

AFFIDAVIT OF NATHANIEL E FRANK-WHITE

1. I am a Records Request Processor at the Internet Archive. I make this declaration of my own personal knowledge.
2. The Internet Archive is a website that provides access to a digital library of Internet sites and other cultural artifacts in digital form. Like a paper library, we provide free access to researchers, historians, scholars, and the general public. The Internet Archive has partnered with and receives support from various institutions, including the Library of Congress.
3. The Internet Archive has created a service known as the Wayback Machine. The Wayback Machine makes it possible to browse more than 450 billion pages stored in the Internet Archive's web archive. Visitors to the Wayback Machine can search archives by URL (i.e., a website address). If archived records for a URL are available, the visitor will be presented with a display of available dates. The visitor may select one of those dates, and begin browsing an archived version of the Web. Links on archived files in the Wayback Machine point to other archived files (whether HTML pages or other file types), if any are found for the URL indicated by a given link. For instance, the Wayback Machine is designed such that when a visitor clicks on a hyperlink on an archived page that points to another URL, the visitor will be served the archived file found for the hyperlink's URL with the closest available date to the initial file containing the hyperlink.
4. The archived data made viewable and browsable by the Wayback Machine is obtained by use of web archiving software that automatically stores copies of files available via the Internet, each file preserved as it existed at a particular point in time.
5. The Internet Archive assigns a URL on its site to the archived files in the format `http://web.archive.org/web/[Year in yyyy][Month in mm][Day in dd][Time code in hh:mm:ss]/[Archived URL]` aka an "extended URL". Thus, the extended URL `http://web.archive.org/web/19970126045828/http://www.archive.org/` would be the URL for the record of the Internet Archive home page HTML file (`http://www.archive.org/`) archived on January 26, 1997 at 4:58 a.m. and 28 seconds (1997/01/26 at 04:58:28). The date indicated by an extended URL applies to a preserved instance of a file for a given URL, but not necessarily to any other files linked therein. Thus, in the case of a page constituted by a primary HTML file and other separate files (e.g., files with images, audio, multimedia, design elements, or other embedded content) linked within that primary HTML file, the primary HTML file and the other files will each have their own respective extended URLs and may not have been archived on the same dates.
6. Attached hereto as Exhibit A are true and accurate copies of browser screenshots of the Internet Archive's records of the archived files for the URLs and the dates specified in the attached coversheet of each printout.



7. Attached hereto as Exhibit B are true and accurate copies of the Internet Archive's records of the archived files for the URLs and the dates specified in the attached coversheet of each file.
8. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

DATE: 02/09/2024

Nathaniel Frank-White

Nathaniel E Frank-White

Please see attached
All Purpose
Jurat form
for additional
Notary Events



JURAT ATTACHMENT

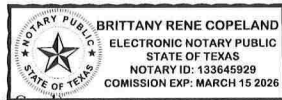
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF Texas }

COUNTY OF Tarrant }

The foregoing instrument was subscribed and sworn before me this date of 02/09/2024, by Nathaniel Frank-White

This notarial act was an online notarization.



(Notary Seal)

Notary's Signature _____ Bruce R. Campbell

Registration No.: 133645929

Commission Expiration Date: March 15, 2026

EXHIBIT A

VDOE Home

About VDOE

Board of Education

News

For Public Education Administrators

For Students & Parents

Education Directories

Testing & Standards of Learning (SOL)

Instruction

Special Education

Student & School Support

Teaching in Virginia

Federal Programs

Statistics & Reports

Information Management

School Finance



Autism Spectrum Disorders

A child may be found eligible for special education and related services as a child with autism if there is an adverse effect on the child's educational performance due to documented characteristics of autism and the child has any of the Pervasive Developmental Disorders, also referenced as autism spectrum disorder, such as Autistic Disorder, Asperger's Disorder, Rhett's Disorder, Childhood Disintegrative Disorder, or Pervasive Developmental Disorder – Not Otherwise Specified including Atypical Autism. Children with a medical diagnosis of autism spectrum disorders must be found eligible for special education and related services under IDEA before an Individualized Education Program (IEP) is developed. Children who are suspected of having a disability should be referred to their local school division for evaluation and to initiate the process for determining eligibility.

[Autism Spectrum Disorders Resources](#)

- [Skill Competencies for Professionals and Paraprofessionals in Virginia Supporting Individuals with Autism Across the Lifespan](#) (PDF) - VDOE recognizes this publication for best practice in supporting individuals with autism. This publication, developed by the [Virginia Autism Council](#), includes a list of competencies for professional and paraprofessional staff in all fields of service delivery that are specific, unique, and/or critical to successfully serving individuals with an autism spectrum disorder. Virginia school divisions offer a full continuum of placements and services to students with an educational identification of autism.
- [A Parent's Guide To Special Education](#) (PDF) Also available in [Spanish](#) (PDF) – help for parents in understanding their rights and responsibilities, their children's rights, and the responsibilities of schools. This publication is currently under revision to reflect changes in state regulations.
- [Special Education - Information For Parents](#)

Division Training & Technical Assistance in Autism

The Virginia Commonwealth University Autism Center of Excellence (VCU ACE) is a new collaborative partnership between the Department of Education; the VCU School of Education, Department of Special Education and Disability Policy; the VCU School of Medicine, Department of Physical Medicine and Rehabilitation; and the VCU Research Rehabilitation and Training Center. VCU ACE is dedicated to improving outcomes for students with autism by providing long-term training and technical assistance options for school divisions across the Commonwealth.

- [Virginia Commonwealth University Autism Center for Excellence \(VCU ACE\)](#)
- [VCU ACE Informational Webcast](#)
- [VCU ACE Handouts](#) (PDF)
- [ACE Technical Assistance Application](#) (PDF)
- [Opportunity for Division Training & Technical Assistance in Autism](#) - Superintendent's Memo #019-11, January 21, 2011

Technical Assistance Documents

Tools for educators, administrators and parents working to improve services for students with autism spectrum disorders (ASD) - created in collaboration with staff at the Virginia Commonwealth University Autism Center for Excellence (VCU ACE).

[Guidelines for Educating Students with Autism Spectrum Disorders](#)
[Guidelines for Educating Students with Autism Spectrum Disorders](#) (PDF)

[Models of Best Practice in the Education of Students with Autism Spectrum Disorders](#)
[Models of Best Practice in the Education of Students with Autism Spectrum Disorders](#) (PDF)



[Autism Spectrum Disorders and the Transition to Adulthood](#) (PDF)

Special Education

SPECIFIC DISABILITIES

MAIN

Autism Spectrum Disorders

Developmental Delay

Emotional Disability

Intellectual Disability

Learning Disability

Multiple Disabilities

Other Health Impairment

Orthopedic Impairment

Sensory Disabilities

Speech-Language Impairment

Traumatic Brain Injury

Resources:

[Regulations Governing Special Education Programs for Children with Disabilities in Virginia](#) (PDF)

[Universal Design for Learning](#)

[Disability Codes](#) (PDF)

[IDEA Legislation](#)

You May Also Be Interested In:

[Special Education Data Collection](#)

[Comprehensive Services Act](#)

[For Students & Parents](#)

[Virginia School for the Deaf and the Blind](#)

Information on this page is provided by the [Office of Instructional Support and Related Services](#).
Phone: 804-786-8079 or 804-225-2079.

[Staff Contacts](#)

[Top of Page](#)

<https://web.archive.org/web/20100812105813/https://infograsp.com/technology/benefits-of-web-applications/>



Web Based Schools & Non Profit Software

[home](#) | [benefits](#) | [pricing](#) | [company](#) | [articles](#)

Benefits of Web Applications

One of the biggest shifts in the computing landscape over the past few years is the move to Web based reporting and applications. Web applications bring a number of significant advantages:

- Ubiquitous Access to Centralized Information
- Easy to Distribute
- Simple to Use

Ubiquitous access:

Wherever an Internet or Intranet enabled PC is found, the application is accessible. Every computer equipped with a Web browser and attached to an Internet (or Intranet) connection can easily access the necessary systems. It does not matter what operating system or where the user resides, Web applications are accessible. The simple act of typing in the Web address in the location field of the browser adds another dimension to ubiquity.

Easy to distribute:

Web applications eliminate the physical and logistic obstacles to distributing and installing fat client software on the end user's computer. Eliminating this hassle improves the experience of software users immeasurably. Removing this significant obstacle also makes frequent upgrades and improvements to corporate applications an achievable goal.

Simple to use:

Because Web browsers have been designed from the start with an easy to use interface, the Web applications that run on them inherit this characteristic. The act of accessing your information becomes as easy as visiting Yahoo for the latest stock prices.

Get A Demo Today

Name:

Email:

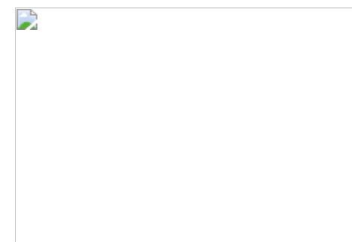
Phone:

[Get A Demo](#)

Explore Inside



Click to Expand



COMMENTS ON THIS ENTRY ARE CLOSED.

NEXT POST: [Frequency of Parent Teacher Communications](#)

[Account Management](#)

[School Accounting](#)

[School Fundraising](#)

[Online Class Management](#)

[Student Information](#)

[Projects and Tasks](#)

If you have more questions, please give us a call at 718 575-9305.

© Copyright InfoGrasp 2009. All rights reserved

Products Overview

NetSuite

- NetSuite ERP
- NetSuite CRM+
- NetSuite Ecommerce

NetSuite OpenAir

NetSuite OneWorld

SuiteAnalytics

SuiteFlow

SuiteCloud Platform

What Customers Are Saying

"For businesses of all sizes, cloud computing can deliver operational efficiencies while establishing the building blocks for the next major wave of IT innovation and business architectures."

—Aberdeen Group

Aberdeen Group

The Origins of the Cloud

The cloud-computing concept first gained public attention in 1960, when Boston-born computer scientist and Turing Award winner John McCarthy noted that "computation may someday be organised as a public utility." Since then, the concept has undergone a series of metamorphoses, touching on everything from service bureaus and application service providers.

Today, cloud computing has taken over as the primary metaphor, and is commonly described as including three areas: Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS) and Infrastructure-as-a-Service. For a fast-growing number of businesses, cloud computing is now the dominant choice of IT technology for running business applications.

The Benefits of Cloud Computing



Cloud Computing: Harnessing the Power of Simplicity

The concept behind cloud computing is simple: it lets you run computer applications over the Internet, without having to buy, install or manage your own servers. You can run your company's IT operations with nothing more than a browser and an Internet connection. Applications, operating systems, servers and network switches all reside out of sight and within the metaphorical cloud, the Internet and are managed by your cloud computing vendor.

A New Way of Doing Business

Cloud computing turns conventional software delivery on its head in a number of ways:

- Low overhead:** Upgrades, maintenance and system administration take place in the cloud and are managed by the vendor, so you don't have to spend nights or weekends supervising a new version upgrade or a failed server. [One industry analyst study](#) found that cloud-based business software cost 50% less than on-premise software over a four-year period for a 100-employee company
- Ease of access at anytime, and from anywhere:** Cloud computing is "always on," making it easy to grow your business and support remote workers and locations, or support a highly mobile sales or service team, because people can access the cloud any time, day or night, from any browser, desktop or [mobile device](#) around the globe, 24x7
- High availability:** Cloud software architectures are designed from the ground up for maximum network performance, so they frequently deliver better application-level availability than conventional, on-premise solutions. For example, NetSuite commits to [99.5% availability](#) for its customers, and provides [data security](#) such as PCI DSS compliance that would be cost prohibitive to achieve with on-premise software
- Security:** For many companies, the level of security and availability, disaster recovery and back-up provided by a software-as-a-service provider far exceeds that which they can provide themselves. NetSuite, for example, provides [data security](#) such as PCI DSS compliance that would be cost prohibitive to achieve with on-premise software
- Fast deployment:** You can be up and running with ERP, CRM or ecommerce applications, on a local or global scale, within a few months, rather than the six to 12 months it would take to install and troubleshoot conventional servers and software
- Optimised performance:** The cloud adjusts to your performance needs, dynamically assigning server cycles whenever and wherever you need them, and automatically adjusting to spikes in your business.
- Subscription-based pricing:** You pay as you go, often on an annual basis, unlike conventional systems where you have to make a major up-front investment in licenses, hardware and software. You benefit from better cash flow and far greater IT flexibility
- Energy savings:** By eliminating the need for on-premise hardware, cloud computing reduces overall server room electric consumption as well, which can save a mid-size businesses more \$10,000 or more per year, according to [a recent sustainability impact study](#).

You're in Control

Best of all, cloud computing lets you focus on your business rather than on your software. You don't have to use valuable IT resources to keep business systems on life support. Instead, you can re-deploy them to focus on more strategic business initiatives while leaving your cloud computing vendor to worry about scalability, security, uptime, application maintenance and system upgrades.

And you can be confident in taking your business public, or into new regions of the world, without outgrowing your cloud computing resources, thanks to the world-class datacenters typically provided by cloud computing vendors.

FREE PRODUCT TOUR

» Contact Us

White Papers

Hurwitz & Associates:
The TCO of Cloud Computing

- [Site Map](#)



Copyright © 1998 - 2011 NetSuite Inc.

International Sites

- [United States](#) |
- [United Kingdom](#) |
- [Australia](#) |
- [Germany](#) |
- [Hong Kong](#) |
- [Singapore](#) |
- [Japan](#)

Financial Software

- [Financial Management](#) |
- [Inventory & Supply Chain](#) |
- [Order Management](#) |
- [Service Resource Planning](#) |
- [Human Capital Management](#) |
- [Business Intelligence](#)

Accounting Software

- [Accounting](#) |
- [Financials](#) |
- [Time and Billing](#) |
- [Purchasing](#) |
- [Payroll](#)

ERP Software

- [Inventory Management](#) |
- [Order Management](#) |
- [Business Intelligence](#) |
- [Key Performance Indicators \(KPIs\)](#) |
- [Employee Management](#)

CRM Software

- [Sales Force Automation](#) |
- [Order Management](#) |
- [Customer Service & Support](#) |
- [Marketing Automation](#) |
- [Partner Relationship Management](#)

Ecommerce Software

- [Webstore](#) |
- [Website](#) |
- [Web Analytics](#) |
- [Customer Self-Service](#) |
- [SEO](#)

Global Solutions

- [Financials and ERP](#) |
- [CRM](#) |
- [Ecommerce](#) |
- [Business Intelligence](#)

PSA Software

- [Project Management](#) |
- [Resource Management](#) |
- [Project Accounting](#) |
- [Timesheet Management](#) |
- [Expense Management](#)

Industries

- [Software](#) |
- [Wholesale Distribution](#) |
- [Manufacturing](#) | [Professional Services](#) |
- [Media Publishing](#)

SuiteApps

- [Get Started](#) |
- [Install Applications](#) |
- [Become a Partner](#)

Connect with Us

- [NetSuite Blog](#) |
- [Facebook](#) |
- [Twitter](#) |
- [YouTube](#) |
- [LinkedIn](#)

[Error processing dynamic tag include("/portal/uk/products/includes/products-tracking-cloudcomputing.html") : Unknown method include()]

[About ADAA](#) / [FAQ](#) / [Press Room](#) / [Donate](#)

[Member Login](#)

Search this site:



ANXIETY DISORDERS ASSOCIATION OF AMERICA

Anxiety disorders are real, serious, and treatable.

- [Understanding Anxiety](#)
 - [Generalized Anxiety Disorder \(GAD\)](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [GAD vs. General Anxiety About the Economy](#)
 - [Obsessive-Compulsive Disorder \(OCD\)](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [Panic Disorder & Agoraphobia](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [Posttraumatic Stress Disorder \(PTSD\)](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [Social Anxiety Disorder](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [Social Anxiety and Alcohol Abuse](#)
 - [Specific Phobias](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [Depression](#)
 - [Symptoms](#)
 - [Treatment](#)
 - [Research](#)
 - [Related Illnesses](#)
 - [Bipolar Disorder](#)
 - [Bipolar Page 2](#)
 - [Bipolar Page 3](#)
 - [Eating Disorders](#)
 - [Headaches](#)
 - [Irritable Bowel Syndrome \(IBS\)](#)
 - [Sleep Disorders](#)
 - [Substance Abuse](#)
 - [Other Related Conditions](#)
 - [Adult ADHD \(Attention Deficit/Hyperactive Disorder\)](#)
 - [Body Dysmorphic Disorder \(BDD\)](#)
 - [Chronic Pain](#)
 - [Fibromyalgia](#)
 - [Stress](#)
 - [Mind-Body Practices](#)
 - [Physical Activity Reduces Stress](#)
 - [Stress and Anxiety Interfere With Sleep](#)
- [Finding Help](#)
 - [Treatment](#)
 - [Choosing a Therapist](#)
 - [Therapy](#)
 - [Medication](#)
 - [Complementary & Alternative Treatment](#)
 - [Low-Cost Treatment](#)
 - [Clinical Trials](#)
 - [Getting Support](#)
 - [Support Groups](#)
 - [Start a Support Group](#)
 - [Support Groups Online and By Phone](#)
 - [Support Groups in Australia](#)
 - [Support Groups in South Africa](#)
 - [Forums](#)
 - [Forums Rules of Use](#)
 - [Log In](#)

- [Continuing Education](#)
- [Depression and Anxiety Journal](#)
- [Research Updates](#)
- [Awards](#)
 - [Career Development Travel Awards](#)
 - [Donald F. Klein Early Career Investigator Award](#)
 - [Past Award Recipients](#)
- [Podcasts](#)
- [About ADAA](#)
 - [Mission & History](#)
 - [People](#)
 - [Board of Directors](#)
 - [Scientific Advisory Board](#)
 - [Clinical Advisory Board](#)
 - [Staff](#)
 - [Position Papers](#)
 - [Annual Reports](#)
 - [Contact ADAA](#)
 - [Request Publications](#)
 - [Press Room](#)
 - [News & Updates](#)
 - [Bios](#)
 - [Facts & Statistics](#)
 - [Press Releases](#)
 - [Multimedia](#)
 - [All Videos](#)
 - [Podcasts](#)

[Home](#) / [Finding Help](#) / [Getting Support](#) / Support Groups

Finding Help

- [Treatment](#)
- [Getting Support](#)
 - [Support Groups](#)
 - [Forums](#)
- [Helping Others](#)

Support Groups

Search below for a support group near you, or learn how to [start a support group](#). ADAA does not have listings in every U.S. state or Canadian province or territory but does have listings in [Australia](#), [South Africa](#), and for groups run [online or by phone](#).

