, 'Don't worry about that, we will handle that.' Just be there and look like you understood from the beginning that this is going to be an expense that is part of the cost of hiring any employee. I very quickly roll out the job retention question. The Department of Labor statistics support the idea that if you hire a person with disability, they're going to stay with you longer and it is going to be a more effective expense for you long term, if you provide this accessibility short term.

I would say that it depends on the size of the employer, because you have to remember that a large portion of this country is employed by small employers. So, if VR has to step forward with a smaller employer, I think that's different than a larger employer. I think the big questions that they (employers) ask us are, help us understand what we need. We don't know how to do the assessment, to buy the right technology. Then get us to a credible provider or a credible vendor. We know with one bank, they'd gotten in touch with a local building company and they were going to charge them $250,000 to put in an automatic door opener. We connected them with another vendor, so they are asking us to help with credibility.

When first meeting with business, a lot of times, we make a ballpark cost, but when we're first building that relationship, we try not to get into the cost. We try to get into the pluses. My fall back is it just ain't cheap to be blind. Folks understand that, and we haven't had a lot of argument one way or the other. It gets done and the person goes to work.

How would you expect employers to react to the costs discussed?

I think from what I saw from what Darren showed, a lot of this stuff is not just benefiting folks with disabilities. It can benefit everybody. So, when approaching an employer, or approaching a business with information about the cost, which is at the beginning of the relationship, but after they're already in love with me, it's like 'how can it benefit everybody within the company, not just the person who's blind or visually impaired?' I think that reaction-- that's where my reaction would come in, and that's where I would start getting the reaction from a business.

Well, I think that again, a large part of that is going to be dependent on if it's a large company or a small company. In Texas, we are part of a large umbrella agency that has 55,000 employees. So, we have the same multi-function document centers across all of the agencies within our umbrella. It's the Xerox centers which are not very accessible. So, we have even dealt with our own agency on that. I don't think it's so much the cost as it is

just finding out what is the most accessible. It's not always the cost. It's finding out what's best for the majority of the people who need accessibility.

When you age, you lose your vision, so the reality is, keep everyone working.

You can't know what to do unless somebody informs you of what's possible. In my agency, I twice made the mistake of being out talking at some conference like this, only to come back and find out the copier died and they bought a new one, and I wasn't there. In both cases it's inaccessible, and that's a blindness agency. So, it happens to everybody. You've got to keep the people who are doing the buying informed. So, the other thing is that sometimes you don't need all the accessibility day one on the job, you can build up to it over time. When the copier gets replaced, then you talk. Make it an accessible copier. When the voice system gets upgraded, then you talk about some of that. You see what you can do to get along in the short term, and worry about those issues in the long term.

What other office hardware or software needs to be made accessible?

Anything and everything that's web based. So much of business is dependent on having access to websites that are accessible. I have to say, it's not just a matter of accessible, it's a matter of usable. You saw Darren up here doing all the clicking and clacking in order to get something done, and you had to say to yourself, 'Boy, how much faster would a sighted person be in doing the same thing?' When you try to demonstrate something, it goes. Nonetheless, it takes a half a dozen clicks to say yes sometimes. So, to me, I guess one is the web, and the other is to make sure that people realize it's not just accessible things, it's also knowledge on how you use them. So much goes into buying the thing that is supposed to be the answer, and then the training is just an afterthought.

I would say, companies are going to online recruitment and application processes, and it's not going company by company, it's going to the producers of the software that these companies are buying. So, how can we get together and educate the software providers? I would also say that anything that has to do with point of sale, whether it's a cash register or-- you can see that we have, these are very specific applications. The other one is called routing functions. If you have anything to do with a customer service center, looking at those, those are real life examples of businesses that have been saying, where do I find the solutions?

I was thinking of specific examples of the software, and I think the web conferencing is something that we really need to work on, get information on to make it more accessible.

From the Audience
Comment: I believe that the web based products that companies will use for different things, like ADP for time sheets for instance, is a huge huge company, bad on accessibility. I think that all the different other programs that they try to sell you for

performance appraisals or employee input, those kinds of things, getting some understanding that there are people in those businesses who need the accessibility functions, and working with the software developers for those products, so that they are more accessible and you can fill out your own time sheet without major hassles, and that sort of thing.

<u>Evaluation</u>
> *Clicker Question:* Was the information applicable?
> Very applicable (63.5%)
> Somewhat applicable (30.2%)
> Not very applicable (3.2%)
> Doesn't relate to what I do (3.2%)

Best Practices in the Randolph-Sheppard Business Enterprise Program
Jacqui Bybee
Terry Smith

<u>Research Summary</u>
An online survey was sent to all state Business Enterprise Program (BEP) directors inquiring about aspects of their program including training, recruiting, and entry-level requirements for entrepreneurs in the program. Forty-four state BEP directors completed the survey. The data collected from this survey has been used as the basis to guide the rest of the research project. Thus far, it has helped in identifying states that have experience in working with blind entrepreneurs with a hearing loss, training area needs for new BEP staff members, and states that have formal programs for recruiting transition-aged individuals to BEP.

A general informational brochure entitled "The Randolph-Sheppard Business Enterprise Program: An Entrepreneurial Program for People who are Legally Blind," was designed as part of this project, to inform state legislators, government officials, and the general public about the history and current trends in the R-S Program. It includes program performance figures, testimonials from current blind entrepreneurs, future directions for the program, and how to get started in the program, among other topics. The brochure was disseminated to all the state directors of blindness agencies and shared with all BEP directors.

> *Clicker Question:* Are you familiar with the National Randolph-Sheppard BEP brochure?
> Yes, I've used it to inform others about the program (21%)
> I've seen it (18%)
> I've heard about it (13%)
> No, but I'm interested in knowing about it (42%)
> No (6%)

The brochure is free to download from the NRTC's website. Thus far, three states have used the brochure to design their own state-specific Randolph-Sheppard marketing brochure. An

additional ten states have downloaded or requested additional print copies of the brochure to use as a marketing tool.

A resource guide for working with blind entrepreneurs with hearing loss is in its final stage of revision and will be available on the NRTC's website in the near future. The resource guide was developed from data collected from 43 BEP directors, training staff, BEP counselors, and blind entrepreneurs with hearing loss. The resource guide focuses on accommodating and working with blind entrepreneurs in training, on-the-job, and at state and national meetings. It also describes the experiences of both BEP staff and blind entrepreneurs with hearing loss in the program and has a list of resources to aid in accommodations. The goal of this resource guide is to assist BEP staff who may be working with a blind entrepreneur with hearing loss for the first time.

