# **Assistive Technology Services**

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# NC DIVISION OF SERVICES FOR THE BLIND POLICIES AND PROCEDURES VOCATIONAL REHABILITATION

Section: A

Title: Assistive Technology Services

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### **ASSISTIVE TECHNOLOGY DEFINED**

An assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of an individual with a disability. Section 7(2) of the Act; 29 U.S.C. 705(2) 34 CFR 361.5

### **DIVISION ASSISTIVE TECHNOLOGY SERVICES**

Division of Services for the Blind primarily addresses assistive technologies related to blindness, low vision and deaf-blindness including devices which are considered low tech, high tech or which may involve a complex integration of various technologies to meet individualized needs that allow consumers to achieve their planned goals.

NC Division of Services for the Blind (DSB) provides a wide range of in-house Assistive Technology (AT) services for individuals who are visually impaired, blind or deaf-blind. Within a comprehensive assessment, a need for AT services may be identified by the Vocational Rehabilitation Counselor (VRC). Where a need for AT services is identified in order to successfully achieve vocational, educational and independent living goals, the VRC will make appropriate referrals for AT services. VRC's may refer to in-house AT services or to external AT services when needed.

Collaboration among various DSB services may be needed to effectively meet individualized needs. The Vocational Rehabilitation Counselor serves as the case manager, makes all needed referrals and is ultimately responsible for coordinating team members addressing assistive technology concerns. VRC's may refer to any of the below DSB specialists as appropriate to assist consumers with meeting their goals:

Assistive Technology Consultants (ATC's) – ATC's provide individualized assessments of AT needs in vocational, educational, community or home settings which are needed to assist individuals achieve their planned goals. Assessments include evaluating technology skills and making recommendations for AT services and purchases. ATC's deliver, setup, install and provide an introduction in the use of purchased equipment to the consumer and may provide minor residential modifications. Individuals who require more than introductory instruction in

the use of technology will need to be referred to Assistive Technology Instructors, the Rehabilitation Center for the Blind or external sources. ATC's also provide consultation to employers for AT accommodations at the job site and troubleshoot existing AT to resolve hardware, software, or compatibility issues. DSB has Assistive Technology Consultants in the six district offices outside of Raleigh. Scheduling priority is given to individuals who are currently working, about to begin working or in a training program.

Assistive Technology Instructors (ATI's) – ATI's develop goals with consumers for AT use and assessing baseline skill levels. ATI's provide in-depth assistive technology instruction to enable the consumer to achieve assistive technology-related employment, educational and independent living goals. ATI's may also provide recommendations for other AT services and purchases when needed.

ATI's are based in the Asheville, Charlotte, Greenville and Winston-Salem offices and cover 80 counties. Individuals residing in counties without an ATI may be referred for special technology training at the Rehabilitation Center for the Blind or to external resources. Scheduling priority is given to individuals who are currently working, about to begin working or in a training program.

Certified Orientation & Mobility Specialist (COMS) - the primary function of a COMS is to work with individuals on safe travel techniques. COMS' may work with low tech low vision distance devices (telescopes) or with GPS technologies. Assessments and training with technologies which involve use of a device while walking or navigating environments should be provided by Certified Orientation and Mobility Specialists. In some cases, a Certified Low Vision Therapist may provide limited instruction with optical devices which may also be used while moving around but will defer more extended instruction and coordination with cane or other orientation and mobility techniques will always be referred to a COMS. DSB COMS cover all counties in NC. See the O&M Guidelines for more information.

<u>Deaf Blind Specialists (DBS)</u> – DBS' provide services to individuals with hearing and vision loss to achieve their maximum potential whether through finding or retaining suitable employment or maintaining independence in the home. DBS' provide comprehensive assessments addressing the impact of deaf-blindness on the ability to achieve vocational, educational and independent living goals. They assist consumers with obtaining hearing devices including hearing aids, assistive listening devices and alerting systems and assist with connecting to a wide range of services.

DBS' are located in the Asheville, Winston-Salem, Raleigh, Greenville and Wilmington offices and cover all counties in NC. In addition to providing services to DSB consumers with active cases, DBS' also provide services through National Deaf-Blind Equipment Distribution Program (NDBEDP). Purchasing for the NDBEDP is done through Division of Services for the Deaf and Hard of Hearing (DSDHH). DBS' make referrals and provide follow up services for the Equipment Distribution Service (EDS) administered by the DSDHH. See the Deaf-Blind Services policy for more information on Deaf Blind Services.