Keyword (optional)	State or Province	Group ▲	Location
	<Any> ▼	Submit	
		Acting - Drama Therapy Workshop	New York, NY
		Agoraphobics Building Independent Lives (ABIL)	Tucson, AZ
		Agoraphobics in Motion (AIM) - Auburn Hills	Auburn Hills, MI
		Agoraphobics in Motion (AIM) - Dearborn	Dearborn, MI
		Agoraphobics in Motion (AIM) - Huntington Woods	Huntington Woods, MI
		Agoraphobics in Motion (AIM) - Livonia	Livonia, MI
		Agoraphobics in Motion (AIM) - Royal Oak	Royal Oak, MI
		Agoraphobics in Motion (AIM) - Warren	Warren, MI
		Anxiety & Panic Disorder Support Group	Sacramento, CA
		Anxiety & Stress Management Therapy Group	Atlanta, GA

- 4
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- ...
- [next »](#)
- [last »](#)

Please note: The listings above do not constitute an endorsement by ADAA of the support group, individual group leader, or affiliated institution or organization. ADAA does not endorse the use of a support group as a substitute for proper diagnosis and treatment. Please check with your health care provider about the benefits of joining a support group as part of an overall treatment regimen.

To get your support group posted or to update group information, [send an e-mail](#).

Find a Therapist



Get Our E-News



[Donate to ADAA Today](#)

Anxiety Disorders

- [Generalized Anxiety Disorder \(GAD\)](#)
- [Obsessive-Compulsive Disorder \(OCD\)](#)
- [Panic Disorder & Agoraphobia](#)
- [Posttraumatic Stress Disorder \(PTSD\)](#)
- [Social Anxiety Disorder](#)
- [Specific Phobias](#)

About ADAA

[Mission & History](#)

[People](#)

[Position Papers](#)

[Annual Reports](#)

[Donate](#)

Press Room

[News & Updates](#)

[Bios](#)

[Fact & Statistics](#)

[Press Releases](#)

[Multimedia](#)

FAQ

[Do I have an anxiety disorder?](#)

[What causes anxiety disorders?](#)

[What treatment options are available?](#)

[more FAQs](#)

Contact ADAA

8730 Georgia Ave.
Silver Spring, MD 20910

240.485.1001

[Contact ADAA](#)

[Request Publications](#)



The Anxiety Disorders Association of America (ADAA) is a national nonprofit organization dedicated to the prevention, treatment, and cure of anxiety disorders and to improving the lives of all people who suffer from them.



[Privacy Policy](#)

© Anxiety Disorders Association of America, 2010



HEALTHCARE INFORMATION AND MANAGEMENT SYSTEMS SOCIETY

SEARCH

HIMSS Web Powered by Google

Home | About HIMSS | Contact Us | Member Login

Professional Development

Publications

JHIM

Author's Guidelines

Editorial Review Board

Peer Review Application

Permission and Reprint Requests

Share Your Ideas

Subscription Information

Future Issues

FAQ

Advertising Information

JHIM

The Journal of Healthcare Information Management (JHIM) is the only peer-reviewed journal specifically for healthcare information and management systems professionals. Published quarterly, each issue of the Journal examines a specific topic in the areas of clinical systems, information systems, management engineering and telecommunications in healthcare organizations. In addition, the Journal publishes contributions on issues such as computerized provider order entry and patient safety, clinical informatics, data mining/data analysis, project management, health informatics education, management systems, and healthcare IT leadership strategies.

Annual subscriptions are free to HIMSS members. Non-member subscriptions are available. For details, see [Subscription Information](#).

All individuals are encouraged to propose articles for the Journal. First-time writers are welcome. HIMSS members who publish will receive points toward their membership advancement. For information, see the [Author's Guidelines](#).

HIMSS members may access the complete Journal articles. [Member Login](#) is required.

Spring 2005 - Volume 19, Issue 2

Spring 2005 - Volume 19 Issue 2

Editor's Introduction - Volume 19, Issue 2 Spring 2005

Richard D. Lang, EdD

Avoiding the Train Wreck in Healthcare: Integrating Information in the Clinic and the Back Office

Jeffrey C. Bauer, PhD

Clinical Decision Support and the Parable of the Stick Shaker

William F. Bria, MD

Strengthening the Links in the Supply Chain—Some Preventive Medicine

Brian J. Compas, FHIMSS

EAI Reaches Outside the Healthcare Organization

Rick Krohn, MA, MAS

Minimize Large-Scale IT Project Risks through Effective Contracting Strategies

Karen J. O'Connor, FHIMSS

Commercial Clinical Data Warehouses: From Wave of the Past to the State of the Art

This article provides an overview of clinical data warehousing and its historical perspective from the early 1990s to present. It uses a survey of five Houston-area healthcare leaders to answer questions such as why commercially available solutions may be more suitable as their enterprise information systems vs. developing them in-house. Which products and vendors are servicing these organizations? What are these organizations looking for when making such strategic purchases? In general, this work is intended as a guideline for healthcare entities to further investigate the commercial clinical data warehousing market and get a feel for industry trends.

Mobin Uddin Akhtar, MS, BSIS, Kim Dunn, MD, PhD, and Jack W. Smith, MD, PhD

The Evolving Role of Supply Chain Management Technology in Healthcare

The healthcare supply chain is a vast, disintegrated network of products and players, loosely held together by manual and people-intensive processes. Managing the flow of information, supplies, equipment, and services from manufacturers to distributors to care providers is especially difficult, compared with more technology-intensive industries like consumer goods or industrial manufacturing. As supplies move downstream toward hospitals and clinics, the quality and robustness of accompanying management and information systems used to manage these products deteriorates significantly. Technology that provides advanced planning, synchronization, and collaboration upstream at the large supply manufacturers and distributors rarely is used at even the world's larger and more sophisticated hospitals. This article outlines current healthcare supply chain management technologies, addresses potential reasons for lack of technology and provides a roadmap for future technology.

Jim Langabeer, PhD, MBA

Rapid Implementation of an Electronic Health Record in an Academic Setting

One of the sources of resistance to the implementation of electronic health records is that it often takes years to roll out a fully functional system. The George Washington University Medical Faculty Associates has set a new standard for rapid EHR implementation by bringing 99

Related Resources:



Explore HIMSS Bookstore for the latest in industry publications.

physicians and 130 residents and interns live in less than 30 days in a complex academic setting. MFA leveraged a rapid implementation process based on study of previous successful implementations. The rollout plan incorporated aggressive hands-on education, in-person and virtual training modules for self-review, and a leadership triad of physicians, administrators, and information technology experts.

Stephen L. Badger, Ryan G. Bosch, MD, FACP, and Praveen Toteja

National Provider Identifier (NPI) Planning and Implementation Fundamentals for Providers and Payers

Federal HIPAA legislation mandates that the National Provider Identifier be fully implemented across all healthcare entities between May 2005 and May 2007 or 2008 for small payers. Starting May 2005, healthcare providers will be eligible to obtain an NPI and use these numbers to submit claims or conduct other transactions specified by HIPAA. By 2007, the NPI must be used in connection with the electronic transactions identified in HIPAA. This article will use software and data experts' knowledge as well as the authors' NPI implementation readiness assessment work to review the impact to both payers and providers, including hospitals, clinics, and other service entities. The authors will suggest planning, budgeting, architecting, and data management solutions for payers and providers to achieve the optimal administrative simplification goals intended by the NPI, without compromising data integrity and interoperability objectives across the service spectrum of the healthcare enterprise.

Scott Pickens and Jamie Solak

Making Sausage—Effective Management of Enterprisewide Clinical IT Projects

Unlike most other industries in which company employees are, well, company employees, U.S. hospitals are typically run by both employees (nurses, technicians, and administrative staff) and independent entrepreneurs (physicians and nurse practitioners). Therefore, major enterprise-wide clinical IT projects can never simply be implemented by mandate. Project management processes in these environments must rely on methods that influence adoption rather than presume adoption will occur. "Build it and they will come" does not work in a hospital setting. This paper outlines a large academic medical center's experiences in managing an enterprise-wide project to replace its core clinical systems functionality. Best practices include developing a cogent optimal future-state vision, communications planning and execution, vendor validation against the optimal future-state vision, and benefits realization assessment.

Detlev H. Smaltz, PhD, FHIMSS, CHE, Rhonda Callander, Melanie Turner, RN,

Web-Based Communication to Enhance Outcomes: A Case Study in Patient Relations

Conducting research on a particular health condition on the Internet often yields vast amounts of information, much of it not relevant, specific, or even accurate. Therefore, it is important to tailor a search to elicit results that will be the most precise to a specific situation. Web sites that use "push technology," such as targeted e-mail, rather than a passive site that must be visited and surfed through, offer a more effective way of obtaining "just-in-time" information. Such sites are able to reach people with pertinent information that will spark their interest, assist them in formulating questions when speaking to their physicians, and, above all, improve their own well-being. This article discusses a particular push technology strategy, how outcomes information was obtained to validate the strategy, and the results for a particular healthcare diagnosis.

Velma Payne, MBA and Joan M. Kiel, PhD

Data Mining Applications in Healthcare

Data mining has been used intensively and extensively by many organizations. In healthcare, data mining is becoming increasingly popular, if not increasingly essential. Data mining applications can greatly benefit all parties involved in the healthcare industry. For example, data mining can help healthcare insurers detect fraud and abuse, healthcare organizations make customer relationship management decisions, physicians identify effective treatments and best practices, and patients receive better and more affordable healthcare services. This article explores healthcare data mining applications. It discusses data mining and its healthcare applications in major areas such as the evaluation of treatment effectiveness, management of healthcare, customer relationship management, and the detection of fraud and abuse. It also gives an illustrative example of a healthcare data mining application involving the identification of risk factors associated with the onset of diabetes.

Hian Chye Koh and Gerald Tan

CIOs' Views of HIPAA Security Rule Implementation— An Application of Q-methodology

The purpose of this study is to uncover the attitudes held by chief information officers (CIOs) regarding the implementation of HIPAA's Security Rule. In March and April of 2004, five Chicago area CIOs were surveyed and asked to rank 26 opinion statements that presented possible implementation barriers to the Security Rule. Q-methodology, which is a powerful tool in subjective study, was employed to identify and categorize the viewpoints of CIOs toward the barriers. Two factors (opinion types) that represented two different views--socially motivated CIOs and resources-motivated CIOs--regarding the implementation barriers were extracted. The study sheds light on the attitudes and perceptions of CIOs as they begin rule implementation. Current CIOs can use this information as a way to begin to examine what the prevailing attitude may be at their institution and, therefore, how to begin building a successful implementation strategy.

Mei Ao, MD, MS, and Rosemary Walker, DDS, MBA, MS

The Impact of Patient-Physician Web Messaging on Provider Productivity

Patients increasingly want electronic access to providers, but physicians have been slow to offer e-access, fearing they will be overwhelmed by

unreimbursed patient messages. This article reports on efforts to measure how patient-provider web messaging affects physician productivity. To measure productivity, researchers analyzed the work of a group of physicians using a secure Web messaging system, compared with a control group that did not use the system. Results showed that physicians using the electronic media to communicate had about a 10 percent increase in productivity. Secure Web messaging's benefits also outweigh those of e-mail in increasing productivity and allaying concerns of physicians.

Eric M. Liederman, MD, MPH, Jerry C. Lee MD, MS, Victor H. Baquero, MD, and Paul G. Seites, MD

[Writer's Guidelines](#)

[© 2005 Healthcare Information and Management Systems Society | Privacy Policy](#)
HIMSS, 230 East Ohio Street, Suite 500, Chicago, IL 60611-3269
Phone: 312/664-4467 Fax: 312/664-6143
[Contact the Webmaster](#)

LOGIN

Enter e-mail address

Enter password

☒ REMEMBER ME

NOT REGISTERED ?
FORGOTTEN PASSWORD ?
INSTITUTIONAL LOGIN >

Home > Psychiatry > Psychiatry > International Journal of Methods in Psychiatric Research > Vol 20 Issue 2

JOURNAL TOOLS

- Get New Content Alerts
- Get RSS feed
- Save to My Profile
- Get Sample Copy
- Recommend to Your Librarian

JOURNAL MENU

Journal Home

FIND ISSUES

Current Issue
All Issues

FIND ARTICLES

Early View

GET ACCESS

Subscribe / Renew

FOR CONTRIBUTORS

OnlineOpen
Author Guidelines
Submit an Article

ABOUT THIS JOURNAL

News
Overview
Editorial Board
Permissions
Advertise
Contact

SPECIAL FEATURES

Journal Ethics Policy
Wiley Job Network

INTERNATIONAL JOURNAL OF METHODS IN
PSYCHIATRIC RESEARCH

International Journal of Methods in Psychiatric Research

© John Wiley & Sons, Ltd



June 2011

Volume 20, Issue 2
Pages 63–133, e19–e37

[Previous Issue](#) | [Next Issue](#)

SEARCH

In this issue
Advanced > Saved Searches >

☐ Select All [Save to profile](#) [Export citation](#)

Research Articles

Jump to...

- ☐ **How to assess the clinical impact of treatments on patients, rather than the statistical impact of treatments on measures (pages 63–72)**
Helena Chmura Kraemer, Ellen Frank and David J. Kupfer
Article first published online: 25 APR 2011 | DOI: 10.1002/mpr.340
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(209K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **The predictive validity of subjective adherence measures in patients with schizophrenia (pages 73–81)**
Martijn J. Kikkert, Maarten W.J. Koeter, Jack J.M. Dekker, Lorenzo Burti, Debbie Robson, Bernd Puschner and Aart H. Schene
Article first published online: 9 MAY 2011 | DOI: 10.1002/mpr.335
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(121K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **The DETECT adherence score – structure and psychometric exploration of a novel approach to measure adherence to drug and non-drug interventions in primary care (pages 82–92)**
J. Klotsche, D. M. Leistner, L. Pieper, D. Pittrow, A. M. Zeiher and H.-U. Wittchen
Article first published online: 25 MAY 2011 | DOI: 10.1002/mpr.341
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(265K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **Structural equation modeling of repeated retrospective reports of childhood maltreatment (pages 93–104)**
David M. Fergusson, L. John Horwood and Joseph M. Boden
Article first published online: 15 APR 2011 | DOI: 10.1002/mpr.337
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(276K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **Validation of the diagnoses of panic disorder and phobic disorders in the US National Comorbidity Survey Replication Adolescent (NCS-A) supplement (pages 105–115)**
Jennifer Greif Green, Shelli Avenevoli, Matthew Finkelman, Michael J. Gruber, Ronald C. Kessler, Kathleen R. Merikangas, Nancy A. Sampson and Alan M. Zaslavsky
Article first published online: 15 APR 2011 | DOI: 10.1002/mpr.336
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(140K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **Measurement and description of underlying dimensions of comorbid mental disorders using Factor Mixture Models: results of the ESEMeD project (pages 116–133)**
Josué Almansa, Jeroen K. Vermunt, Carlos G. Forero, Gemma Vilagut, Ron De Graaf, Giovanni De Girolamo and Jordi Alonso
Article first published online: 26 APR 2011 | DOI: 10.1002/mpr.334
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(641K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **Clinical trial design in non-invasive brain stimulation psychiatric research (pages e19–e30)**
André Rusowsky Brunoni and Felipe Fregni
Article first published online: 2 MAY 2011 | DOI: 10.1002/mpr.338
[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(171K\)](#) | [References](#) | [Request Permissions](#)
- ☐ **Validation of a 4-item Negative Symptom Assessment (NSA-4): a short, practical clinical tool for the assessment of negative symptoms in schizophrenia (pages e31–e37)**
Larry Alphs, Robert Morlock, Cheryl Coon, Pilar Cazorla, Armin Szegedi and John Panagides
Article first published online: 2 MAY 2011 | DOI: 10.1002/mpr.339

☐ [Select All](#) [Save to profile](#) [Export citation](#)

JOURNAL TOOLS

- Get New Content Alerts
- Get RSS feed
- Save to My Profile
- Get Sample Copy
- Recommend to Your Librarian

JOURNAL MENU

Journal Home

FIND ISSUES

Current Issue
All Issues

FIND ARTICLES

Early View

GET ACCESS

Subscribe / Renew

FOR CONTRIBUTORS

OnlineOpen
Author Guidelines
Submit an Article

ABOUT THIS JOURNAL

Overview
Editorial Board
Permissions
Advertise
Contact

SPECIAL FEATURES

Journal Ethics Policy
Wiley Job Network

INTERNATIONAL JOURNAL OF METHODS IN
PSYCHIATRIC RESEARCH

International Journal of Methods in Psychiatric Research

© John Wiley & Sons, Ltd



Edited By: Professor Dr Hans-Ulrich Wittchen

Impact Factor: 2.344

ISI Journal Citation Reports © Ranking: 2010: 33/107 (Psychiatry (Social Science)); 59/126 (Psychiatry)

Online ISSN: 1557-0657

Recently Published Issues | [See all](#)

Current Issue: December 2011
Volume 20, Issue 4

September 2011
Volume 20, Issue 3

June 2011
Volume 20, Issue 2

March 2011
Volume 20, Issue 1

December 2010
Volume 19, Issue 4

Online-only publication in 2012

Effective with the 2012 volume, this journal will be published in an online-only format. No printed edition will be published and your article will therefore appear online-only. All normal author benefits and services remain in place e.g. authors will continue to be able to order print reprints of articles if required. Furthermore, there will no cost to authors for the publication of colour images in the online-only edition and authors can make use of an improved facility to publish larger datasets, animations and models.