> *Clicker Question:* Do you know how an individual with a hearing and vision loss can be a successful Randolph-Sheppard entrepreneur?
> Yes, I've referred an individual (37%)
> Yes, but haven't referred an individual (27%)
> No, but I'm interested in knowing more (30%)
> No (7%).

The next component of the project will focus on developing a guide of formal recruitment strategies or programs state BE programs have for transition-aged youth. From the original survey of BEP directors, 17 states have been identified as having some type of formal recruitment for this demographic. Each of the 17 states will be contacted and asked to elaborate on their specific practices. The data gathered will then be compiled into a resource guide that will be distributed to all state BE programs. The goal of the guide is to encourage BE programs with no formal recruitment of transition-aged individuals to adapt some formal recruitment and to use the developed guide as a reference point to start such a program.

> *Clicker Question:* If there was a Randolph-Sheppard BEP marketing brochure available that was targeted toward transition-aged individuals, would this be a valuable tool that you would use?
> I would use this (84%)
> I would not use this (4%)
> I'm not sure (12%)

The last component of the project is to compile minimum entry-level standards an individual must meet in order to qualify for the Randolph-Sheppard BEP. Each state has a different set of minimum qualifications and having this compiled in one place may serve as a resource for BE programs when considering their current status. A list of preferred qualifications will also be compiled for the same purpose. Average facility performance standards (e.g. gross profits, net sales, operating costs, etc.) will also be developed in order to provide both BEP staff and blind entrepreneurs supplemental information when determining whether a potential or current facility is a viable location.

Another output of this project is a fourteen module, self-paced, online course that will be available through the NRTC website. It will orient new BEP staff to the Randolph-Sheppard program. This course is being developed as a collaborative effort between the NRTC and Mr. Terry Smith, BEP expert consultant. The 14 modules are: Orientation to blindness; Vocational rehabilitation and how it intersects with Randolph-Sheppard; The Randolph-Sheppard Act and its implementing regulations; Active participation – what it is and what it isn't; Assistive technology and its potential for blind entrepreneurs; The role of the business consultant; Business principles of managing a food service facility; Human resource management for the Randolph-Sheppard blind entrepreneur; Marketing and customer service relations; Marketing the Randolph-Sheppard Program to outside parties; Teaming and branding – a way to increase income for blind entrepreneurs; Food safety and sanitation; Changing trends: Meeting the challenges of providing healthy food options; and maximizing opportunities for blind entrepreneurs with a hearing loss. Each module can be taken individually, or the entire series with completion certificates for each.

> *Clicker Question:* Should there be a module on SSDI and the special rules that apply to blind entrepreneurs?
> This is necessary (91%)
> This is not necessary (6%)
> I'm not sure (3%)

Key Points
1. Marketing the Randolph-Sheppard BEP is an important endeavor. Over half (52%) of the audience had at least heard about the Randolph-Sheppard general informational brochure and an additional 42% were interested in learning more about it.
2. Data supports that blind entrepreneurs with hearing loss are successful in the Randolph-Sheppard Program.
3. Focusing on recruitment of transition-aged individuals into the Randolph-Sheppard BEP is needed. Eighty-four percent of audience members stated that they would use a Randolph-Sheppard marketing brochure targeted towards transition-aged individuals if one was available.
4. Providing online training for new BEP staff members at no cost will be a valuable resource to professionals in the field.

From the Audience
> *Comment:* This brochure is outstanding. My only request if we could have the next brochure, the one that's designed to hand out to the consumers, be in large print. I think it would just be much more user-friendly to those who read large print. Thank you.

> *Comment:* I speak to youth all over the country, like over a thousand in the last fifteen months. I'll tell you that the majority of youth do not know about the BEP Program. So we have to do a better job of marketing the program and presenting it also to educators; present it at some State AER Conferences and such, where it's aimed towards TVIs, I bet

you'd reach a lot more teachers who could present that information as well to the transitioning student.

Question: Do you have a timeframe of when your new training program may be out? Also the course specifically for entrepreneurs - the course with Hadley? Do you have a timeframe for that?

Answer: By the end of the calendar year, that is our goal, to have these modules actually developed and available. As far as the training for the entrepreneurs that I was talking about, I can't say-- we do not have a 100% commitment. Hadley is reviewing curriculum and figuring the cost for the course. If they agree it will hopefully be up and running by early 2015.

Comment: I was thinking it might also be helpful to have a module on vending machines. I have noticed a trend in that direction away from the cafeteria style.

Comment: We were talking about placing a vendor just recently who is classified as deaf-blind. But, as my BEP director had mentioned, with the aging population of our vendors, most of them who came to us blind are now also significantly hearing-impaired, I don't know if that's something that we need to look at or address.

Comment: I'll tell you, to me this is outstanding, not just for my BEP staff, but for my counselors as well.

Panel Discussion
   Panelists:
   Ray Hopkins, Virginia DBVI
   Daniel Frye, New Jersey CBVI
   Joe Ashley, Virginia DARS
   Catriona Macdonald, Linchpin Strategies, LLC

Would having a compiled list of each state/territory's minimum qualifications for blind entrepreneurs to qualify for entry into the R-S BEP be of value? Would having a list of preferred qualifications for an R-S blind entrepreneur to possess in order to enter the program be of value?

Certainly I think that there would be value in having both lists, a minimum set of qualifications and a preferred set of qualifications. At the Federal level, Randolph-Shepherd has very basic qualifications as outlined in the Randolph-Sheppard Act, that you be legally blind, that you be a citizen. Having served at the National level at RSA as the Program Manager, I know that states have added additional qualifications, and I think it would be valuable as people shop around in terms of where they want to work geographically and otherwise. A preferred list I think would also be quite helpful. As this program evolves in terms of those who enter it, it's really the push of most in the industry to strengthen and enhance the vibrancy of the program. It needs to become a program, if

it is to flourish; that is not simply thought of as a last resort but instead is a program that attracts entrepreneurs with real business acumen.

Let me add, as one who also worked at the program level, we always received questions about qualifications and about the ability of vendors to move from state to state. The third piece of those qualifications is that individuals be determined qualified by the state Vocational Rehabilitation Agency, and that creates great variance in the program right now. So to be able to have a list of minimum qualifications and for qualifications that SLAs can consider and perhaps incorporate into their practice would add to consistency and might allow for greater movement of licensed-blind business owners from state to state.