Nursing Eye Care Consultants (NECC's) - NECC's conduct low vision assessments in the home or in the community and make recommendations for the purchase of primarily low tech

devices. Devices recommended include non-optical (light filters, reading guides, reading lights, etc.), optical devices (handheld magnifiers, stand magnifiers, specialty reading glasses, etc.) and video magnification (in-line, portable and handheld). NECC's cover all counties in NC. See the Low Vision Services policy for more information on NECC services.

Rehabilitation Center for the Blind (RCB) – the RCB is based in Raleigh and offers extended classroom instruction in a residential setting on a wide range of skills to enable individuals to achieve their vocational, educational and independent living goals. For individuals residing on campus, additional workshops, activities and labs provide opportunities for the practice and reinforcement of skills learned in the classroom. Available technology instruction includes use of a wide variety low tech devices, keyboarding, Word processing, internet and email, screen enhancement software, screen readers, mobile devices and Braille technologies. VR consumers from anywhere in the state may be referred for any of the RCB services. See the Rehabilitation Center for the Blind policy for more information.

Individuals may be referred for a full program of instruction or may be referred for specialized services only including:

- Low Vision Clinic comprehensive low vision evaluations are provided by a Certified Low Vision Therapist and/or a Low Vision Optometrist. AT services available include the assessment for non-optical and optical devices for distance and near, video magnification. Prescription optical devices may also be assessed and prescribed by the Low Vision Optometrist when indicated. Referrals for low vision only evaluations are made with the VR Internal Referral Evaluation Unit form. See the Low Vision Services policy for more information on Low Vision Clinic services.
- Special Technology Training this training is primarily available to individuals living in counties without an assigned ATI. Individuals residing in counties served by an ATI who have specialized training needs which are best met at the RCB may also be referred. Priority for training is given to individuals who are currently employed, about to begin employment or who are in a vocational or educational program. Referrals for special technology training are made with the BEAM VR Internal Referral Rehabilitation Center form.
- Technology Resource Center is based at the Rehabilitation Center for the Blind. The Technology Resource Center houses current technologies for individuals who have low vision or are blind. Devices may be demonstrated to staff or consumers by appointment with the Technology Teacher.

Rehabilitation Engineer - the Rehabilitation Engineer works with DSB consumers, DSB staff and employers to identify the best possible technology solutions to enable consumers to achieve their vocational, educational or independent living goals. This role provides services to individuals referred by the Raleigh District Office which are comparable to the services provided by the Assistive Technology Consultant and also provides statewide consultation to DSB Assistive Technology Consultants on difficult and complex situations such as job site modifications.

DSB has one Rehabilitation Engineer based in Raleigh. The Rehabilitation Engineer's primary responsibility is to provide services to individuals served by Vocational Rehabilitation. Scheduling priority is given to individuals who are currently working, about to begin working or in a training program.

# Flow of Services

The VRC is responsible for conducting a comprehensive assessment of consumer needs in relation to vocational and educational goals. Independent living goals are also taken into consideration as the ability to perform daily living tasks is an essential part of vocational success. Based on the comprehensive assessment, the VRC may determine that referrals are needed to any of the above specialists. The VRC will make purchases recommended by specialists according to Division policy.

In order to properly conduct the ATC assessment and, if required, recommend high tech devices which are likely to result in successful outcomes, the ATC needs information on baseline functioning such as typing skills, the ability to use specific software, screen readers, mobile devices, etc. If needed, these abilities will most often be assessed by ATI's or at the RCB. After any recommended devices are purchased, the VRC needs to also ensure the consumer has the ability to use the device effectively. The ATC can provide a basic overview of devices but if more extended training in the use of the device is needed this instruction will typically be provided by the ATI or at the RCB.

The Assistive Technology Consultant and/or Rehabilitation Engineer must be involved if adaptive equipment is required when the home or workspace must be modified to accommodate the individual's disability for successful employment. The purchase of equipment must be part of the individual's Individual Plan for Employment.