NEW for 2011: E-only Articles

To make sure you don't miss out, sign up to receive FREE table of content lists e-mailed to your inbox. Click on 'Get New Contents Alerts' at the top left of this page.

Recently Published Articles

Testing the Short and Screener versions of the Social Adjustment Scale – Self-report (SAS-SR)

Marc J. Gameroff, Priya Wickramaratne and Myrna M. Weissman
Article first published online: 5 DEC 2011 | DOI: 10.1002/mpr.358

[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(298K\)](#) | [References](#) | [Request Permissions](#)

Quality assessment of observational studies in psychiatry: an example from perinatal psychiatric research (pages 224–234)

L. E. Ross, S. Grigoriadis, L. Mamisashvili, G. Koren, M. Steiner, C.-L. Dennis, A. Cheung and P. Mousmanis

Article first published online: 24 NOV 2011 | DOI: 10.1002/mpr.356

[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(141K\)](#) | [References](#) | [Request Permissions](#)

The psychometric properties of the K10 and K6 scales in screening for mood and anxiety disorders in the South African Stress and Health study (pages 215–223)

L. S. Andersen, A. Grimsrud, L. Myer, D. R. Williams, D. J. Stein and S. Seedat

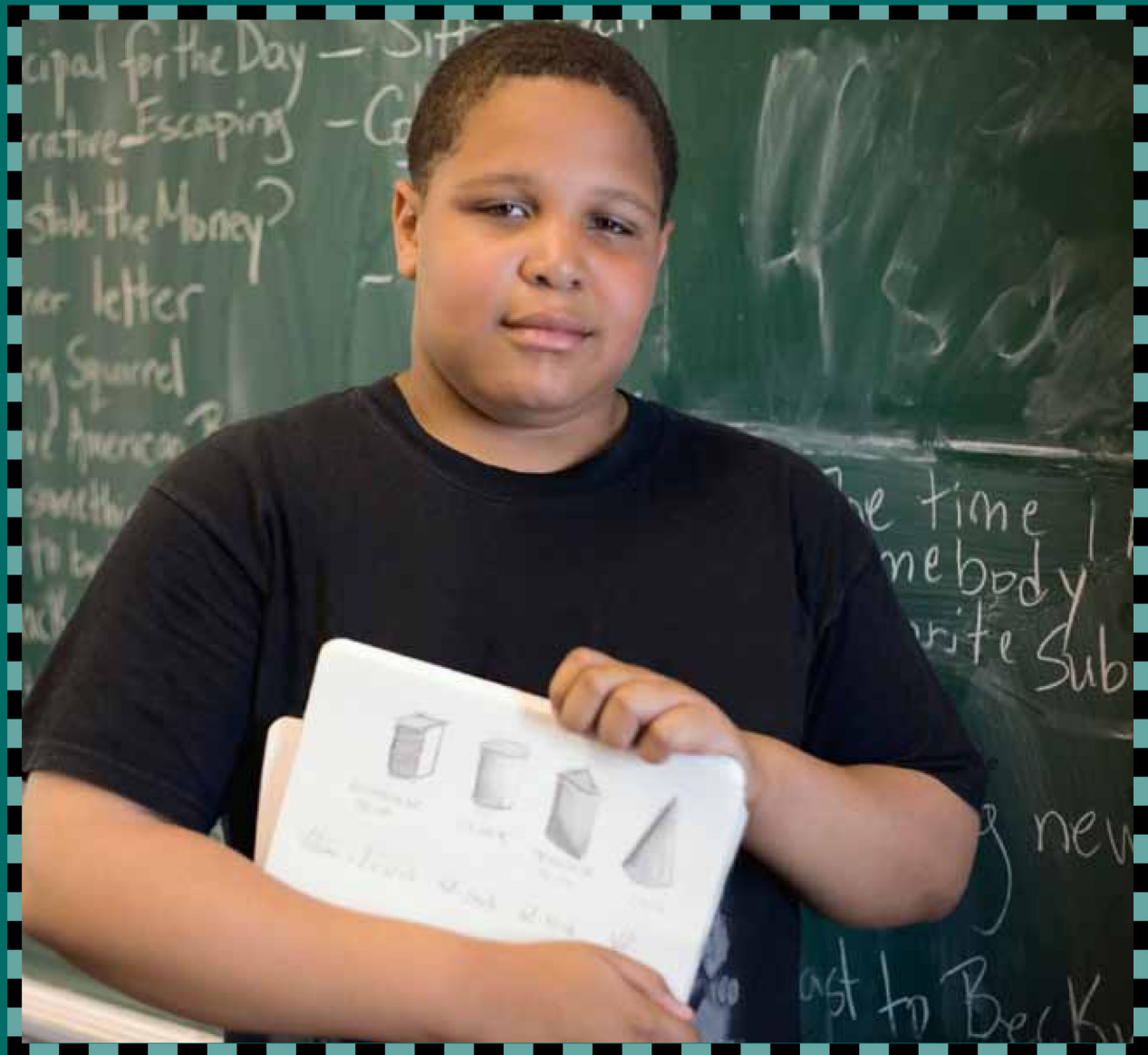
Article first published online: 24 NOV 2011 | DOI: 10.1002/mpr.351

[Abstract](#) | [Full Article \(HTML\)](#) | [PDF\(274K\)](#) | [References](#) | [Request Permissions](#)

EXHIBIT B

https://web.archive.org/web/20111208073441/http://www.doe.virginia.gov/special_ed/disabilities/autism/technical_asst_documents/autism_transition.pdf

Autism Spectrum Disorders and the Transition to Adulthood



October 2010

Virginia Department of Education, Office of Special Education and Student Services

Page 28 of 101



Table of Contents



Commonly Used Acronyms	4
Middle and High School Youth with Autism Spectrum Disorders	5
Autism Spectrum Disorders in Middle and High School	6
Transition to Adulthood for Students with ASD	10
Characteristics of Excellent Transition Programs	11
The Transition Team	12
Transition Assessment for Students with ASD	13
Educational and Transition Planning for Middle and High School Students with ASD	15
Legal Requirements and the Transition Plan	15
Identifying Goals for Transition-Aged Students with ASD Based on Preferences and Interests	18
Curriculum, Literacy, and IEPs	19
Curriculum and Students with ASD who Work toward a Standard or Advanced Studies Diploma	22
Measurable Goals	23
Selecting Modifications and Accommodations	23
Inclusion and Direct Instruction, Achieving the Right Balance	25
Community-Based Instruction	26
Accessing Transportation	26
Street-crossing	26
Use of Public Transportation	26
Instruction for Transition-Aged Youth with ASD in Natural Environments	26
The Instructional Process	27
Specific Instructional Strategies	28
Addressing Challenging Behavior through Positive Behavior Support	31
Functional Behavioral Assessment	31
Behavior Intervention Planning	34
Navigating the World of Adult Services	36
Adult Services	36
The Department of Rehabilitative Services	38
Employment Service Organizations (ESOs)	40
One-Stop Career Centers	40
Virginia Department of Behavioral Health and Developmental Services, Local Community Service Boards and/or Behavioral Health Authorities	41
Resource Development	42
Postsecondary Education	44
Options in Postsecondary Settings	44
Description of Current Postsecondary Models	44
Expectations	44
Four Year Colleges and Universities	45
Considerations for Choosing a College	45

Two Year or Community Colleges	46
Services and Supports.....	46
Going to College	47
Critical Skills and Possible Services or Supports	47
Employment in the Community	48
Workplace Challenges and Supports.....	51
General Workplace Supports.....	52
Workplace Supports.....	52
Telework.....	52
Self-Employment.....	53
Business Leading the Way.....	53
Home Living Skills	54
Community Living Options	54
Considerations for Choosing a Residence.....	55
Transition Planning: Home Living Skills.....	56
Individualizing the Home Living Skills Curriculum	59
The Importance of Recreation and Leisure Skills in the Healthy Adult Life	59
School Activities	59
Activities sponsored by private facilities and public organizations	60
Trips and Outings	60
Exercise and Sports	60
Hobbies, Games, Crafts, and Art	60
Social Events.....	60
Trivial Pursuits.....	60
Social Security and Benefits Planning.....	60
Benefits Programs	61
Benefits Planning Services.....	62
Social Security Benefits and Transition-Aged Youth	63
A Word about Social Security Benefits for Young People with Disabilities.....	63
Youth Under Age 18.....	63
Critical Considerations at 18th Birthday.....	64
SSI Age-18 Redetermination Process.....	64
Students who are Vulnerable during Age-18 Redeterminations	65
Continuing SSI Eligibility under Section 301 Provisions.....	66
Establishing Entitlement for Childhood Disability Benefits (CDB).....	66
References	68

Tables and Figures

Table 1. A Comparison of Characteristics between Autism, Asperger's Disorder and PDD-NOS	6
Table 2. Behavioral Characteristics across the major symptoms of ASD	8
Table 3. Characteristics of Excellent Transition Programs for Students with ASD	11
Table 4. Informal Assessments and Structured Observations for Transition	14
Table 5. Essential Components of a Transition IEP	16
Table 6. State Performance Plan Indicators Related to Transition and their Impact on Transition Programs for Youth with ASD	17
Table 7. Translating Student Preferences into Meaningful Activities	19
Table 8. Four Curriculum Approaches to Teaching Functional Academics	20
Table 9. Example of Aligned Standards of Learning and Functional Skills Where Those Standards Can Be Taught	21
Table 10. Matthew's High School Plan to meet his Advanced Academic Needs and His Functional Employment and Social Skill Needs	22
Table 11. Commonly Used Accommodations for Students with ASD	24
Table 12. Evidenced-Based Instructional Strategies for Transition-Aged Youth with ASD	28
Table 13. Three Phases of Functional Behavioral Assessment	32
Table 14. Sample Behavior Intervention Strategies for Each Essential Building Block	35
Table 15. Major State and Local Agencies that Provide Services to Transition-Aged Youth and Adults with Disabilities	37
Table 16. Employment Practices to Support Individuals with ASD at Work	48
Table 17. Implementing Supported and Customized Employment	49
Table 18. New Employment Models for Individuals with ASD	50
Table 19. Partial Ecological Inventory for Independent Living	59
Figure 1. Personal Profile Questionnaire	9
Figure 2. Transition Process for Students with Disabilities	10
Figure 3. The Instructional Process	27
Figure 4. Sample Graph Depicting Ongoing Data Collection	27
Figure 5. The Competing Behavior Model for Escape Motivated and Attention Motivated Behavior ..	33
Figure 6. Three Essential Building Blocks for a Behavior Intervention Plan	34
Figure 7. Steps for Increasing Independent Living Skills	58



Commonly Used Acronyms

ABA	Applied Behavioral Analysis
ADDM	Autism and Developmental Disabilities Monitoring Network
ASD	Autism Spectrum Disorder
BIP	Behavior Intervention Plan
CDC	Centers for Disease Control
DD	Developmental Disabilities
DSM-IV-TR	Diagnostic and Statistical Manual (Fourth Edition, Revised)
FAPE	Free Appropriate Public Education
FBA	Functional Behavioral Assessment
FCT	Functional Communication Training
IDEA	Individuals with Disabilities Education Act (2004)
IEP	Individualized Education Program
IFSP	Individualized Family Service Plan
JA	Joint Attention
LEA	Local Education Agency
MDT	Multidisciplinary Team
NET	Natural Environment Teaching
NLP	National Language Paradigm
NOS	Not Otherwise Specified
PBIS	Positive Behavioral Interventions and Supports
PDD	Pervasive Developmental Disorder
PECS	Picture Exchange Communication System
PLEP	Present Levels of Educational Performance
PRT	Pivotal Response Training
SAT	Student Assistance Team
SEA	State Educational Agency
TEACCH	Treatment and Education of Autistic and related Communication Handicapped CHildren
VDOE	Virginia Department of Education

Middle and High School Youth with Autism Spectrum Disorders

Dan is 16-years-old. He is enrolled in the local high school. Dan's program can be thought of as "work-study." He takes classes in the morning and goes to work in the afternoon. His classes are general mathematics, English, and Industrial Arts. He holds a job at the public library sorting books. Dan is preparing for adulthood, similar to high school students across the country. However, Dan is not like most high school students. Dan has autism. Autism is a pervasive developmental disorder and Dan's autism has pervasive effects in all areas of his life.

Dan is similar to other persons with autism regarding his academic coursework. In fact, over 90 percent of persons with autism do take some academic courses in high school (National Transition Longitudinal Study, NTLS, April 2007).

The wide range of interests that most high school students experience is more limited for Dan. Dan has had the same intense interests dating back to childhood. He is fascinated by calendars and geography and spends many evenings in his room studying maps and calendars. He can recite the route to almost any destination in the country, but his litany includes no plans to go there and no one to go there with. Dan has a longing for sameness and predictability and even postponement of the regular Friday morning mathematics quiz can be the source of great anxiety and unrelenting questioning of the teacher as to why.

Does Dan seem like anyone you have known? Do some of these characteristics seem very unusual and atypical? Can you think of how these characteristics might be useful as an adult? While no one set of characteristics can define any person with autism, clearly, Dan reflects those traits that would be identified with autism.

Although Dan's autism has affected all aspects of his transitioning years, he has made progress both academically, socially and vocationally. He is able to attend general education classes with the help of an aide, similar to 36 percent of youth with autism nationally (NTLS, 2, April 2007). He succeeds at his job at the public library under the watchful eye of his job coach, a staff person who is a trainer and an advocate at the job site (Wehman, Revell, Inge, Brooke, 2006). While his supports will not "cure" his autism, they will allow him to progress in the present and make plans for the future. Dan has an enormous amount of potential; he has extraordinary possibilities for an excellent life but this will not just happen: he will need guidance and planning like most young people.

In this Guide, we discuss the issues, challenges, and strategies that are involved in helping young people like Dan fully participate in society. Our focus in this guide is about what young people with autism can do and how to design the supports to expand opportunity and potential. Fortunately, we know that more persons like Dan are successfully served in the mainstream of school, (Kluth, 2003; NTLS, 2, 2007) work, (Wehman, Targett & Young, 2007) and the community (Wehman, Inge, Revell, & Brooke, 2007). Large companies like Walgreens are beginning to look seriously at hiring persons like Dan in their businesses (Merrick, Wall Street Journal, August 2, 2007). We know, however, that careful transition planning will be critical for young people like Dan to be successful in the community (Wehman & Wittig, 2009). The chapters in this Guide will describe how to help persons with autism move from adolescence to adulthood, and overcome the barriers that their disability presents. Growing up is hard enough for most teenagers; for those with autism, there are large additional barriers as well. But before we discuss transition, we must first understand what autism is.

Autism Spectrum Disorders in Middle and High School

There are five disorders that are in the 'autism spectrum.' They are:

- ★ Autism
- ★ Asperger's Disorder
- ★ Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS, also sometimes referred to as 'atypical autism')
- ★ Childhood Disintegrative Disorder (CDD)
- ★ Rett's Disorder



The graphic above shows how these five disorders are related under the umbrella title "Autism Spectrum Disorders or ASD."

For all of these disorders individual symptoms can range from mild to severe. Thus, individuals with ASD require different levels and types of special education services. Individuals with ASD have deficits in communication and social skills. ASD is also marked by 'repetitive, restricted, and stereotyped' patterns of behavior and interests (APA, 2000). Of the five disorders above, autism, Asperger's

disorder, and PDD-NOS are the most common. Therefore, this guide will focus on those three disorders. Table 1, below, describes the symptoms and characteristics associated with autism, Asperger's disorder, and PDD-NOS.

Table 1

A Comparison of Characteristics between Autism, Asperger's Disorder and PDD-NOS

(Source: Schall & McDonough, 2009)

Characteristic	Presentation in Autism	Presentation in Asperger's Disorder	Presentation in PDD-NOS
Cognitive and Intellectual Ability	More individuals display intellectual disabilities. Cognitive abilities range from gifted to severely impaired.	More individuals display average to above average abilities. Cognitive abilities range from gifted to mildly impaired.	Individuals with PDD-NOS display abilities across the entire range of intellectual ability.
Social Interaction	Social skill deficits in all areas of interaction. Social skill errors and misunderstandings can present as problem behavior.	Social skill deficits in all areas of interaction. Social skill errors and misunderstandings can present as problem behavior or social language difficulties.	Individuals display social skill deficits, but may not meet full criteria in this category for either autism or Asperger's Disorder.