I think that the type of description of qualifications is huge to have, and I would take it a step further. Information is vocational choice. I'm hoping someone somewhere has identified the critical skills and tasks needed to be successful. And not only the qualifications but what does it take to be successful in this particular endeavor and then turning that into a way to get people to quote those standards and say, "This is a good career choice." I would then further take that for your youth and look at a way to find out how to match up what those good qualifications are - the things that make a difference. If you've got a young person you can then show some sort of career assessment tool to and say, "Here is what this is like to be this person." A descriptive video, "This is usually what a day is like." Here's the things that-- you like to do math. You like to do these things. The school might have an entrepreneurship-type course or some internship or shadowing opportunity that might be arranged. I am sure there's ways that you can cross walk this, and somebody's probably done this somewhere, but that would be a way to look at the youth and make it a real opportunity to get people to think about it.

As someone who does advocacy, I think I have a complementary but slightly different perspective. I also think that a list of qualifications is really useful in helping other people understand the program, and the words "entrepreneur" and "small business" are very powerful, not just on Capitol Hill, where there are lots of people lining up to be pro-small business and pro-entrepreneur, but I think in society more broadly, certainly millennials are much more interested in working for themselves than they are working for somebody else. We're hearing about folks coming back from overseas, veterans, who are having difficulty in some cases, settling into a formal work place, and self-employment is sometimes a better choice for them. But I think that for people who are sighted and are not familiar either with small business or with blind entrepreneurs, it's very hard for them to understand how somebody who is blind could really be in charge of running their own business. Having said that, I don't think you need a detailed list of qualifications for your PR and marketing efforts the way that we're talking about here. It's a matter of thinking about the kinds of questions various audiences might have and being prepared to answer them. I think we already have a lot of what we need. And we just need to start using it in a better and more effective way.

Would having average profit and operation figures based on type of facility and location type aid in making decisions about the viability of current and potential locations?

I certainly think that access to that information would be one factor that one would want to consider. I would say that the information would need to be accurate. The RSA-15 data that is collected is based on what we observe and what states observe but sometimes does not reflect what happened. So while I think it would be a useful starting point, I think it's going to be incumbent upon the blind manager or entrepreneur to go in and evaluate his or her potential location in concert with his or her business consultant and make a more informed decision.

I would just say that I'm unsure. If you're relying on RSA-15 data, I just don't believe it's consistent enough and that everybody applies the same rigor in providing the data. I almost think that it's more useful to rely on data generated within the state, then make comparisons across the nation.

I think that accurate data and information on potential earnings is huge when you're trying to do career counseling. Without that, how would people know what types of decisions to make or what their best decisions would be? If you don't have accurate data, if you think state data is better, then I would think it would be dependent on people to gather the state data and put it into some parameters around that, and I also noticed they talked about by facility. I'm assuming there's other things around. How much work is in each of these facilities that you can then better describe the opportunities to people? I agree that millennials are into working for themselves, and finding ways to get into careers. We've got to have the information to do that.

I think data is really powerful for good or for ill, and I would not suggest not having the data, but we need to be careful about how it's used. If we have a set of data that shows these types of opportunities bring in $20,000, $25,000, or $30,000 a year for a vendor, nobody's going to be all that interested in picking those off. You have different categories of opportunities, some are earning people $80,000 or a $100,000 a year, and it's an invitation to other people to say, "Why should those blind entrepreneurs who are being helplessly aided by the state have those opportunities? I would like to move in and do that myself." It's not a reason to not have the data. It is a reason to be careful in how it is used, and it may create some additional work for us in defending the Randolph-Sheppard priority.

Evaluation
    Clicker Question: Was the information applicable?
    Very applicable (79.7%)
    Somewhat applicable (14.5%)
    Not very applicable (1.5%)
    Doesn't relate to what I do (4.5%)

Predictors of Outcomes for SSDI Beneficiaries

J. Martin Giesen
Brenda S. Cavenaugh

Research Summary
This research examined factors that helped predict competitive employment outcomes for consumers of VR services who were blind or visually impaired (BVI) and were Social Security Disability Insurance (SSDI) beneficiaries. Goals were to identify what hurts, helps, and "what works" (best services); and strive for practice and policy recommendations to improve competitive outcomes. Recent national VR data were examined using a multi-level approach, involving individual- and state-level factors. The conference presentation focused on demographic and socioeconomic factors and their implications.

SSDI beneficiaries in VR are worthy of study because of the prominence of Social Security Administration (SSA) programs (about 22%) in our total Federal Budget approaching $4 trillion, and the facts that more than 25% of all VR consumers are SSA beneficiaries, and about one third of VR consumers who are legally blind are SSDI beneficiaries. Further, the SSDI population in VR is generally considered at greater risk for poor employment outcomes. But just how much?

The Data and Definition of Competitive Employment. The data were from the FY 2010 RSA-911 Case Service Report on 4,478 consumers, age 18 to 75, all BVI, receiving SSDI at application, and *closed after receiving services*. The study outcome measure was whether the closure was in competitive employment or a "noncompetitive closure." Competitive employment closure followed the standard definition in the RSA Case Service Report manual, as did "noncompetitives" with the exception that noncompetitives also included "unsuccessful" closures who exited without an employment outcome, after receiving services (old Status 28). (Note: Our measure was not the same as the Competitive Employment indicator in the RSA Case Service Report due to our inclusions of unsuccessfuls.)

Predictors included age, race/ethnicity, presence of a cognitive or noncognitive secondary disability, legal blindness, education, personal earnings, amount of SSDI check, and SSI receipt (all at application). State- or agency-level predictors included state population, unemployment rate, per capita income, and state agency structure type (blind vs. combined or general). Our analysis method, logistic multilevel regression modeling (also called HLM) allowed us to look at "cross-level" interactions of personal and state/agency factors.

Expectations were that receipt of SSI or SSDI are both are employment risk factors, as based on past research and thinking that such receipts created disincentives for employment.

Clicker Question: Compared to the overall competitive employment rate for all consumers who are blind or visually impaired, the rate for those receiving SSDI is:
10% lower (11%)
20% lower (16%)
30 % lower (48%)
35% lower (24%)

In contrast, we found it was only about 10% lower. The overall competitive closure rate for *all* consumers who are BVI was 53%, whereas our SSDI subsample it was 43%. Implications are that SSDI recipients may have substantial employment potential. Maybe they have been "under-rated," as our audience response indicated. Why? Perhaps lack of specificity in thinking - "combining" SSI and SSDI recipients and thinking the same way about both of these. This has happened in older outcome research, which found receipt of benefits were negative factors. It's also possible that VR agencies serving consumers who are BVI are doing a better job.