### **EXTERNAL ASSISTIVE TECHNOLOGY SERVICES**

Some individuals may require assistive technology services from resources external to the Division. A consumer who has been informed of options for assessment and training within the Division may request referral to an external resource. Referrals to external resources may be made under the following circumstances:

- Loaner equipment is needed, which may be recommended by the Division, but is not available via the Division.
- Individuals may be referred to community resources for acquisition of low cost refurbished computers.
- The consumer presents with a secondary disability which is best addressed by an outside vendor or another agency with expertise in the types of technology required, for example, mobility impairments where the individual requires a power wheelchair, wheelchair ramp or other extensive home modifications.
- Division staff may also partner with external resources to address the needs of individuals with multiple disabilities where the Division is able to offer expertise in the areas of visual

impairment, blindness and deaf blindness and where the external partner offers expertise in other types of disabilities.

 An external specialist's services would allow the consumer to meet a particular timeframe required to facilitate employment or career-related training.
In all cases where referrals are made to external resources for assessment and training for AT addressing the needs of individuals who are visually impaired, blind or deaf blind, the VRC must have informed the consumer of the Division's available in-house resources and also ensured that referrals are made to individuals qualified to provide these highly specialized services.

Recommendations for purchases made by external resources may be pursued if they comply with current DSB policy. Consumers should be informed that any items recommended for purchase may only be made as policy allows.

## **HEAD-BORNE VIDEO MAGNIFICATION DEVICES**

Many newer digital technologies are head-borne. At this time, DSB is not purchasing head-borne electronic magnifying devices. Requests for exceptions for individuals who require this type of device to enable them to complete specific required job tasks or required job-specific training tasks must be reviewed by the Area Supervisor. If the Area Supervisor approves the request, the Chief, Rehabilitation Field Services will make the final determination on whether an exception may be granted. Any requests for exceptions will require additional evaluations. A pilot evaluation process is being conducted through the Evaluation Unit Low Vision Clinic.

#### **MOBILE DEVICES**

The development of mobile computing devices which offer touch screens, apps and built-in accessibility options has created new opportunities for Division consumers to achieve their vocational, educational and independent living goals. Built-in accessibility options and the wide range of available apps potentially give consumers the opportunity to utilize these devices for numerous daily life and vocationally-related activities which previously required multiple other devices to achieve the same outcome.

DSB is able to provide training in the use of iOS and Android devices. Instruction in their use may occur with Assistive Technology Instructors, Deaf Blind Specialists, at the Rehabilitation Center for the Blind and, to a limited degree, with Assistive Technology Consultants. DSB independent living programs may also provide instruction in the use of iOS technology.

Where policy allows for the purchase of a mobile device, consumers are only eligible for the purchase of one mobile device. Eligible consumers may receive either a tablet or smart phone, but not both. Models of purchased mobile devices may be no newer than one generation earlier than the most currently available model and upgraded devices will, in almost all cases, not be purchased. Consumers must be in status 18, 20 or 22 to be eligible for the purchase of assistive technology. See the Assistive Technology Purchasing policy for more information on allowable purchases.

#### **Tablets**

Tablets include Apple brand iPads and a variety of brands of Android devices. In addition to providing assessments in the use of tablets and instruction in their use, purchases for tablets may be made when needed to assist an individual achieve post-secondary, career training or vocational goals on their Individualized Plan for Employment. To be eligible for the purchase of a tablet, the individual must also have access to working wifi which they are responsible for establishing and maintaining, must have received an assessment by a qualified staff member who determined the individual is able to utilize the recommended device and must be able to receive any necessary instruction to utilize the device effectively.

#### **Smart Phones**

Smart phones offer the same type of technology as tablets but typically in a smaller, more portable version which may offer better options for engaging in community-based activities including education, training and employment.

The Division may purchase smart phones for eligible individuals but may not enter into contracts with phone companies and may not pay for any expenses related to talk, text or data usage. Therefore, the Division may purchase "unlocked" phones which are not connected to a specific provider.

To be eligible for the purchase of a smart phone, the consumer must need the device for activities that relate to post-secondary, career training or vocational goals on their Individualized Plan for Employment, must have received an assessment by a qualified staff member who determined the individual is able to utilize the recommended device and must be able to receive any necessary instruction to utilize it effectively. Additionally, the consumer must have access to working wifi which they are responsible for establishing and maintaining or must be able to independently purchase plans for data, text and talk as needed.

### **Apps**

The Division may purchase apps which are required for achieving post-secondary, career training or vocational goals on their Individualized Plan for Employment. The purchase of the app must be recommended by a qualified staff member who determined the individual is able to utilize the recommended device and must be able to receive any necessary instruction to utilize it effectively.

See the Assistive Technology Purchasing policy for more information.