Table 1
A Comparison of Characteristics between Autism, Asperger's Disorder and PDD-NOS *continued*
(Source: Schall & McDonough, 2009)

Characteristic	Presentation in Autism	Presentation in Asperger's Disorder	Presentation in PDD-NOS
Communication	More individuals display late acquisition of language and lifelong language delays and disorders including increased use of idiosyncratic and echolalic language. Most individuals have significant challenges displaying and understanding nonverbal communication.	Most individuals acquire language on time, but display significant challenges with the social use of language (also called pragmatics). Many display difficulties with reciprocity in communication and understanding and using nonverbal communication.	Individuals display communication deficits, but may not meet full criteria in this category for either autism or Asperger's Disorder.
Patterns of Behavior	More individuals display unusual motor movements and stereotypes such as flapping hands, rocking, jumping, etc. Many individuals resist changes in routine and engage in nonfunctional rituals.	Many individuals converse about intense interests to the exclusion of reciprocal interaction with others. Some individuals display motor stereotypes, but to a lesser degree than those with autism. Many individuals resist changes in routine and engage in nonfunctional rituals.	Individuals may display restricted and stereotyped patterns of behavior, but may not meet full criteria in this category for either autism or Asperger's Disorder.
Secondary Characteristics	Many individuals display challenging behavior including aggression, self-injurious behavior, darting or wandering away, and over activity. Some individuals with higher intellectual abilities may also experience anxiety disorders and depression. Many individuals also display varying patterns of hyperresponsiveness and hyporesponsiveness to sensory stimulation.	Many individuals display challenging behavior including aggression, self-injurious behavior, darting or wandering away, and over activity. Many individuals may also experience anxiety disorders and depression. Many individuals also display varying patterns of hyperresponsiveness and hyporesponsiveness to sensory stimulation.	Some individuals display challenging behavior including aggression, self-injurious behavior, darting or wandering away, and over activity. Some individuals with higher intellectual abilities may also experience anxiety disorders and depression. Many individuals also display varying patterns of hyperresponsiveness and hyporesponsiveness to sensory stimulation.

While these clinical descriptions are important to understand, Table 2 shows a list of behaviors commonly associated with ASD.

Table 2
Behavioral Characteristics across the major symptoms of ASD

(Note, not all persons with ASD exhibit all Symptoms listed below)

Speech and Communication Deficits

- ★ Nonverbal may use sounds or gestures, may use pictorial cues
- ★ Limited ability to express self
- ★ Limited ability to understand the thoughts, beliefs, or feelings of others
- ★ Difficulty following instructions
- ★ Unable to follow lengthy conversations or participate in back and forth exchanges
- ★ Does not understand abstract concepts
- ★ Literally interprets speech
- ★ Poor pragmatic language skills (i.e., does not use eye contact, affect or gestures when sharing experiences and or fails to pick up on subtle nonverbal cues like voice intonation, facial expressions or body posture)
- ★ Trouble answering open-ended questions
- ★ Abnormal speech rhythm, may speak too fast or too slow
- ★ Monotone speech or flat affect
- ★ Repeatedly and persistently speaks about the same topic or asks same question
- ★ Repeats back verbatim what was heard (i.e., may be current or previous conversation)
- ★ Mimics and synchronizes facial expressions, vocalizations, and movements with another person
- ★ Uses the pronoun “you” instead of using the word “I”
- ★ May use behaviors (self-injurious behavior, tantrum, aggression) to communicate (i.e., get attention, escape task, protest change, or regulate social interaction in predictable manner)

Personal Relationships and Social Skill Deficits

- ★ Appears to have decided lack of interest in other people in the environment
- ★ Fails to make friends
- ★ Fails to engage in social interactions
- ★ Withdrawn from others and/or prefers to be alone
- ★ Does not know how to terminate conversation (i.e., may walk away while someone is talking to them)
- ★ Does not use certain social skills (i.e., walks in room and does not acknowledge others presence, does not say hello or good-bye, interrupts others)

- ★ Does not use social amenities (i.e., please, thank you, you are welcome)
- ★ Invades other people’s personal space (i.e., stands too close to others when communicating)
- ★ Acts immature
- ★ Talks loudly to self
- ★ Perseveration on bizarre topics
- ★ Asks embarrassing personal questions (i.e., how old are you, are you married, why not)
- ★ Incessant talking or questioning
- ★ Presence of abnormal verbalizations (i.e., scream, hoot, yell or hum)
- ★ Avoids eye contact and/or fails to orient body towards person speaking
- ★ Interrupts others

Unusual Responses to Sensory Stimulation and Repetitive Motor Movements

- ★ Ignores important environmental events
- ★ Seeks out objects or activities that offer desired stimulation to the exclusion of other activities
- ★ Attends to unusual sensory stimuli (i.e., things that spin, shiny objects or certain textures)
- ★ Focuses on minute details and is oblivious to rest of the environment
- ★ Difficulty attending to auditory and tactile input and prefers visual or vestibular channels
- ★ Engages in repetitive behaviors that provide sensory stimulation (i.e., repetitive noise making, hand flapping, rocking, pacing, finger flicking, tapping, spinning or jumping up and down)
- ★ Averse or fearful reaction to certain stimuli (i.e., certain noises, food textures, fluctuations in lighting) that are not necessarily threatening
- ★ Reacts to certain sounds that others cannot hear
- ★ Fails to react to painful or uncomfortable stimuli
- ★ Engages in self-injurious behaviors (i.e., skin scratching, head banging, hits or bites self)

As a result of these behaviors, there are frequently secondary characteristics associated with ASD. For example, some individuals display problem behaviors that require specialized behavioral analysis and support. Others develop depression and anxiety disorders. Finally, many individuals with ASD display unusual responses to sensory experiences. For these students, a high school assembly or the chaos of the bus loop can be daunting and result in pain due to sight or sound sensitivity.

While there are deficits associated with ASD many individuals also display strengths. These strengths can be capitalized upon to increase the person's success in work and adulthood. ASD is not one profile or set of behaviors that is common across all people with the disability. Rather, ASD is a collection of behaviors that different people with the disorder

may have to greater or lesser degrees. Some people with ASD do not use words to communicate, while others seem to talk on and on without stopping. Some individuals like to have their schedule precisely the same every day, while others spend all of their free time reading about a special interest. Some individuals like to be near peers and seek peer attention while others prefer to be left alone. In short, this is a disability category that is more different within itself than alike. Rather than simply being of one set of behaviors, ASD is a disability where each individual's behaviors can be vastly different from the others with the disorder. All people providing care and services to a person with ASD must discover the unique behaviors that define that person. Figure 1 is a questionnaire that a teacher, administrator or counselor can use to create a profile to describe the person with ASD.

Figure 1

Personal Profile Questionnaire (Source: Schall & Wehman, 2009)

Personal Profile on (Person's Name)
What does s/he like?
What does s/he dislike?
How does s/he tell you that s/he likes something?
How does s/he tell you that s/he dislikes something?
How does s/he tell you that they want to stop doing something?
How does s/he tell you that they want to be left alone?
How does s/he tell you that they want something or want to do an activity?
What does s/he like to do in their free time?
What does s/he do when they are upset or frustrated?
What kinds of situations seem to upset or frustrate her/him?
Who are her/his friends?
With whom does s/he like to interact or spend time?
Are there people who are problematic for this person, who they do not like to be around?
What other information about this person is important to share? (Think about personal, communication, social, medical or behavioral issues that others should know about.)

Transition to Adulthood for Students with ASD

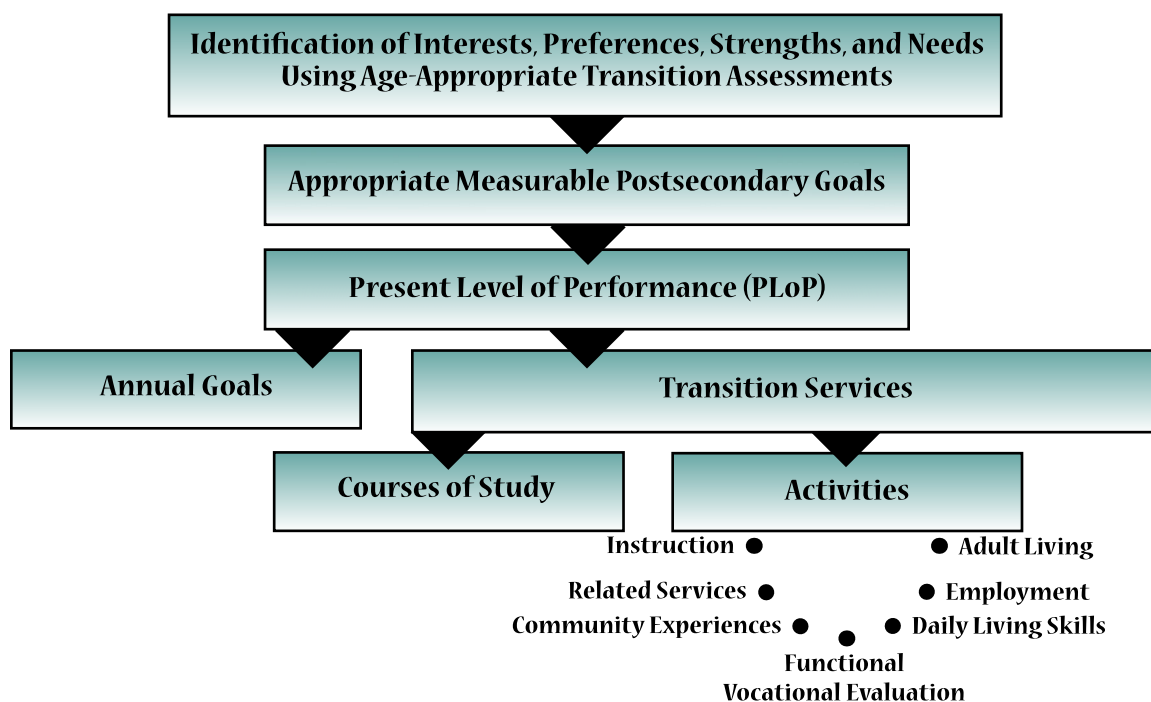
The transition from school to adulthood is a process for all students, regardless of their abilities or diagnoses that begins when students and their parents begin planning for their post high school life. In Virginia, all students with disabilities who have individualized education plans (IEPs) are required to develop a transition plan as a part of their IEP at the age of 14. Figure 2, below shows the process of transition for all youth with disabilities.

This figure demonstrates the importance of transition as a key to IEP development during these final years of school. In fact, the transition process actually drives the IEP at this point. Consequently, transition goals should relate directly to the IEP

annual goals and the course of study the student takes in these years. At this point in the individual's education, there should be a direct tie between every educational goal and activity to the student's desired future. This is an essential aspect of transition; that the student's desired future drives the IEP and all other educational activities. While this process is the same for all students with disabilities, students with ASD have unique characteristics. Consequently, students with ASD, their families, and IEP teams serving students with ASD must take into account those unique characteristics when developing and implementing transition plans and IEPs. The rest of this guide will discuss the specific issues that transition teams should attend for students with ASD.

Figure 2
Transition Process for Students with Disabilities

(Source: Virginia Department of Education Training and Technical Assistance Center at the College of William and Mary)



Characteristics of Excellent Transition Programs

In addition to understanding the person with ASD well, it is important to identify the characteristics associated with excellent transition programs.

Table 3 shows elements important to an excellent transition program for youth with ASD.

Table 3

Characteristics of Excellent Transition Programs for Students with ASD

(Source: Schall, et al., 2006)

Characteristic	Description
Delivering systematic carefully planned instruction that results in a high degree of student/youth engagement	Carefully structured and implemented teaching techniques including multistep task analysis, discrete trial teaching, use of structured prompting and fading, application of behavioral principles to natural environments teaching. Many of these techniques rely on the application of behavior analytic principles to educational, work, and community-based environments.
Designing comprehensible and/or structured environments, (usually involving picture or written schedules, specific definition of areas of the environment with furniture and other visual cues, and embedding choice making into the routine and environment)	Using written or picture cues to : ★ Give information and directions ★ Organize the environment ★ Communicate between environments Designing workstations and break areas to allow for: ★ Independent task completion ★ Calm down space ★ Expectations to match design of classroom
Providing a specialized curriculum that addresses communication and social skill needs	Examples of the communication and social skills include: ★ Asking for more work ★ Asking for help ★ Taking a break in the break room ★ Saying 'excuse me' when bumping into someone ★ Talking with co-workers about mutually interesting topics ★ Talking with supervisors and co-workers with respect ★ Asking for clarification when given conflicting jobs
Implementing a functional approach to problem behavior	Teachers and staff who work in programs supporting individuals with ASD must be able to use functional behavior assessment to develop positive behavior support plans. Plans should include strategies to: ★ Prevent the problem behavior from occurring ★ Teach adaptive behaviors to replace the problem behavior. ★ Reinforce adaptive behaviors while ignoring or responding differently to the problem behavior
Ensuring intensive family involvement	Involving families in the team process to increase knowledge of the person by the team and involving them in person-centered visioning and planning

Table 3
Characteristics of Excellent Transition Programs for Students with ASD *continued*

Characteristic	Description
Including functional skills and behaviors in the context of the curriculum	Making sure that skills taught in the transition program will result in better functioning in work and community-based environments. Making sure the focus is on the functional needs of the person and not just on standards.
Assuring maintenance and generalization of skills in natural environments	Assuring generalization by providing rich and intensive experiences in work and community settings.
Coordinating connections with outside agencies and adult support provider to ensure a smooth transfer of information and continuation of supports	One important aspect of transition planning is to connect the person and their support system to all of the resources and service providers available to adults with disabilities. With a thorough understanding of these services, teachers will be better suited to address the needs of their students with ASD and their families.

The Transition Team

In order to implement a transition program that includes all of these characteristics, the person with ASD requires team members who have knowledge or expertise that can assist the young person with ASD. The team must support the young person in acquiring skills and learning behaviors that will increase their success in adulthood. The team should include a number of different perspectives and skills. Below is a list of the skills that comprise a sound educational team. Thus, instead of thinking about professional titles, teams should consider the skills required to support the team and seek out persons who can contribute those skills to the team. The skills required include:

- ★ Teaching social skills;
- ★ Teaching communication skills;
- ★ Analyzing behavior and developing positive behavior intervention plans;
- ★ Coordinating communication and services between school and community-based service providers;
- ★ Addressing environmental, sensory, behavioral and/or mental health concerns;
- ★ Identifying potential careers, and employers and connecting the person with work experiences to expand their understanding careers and work;

- ★ Teaching work behaviors, job skills, and community living skills;
- ★ Facilitating a person-centered visioning process; and
- ★ Assuring fidelity of implementation and data collection to assure the success of the plan

While this list is daunting, individual team members may be able to contribute multiple skill sets to the team.

In summary, individuals with ASD display many different characteristics and behaviors that are unique to the disability and to each individual. As they prepare for adulthood, individuals with ASD can learn to compensate for many of those behaviors that are most problematic at work and in adult life. Middle and high school programs should address the needs of youth with ASD by providing a quality transition program and developing team skills that will result in success. The rest of this guide will detail how to plan and deliver transition services to youth with ASD in middle and high school.

Transition Assessment for Students with ASD

As students with ASD enter transition, they will have already experienced multiple assessments across their education. At the same time, when a student with ASD turns 14, this milestone signifies the 'beginning of the end' of public education under IDEA. Consequently, the focus must shift from what is missing in the student's developmental profile, to what skills are necessary for the student to be successful in the next stage of their life. This shift in focus necessitates a shift in assessment priorities. That is, instead of measuring what a student cannot do, it is time to measure the student interests, preferences, strengths, work habits, and describe supports and modifications necessary for the student to be successful in the future. In fact, Sitlington, Neubert, Begund, Lombard, and Leconte define transition assessment as "an ongoing process of collecting information on a student's strengths, needs, preferences, and interests as they relate to the demands of current and future living, learning, and working environments" (2007, p.2). Further, Sitlington & Clark identified eight areas that comprise basic to minimum compliance with the charge to assess academic and functional performance (2007). They are:

1. Interests;
2. Preferences;
3. Cognitive Development and Academic Achievement Performance;
4. Adaptive Behavior;
5. Interpersonal Relationship Skills;
6. Emotional Development and Mental Health;
7. Employability and Community Skills; and
8. Community Participation.

Considering the unique needs of transition-aged students with ASD, this list is comprehensive as long as the unique communication and social skill needs are assessed under the areas of adaptive behavior and interpersonal relationship skills. This shift toward a future oriented focus can be measured by a shift in questions that the team seeks to answer through the assessment process. Once a student reaches age 14, the team must begin to contemplate the student

as an independent adult worker and consider their strengths and their needs from the perspective of adulthood and not from the perspective of deficits related to their disability. The 12 questions listed below present some of the questions that should drive transition assessment during this final period of education.

1. To what degree is the student 'self-determined,' that is able to make personal decisions and accept responsibility for those decisions?
2. What is the student's or their caretakers' vision of their future?
3. Where does the student want to live and work as an adult?
4. What are the elements that would create an enviable life for this student?
5. What skills and abilities does the student currently possess that would match his/her vision for him/herself?
6. Will this student need additional training or education after high school to be able to accomplish their vision for themselves?
7. Is this person able to live independently, that is, do they have the ability to care for themselves, live on their own in an apartment or house, get around in the community, and/or budget their money wisely?
8. What is the depth of this student's experiences in the world of work and adult life?
9. What resources are available to her/him that increase the likelihood that she/he will achieve this vision?
10. What skills and abilities will this student need to learn between now and high school

graduation that will assist him/her in achieving his/her vision?

11. What experiences does this student need to better inform her/his decision making to prepare for life beyond high school?
12. What experiences, resources, and new agencies will increase the likelihood of a smooth transition into work or postsecondary education and adult life?

These questions will guide the team to assessment methods that move beyond an update in the student's current reading and mathematics scores toward the development of a plan to move from school to adult life with mindfulness and efficiency. In fact, the answers to these questions will assist the team in prioritizing the skills that lead the person to a smooth transition to adulthood.

The purpose of a transition assessment is to develop a transition plan and embed skills into the IEP that move the student toward their desired career and adult life (Leconte, 2006). The elements included in

such an assessment vary based on the age and needs of the student with ASD. Some of the elements that are included in transition assessment include career awareness assessment, vocational assessment and evaluation, independent living and community skills assessment, and assessment of self-determination. These assessments should culminate in the development of a person-centered plan.

There are many standardized and criterion referenced formal assessments that teams can use to assess a student with ASDs preferences, interests, strengths, and needs. However, due to their unique characteristics, students with ASD may best be served by informal assessments or structured observations that provide the team with information about the student in real settings. Table 4 below lists and describes some of those assessment methods.