Clicker Question: How does having weekly earnings at application or receiving higher amounts of SSDI effect the likely hood of achieving competitive employment?
Increases for both (31%)
Decreases for both (11%)
Increases for weekly earnings, but not SSDI (45%)
Increases for higher SSDI, but not for weekly earnings (13%)

Data revealed an *increase* in chance of competitive employment for BOTH having weekly earnings and higher amounts of SSDI. Observations were that having earnings and/or SSDI receipt indicate employment – current or previous. Other research with adults and transition-age youth—even across disability types—indicates that work experience is very important for subsequent employment. Thus, 1) our findings further support importance of work experience in increasing the likelihood of competitive employment, and 2) our SSDI sample had sufficient work quarters to qualify for SSDI, and payment amounts reflect duration and/or level of previous work. Thus, it is not surprising this group has, as we found, a reasonable base rate of competitive employment.

Next, an interaction of age at application and agency structure type was discussed.

Clicker Question: As age of application increases, the chance of competitive employment:
Increases (14%)
Decreases (30%)
Increases then levels off (24%)
Increases then decreases (31%)

The data indicated, overall, that competitive employment rate increases and peaks in mid-to-late 30s, then declines for those older at application, *but agency structure had a strong impact* on this trend. A graph was presented and described. Whereas both rates peaked in the late

30s, blind agencies were about 10% higher and stayed stable for older consumers, but the rate declined for combined agencies. Thus, both younger, and particularly, older SSDI consumers (40 or older) did better in blindness agencies than in combined or general agencies. Service in blindness agencies mitigated the general decline in competitive employment rate with increased consumer age. This is new evidence that consumers tend to have better outcomes when served in agencies exclusively serving consumers who are BVI. An additional interaction showed that Asian consumers (and females, though not discussed) also did better when served in blind agencies.

> *Clicker Question*: With respect to rate of competitive employment, what race and other ethnicity differences would you expect?
> White greater than Hispanic greater than African American (62%)
> Hispanic greater than White greater than African American (10%)
> White equal to Hispanic greater than African American (6%)
> White equal to Hispanic equal to African American (23%)

We had a clear finding of *no race differences in competitive closure rate*. This was viewed as an amazing and historic finding because African Americans have consistently not done as well. This was likely no statistical "accident" because of the tremendous statistical power of almost 4,500 cases to find differences, if they existed. The interpretation of these findings considered that previous research which found race difference had employed *all* VR consumers, whereas we focused on SSDI recipients. The key difference is that virtually all SSDI consumers had a history of work experience; it has a "leveling effect" – appearing to moderate race differences in employment. Implications were that steps to enhanced work experiences during VR process may be very important for overcoming race/ethnicity differences in employment outcomes.

Key Points
1. Blind or visually impaired consumers in VR who are SSDI beneficiaries have substantial potential for competitive employment. Also, perhaps this potential is not fully realized—and is underestimated—by VR administrators and service providers.
2. Our findings further corroborate other findings and add to the strong implications for the importance of work experience in achieving competitive employment outcomes. Consumers need to participate in as many work (and work-like) experiences as available, including during the VR process.
3. For a wide range of consumers who are older SSDI-recipients, Asian, and female, these results add more support to the existing evidence of the employment advantages of specialized services in blindness agencies to all consumers who are blind or visually impaired.

From the Audience
> *Question:* Are there any plans to expand the research to see how many of the 43% who were successfully closed were able to get off of SSDI?
> *Answer:* We don't have that data, since the trial work period is 9 months and VR services close after 90 days; that information is just not there for the current data set.

Comment: These are really good quantitative arguments to the value of categorical services provided by us. Could you take those findings, just the sound-bites, those pieces of data that are clearly showing the value of these categorical services, and just put them on the Mississippi State website? Maybe they could just be a one-pager that says the value of categorical services. You have a one-pager; here it is, and then you want the story behind it, here is the study that supports it. For us and our state, we find ourselves frequently needing to have that sound bite of data where you have 15 seconds to catch someone's attention.

Question: Are the 43% of closed cases closed with employment that is full-time or part-time?
Answer: It's both, at least minimum wage.

Question: Is there any break down by region for the demographic findings?
Answer: No, the findings were an average across all states, but that could be investigated.

Question: When you considered the categorical services data on the combined agency, did you take into account a state requirement for categorical services?
Answer: No, we just went by how the state was designated: separate or combined.

Question: Were you able to exclude DAC, disabled adult child, from other SSDI recipients?
Answer: No we couldn't separate them. We know that around 10% or less of the total are DAC.

Panel Discussion
> *Panelists:*
> *Ray Hopkins, Virginia DBVI*
> *Daniel Frye, New Jersey CBVI*
> *Joe Ashley, Virginia DARS*
> *Catriona Macdonald, Linchpin Strategies, LLC*

Given our finding regarding higher SSDI income amounts being associated with greater chance of competitive employment, what are your thoughts about this finding and any implications?

> This is an excellent study from my perspective, and just a little background: I work for the general agency in Virginia. And we have a return on investment grant that we're working with four agencies to look at developing, a return on investment that starts at the individual level. We want to answer that question, did they go off benefits? We are looking out over ten years, and getting down to that surface level. We have a discussion going on this evening among the states who are participating with this on blind services -

because we are getting down to developing a level of service, and you've got to have the discussion: How would you group the services to best match them up to be able to look at predictors of outcomes? This should be very good as every four years we need to answer the question about categorical services.

Defending separate services is now an 18 month exercise, and I think the implications are great. First, I think the study underscores what we've heard, what we've seen from other research, that the number one indicator in whether a consumer of vocational rehabilitation services will go to work is prior work experience. For our program, it means that we need to increase the discussion about how we translate priority experience, or SSDI recipients into successful outcomes, how we assure that younger recipients receive opportunities whether they are paid or unpaid.

I assumed there would be a correlation between recipients of SSDI and seeking employment. In addition to the fact that these candidates have already worked, I think the other thing to consider is that SSDI for blind people does provide a more progressive set of work incentives. Now, it certainly doesn't often result in reimbursement to agencies, because some people obviously stay on disproportionately. In terms of the trial working grace period eligibility time frames - where there are no limits on what you can earn - I think if you take that this as a group of people who already have worked, and a group of people that are motivated to seek employment, it makes sense that they are successful.