The purpose of the transition assessment is to assist the team in developing a targeted transition plan that will result in desired outcomes for the person with ASD.

Table 4
Informal Assessments and Structured Observations for Transition

Assessment	Description
Behavioral Observation	Structured observation of student in real setting completing required tasks related to the activities in that setting. Can include numerous data collection tools including frequency of behaviors observed, amount or intensity of support needed to complete tasks, a measure of independence with which the task was completed, conditions that lead to success in completion of the task, environmental elements related to the task that help or hinder completion of the task, etc.
Performance Sample	Structured observation in a real or contrived setting where student performs a predetermined task while the evaluator notes the quality, quantity, time, and/or speed with which the task was completed.
Situational Assessment	An assessment in a real or contrived setting that allows the teacher or vocational evaluator to design a brief trial for the student to try out a job, recreational task, or living situation then systematically records their observations of the student in that situation.

Educational and Transition Planning for Middle and High School Students with ASD

As educators, we hope that our students graduate from our programs with the skills necessary to live personally satisfying lives. That is, we hope they have friendships with people they care about and who care about them, work jobs that provide them with a sense of contribution and satisfaction, live interdependently with people who care about and for them, and report that they are basically happy with their lives. The research that asks questions about outcomes for individuals with ASD indicates, that by and large, people with ASD can work and achieve a quality life, but not without support (Howlin, Goode, Hutton, & Rutter, 2004, Jennes-Coussens, Magill-Evans, & Konig, 2006, Schall, et al., 2006, Shaller & Yang, 2005, Tsatsanis, 2003). Therefore, we have to plan and implement the most effective supports in high school to guarantee that our students achieve a successful transition from school to a rich and satisfying adult life. In order to do this well, we must first explore the assessment process so that the plan we create for our students is as effective as possible. Then, once we have identified each individual's needs, we must then develop a sound education and transition plan.

Legal Requirements and the Transition Plan

The development of a comprehensive and sound transition plan that leads to employment for students with disabilities is one of the most important activities that middle and high school teams can do for students with ASD. Without this kind of planning and preparation, our students with ASD are at risk for lifelong dependence on others. Also, the Individuals with Disabilities Education Improvement Act of 2004 identifies transition as a priority for students with disabilities. In fact, the final regulations of IDEA 2004 define transition services as follows:

The term "transition services" means a coordinated set of activities for a student with a disability that:

- ★ Is designed to be a results-oriented process that is focused on improving the academic and functional achievement of the [student] with a disability to facilitate the [student's] movement from school to post-school activities, including
 - ✧ postsecondary education;
 - ✧ vocational education;
 - ✧ integrated employment (including supported employment);
 - ✧ continuing and adult education;
 - ✧ adult services;
 - ✧ independent living; or
 - ✧ community participation.
- ★ Is based on the individual [student's] needs, taking into account the [student's] strengths, preferences, and interests; and
- ★ Includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and functional vocational evaluation. [34 CFR 300.43 (a)] [20 U.S.C. 1401(34)]

This statute means that transition services are required to be a part of the educational plan for students with ASD who have IEPs. The age at which transition services are required in Virginia is 14 years old. Practically though, for a student with an ASD, the beginning of sixth grade is a great time to assess a student's functional life skills and plan for instruction in academic, career awareness, employment, and living skills (Wehman & Wittig, 2009). In fact, instruction in social and life skills is important even for students with Asperger's Disorder who may be working toward a standard or higher diploma. Table 5, below, describes the essential components of the Transition Individualized Education Plan (Transition IEP).

Table 5
Essential Components of a Transition IEP

Essential Component	Description
Statement of the student's post-school vision in employment, vocational training, higher education	This is best described in the present level of performance. It should be specific and individualized. Teams should avoid general statements regarding a student's desire for a job or independent living. Programs that provide pull down menus of postsecondary goals are not individualized enough to meet the needs of students with ASD.
Report of the Findings from a Transition Assessment in the Present Level of Performance	This assessment should include formal assessment tools as well as structured observations. It should include an assessment of: ★ Student Interests ★ Student Preferences ★ Career Awareness ★ Cognitive Development and Academic Achievement ★ Adaptive Behavior ★ Self-Determination ★ Interpersonal Relationship and Social Skills ★ Communication Skills ★ Emotional Development and Mental Health ★ Employment and Community Skills ★ Community Participation and Independent Living Skills
Appropriate, Measurable, Postsecondary Goals related to ★ Education ★ Employment ★ Independent Living Skills	This is different from the post-school vision mentioned above due to the requirement that this be a measurable goal. For example: Jack will work in a community job that interests him and capitalizes on his word processing and data entry skills. Independent Living Skills should consider the student's needs in the following domains: ★ Home Care and Living ★ Transportation/Mobility ★ Financial and Banking Needs ★ Self-Determination ★ Communication ★ Social Competence and Social Skill Instruction ★ Health and Safety
Transition Services including courses needed to help the students reach their goals	This section of the IEP should include all of the major transition activities required to help the student connect and coordinate supports with adult services agencies.
Summary of Performance for students who are graduating (While not necessarily a part of the IEP, the Summary of Performance is an essential document required by IDEA, especially at the end of school.)	This is required for students prior to graduation to assist them in communicating their accomplishments through school and articulate their post-school vision and goals. The Summary of Performance should include a statement of the student's postsecondary goals; academic achievement, including courses of study; current functional performance; and recommendations on how the student can meet their postsecondary goals.

Finally, section 616(b) of the most recent reauthorization of the Individuals with Disabilities Education Act (IDEA, 2004) requires that states develop State Performance Plans and monitor outcomes related to 20 different indicators of quality. Of those 20 indicators, four related directly to transition. They are listed below with a description of their impact on transition programs for youth with ASD in Table 6.

Table 6
State Performance Plan Indicators Related to Transition and their Impact on Transition Programs for Youth with ASD (20 U.S.C. 1416 [a][3][B])

Indicator	Impact on Transition Programs for Youth with ASD
Indicator 1: "Percent of youth with IEPs graduating from high school with a regular diploma."	This indicator is likely to increase youth with ASDs access to general education curriculum and services to assist students who are able to acquire a standard or higher diploma.
Indicator 2: "Percent of youth with IEPs dropping out of high school."	There will be close monitoring of dropout statistics and efforts to increase successful completion of high school as a result of this indicator. This will have significant impact on the education of students with ASDs who are on or slightly below grade level and are struggling with academic instruction.
Indicator 13: "Percent of youth with IEPs aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition services needs. There also must be evidence that the student was invited to the IEP Team meeting where transition services are to be discussed and evidence that, if appropriate, a representative of any participating agency was invited to the IEP Team meeting with the prior consent of the parent or student who has reached the age of majority. (20 U.S.C. 1416(a)(3)(B))"	This indicator will have a significant impact on IEPs for transition-aged students and will likely result in changes to the IEP beginning at age 14 in Virginia. Instead of having the transition plan as an add-on document in the IEP, this indicator would best be achieved by transforming the IEP at age 14 to a 'Transition IEP.' The transition IEP would be a document where annual goals and transition services are embedded throughout the document and not separated in a "stand-alone" plan.
Indicator 14: "Percent of youth who are no longer in secondary school, had Individualized Education Programs (IEPs) in effect at the time they left school, and were: A. Enrolled in higher education within one year of leaving high school. B. Enrolled in higher education or competitively employed within one year of leaving high school. C. Enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school. (20 U.S.C. 1416(a)(3)(B))"	This indicator should act as a counterbalance to the push for meeting graduation requirements only for students who are able to achieve a standard diploma. Students with Asperger's Disorder should have access to the general education curriculum and specialized instruction in relevant vocational, daily living, and social skills.

These legal requirements emphasize the importance of transition assessment, planning, and programming for youth with disabilities. This is particularly important for youth with ASD. As a group, transition-age students with ASD struggle to achieve employment more than those with other disabilities (Joint Legislative Audit and Review Commission, 2009).

Identifying Goals for Transition-Aged Students with ASD Based on Preferences and Interests

Once a student reaches middle school, the IEP team must begin to contemplate the student as an independent adult worker and consider their strengths and needs from the perspective of adulthood and not from the perspective of missed developmental milestones and deficits related to their disability. The questions below should guide IEP development during the student with ASDs transition years in middle and high school.

1. To what degree is the student's self determined, that is able to make personal decisions, set goals, and implement plans to accomplish those goals?
2. What is the student's or their family members' vision for their future?
3. Where does the student want to live and work as an adult?
4. What are the academic, vocational, recreational, and community-based elements that would create an enviable life for this student?
5. What academic, functional, daily living, communication, and social skills and abilities does the student currently possess that would match his/her vision for him/herself?
6. What academic, functional, daily living, communication, and social skills and abilities does the student require to be able

to accomplish their vision for themselves?

7. Will this student need additional training or education after high school to be able to accomplish their vision for themselves?
8. Is this person able to live independently, that is, do they have the ability to care for themselves, live on their own in an apartment or house, get around in the community, and/or budget their money wisely?
9. What is the depth of this student's experiences in the world of work?
10. What resources are available to her/him that increase the likelihood that she/he will achieve this vision?
11. What skills and abilities will this student need to learn between now and high school graduation that will assist him/her in achieving his/her vision?
12. What work and community experiences does this student need to better inform her/his decision making to prepare for life beyond high school?
13. What experiences, resources, and new agencies will increase the likelihood of a smooth transition into work or postsecondary education and adult life?

When IEP teams consider these questions as a guide to IEP goal development for students with ASD, they will assure that the IEP is based on the student's preferences, interests, and future vision for themselves.

This is important for students at all ability levels who have ASD. In the case of students with ASD who may have difficulty articulating their interests due to an intellectual disability or difficulty communicating with words, teachers and family members may have to rely on observation of the student's preferences to identify meaningful activities for that student. For

example, imagine a student who likes to be outside. Some potential meaningful activities would include gardening, horseback riding, or boating. Some potential jobs could be in landscaping, working on a dock or on a farm. Table 7 demonstrates how narrow student preferences could be shaped into meaningful activities and work.

Table 7
Translating Student Preferences into Meaningful Activities

Preference	Possible Activities	Possible Work Site	Possible Recreation/ Leisure Site
being outdoors moving things loves motion	gardening landscaping boat rides horseback riding	nursery dock farm	nursery home farm park
water baths smells	swimming laundry dishwashing	hotel restaurant candle store	pool
vibrations	baking/cooking vacuuming bike riding amusement rides	hotel restaurant bike store theme park	theme park bike trail
moving things pushing things people	shopping cleaning delivering things pushing a stroller rowing machine	mall grocery store day care post office	gym mall

Curriculum, Literacy, and IEPs

When considering moving from preferences and interests to IEP goals and academic curriculum, it is important to consider the type of curriculum through which a student will acquire mathematics and reading literacy skills. Snell and Brown identified four potential ways to address the curricular needs of students with disabilities (2006). They are presented in Table 8 with a description of the relevant Virginia curriculum that might be delivered through the classroom.

Table 8
Four Curriculum Approaches to Teaching Functional Academics
 (Source: Snell & Brown, 2006)

Curriculum	Learning Outcome	Related Virginia Standards
General education curriculum with or without adaptations	Student will master grade level material with outcomes similar to classmates	Virginia Standards of Learning
Functional, generalized skills usable across life routines	Student will master critical skills for use in home, community, school, and work settings. Students in this curriculum may perform between a 2nd- to 5th-grade level in academic content areas.	Virginia Standards of Learning or Virginia Aligned Standards of Learning depending on grade and age of student and current level of performance.
Embedded academic skills usable in specific life routines	Student will acquire academic skills in the context of their daily routine, e.g.: reading the menu choices at lunch, counting the coins to make a vending machine purchase.	Virginia Aligned Standards of Learning
Adaptations to bypass academic skills	Students will use community-based functional adaptations to academic skills such as matching coins and bills to a money placket, using picture menus to order food at restaurants, following picture schedules to read.	Virginia Aligned Standards of Learning

Any given student could receive instruction in different curriculum for different subject areas. The student with ASD who has strength in mathematics might receive instruction from the *general education curriculum with adaptations*, while that same student might receive instruction from the *embedded academic skills usable in specific life routines curriculum* for reading or language arts. The teacher should always be prepared to offer guidance on what skills and curricula are necessary to maximize future levels of independency.

Thus, students who have intellectual disabilities in addition to ASD and receive their education in a functional life skills program continue to require instruction in basic mathematics and reading literacy. Teams should embed academic content into functional activities to assure that students who have ASD and intellectual disabilities have their academic and functional skill needs met in their educational programs. Table 9 demonstrates how functional skills and Virginia's Aligned Standards of Learning are compatible.

Table 9
Example of Aligned Standards of Learning and Functional Skills
Where Those Standards Can Be Taught

Virginia's Aligned Standards of Learning (ASOL)	Functional Activities In Which the Standard can be Taught
E-RW 21 (SOL 6.5) The student will read and demonstrate comprehension of a variety of informational selections. a) Identify questions to be answered. b) Make, confirm, or revise predictions. c) Use context to determine meanings of unfamiliar words and technical vocabulary. d) Draw conclusions and make inferences based on explicit and implied information. e) Organize the main idea and details to form a summary. f) Compare and contrast information about one topic contained in different selections. g) Select informational sources appropriate for a given purpose.	While reading newspaper articles about their high school's sports teams, students with ASD learn how to master the skills in this ASOL. Students who do not have reading skills use picture clues and writing with symbols to read a simplified version of the article.
E-RC 10 (SOL 5.6) The student will read and demonstrate comprehension of nonfiction. a) Use text organizers, such as type, headings, and graphics, to predict and categorize information. b) Identify structural patterns found in nonfiction. c) Locate information to support opinions, predictions, and conclusions. d) Identify cause-and-effect relationships. e) Identify compare-and-contrast relationships. f) Skim materials to develop a general overview of content and to locate specific information. g) Identify new information gained from reading.	On their community-based job site, students will read signs and written instructions in the environment to gain information regarding the rules at work. For students who do not have reading skills the teacher created picture representations to assist them in comprehending nonfiction work.
M-NS 30 (SOL 6.1) The student will identify representations of a given percent and describe orally and in writing the equivalent relationships among fractions, decimals, and percentages.	While delivering the middle school's newspapers, students calculate the percentage of newspapers delivered and yet to be delivered using fractions, decimals, percents, and simple ratios.
S-R 5 (SOL 3.11) The student will investigate and understand different sources of energy. Key concepts include a) the sun's ability to produce light and heat energy; b) sources of energy (sunlight, water, wind); c) fossil fuels (coal, oil, natural gas) and wood; d) renewable and nonrenewable energy resources.	While completing community-based training, students will identify how different environments are heated including buildings, cars, outdoor areas, and homes.
HS-E11 (SOL 3.9) The student will identify examples of making an economic choice and will explain the idea of opportunity cost (what is given up when making a choice).	While completing community-based shopping tasks, students will make purchase choices based on the amount of money they have available to them.

Curriculum and Students with ASD who Work toward a Standard or Advanced Studies Diploma

Too often students with Asperger's Disorder who have the academic skill to graduate with a standard or higher designation diploma do not receive specialized instruction in important social and functional living skills that would increase their success in higher education and employment. Thus, too many students with higher academic abilities are not able to achieve successful employment or independent living because of the lack of specialized instruction in these important areas. A student with ASD who is able to manage complex academic

work should not have to sacrifice their academic goals to receive instruction in functional and social skill needs. They should not have to choose between receiving specialized instruction in functional work and daily living skills or academic rigor. Instead, IEP teams should be flexible and take advantage of the extra time provided to students with disabilities to meet their functional *and* academic instructional needs. Table 10 demonstrates how one IEP team delayed graduation for Matthew, a student with ASD, who had advanced academic skills and significant social and functional skill needs to develop a comprehensive educational plan and extend his high school career by one year.

Table 10

Matthew's High School Plan to meet his Advanced Academic Needs and His Functional Employment and Social Skill Needs

High School Year 1 ★ English 9 ★ Social Studies 9 ★ Earth Science ★ Basic Computer Programming Elective ★ Education for Employment 1 ★ Social Skills for Success 1	High School Year 2 ★ English 10 ★ Algebra II (He completed Algebra I in the Middle School Honors Class) ★ Computer Programming ★ Biology ★ Education for Employment 2 ★ Social Skills for Success 2	High School Year 3 ★ English 11 ★ Calculus ★ Chemistry ★ Elective ★ Work Study – 2 Periods
High School Year 4 ★ Trigonometry ★ Computer Elective – Dual Enrollment at the Community College ★ Science Elective – Dual Enrollment at the Community College ★ Western Civilization ★ Elective ★ Work Study – 2 periods	High School Year 5 ★ English 12 ★ Math Elective – Dual Enrollment at the Community College ★ Computer Elective – Dual Enrollment at the Community College ★ Science Elective – Dual Enrollment at the Community College ★ Work Study – 3 periods	Summer Classes in High School Year 1, 2, and 3 ★ Physical Education and Health ★ Physical Education, Health, and Driver's Education ★ Computer Animation (By taking summer courses, Matthew was able to have extra time in his school day to meet with the speech therapist and practice social skills during the first 3 years of high school)

Regardless of the curriculum, many students with ASD required specialized instruction in communication, social interaction and social skills. These skills are critical to lifelong success for persons with ASD. The next step in the process of developing a transition IEP is to identify measurable goals.

Measurable Goals

Once the team has identified the general curriculum components needed for a transition-age student with ASD to move closer to their future vision, the next task is to convert those general ideas into measurable annual goals. Because of the learning profiles of students with ASD, school teams need to collect data to verify acquisition of skills. Thus, the design of the goal is very important. A measurable goal has five components. They are:

- 1.) The condition under which the student will perform the skill;
- 2.) The student's name and future tense modifying verb;
- 3.) The skill written in observable terms;
- 4.) The criterion that the student must demonstrate to master the goal; and
- 5.) The amount of times the student must maintain the mastery criterion to confirm mastery.

Below is an example of a measurable goal that meets all of these requirements for a student who is in a functional skills curriculum:

1. Given a visual schedule with her assigned tasks in order (condition),
2. Emma will (student's name and verb),
3. Complete at least three consecutive tasks in her internship in the middle school library (skill written in observable terms),
4. With 90 percent independence (criterion for mastery),
5. For three consecutive weeks (amount of time to confirm mastery).

Next is an example of a measurable goal for a student who is in a general education with modifications curriculum:

1. Given a vocational Internet site, a computer with Internet access, and a vocational titles

dictionary,

2. Rob will
3. Prepare a report on career requirements and demands in career fields of his choice
4. Receiving 90 percent or higher on a scored, teacher-made rubric
5. On at least two different reports each 9 weeks.

The ability to write measurable goals is one of the most important aspects of IEP development. After all, a student's IEP goals comprise the skills a student will master in the school year and defines the specialized instruction that a student will receive. The biggest error teachers make when writing measurable goals is using a term that sounds like a laudable goal but is not measurable. For example, a teacher might want to increase a student's 'understanding of the world of work.' Thus, they might write a goal that reads, "Jackson will increase his understanding of the world of work to 90 percent accuracy for three consecutive weeks." While this is a laudable sentiment, it is not a measurable goal. In order to make this goal a measurable one, Jackson's teacher must define what Jackson will do in order to demonstrate his 'understanding of the world of work.' Not only will measurable goals result in better instruction for students, they will also make the teacher's job easier. Compare the task of teaching a student to 'understand the world of work' to 'completing a report on the requirements and demands in a career industry of his choice.' The second is easier to implement because it is defined in a way that the teacher can easily teach and evaluate the result of instruction.

Selecting Modifications and Accommodations

Students with ASD frequently require accommodations and modifications to nullify the effects that chaotic school and community environments can have on their hypersensitive sensory systems. For many with ASD, sensory issues are not only irritating but also may be painful and disrupt their ability to learn and participate in typical activities. Putting students with ASD in settings where sensory irritants are not addressed is

a recipe for disaster. How do you modify a classroom environment to address the sensory issues of someone with ASD? This is often a complicated and difficult question as many schools are unprepared or unable to make huge environmental changes (e.g., change all of the lighting in a school building to incandescent or change the heating system). Simple adaptations and accommodations, though, can be made to lessen the impact of sensory issues on the student with ASD. When accommodating for sensory issues three key questions apply:

1. **Can the source of sensory input be eliminated or avoided?** For example, avoid placing a student who gags at the smell of certain foods being cooked in cooking class or the cafeteria when these foods are prepared.

2. **Can the source of sensory input be modified?** For example, reducing the amount of material posted on classroom wall for a student who has problems with excessive visual stimulation.
3. **Can the student be taught a new response?** For example, teach the student to recognize the problem and ask in their mode of communication to leave the area.

Some common ways that teams provide accommodations to assist students with ASD in chaotic sensory environments are listed and described below in Table 11.

Table 11
Commonly Used Accommodations for Students with ASD

Type of Accommodations	Examples of Accommodation
Visual Supports	Visual Schedules Lists of Tasks Video Examples of Expected Social Behaviors Visual Representation of Classroom / Work Site rules
Structured Classroom and Work Site Tasks and Routines	Providing a low distraction, visually clear area for work Developing and teaching standard routines to adjust to difficult situations such as changes in routine and managing downtime at work
Academic Accommodations and Modifications	Using a computer in place of handwritten work due to difficulties related to fine motor skills Providing a specific block of time in which to complete tasks Using a timer to assist the person with transitions between tasks Providing visual cues on written tasks Reducing the number of problems to be completed Reducing homework demands due to time it takes to complete or anxiety regarding school work Reducing written work demands Providing copy of notes Allowing modified assignments based on the student's IEP goals Providing extra time to complete tests Providing a word bank for writing assignments
Other Accommodations	Provide a quiet/calming space when students become overwhelmed Provide frequent breaks to move around

While this list is not exhaustive, it does provide a sample of the type of accommodations that are frequently provided to students with ASD. In addition to accommodations, teachers frequently find it necessary to modify the work that students with ASD complete. Many students have motor challenges that make handwritten work difficult and sometimes painful. Thus, teachers often seek ways to measure the student's knowledge without having to rely upon handwritten work. Those modifications include providing students copies of notes, allowing typing in place of handwriting, allowing the student to dictate answers to questions, allowing students to complete complex file-folder activities, and other such modifications. It is important to note that these accommodations and modifications are intended for use in the classroom and regular classroom work. There are specific regulations regarding the types of accommodations and modifications allowed when students take the Standards of Learning tests. By providing accommodations and modifications such as those described above, students across the autism spectrum are frequently able to increase their independent participation in their own education.

Inclusion and Direct Instruction, Achieving the Right Balance

Youth with ASD have significant communication and social challenges across the spectrum. Most students require direct instruction in communication and social interaction. They also need to learn from and with peers who do not have ASD. Inclusion is the practice of placing individuals with disabilities into classroom and community settings and situations with their peers without disabilities. This is a very important aspect of education for individuals with ASD. Providing inclusive experiences allows the individual with ASD to learn social and communication skills in the very place they will use them, with other people. Thus, through inclusive experiences, a team is able to impact the most difficult aspects of the disorder, addressing the need for improvement in social and communication skills. For individuals with ASD, the objective of such placements concerns the very

characteristics of the disorder itself. Specifically, we place youth with ASD in inclusion settings to:

- ★ Learn literacy skills in general education settings;
- ★ Learn social communication and interaction skills with peers without disabilities; and
- ★ Foster independence and self determination.

People with ASD have much to gain that will enrich their lives and provide opportunities to learn new skills when they go to school and interact with peers without disabilities (Harrower & Dunlap, 2001). Even so, inclusive experiences require planning and coordination among team members. Therefore, teams need to assure a balance between direct, specialized instruction and inclusion. For many students with Asperger's Disorder, their educational program is unbalanced with too much inclusion and not enough direct instruction in social communication and interaction. Likewise, students with ASD who also have significant intellectual disability frequently experience the opposite; too much direct instruction in self-contained special education environments and not enough inclusive opportunities.

In order to increase the success of inclusion experiences and maximize learning, educational teams have to:

- ★ Balance inclusive experiences with a student's need for direct, specialized instruction and assure that the student is adequately supported in the inclusive environment;
- ★ Select the inclusive environment that will result in the student meeting their goals; and
- ★ Develop easy, informative, and effective communication between team members. Inclusion can be an effective tool that increases a student with ASD access to the general education curriculum and provides rich learning experiences. At the same time, implementing inclusion requires careful planning and coordination among educational team members.

Community-Based Instruction

One final point about inclusion, though, is important to emphasize. That is to remind educators to think widely about inclusion for transition-aged youth. In special education, the word, 'inclusion' usually means placement in general education classes. However, for an 18-year-old student with ASD, inclusion could be accomplished by placement in a community-based internship or work experience. In fact, given the difficulty that students with ASD have generalizing skills from one setting to another, providing inclusive experiences in real environments is a very important educational strategy.

As learners, students with ASD need extensive practice in order to be able to generalize skills learned in one environment to a new environment. This is true whether the student experiences Asperger's or classic autism. The best way to avoid having to teach and re-teach skills in every new environment is to teach skills in the environment where it will be used. For transition-aged students this is most important. After all, nearly all of the skills a transition-aged student learns will be used in other environments. Consequently, whenever possible, instruction should be provided in the community where the student lives and in businesses frequented by the student and his or her family. This will ensure that the student has opportunities to socialize in the community and learn skills that will be applicable in the student's community environment. In community-based instruction, educational objectives are taught in natural community environments, such as work sites, shopping malls, and restaurants. Where other students rely on textbooks, computer Web sites, and teacher lectures to learn skills, students with ASD require community-based instruction to learn skills. These are not field trips. Instead, educators should consider these community experiences as though they are the textbooks to teach necessary skills.

Accessing Transportation

One important aspect of community-based instruction and community living is accessing

transportation. Getting around by foot, bus, train or car can be problematic for some students with ASD. Inability to safely travel can interfere with their attempts at gaining independence. Although they may know the steps involved in safe and independent transportation, there can be a failure to actually use those skills during community travel. Some areas that may need support like crossing the street, minimizing disruptive or dangerous behavior when riding in private vehicles, and using appropriate social skills to use public transportation will be described below.

Street-crossing

Simple skills like safe street-crossing can be absent in individuals with ASD. Failure to pay attention, refusal to follow traffic laws, or the tendency to engage in rituals while walking can all present hazards to individuals with ASD. Although the student might be able to repeat the rules, the student might not use them.

Use of Public Transportation

Use of public transportation involves logistics and skills that many students with ASD can easily learn and master. These logistics include bus numbers, routes, fares, and transfers. The social requirements of public transportation can be more difficult to learn. Talking aloud to one's self on public transportation, becoming irate at fellow customers who accidentally bump into them and becoming alarmed if the route is changed are not uncommon problems for students with ASD.

Instruction for Transition-Aged Youth with ASD in Natural Environments

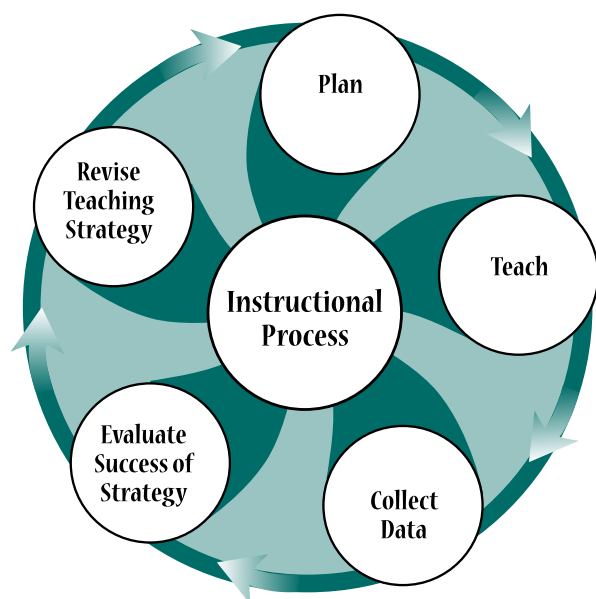
As noted above, it is critical to learning that transition-aged youth with ASD have access to educational services in natural environments. The next sections will discuss how to implement services in natural environments using scientifically-based teaching practices.

The Instructional Process

Up to this point, this document has reviewed important aspects of education for transition-aged youth with ASD. Specifically, transition-aged students with ASD have been described, (who). The identification of educational goals based on student interests and preferences has been discussed, (what). A balanced approach to educational placement and the importance of community-based instruction has been illustrated, (when and where). The last and perhaps most important aspect of transition programming is to teach the skills in the transition IEP and structure community-based experiences to maximize learning (how). This section will review evidenced-based teaching strategies for youth with ASD.

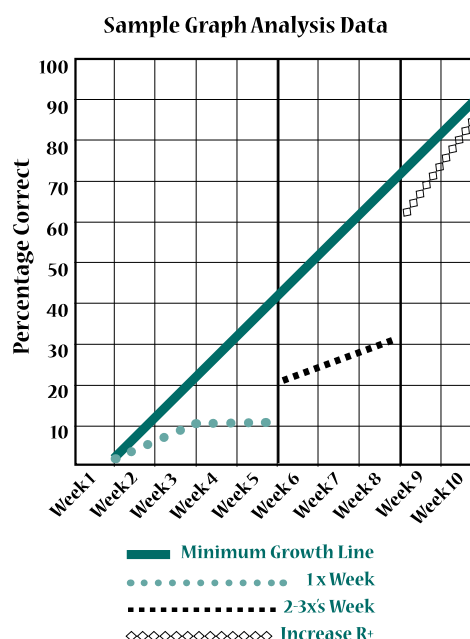
Systematic instruction is the set of teaching strategies and techniques which can empower young people with autism to be more independent and capable. These learning strategies need to be evidence-based, that is, need credible empirical research as a foundation. All evidence-based strategies involve data collection to verify the success of the instructional method. In fact, Figure 3 shows how data informs educational practice and instructional strategies through the instructional process.

Figure 3
The Instructional Process



Using an evidenced-based teaching strategy does not guarantee instructional success. Instead, teachers have to collect data in order to either verify the success of the instructional strategy or decide to revise the strategy. Thus, the instructional process is continual until the skill is mastered. Figure 4 presents a sample graph detailing how teachers should evaluate their instructional strategy.

Figure 4
Sample Graph Depicting Ongoing Data Collection



Note first, the solid line that extends across the entire graph. This is called the *minimum growth line*. It does not represent actual data collected. Instead, it is a line by which a teacher can track whether or not a student's learning rate is sufficient to master the given goal. In this case, the goal stipulates a mastery criterion of 90 percent correct by the end of the teaching period. At the beginning of the teaching period, the teacher completed a probe and found that the student demonstrated 0 percent of the skill. The teacher then drew a line between the baseline (0 percent) and the goal criterion (90 percent). This line is a guide to the teacher as instruction progresses; s/he can compare the student's performance against that line. As long as the student demonstrates performance that is on or above the line, then the

student is on track to master the goal. If the student demonstrates performance below that line for three data points, then the teacher should revise their teaching strategy.

Once the teacher has established a baseline performance and plotted the minimum growth line, then s/he should collect data on the skill on a reasonably regular schedule. Daily data collection may impede instruction and take too much time, while monthly data collection would not allow the teacher to make changes quickly enough to revise their instructional strategy when the student falls behind. Thus collecting data weekly to twice monthly would allow flexibility in instructional strategy revision without interfering with daily instruction.

In the example in Figure 3, the teacher taught the skill once weekly between weeks 1 and 4. This is depicted on the graph by the dotted line at the bottom of the graph between week one and four. This schedule of presentation was inadequate to result in sufficient progress. Consequently the teacher increased skill practice to twice or thrice weekly beginning in week 5. This is depicted on the graph by the dashed line between weeks 5 and 7. With the increased practice, this student's performance improved, but not enough to master the skill within the time left. Consequently,

the teacher increased the amount of positive reinforcement (R+) presented in response to the skill. This change was depicted between weeks 8 and 10 by the diamond line. That revision to instruction resulted in the student mastering the skill at the targeted criterion. Regardless of the instructional strategy selected, data collection is an essential aspect of the instructional process. We emphasize the importance of data to guide teaching practice by describing it in detail prior to explaining specific instructional strategies. This is because data collection is the bedrock practice that will allow teachers to plan and adjust their plans resulting in increased student progress.

Specific Instructional Strategies

While there is no one curriculum or treatment package that automatically results in guaranteed learning for students with ASD, there are a number of instructional strategies that do result in increased independence and skill acquisition for middle and high school students with ASD. Table 12 presents a list of those strategies that have been demonstrated as evidence-based according to the National Professional Development Center on Autism Spectrum Disorders for this age group. Additionally, Table 12 details the type of skills best matched to the strategy.

Table 12

Evidenced-Based Instructional Strategies for Transition-Aged Youth with ASD

(Source: The National Professional Development Center on Autism Spectrum Disorders, 2009).

Evidence-Based Strategy	Brief Description of Strategy	Skills Best Taught or Intervention Addressed by Strategy
Antecedent-Based Interventions	Modifying the environment, antecedents, or setting events to prevent the need for challenging behavior	In response to problem behavior and after a functional behavior assessment has been completed
Computer-Aided Instruction	Use of a computer to teach communication or academic skills. There are some programs currently being used to teach social skills as well.	Communication Skills Academic Skills Limited Evidence for Social Skills

Table 12**Evidenced-Based Instructional Strategies for Transition-Aged Youth with ASD *continued***

Evidence-Based Strategy	Brief Description of Strategy	Skills Best Taught or Intervention Addressed by Strategy
Differential Reinforcement Integrated into Self-Management Plans	Providing positive reinforcement for the absence or lower rate of a problem behavior	In response to problem behavior
Functional Communication Training	Replacing a problem behavior with a communication behavior	In response to problem behavior after a functional behavior assessment has been completed
Naturalistic Intervention	Providing cues, prompts, and instruction in natural environments to elicit and reinforce communication and social behaviors	Communication skills and behaviors Social skills and behaviors
Peer Mediated Instruction	Teaching peers without disabilities to interact with and cue positive social behavior	Social interaction and social networking
Pivotal Response Training	Applying the principles of applied behavior analysis to natural environments to teach pivotal behaviors including motivation, responding to multiple cues, social interaction, social communication, self-management, and self-initiation	Social communication and interaction behaviors
Prompting Procedures	Verbal, gestural, physical, model, and visual prompts and prompting systems including least to most prompts, simultaneous prompts, and graduated guidance	A wide variety of skills
Reinforcement	Strengthening any behavior by providing a consequence that increases the likelihood that the behavior will occur again. Includes positive reinforcement, tokens, point systems, graduated reinforcement systems.	A wide variety of behaviors
Response Interruption/Redirection	Providing another activity that appears to serve the same function as a problem behavior; e.g.: Offering popcorn in place of eating a pencil (pica)	Problem behaviors that appear to serve a self-stimulatory function
Self-Management	A wide array of interventions to increase appropriate behaviors and decrease problem behaviors for learners across the spectrum including social conversation, sharing, giving compliments, anger management, habit reversal, etc.	Behaviors that are able to be defined and practiced by the person with ASD
Social Narratives	A written intervention where social situations and responses are described in detail. Social stories (developed by Carol Gray) are included in this category.	Social Skills

Table 12
Evidenced-Based Instructional Strategies for Transition-Aged Youth with ASD *continued*

Evidence-Based Strategy	Brief Description of Strategy	Skills Best Taught or Intervention Addressed by Strategy
Social Skills Groups	Up to eight individuals with ASD practice social skills and social interactions in a group with an adult facilitator.	Social Skills
Speech Generating Devices (Voice Output Communication Assistance, VOCA)	An electronic device that has small to large screens where a picture indicates what will be said when pressed.	Communication
Stimulus Control	Using reinforcement to teach a person to perform a certain behavior under very specific stimuli.	Behavior and Academic Skills
Structured Work Systems	Designing the environment so that work is visually displayed and expectations for completion are visually presented as well.	Transitions between activities and Academic Skills
Task Analysis	Teaching skills with many steps a few steps at a time with reinforcement following each step.	A wide variety of skills
Video Modeling	Using video to show the correct way of responding to a variety of social situations.	Academic skills, communication, and social skills
Visual Supports	Providing an array of information in visual formats including the daily schedule and steps to complete a task, social behaviors, communication supports, how to transition between activities.	A wide variety of skills

As the table above demonstrates, there are many individual strategies that are scientifically-based and applicable for transition-aged youth. At the same time, there is not one packaged program or curriculum that is evidenced-based. This is an important point for transition-aged youth with ASD. This means that teachers can feel confident implementing any of the strategies above provided that they are able to implement the strategy with fidelity and that they have applied it appropriately to the correct skill or skill set. Finally, the fact that there are a number of individual strategies that can be implemented with confidence, it is, again, important to verify the success of the strategy through data collection. In other words, if a teacher is attempting

to teach a student with ASD how to ask for time off from their supervisor, and he finds that the task analysis is not resulting in sufficient progress, then the teacher should alter the teaching plan. That alteration could include changing the teaching strategy from task analysis to video modeling or pivotal response training.