Evaluation
> *Clicker Question*: Was the information applicable?
> Very applicable (91%)
> Somewhat applicable (6%)
> Not very applicable (0%)
> Doesn't relate to what I do (3%)

A Customized Transportation Intervention
Adele Crudden

Research Summary
An intervention, "Customized Transportation," was developed to assist consumers referred from the Alabama Department of Rehabilitation Services who are blind or visually impaired in locating transportation to and from work. The intervention was implemented by a transportation coordinator and was based on concepts from customized employment, case management, and problem solving skills. Consumers were assigned to an intervention group or a comparison group based on their zip codes. Those in the comparison group received a resource guide with information concerning transportation. Persons in the intervention group developed a customized transportation plan and received individual services from a Transportation Coordinator.

All participants were referred by their vocational rehabilitation counselor and completed pretests via telephone. Pretests included an orientation and mobility screening, the *Social Problem-Solving Inventory-Revised* short form, a measure of transportation self-efficacy, and a measure of transportation knowledge. The three latter items were completed as posttests after approximately one year. Participants also granted access to their state vocational rehabilitation case file. Additional data sources for the intervention group included their transportation plans, transportation coordinator logs of activities, and a satisfaction survey administered approximately 60 days after receiving services from the coordinator. Comparison group participants received a $25 gift card for completing pretests. All participants received a $25 gift card for completing posttests.

Referral numbers were lower than anticipated, making it difficult to compare the intervention and comparison groups, and there was some attrition. Of 54 referrals, 48 persons participated, including 16 in the intervention group. Twelve intervention participants completed satisfaction surveys. Posttests were completed by 32 persons; only five of those were in the intervention group. Eleven of the 12 participants were satisfied with the customized intervention services and all recommended that a transportation coordinator be assigned to work with consumers in locating transportation to and from work. Participants indicated receiving information and support from the coordinators.

Based on results of the *Social Problem-Solving Inventory-Revised*, participants were likely to face problems with less emotional distress and be effective and efficient problem solvers. These results were stable from pre to posttest. The measure of transportation self-efficacy found participants confident about their ability to perform most transportation related tasks with no difference from pre to posttest. The transportation knowledge measure found participants generally knowledgeable about transportation issues but participants were significantly more knowledgeable at posttest.

Overall results indicate that consumers are in need of additional information about: (a) negotiating carpool arrangements, (b) screening and hiring drivers, (c) maximizing their transportation independence, (d) keeping current about costs and reasonable compensation for drivers, and (e) identifying transportation options.

> *Clicker Question:* What is the average cost of owning a medium size car for one year, this would include all cost associated with the car such as: car payment, insurance, gas, maintenance, oil change, tires, etc.? (This is an example of one of the knowledge questions on the transportation knowledge instrument.)
> Less than $5,000 (4%)
> Between $5,000-$7,500 (54%)
> More than $7,500 (40%)
> Don't know (2%)

Two transportation surveys were conducted to supplement the intervention study data. The first survey targeted persons on the NRTC Participant Registry, a pool of persons who have

volunteered to participate in blindness related research projects. A useable pool of 144 persons was achieved. Respondents received gift cards for $25. The survey was modified and disseminated via the NRTC National Advisory Committee, Facebook, discussion lists, and consumer groups. That snowball sample approach generated over 300 participants and six $100 gift cards were awarded to randomly selected respondents.

Data from the first survey that included persons from the NRTC Participant Registry is not representative of persons with visual disabilities. Participants were more likely to be White (78%, with 9.7% African American) and highly educated (with 58% have undergraduate or graduate degrees). Of those responding, 44.4% were employed, 26.4% unemployed (n=38), 20.1% retired or volunteers, and 6.9% self-employed.

> *Clicker Question:* How do you typically get to work? (This is an example of a question from the survey.)
> Drive myself (47 %)
> Public transportation/para transit/taxi (31%)
> Spouse or other family member drives (16%)
> Walk (2%)
> Other (5%)

The survey found that employed persons were most likely to use public transportation, followed by walking, use of paratransit, and being driven by a spouse or family member or a volunteer driver; only a small number (n=7) reported using a carpool. Participants were generally satisfied with their transportation to and from work but less satisfied persons may have stopped working due to transportation issues. When asked if they had ever turned down a job because of transportation concerns, 65.7% said no. Transportation concerns were more likely to occur surrounding entertaining/leisure activities, visiting friends, and shopping.

Of 131 persons responding, 74.8% had received state vocational rehabilitation services. Of that number, 79.4% said those services did not include assistance in locating transportation to and from work. When assistance was received, it included orientation and mobility training, referrals to public and paratransit, and reimbursement or vouchers. Most (80.5%) received orientation and mobility training and for 77.6% of those, that training included using public transportation. Public transportation was available to 75% of the respondents. Of the employed persons, 87% could give directions to their work site.

> *Clicker Question:* Whose responsibility is it to assist consumers in locating transportation to and from work?
> Rehabilitation counselor (36%)
> Orientation and mobility specialist (23%)
> Job placement specialist (3%)
> Job coach (3%)
> It's not the responsibility of anyone in the agency (34%)

Products generated from this project include a consumer guide to transportation available on the NRTC website and a Transportation Plan, a tool to assist counselors in identifying and evaluating transportation options with consumers. A transportation focused webinar is being developed and successful completion will generate continuing education units for CRC credit. Checklists to assist in transportation planning for both consumers and counselors are in development. Manuscripts for submission to professional journals are also in process.

Key Points
1. Intervention participants support use of Transportation Coordinators to assist them in devising strategies to get to and from work, though we do not currently have empirical data to conclude that this intervention results in increased employment participation.
2. Consumers in the study were generally good problem solvers and were confident about their abilities, but need information about negotiating carpool arrangements, screening and hiring drivers, maximizing their transportation independence, keeping current with costs and compensation, and finding transportation options.
3. Survey participants expressed more concern about transportation for other life activities than transportation to and from work.

From the Audience
Question: This was very interesting because several years ago, the American Council of the Blind did a survey of members regarding perceived barriers to employment. The thing that we found fascinating was that transportation was the number one barrier that people cited. Is it correct that your survey participants all had ready access to public transportation? I guess if that's the case, are there plans to do further work with regard to people in areas where there isn't such ready access to public transportation or para transit?
Answer: In this particular survey, 75% of the people who responded had access to public transportation. But again, this is not a representative sample. One of the issues would be, how can we do further work on this, while we reach a broader sample? You see how many people, it was over 44% were employed. We need to reach some of these other people, get that information from them.

Panel Discussion
Panelists:
Donna Smith, Easter Seals, Project ACTION
Sean Whalen, National Association of Blind Students
Joey Richey, Alabama DRS
Joe Strechey, AFB

The referrals to the transportation project from the state agency were lower than anticipated. Why do you think this was the case?

I suspect that it may be related to the perception of whether or not transportation is a factor of rehabilitation services. Is this something counselors need to be involved in, and

if the general perception is that it is not part of counselors' jobs to assist in working out transportation, then perhaps that's why there was a low response.

I wonder about the buy in and engagement during the recruitment process and getting people to convince people to be referred to this project.

Yes. I was one of the people that did refer individuals. One of the problems initially was the narrow criteria, for someone to have a job identified, that really limited the people that we could refer. They did open that criteria up to a job-ready status, and that helped a little bit. But again, the individuals that were referred probably already had a good amount of intervention. It is something that we believe is very critical to employment success. We'd like to see very, very early intervention, right from the very beginning to have that transportation intervention planned for.

What is the best way to make sure that potential transportation issues are discussed and resolved with each consumer?

I would suggest that there's bound to be some sort of a checklist or process list of things that counselors need to check off, in terms of providing services, and that it should be added to that list, perhaps with some sub points that help work through the process. Project ACTION is a national training and technical assistance center on accessible transportation concerns. We have some handouts or fact sheets that we've made around solutions for finding transportation. It really is just a check list of: Do this if you have public transportation, here's where you go to find out about that, here's what's required for para transit service, here's where else you can look if those things that aren't available. It just kind of works you down through a list of potential transportation options. Some tool like that in the hands of counselors, would probably be helpful as well.

Yes, from a personal note, I have a similar tool that I use, it's very much like a check sheet, and I call it my transportation work sheet, where I identified the public transportation options, the local cab companies, to identify friends and families, look for volunteer organizations. I give this to the consumer and ask them to participate in their own plan, to do some research, to get out there and to look at this. The survey mentioned whose responsibility. The counselor's responsible, the O&M's responsible, and the job coach is responsible. I think it's a team effort, along with the consumer. We should all work together, at different stages in the process, to help that consumer be as educated about transportation as possible.

Do you have any other thoughts about what would be helpful for us to know about transportation issues?

A couple of things, first of all -- I just finished the quarterly report for Project ACTION, and every quarter when we look at technical assistance questions that come in, para transit

questions are always queen. But second in line is how do I find a ride? Obviously, this isn't specific to people who are blind or visually impaired, but a wider issue for many disability groups; this is a huge piece. One of the pieces that this NRTC project has developed, was a Transportation Guide. It's a very good step by step guide to how do we find a ride, and then what are those things that you need to know. The survey indicated things like: people didn't know how much to tip a cab driver, or they were unsure about how to screen and hire drivers, those sorts of things. This tip sheet really does help people to have that information right there. I think that's a real critical piece.

I also agree with someone who said, "Early is better." One of the things that we do in Project ACTION is work with school programs, education programs. Mostly, we're working right now with public schools. We are trying to get a transportation education goal built into the curriculum. We are talking to students, who likely aren't going to ever drive, about transportation at an early age. As they learn, and by the time they reach transition age; they're looking to get out there into the world, come over to be our clients and be employed, that they'll have some of that background. I know that there's a collaboration between VR and the transition programs and special ed. Students get O&M services and that's great. That's kind of a leg-up already, compared to people with other disabilities, who are still struggling to get travel training services. If we can tag on to that, and "here's what you need to know about transportation", in school. I think it would be significant, if when you come into the employment arena where you're looking for work, if as you're considering here's what we know the cost of rent or mortgage might be. Here's what you can expect to budget and spend on food. There needs to be some reasonable expectation of what transportation costs. We hear people all the time, complain about the cost of para transit, the cost of taking taxis. It does cost. There is a cost to it. But when you compare what I spend on public transportation, to what somebody spends on owning a vehicle, it's minimal.

I want to echo what's been said, but we also have to create a value on transportation in youth, so that they understand. That does come from experience. Also, that it's not just the VR counselor, not the O&M instructor. It is a team effort. But it is also the individual's responsibility too. We have to create that value at an early age that they want to live around transportation. I grew up not having the easiest access to transportation, but I made a goal for myself to plan my life around living in areas where I had good public transportation.

That was the same direction I was going. It's for the youth, our transition population, to make them aware, very early, thinking about those things. The possibility of relocating, where I'm going to live? How am I going to get back and forth to work? To plan on that, from a very early age, and to have an understanding of that.

Clicker Question: Was the information applicable?
Very applicable (64.6%)
Somewhat applicable (29.2%)
Not very applicable (4.6%)
Doesn't relate to what I do (1.5%)

Mentoring and Employment Preparation for College Students

Jamie O'Mally

Research Summary
Given a competitive employment environment, it is important to consider ways in which students who are blind can gain experience to prepare them to be successful in finding jobs after graduating. Although there are existing mentoring programs for students who are blind, this study uses a randomized controlled trial design to investigate the effectiveness of mentoring on employment. The purpose of this study is to investigate best practices in mentoring to improve competitive employment outcomes for college students who are legally blind.

Clicker Question: How realistic do you think college students with B/VI are in their expectations about their ability to find jobs after graduating?
Very realistic (10%)
Somewhat realistic (48%)
Not realistic, they're too optimistic (34%)
Not realistic, they're too pessimistic (7%)

Many students with blindness have limited work experience. Working with mentors allows students to gain valuable information about the job search, expand their professional network, increase their confidence in finding employment, and provides opportunities for job shadowing and practicing interview skills. Students and professionals were recruited nationwide to participate in this longitudinal study. To be eligible, all participants needed to be legally blind and living in the United States. Professionals included individuals who met that criteria, and were also currently employed or recently retired. Student participants also had to be under age 35, in their last year of college or graduate school, and planning to work immediately following graduation. All individuals interested in participating completed an online eligibility form.