Also, all of these strategies apply the principles of applied behavior analysis (ABA). When teachers use these strategies to teach functional skills documented in the IEP, and they collect data to verify the efficacy of instruction, they are using ABA. Thus, ABA is not a singular curriculum designed to teach young children with ASD only. Instead, ABA

is the manipulation of antecedent events and the application of reinforcement designed to strengthen target behaviors.

Finally, observe that a notable ABA strategy, discrete trial training, is not on this list of scientifically-based practices for middle and high school youth with ASD. This is because, while discrete trial training is a scientifically-based practice for younger children with ASD, there is not enough research to document its applicability to adolescents and young adults. Therefore, it is not included on this list at this time.

Addressing Challenging Behavior through Positive Behavior Support

As mentioned earlier in this Guide, some individuals with ASD display challenging behavior. Such behavior can be a barrier to successful inclusion in work and community living. Thus, an important aspect of transition services is to address a challenging behavior through the use of behavioral strategies.

Most behavior, problem or adaptive, serves a specific function in the life of the person in question. In order to change that behavior we must assess the function of problem behavior and replace it with a functional communication or social skill that will accomplish the same outcome for the person (O'Neill, et al., 1997). With this view, it is important to understand that problem behavior is not something that has to be suppressed. Instead, problem behavior is a form of communication that has a function in the life of the person who displays it. Using the laws of behavior, we can narrow the messages that a behavior is communicating down to four basic messages. Those messages are; a.) seeking attention from others, b.) seeking something tangible like an item, activity, or food, c.) seeking sensory input

from the action itself, or d.) avoiding a person, task, item, or environment. These consequences, also known as reinforcement, make behavior stronger. According to ABA, behavior that is reinforced with one of the four basic consequences described above is made stronger (Cooper, Heron, & Heward, 2007). So, problem behavior has been reinforced, probably unknowingly, by one or more of those four consequences. Thus, problem behavior becomes established as a way of 'requesting' a particular consequence. In order for us to replace that behavior with a different behavior, we have to figure out which of the four basic consequences are relevant to an individual with ASD particular behavior and teach that person a new way to ask for that consequence.

In addition to understanding the consequences that are present after a problem behavior has occurred, we also have to understand the events preceding the behavior that trigger its occurrence. These events, called antecedents, will help us understand which of the four consequences result in the problem behavior. For example, if a problem behavior mostly happens after an individual with ASD is left alone, we might guess that individual is seeking attention. If his problem behavior usually happens after an individual is given a task he does not like, then we might guess that he is avoiding that task.

Functional Behavioral Assessment

In this discussion of problem behavior, we have proposed that problem behavior might serve a particular function. In order to identify the function of a particular behavior, we will have to perform a functional behavioral assessment (FBA). FBA includes three different phases. They are indirect assessment, direct assessment, and hypothesis development. Table 13 defines each phase and describes the way data is collected to assess the function of problem behavior.

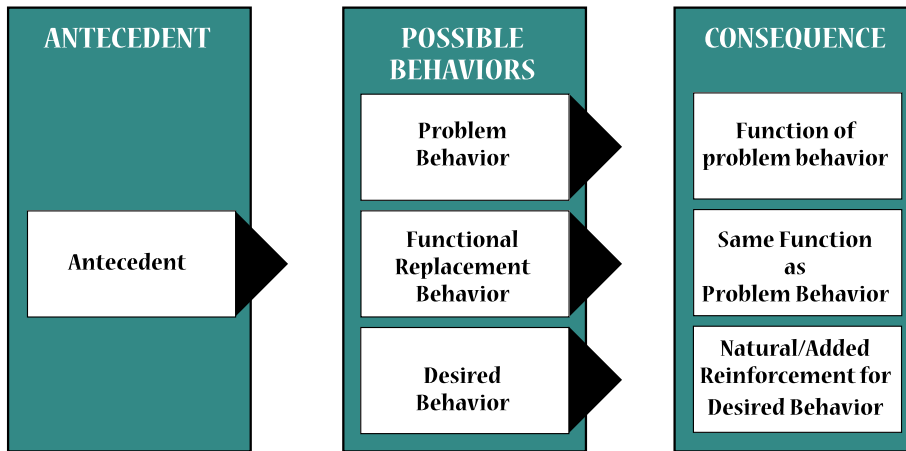
Table 13
Three Phases of Functional Behavioral Assessment

Phase	Type of Data Collected	How Data is Collected
Indirect Assessment	Understanding of person's likes, dislikes, long-term goals Definition of problem behavior History of problem behavior Person's and/or family members' perspectives on possible antecedents and function of problem behavior Team members perspectives on possible antecedents and function of problem behavior	Review of person's educational and behavioral records Interview with person and team Review of incident reports Review of behavioral data
Direct Assessment	Antecedent, Behavior, Consequence Patterns Interval Counts Frequency Counts Measures of intensity of problem behavior Current strategies and their effectiveness	Observations of the person in environments where they work, learn, communicate, interact with others, and live.
Hypothesis Development	Antecedents associated with problem behavior Functions of problem behavior Locations where problem behavior occurs Descriptions of the behavior including frequency, intensity, duration Identifies possible functionally equivalent replacement behaviors and desired behaviors	Summarize findings from data collected through indirect and direct assessment

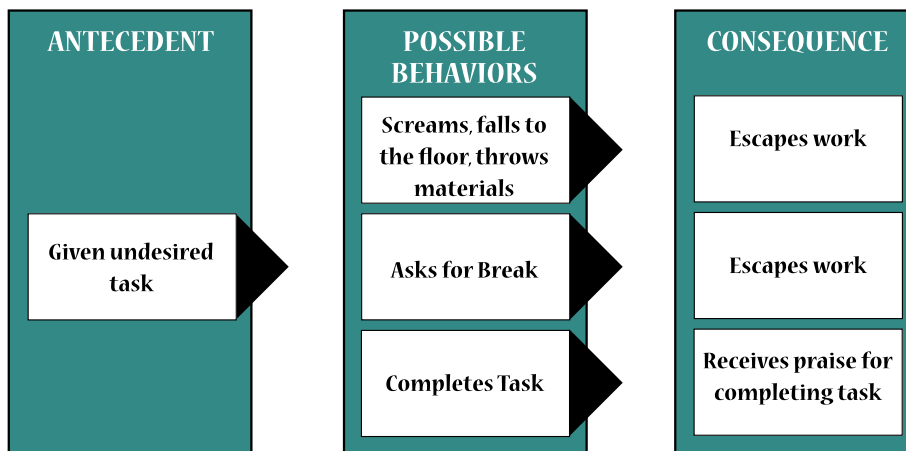
Behavior Model" (O'Neill, et al., 1997). This model is the first step in developing a Behavior Intervention Plan. Figure 5 provides an example of the Competing Behavior Model for an escape motivated and attention motivated behavior.

Figure 5

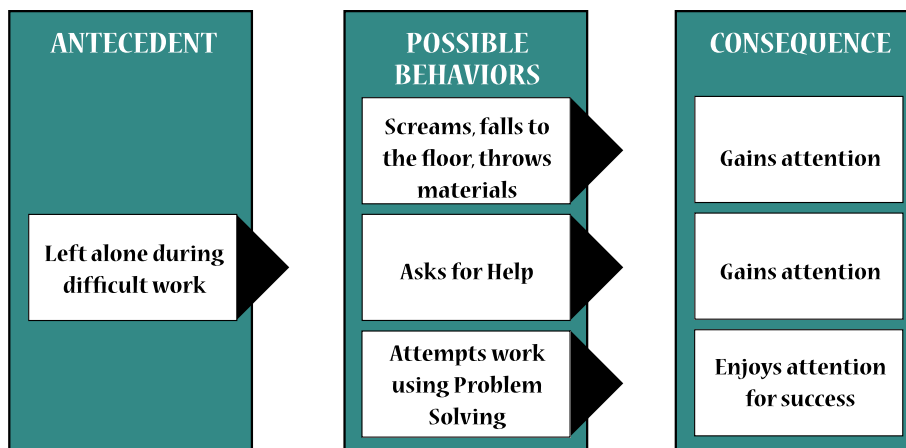
The Competing Behavior Model for Escape Motivated and Attention Motivated Behavior



Example of Competing Behavior Model for Escape Motivated Behavior



Example of Competing Behavior Model for Attention Seeking Behavior



In Figure 5 on the previous page, there is one antecedent and three possible behaviors that lead to two different outcomes. In plain terms, the 'escape motivated' example (above) could be described as follows:

1. When Sam is asked to complete a task he does not like, he will scream, fall to the floor, and throw his materials in order to avoid the task.
2. His teacher will first teach him to ask for a break to replace screaming, falling to the floor, and throwing his materials.
3. Once Sam has mastered the replacement behavior, asking for a break, his teacher will teach him to tolerate completion of the undesired task by increasing positive reinforcement for task completion.

Likewise, the attention motivated behavior could be described as follows:

1. When Emily is left alone during difficult work, she will scream, fall to the floor and throw materials in order to gain her teacher's attention.
2. Her teacher will first teach her to ask for help to replace her problem behavior.
3. Once Emily has mastered the replacement behavior, asking for help, her teacher will teach her to attempt her work using problem solving strategies before asking for help.

Notice that, in each case, the behaviors are the same, but the strategies to change behavior vary. This is because the function of each behavior is different. That is an important point to remember when developing an intervention to change behavior. That is, there is no 'treatment' per se, for specific problem behaviors. Instead, the real key to changing problem behavior is to understand and treat the function of the problem behavior. Also, notice that by completing the competing behavior model, the

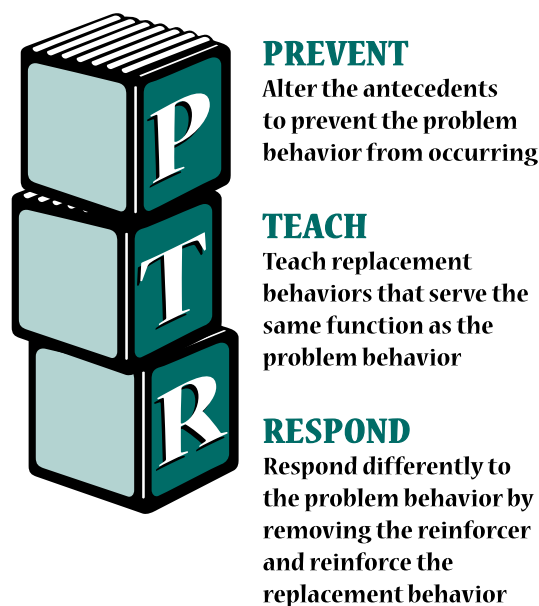
educational team actually begins to assimilate the information collected from the FBA and develops a behavior intervention plan (BIP).

Behavior Intervention Planning

Through the Competing Behavior Model, the educational team identifies new behaviors that can replace the problem behavior. At the same time there are other strategies that the team should consider. In fact, at minimum, a BIP should include three essential building blocks. They are: 1.) prevent the problem behavior from occurring, 2.) teach new behaviors that will replace the problem behavior, and 3.) respond differently when the new behaviors and the problem behaviors occur. These three building blocks are depicted in Figure 6.

Figure 6
Three Essential Building Blocks for a Behavior Intervention Plan

(Source: Dunlap, et al., 2010)



On the next page, in Table 14 are some sample behavior intervention strategies for each of these three essential building blocks.

Table 14
Sample Behavior Intervention Strategies for Each Essential Building Block

 PREVENT the Behavior From Occurring	 TEACH Replacement Behaviors	 RESPOND Differently to the Problem and New Behavior
Remove Problem Events • Avoid giving difficult word problems for independent seat work • Avoid requiring repetitive tasks (e.g., writing out spelling words) • Avoid giving caffeinated drinks • Avoid bringing the person to large crowds • Avoid exposing person to long delays Modify a Problem Event • Shorten lessons • Reduce the number of problems on a page • Modify instruction to decrease errors • Increase instruction pace • Change voice intonation • Modify a boring schedule • Use suggestive rather than directive language • Increase fiber in diet • Treat the physical illness Interspersing Events • Mix difficult word problems with easy ones • Mix mastered tasks with acquisition tasks for independent seat work • Schedule nonpreferred activities among preferred activities • Precede directive for non-preferred activities with easily followed directives Block or Neutralize Negative Events • Allow the person to take frequent breaks during difficult work activities • Reduce academic demands when the person appears agitated or upset • Provide opportunities for rest when the person is tired or ill • Provide time alone or time to regroup after a negative event	• Teach the individual to communicate "I need help," during difficult situations • Teach the person to initiate social interactions (play with me) • Teach the person to play a video game to replace finger flicking • Teach the person to request a break when frustrated or tired • Teach organizational skills to prevent the person from becoming frustrated when faced with multiple tasks • Expand social interaction skills so that the person has more opportunities to make friends • Teach the person to self-initiate activities using a picture schedule to prevent boredom • Use desensitization techniques to teach the individual to accept medical examinations • Teach the individual to relax during stressful events • Teach the individual negotiation or conflict resolution skills • Teach the individual to control angry outbursts Add Events That Promote Desired Behaviors • Provide a choice of tasks, materials, and activities • Include the person's preferences in curriculum development • Use cooperative learning strategies to encourage participation • State clear expectations for the person's performance at the start of each activity or lesson	Reinforce Use of Alternative Skills Examples • Respond to all requests for a "break" immediately and consistently • Prompt peers to respond to person's request for interaction • Use praise and give as rewards for solving word problems • Have the student self-record instances of controlling anger Reduce Outcomes of Problem Behavior Examples • Redirect the person to another activity or prompt her to use the alternative skill • Provide corrective feedback Crisis Management Examples • At the first signs of crisis, engage the person in a calming activity • Clear others from the room and make the room safer • Use gentle physical guidance and protection to prevent self-injury • Schedule preferred activities in daily routines; involve person in the planning of their day to increase predictability • Provide a rich variety of activities from which to choose • Provide increased opportunities for social interactions before problems arise • Provide opportunities for daily exercise • Promote a healthy diet

In addition to the strategies listed above, individuals with ASD frequently require additional interventions to increase their maintenance of skills learned and to improve their connections to others. They include the following:

Maintenance Strategies Examples

- ★ Teach teachers and/or staff in other settings how to make specific accommodations
- ★ Teach peers to understand the person's communication system
- ★ Use picture schedules to make daily routines predictable and understandable to the person
- ★ Help the person practice new skills in different settings
- ★ Develop the person's problem solving skills
- ★ Help the person set and monitor goals.

Quality of Life Adaptations Examples

- ★ Help the person maintain friendships by inviting peers to interact and share common interests
- ★ Use peer networks to introduce the person into social and play groups
- ★ Incorporate opportunities for daily choice-making into all routines
- ★ Develop an action plan that will move the person from a segregated to an inclusive setting
- ★ Sample prospective jobs to help the person procure a job of their choice
- ★ Help the person participate in social recreation and leisure activities of their choice

In summary, a single BIP requires multiple strategies in at least three areas to result in long-term change. They are prevention strategies, teaching strategies, and strategies that result in responding differently to the problem behavior.

Navigating the World of Adult Services

So far, in this Guide, we have focused on the supports and services a transition-aged student with ASD requires in school. Having discussed those essential elements of a transition program and teaching strategies, it is now time to turn attention to a very important aspect of transition planning. That is the coordination of services with agencies and support outside of the school. These next sections will discuss the supports and services that are available to individuals with ASD in the community and from adult services agencies.

Adult Services

Transitioning youth with ASD and their families have the potential to receive services and support from a variety of public and private programs. The exact mix of what is available will vary and will depend upon a student with ASD needs and transition goals, the nature of the individual's disability, and the program's eligibility requirements. In the public education system, special education services are an entitled service for eligible individuals. When a student with ASD leaves high school he or she no longer has a legal right to the variety of services covered by the Individuals with Disabilities Education Act (IDEA) (U.S. Department of Education, 2004). For the most part, adult services are not entitlement-based. Instead, a student with ASD must meet a particular organization's entrance eligibility and prerequisite criterion to be eligible for services. Different laws and/or policies govern each of these programs. In addition, there is no one agency that acts as a single point of contact for

overall service coordination. Therefore, a critical part of transition involves connecting each student with ASD with the appropriate adult services. This requires developing a good understanding of these programs as well as establishing and maintaining an ongoing working relationship across all agencies and team members.