Once determined eligible, students were randomly assigned to either an intervention group or a comparison group. Those in the intervention group were paired with a mentor (who was legally blind and working in a similar profession) for the course of one year. Mentees and mentors completed an online orientation to the program and were provided with a mentoring manual that detailed the program and offered resources for job preparation. Mentees completed monthly and quarterly reports online detailing their progress with mentors and their job search. Mentors completed quarterly reports online to provide information about their

progress with their mentees. Every effort was made to match each student with a mentor who lived no more than an hour away, to allow for face to face interactions and job shadowing opportunities. When this was not possible, students were matched with distance mentors who were encouraged to set up meetings to talk or Skype on a regular monthly basis over the course of the year. Mentees received a $20 gift card on a monthly basis throughout the project to offset transportation costs incurred as a result of meeting with their mentors.

> *Clicker question:* I believe that it is most important for students to be matched with mentors who:
> Have a similar disability (42%)
> Work in the same profession (41%)
> Live close enough for face to face interaction (17%)

The comparison group of students did not work with mentors, and instead received traditional career preparation materials in the form of a resource sheet that was also provided to those in the intervention group. The comparison group also completed quarterly reports to document their job search activities. They received a $20 gift card as an incentive for each report completed. All students in the project completed pre-test, 6-month, and post-test measures online to assess a variety of differences (e.g. self-efficacy in job-seeking, assertiveness, career optimism, and employment outcomes).

> *Clicker question:* Did you refer students to participate in this project, or encourage staff to share the information?
> Yes, I shared project information with eligible students/agency staff. (42%)
> No, I didn't know anyone who would be eligible. (5%)
> No, I never heard of the project before today. (47%)
> I don't remember. (5%)

Students (N = 51, 25 intervention, 26 comparison) participated in the study in one of four cohorts designated by graduation date. Mentees were paired with 25 mentors. Data collection for Cohort 1 and 2 were completed, however data for Cohort 3 and 4 were still in progress at the time of the presentation. All data collection will be complete by January 2015. The majority of mentees and mentors were White (77% and 80% respectively), and over 60% were women. Most of the students participating were undergraduates (72.5%). The majority (80%) of mentors were currently employed, with only 20% recently retired. There were a wide variety of majors represented among the students with the largest categories being: Social Sciences (21%); Science, Technology, Engineering, and Math (17%); and Law/Government/Public Administration (16%). More than half (52%) of the mentors selected had a graduate degree, and 24% had a doctoral degree.

Clicker question: In order to secure competitive employment, in my opinion, students with B/VI need the most help improving their:
Social skills (33%)
Blindness/independence skills (40%)
Job search skills (25%)
Academic performance (1%)

Preliminary results included pre-test self-efficacy data for all students, and data on employment outcomes and experiences in the program were only available for those in completed cohorts 1 and 2 (N = 19). Participant retention was very high, with only two pairs withdrawing prematurely due to personal circumstances. The majority of mentors and mentees strongly agreed that the program would be beneficial to others, and most mentors and mentees reported that they planned to stay in touch after the program. On average, students submitted 15 job applications each, with a median of 5 applications. In a pre-test measure of job-seeking self-efficacy, the majority of scores indicated high confidence, particularly in independent tasks and contributions once employed (e.g. requesting a job application form, working on your own, completing an application). Areas with lower self-efficacy scores appear to revolve around interacting with employers during the interview process (e.g. disclosure of visual impairment, general interview skills, self-presentation during an interview).

Of 19 students with complete data, 10 were employed (1 of those part time) and 9 were not employed at the completion of the project. Salaries ranged from $13,000 to $52,000. All who were working full time received insurance and benefits. The majority of the participants reported high satisfaction with their jobs, and indicated that it matches their education level and interests.

Future research will include analyses on all 4 cohorts, comparisons between groups (intervention and comparison group), and the analyses of other measures including assertiveness and career optimism. Products anticipated to come from this project include a mentoring manual, a career preparation resource sheet, and an employment preparation listserv.

Key Points:
1. The study assesses best practices in a mentoring program by comparing employment outcomes for college graduates working with mentors with those using traditional career resources.
2. Recruitment activities suggest that there are many highly educated, experienced professionals nationwide who are legally blind and willing to volunteer their time to work with students on career preparation.
3. Preliminary analyses indicate that confidence in job seeking is high, and that individuals who find employment after graduation are able to find competitive employment that is satisfying, matches their interests and education, and offers benefits and reasonable salaries.

4. The study is still in progress and comparisons will be made in the future between groups to determine the effectiveness of mentoring. Successfulness of the program is currently indicated by very high retention; reports by mentors and mentees that the program was beneficial and they enjoyed working together; and intentions of participants to remain in contact after the completion of the study.

Panel Discussion
Panelists:
Donna Smith, Easter Seals, Project ACTION
Sean Whalen, National Association of Blind Students
Joey Richey, Alabama DRS
Joe Strechey, AFB

When we originally designed this study, we intended to match mentors and students based on location, profession, and disability. Meeting all three criteria was not always possible. We asked our participants in this audience which they feel is most critical. Now we will ask you, from your experience, which of these is most critical to match, and why?

My belief is location, obviously, and disability, but I would say that the commonality and really what they're learning from it is typically about that type of career. All these things have a role, and it also depends on the individuals involved.

I think I'm right in line with the results from the audience, and agree with the previous comment. If you have to sacrifice one, I think location is the clear one to go. When weighing whether it's disability or field of employment that is important, I guess I'd look at what the student needs most from this mentoring relationship. This I admit can be hard to determine sometimes, but if it's questions about, 'Look, I want to be a chemist, how am I going to do this particular job?' Or, 'I want to be an economist, how is this going to work for me?' That obviously needs someone who's in the same field. If it's somebody who just maybe needs more confidence and just to see that there are blind people out there who are professionally and successfully employed, really just having somebody who can share those skills and help instill that confidence can be really helpful. If I had to pick one, I would default to disability, but I think field of employment is a close second.

I totally agree on these ideas. I would default to vocation being the most important, and disability being second. One of the potential benefits of using mentors who are not people who are blind or visually impaired might be to help build some connections within those fields. If you are a chemist, or about to graduate and want to be a chemist, and you're talking to a professional in that field already, then that may help you get some connections within that field, and help people who are not blind or visually impaired also to understand that this is a really sharp person coming out of university eager, ready to do the work, can do the work, and that may be some job connections that would be useful.

We speculated that some of our difficulty with recruiting students may have been due to narrow eligibility of criteria required by the project. Can you suggest other reasons that we have lower responses from students than we expected, and how, via our counselors, to encourage students to become engaged in mentorship programs like this?

> I would also say it's hard to get youth to engage in a lot of things. You put out scholarships, and it's hard to get youth to apply for scholarships. Corporations put out large scholarships, and they still have a hard time engaging youth and getting them to buy in and go through the process.

> I would definitely agree with that and also to say, one thing maybe is baseline of confidence coming in. If you don't think that you're employable and won't really benefit from this relationship, you might not be inclined to get engaged with the program.

> I was aware of the project, but I was one of those people that did not refer, but it wasn't because I didn't want to, I didn't have anyone eligible. I have quite a few students, but none of them were at that level to transition from school to employment.

> I think that youth coming out of college now, people who are blind or have low vision, for the most part, went to public schools. They were in inclusive environments, they went to university in inclusive environments, there are expectations that they are going to leave university and work in inclusive environments. I think that one possibility is that you could get a little more interest if it was not so specific to disability.

<u>Evaluation</u>

> *Clicker Question:* Was the information applicable?
> Very applicable (60.9%)
> Somewhat applicable (37.5%)
> Not very applicable (1.6%)
> Doesn't relate to what I do (0.0%)

From Dream to Action: Evidence-Based Practice in VR Service Delivery
John Lui, RRTC on Evidence-Based Practice-University of Wisconsin-Stout

Acquiring knowledge is of no use to VR professionals unless they apply it to services. Dr. Lui challenged the participants to share how they apply what they have learned since they drive future research. He stressed that knowledge translation needs to be understandable and clear. Social media can be used to convey plain short blasts of usable information to practitioners. Both the knowledge creation and the knowledge action will benefit if everyone works together.

Knowledge Translation Activities

B.J. LeJeune

Kendra Farrow

Many practical resources are being developed to help facilitate implementation of the research findings under this NIDRR sponsored grant. These resources include continuing education classes for CRC credits, guides and manuals, worksheets, multi-module training, and brochures. All of these resources are being made available without charge on the National Technical Assistance Center (NTAC) web site: www.blind.msstate.edu. In addition, the NRTC provides training to VR counselors through the Vision Specialist Program. This is primarily an online class, and requires 3 weeks of on campus classes. The NRTC has established the "Research and Training Utilization Award" given annually to an individual who has used the materials or research of the NRTC to provide new or improved services to persons who are blind or visually impaired.

Overall Evaluation

1. How would you rate the overall NRTC State of the Science Conference?
Excellent (54.2%)
Good (38.9%)
Average (6.9%)
Fair (0%)
Poor (0%)

2. Did the conference help you to envision ways you might improve or enhance services for your agency?
Yes (92.5%)
I'm not sure (6.0%)
No (1.5%)

3. How did you feel about the use of interactive technologies, like the "clickers?"
Liked it very much (88.6%)
It was okay (11.43%)
Found it somewhat distracting (0%)
Did not like (0%)

Follow-up Evaluation (via email; N=42)

1. Did you like having the SOS research presented during the NCSAB conference?
Yes (98%)
No (2%)

2. Did you like the use of panel discussions following the research presentations?
Yes (90%)
No (10%)

3. Overall, were the research results for the RRTC presented clearly?
Yes, very clear (65%)
Mostly clear (27.5%)
Somewhat clear (7.5%)
4. Do you think that the information presented can be used to improve services in your state?
Yes (87.2%)
Not sure (12.8%)
No (0%)

5. Will you share the information from these presentations with your coworkers and staff?
Yes (90%)
Maybe (10%)
No (0%)

6. If we set up a conference call to further examine strategies to utilize research, which of the following would you or a designated member of your staff join in?
Agency/Employer (81%)
Transportation (57.1)
Mentoring (47.6%)
SSDI (42.9%)
Accessible Office (42.9%)

7. Would you or some of your staff participate in an e-mail discussion group (listserv) on employment?
Yes (87%)
No (13%)

8. If we could provide training activities on these topics for your staff, in what format would you like the training presented?
Webinars (76.2%)
Short Course (71.4%)
Website (50%)
Workshops (31%)
Vision Specialist (23.8%)

9. What further research topics would you like to see explored?

Impact of changing demographics of people who are blind on employment, e.g. types of employment, challenges, opportunities. Impact of accessible office equipment on employment, including emerging technologies. Additional SSDI research, notably around the financial cliff.

Benefits to taxpayers, gov't budgets of people working vs. collecting entitlements.
Characteristics of successfully employed individuals who are blind, from birth to today

Successful transition and employment outcomes for multiply impaired students.

Autism and other related disability topics that can help us counselors and case managers do our job well every day.

More in-depth role of transportation and employment looking at a bigger cross-section of the country.
Employment achieved without assistance from VR - jobs people get on their own.
Development of new course materials for professionals in VR, including career development for clients.
Anything that will help to move us off the 30% employment status!

Education and employment in visually impaired and income disparity compared to non visually impaired for various levels of education and employment. Barriers to rural visually impaired to rehabilitation services compared to urban and training outcomes. Does the blind individual in rural regions who has less training time and access have different outcomes in independent living than their urban counterparts? Would like to have a transportation barrier study done on blinded veterans. The VA has established in past two years an extensive Veterans Transportation Program VTS at 89 medical centers with transportation coordinators. Problem is they have no data on impact on those blinded veterans who attempt to utilize services.

Employer outreach and transportation.

Employment and older blind individuals; whether receiving blindness adaptive training at a center or itinerant makes a difference in employment outcomes

Pre-Vocational services.

More information on how to assist college students, and specific advice on helping college career centers collaborate more effectively with VR agencies.

Working with Blind VR recipients in rural areas and the unique issues that they face (i.e. stigmas about people in the blind community "not able" to work, families holding them back due to monetary gain (SSDI), lack of appropriate job opportunities nearby). Often times, children who are blind and live in rural communities lack basic social skills because they are stereotyped, so something looking into how to help the children gain the social skills that they might not have been taught.

The success of specialized services for the blind within combined agencies.

Transition issues, particularly identifying and getting connected to VI students with 504 plans who will benefit thru VR.
How a small Blind agency can actually benefit from the WIA partner 1-Stop WDCs.
How can the 1-Stop services & resources be made accessible & usable for Blind customers.

Dissecting the new census data to extract BVI info geographically.

Rural employment.
Increasing average weekly earnings.
How do rehab teacher services affect outcomes?