In this section, a general description of the federally funded state Department of Rehabilitative Services, Community Rehabilitation Service Providers, Centers for Independent Living, One-Stop Career Center, and Community Service Boards is provided. Table 15 below shows the agencies that will be reviewed, followed by text describing each agency, their mission and eligibility criterion.

Table 15
Major State and Local Agencies that Provide Services to Transition-Aged Youth and Adults with Disabilities

State or Local Agency	General Services Offered	Web Site
Department of Rehabilitative Services (DRS)	Employment planning and access to funding for employment services and supports	http://www.vadrs.org/
Employment Services Organizations (ESO)	Independent organizations who provide a variety of direct supports and services to individuals with disabilities seeking employment or working	See: http://www.vadrs.org/essp/esolist.aspx for interactive list
One-Stop Centers	Centers available to anyone in the community seeking employment, including individuals with ASD and other disabilities. Provides an array of services including vocational training and job placement services.	http://www.vadrs.org/dpn.htm
The Department of Behavioral Health and Developmental Services (DBHDS)	This state agency is the agency responsible for providing leadership and guidance to community public and private agencies that provide services to individuals with behavioral and developmental disabilities	http://www.dbhds.virginia.gov/
Community Services Boards (CSBs) and Community Behavioral Health Authorities (BHAs)	Local community agencies charged with providing case management, and distribution of local, state, and federal funds for services to individuals with developmental and mental health disabilities. Many CSBs and BHAs also provide direct services in employment and housing for individuals with behavioral and developmental disabilities. Some individuals with ASD are eligible for services based on their additional diagnoses and needs.	For a list of CSBs and BHAs see: http://www.dbhds.virginia.gov/documents/OCC-CSBAddressList.pdf or to quickly find a local CSB go to the locator at http://www.dbhds.virginia.gov/SVC-CSBs.asp#lo

The Department of Rehabilitative Services

The Rehabilitation Act of 1973, as amended, provides federal grants for states to operate comprehensive programs of vocational rehabilitation services for individuals with disabilities (Public Law 105-202). Vocational Rehabilitation (VR) is a federal/state cooperative program that exists in all 50 states, the District of Columbia, and U.S. territories. In Virginia, this organization is known as the Virginia State Department of Vocational Rehabilitative Services (DRS) and serves as a core transition resource for youth with disabilities. DRS focuses specifically on achievement of employment.

Qualification for DRS services is based on eligibility criteria. A rehabilitation counselor will process an application and make a determination of eligibility for vocational rehabilitation services. Eligibility is based on:

- ★ the presence of a physical, mental, or cognitive impairment that constitutes a substantial impediment to employment;
- ★ the expectation that the person will benefit from services in terms of an employment outcome;
- ★ the expectation that the person requires services to enter, engage in, or retain employment;
- ★ the person must be eligible to work in the United States; and
- ★ the person is present in Virginia at the time they are seeking services.

DRS can provide an array of services and supports both prior to and after graduation from high school as a component of a transition plan and program. Once eligibility for vocational rehabilitation has been determined, individuals with ASD will be assigned a Rehabilitation Counselor. In collaboration with the team, the individual with ASD and their counselor will develop an Individualized Plan for

Employment (IPE). In the IPE the individual with ASD will identify an employment goal and the services and supports needed to achieve that goal. Rehabilitation counselors are a potential resource for teachers, transitioning youth with ASD, and their families in setting transition goals and implementing transition plans. Counselors provide case management and service coordination. Case management through vocational rehabilitation continues until case closure occurs. Case closure can occur after a minimum of 90 days of employment in a job that is consistent with the employment objective established in the IPE. Case closure can also occur if the individual is not making progress towards achieving an employment outcome.

There are a variety of services available through DRS. These services include, but are not limited to, the following:

- ★ Assessment for determining eligibility for services;
- ★ Vocational counseling, guidance, and referral;
- ★ Vocational and other training, including on the job training;
- ★ Personal assistance services, including training in managing and directing a personal assistant;
- ★ Rehabilitation technology services; and
- ★ Job placement services and supported employment services.

DRS provides direct services such as counseling, guidance and job placement assistance. Additionally, DRS will usually provide funding for individuals to access community providers who can provide services such as rehabilitation technology and supported employment. The ability of DRS to reach out into the community for individualized services is one of the key strengths.

It is important to note that there may be a fee for some DRS services. DRS may require that the

consumer fund some services based on their own or their family's income. If a consumer receives Temporary Assistance to Needy Families (TANF), General Relief Supplemental Security Income (SSI), or cash benefits from Social Security Disability Insurance (SSDI), they are exempt from this fee for service requirement. If a consumer is not exempt from having to pay fees, then they may have to pay a fee for some of the following services if they are not eligible for exemption from:

- ★ Supported Employment
- ★ Apprenticeship Programs
- ★ Work Adjustment Programs
- ★ Postsecondary Education Programs
- ★ Other External Training Programs
- ★ Life Skills Training
- ★ Behind the Wheel Driver's Education Training
- ★ Transportation
- ★ Rehabilitation Technology and Accommodations
- ★ Personal Assistance Services
- ★ Independent Living Skills Training
- ★ Other Similar Supportive Services

There are also a number of services that DRS can provide at no cost to any consumer. Those services include:

- ★ Diagnostic, Evaluation, and Assessment for the purposes of determining eligibility
- ★ Disability awareness and counseling
- ★ Vocational and career counseling
- ★ Job seeking and job retention counseling
- ★ Access to employment resource centers
- ★ Job placement services
- ★ Driver evaluation services
- ★ On the job training services
- ★ Following along services after placement

Vocational rehabilitation counselors have access to case service funds that can be used to purchase services from authorized vendors. If the service supports the employment goal established in the IPE, funds can be used to purchase services such as postsecondary education and training, supported employment, transportation, tools and uniforms, and a variety of other services. Counselors are also usually very familiar with other funding sources

that can be used to complement DRS funding. In Virginia, consumers can frequently access additional services from Woodrow Wilson Rehabilitation Center (WWRC) in Fishersville, VA. Some of the services available at WWRC include:

- ★ Vocational Evaluation
- ★ Vocational Training
- ★ Life Skills Training
- ★ Medical Rehabilitation Services
- ★ Driver Education
- ★ Deaf and Hard of Hearing Case Management
- ★ Counseling and Case Management
- ★ Postsecondary Education Rehabilitation Transition (PERT)

The PERT program may be of special interest to adolescents with ASD who are transitioning from school to adult life due to its specially tailored program. High schoolers who are recommended by their school and DRS counselor can receive a 10-day comprehensive vocational evaluation on site at WWRC. For more information about WWRC or the PERT Program, contact your local DRS office or go to www.wwrc.virginia.gov.

If employment is a goal it is important to involve DRS on the student with ASDs' team prior to leaving school. The vocational rehabilitation counselor is an important member of the transition team. Not only do they offer a wealth of knowledge about community services but may be able to offer some services such as vocational guidance and counseling or assessment; or in some instances supported employment. This means a student with ASDs' IPE could potentially be in place prior to exiting the school program.

For More Information

Visit the Virginia Department of Vocational Rehabilitative Services (DRS) Web site at <http://www.vadrs.org/>

Download the DRS Transition Services Guide that details how DRS can be a part of a student with ASDs transition team <http://www.vadrs.org/transitionservices.htm>

Employment Service Organizations (ESOs)

Employment Service Organizations (ESOs) offer individualized services to assist individuals with disabilities in finding and maintaining employment. Services offered vary and may include assessments, benefits counseling, job development, supported employment services and more. The ESO staff may be referred to as employment consultants, specialists or job coaches.

ESOs are not typically a primary source of funding and may work under various arrangements to cover the cost for their services. For example, many ESOs obtain funding from DRS. Today, more and more schools are forming partnerships with ESOs to assist them with providing vocational exploration, assessment and training experiences as well as employment services to students with ASD. It is important for educators to get to know area providers so that they can explore the possibility of such arrangements. It is equally important to note that if there are no providers in the area the team should work together to explore creative ways to provide the employment services the student with ASD needs. In other words, services need to be tailored to the student with ASD, rather than the student with ASD conforming to available service options. Creative efforts could involve having the rehabilitation counselor expand his or her role to that of a job coach, hiring a vendor to come in from out of the area, or hiring someone local to provide needed employment support services.

For More Information

Employment Service Organizations contact information, overview of services and more can be found quickly using the DRS ESO Interactive Directory
<http://www.vadrs.org/essp/esolist.aspx>

One-Stop Career Centers

The Workforce Investment Act (WIA) of 1999 created One-Stop Career Centers as a key employment resource in the community. The One-Stop Centers have core services that are available to anyone in a community who needs help in locating employment. These core services mainly involve access through self-directed job searches through an information center that contains information on available job openings in the community. For those individuals with ASD who meet the criteria for eligibility for more intense service through the One-Stop Center, a variety of more individualized services are potentially available including, but not limited to, access to vocational training and assistance with job placement.

Youth and young adults with disabilities are targeted for services through One-Stop Centers. Therefore, One-Stop Centers can play a significant role in the delivery of transition services as a resource for both youth with disabilities and the school transition team in developing a plan for transition. For those One-Stop customers who move beyond the general core services, One-Stop Center staff can include Plan Managers and/or Disability Program Navigators who can assist in planning employment related services, including reaching out into the community to help identify and acquire other needed transition services. The One-Stop by design frequently serves as a home base for many community partners, such as DRS and representatives of Community Rehabilitation Programs referred to earlier in this chapter, that co-locate staff within the One-Stop setting.

Some One-Stops have more customized employment resource staff that will represent the job interests of an individual with a disability to a potential employer and help negotiate a job opportunity. Additional employment services of potential value to youth with ASD in transition include paid and unpaid work experiences, occupational skills training, job placement, and follow-up services after employment to help with job retention and career development. Funding for employment services

through a One-Stop Center occurs frequently through the Center's direct links with the other community agencies that fund employment services, such as Vocational Rehabilitation and Community Service Boards/Agencies.

Youth with ASD, their families, and their transition teams need to become thoroughly familiar with the resources and services available from the One-Stop Center in their community early on in the transition process.

For More Information

One-Stop Centers contact information, details on how DRS connects with them and more is available at <http://www.vadrs.org/dpn.htm>

Virginia Department of Behavioral Health and Developmental Services, Local Community Service Boards and/or Behavioral Health Authorities

The Virginia Department of Behavioral Health and Developmental Services (DBHDS) is the state agency charged with overseeing services, setting policy and regulations, and providing guidance to state and local services for individuals with developmental and behavioral health disabilities. As a part of that responsibility, DBHDS collaborates with the Department of Medical Assistance Services to administer some of the Intellectual Disability Medicaid Waiver program that funds services for individuals with significant disabilities in community settings. Additionally, DBHDS coordinates services across local community services boards and behavioral health authorities. This section will describe each of these agencies.

Some students with ASD are eligible for services administered through a local Community Services

Board (CSB) or Behavioral Health Authority (BHA) if they have a co-occurring diagnosis of intellectual disability (formerly called mental retardation) or mental health illness. A local CSB and BHA may provide services for individuals with Intellectual Disabilities, Mental Health, and Substance Abuse Disorders. Eligibility for services are based on the presence of a disability that meets specific guidelines. Those services can include:

- ★ Case Management
- ★ Mental Health Counseling and Treatment
- ★ Behavioral Treatment
- ★ Day Support Services
- ★ Residential Support Services (including supported living and group homes)
- ★ Respite Services
- ★ Long-term Employment Supports

Case managers within CSBs and BHAs are excellent resources for the transition planning process. Generally, case managers are available to serve as a coordination hub with very specific knowledge of services for the youth as well as for family members. They will have information on accessing services like: family support, community living, transition planning, behavioral support, employment and more.

It is important to understand the eligibility requirements for receiving services from a CSB and BHA early on in the transition planning process. At times, even eligible individuals are placed on long waiting lists. Consequently, it is important to contact the local CSB or BHA as early as possible to allow the time necessary to work through the eligibility process and be put on the waiting list before services are needed.

A primary funding source for services mentioned above is the Home and Community-Based Services Medicaid Waiver (HCBS also frequently referred to as the Medicaid Waiver). Currently, there are five Medicaid Waivers for which individuals with ASD may be eligible. They are the Intellectual Disabilities Waiver (ID Waiver), the Individual and Family Developmental Disabilities Support Waiver (IFDDS or just DD Waiver), the Day Support Waiver, the Technology Assisted Waiver (Tech Waiver) and

the Elderly or Disabled with Consumer Direction Waiver (EDCD Waiver). The purpose of these waivers is to provide services in the community for individuals who without these services, because of the significant nature of their disability and resulting support needs, would need to live in an institutional setting. For eligible individuals, these Medicaid Waivers can provide access to supports for community living and employment. These waivers might be a funding resource for some students with ASD. Medicaid Waiver applications are made at the state level. Each Waiver defines a specific target population and specifies the services that will be available. Finally, individuals under the age of 21 who are eligible for any of the Medicaid Waivers are also eligible for Early Periodic Screening, Diagnosis, and Treatment (EPSDT). EPSDT can provide monitoring of health or disability conditions and can also provide treatment to correct, improve, or maintain health or disability conditions. Not all waivers are managed through the CSBs or BHAs. Transition-aged youth with ASD and their families should seek help from their home CSB to identify how to become eligible for the ID waiver, and should contact the Department of Medical Assistance Services (DMAS) for information about eligibility from the other three waivers.

Resource Development

School personnel must be aware of community resources. If educators are not familiar with local community agency services, to get started they can review state services by visiting Web sites and calling state offices. Contact information for major resources is located at the end of this document. Personnel will also want to follow up by making contact with local resources. When contacting the providers the caller will not only want to learn more about services and ways to coordinate but also identify other local resources like community employment service providers as well as others who may consult on the team. A sample questionnaire that could be used while gathering information is offered below. It is important to note, that at a minimum this information should be reviewed and updated on an annual basis. Also, whenever a student with ASD needs a service that does not exist, educators should take steps to collaborate with community partners to develop those needed services.

For More Information

Virginia Department of Behavioral Health and Developmental Services; Virginia's public mental health, intellectual disability and substance abuse services system is comprised of 16 state facilities and 40 locally-run Community Service Boards. The CSBs and facilities serve children and adults who have or who are at risk of mental illness, serious emotional disturbance, intellectual disabilities, or substance use disorders. For more information and links to statewide resources go to <http://www.dbhds.virginia.gov/> or to quickly find a local CSB go to the locator at <http://www.dbhds.virginia.gov/SVC-CSBs.asp#lo>

Contact the Virginia Department of Medical Assistance Services at 804-786-1465 or www.dmas.virginia.gov.

For more information about Virginia's Medicaid Waiver Program or Early Periodic Screening, Diagnosis, and Treatment go to <http://www.dmas.virginia.gov/downloads/pdfs/ab-ltc-medicaid-waiver.pdf>

Sample Interview/Data Collection Tool

Directions: Review the organization's Web site in advance if possible, and then arrange an interview (face-to-face or by telephone). Attach any supporting materials in file, etc..

Organization:

Phone Number:

Web site:

Primary Contact:

Please tell me a little about your organization and what services you provide?

How are you funded?

What are the eligibility requirements?

What is the typical application process? What if any supporting documentation is required?

How soon can a student with ASD get started with the application process?

What type of assistance/support is available to students with ASD to help them complete the application process (will you come to the school or student with ASD home, telephone, online, etc...)?

Once the student with ASD has applied for services how long will it be before a determination of eligibility to receive services is made? Is there any type of waiting list?

Do personnel in your organization serve on students with ASD transition teams? If no, please explain why?

If yes, how do I reach the person (who is our liaison) to serve on a student with ASDs transition team? (Once identified be sure to have a follow-up call with this person and include their name at the top as primary contact).

How can I obtain some information about what others have to say about your services, satisfaction surveys, outcome data, etc...?

If there is a service delivery concern what steps should be taken to solve the problem?
Please send some materials about services to have on file for student with ASD and parents.

Please tell me about some of the community service providers you work with in assisting youth with transitioning from school to adulthood? May I have their contact information?

Would you or someone from your organization be willing provide a presentation on your services some time? Who? Best days and time?

What is the name and title of the person interviewed?

Is this the same as the primary source for contact?

What is today's date and when should this be updated?

Postsecondary Education

Educating young adults with disabilities in postsecondary education settings is an emerging trend in the field of higher education and disability. This section will take a look at some of the core elements that are essential for students with ASD to transition to and remain in college.

Options in Postsecondary Settings

There are several postsecondary education options available for students with ASD as they consider attending college. Each option must be carefully weighed to determine what environment best meets the educational and career needs of these students. The first option is the traditional college experience with supports provided through the Disability Support Services office. There are also specialized programs that are offered at some colleges and universities that provide support in conjunction with the services provided by this office. The three options listed below are considered specialized programs that are designed for students with disabilities who are in need of more intensive services and supports (Hart, Grigal, Sax, Martinez, & Will, 2006; Hart, Zafft, & Zinbrich, 2003).

Description of Current Postsecondary Models

- 1) **Mixed/hybrid Model:** Students with disabilities are involved in social activities and/or academic classes with students without disabilities (for audit or credit). These students also participate in classes with other students with disabilities, typically life skills or transition classes. Employment experiences are offered both on and off campus.
- 2) **Substantially Separate:** Students are on campus, but are in classes only with other students with disabilities. Access to socializing with students without

disabilities is part of the model. Employment experiences typically in pre-established employment settings on and off campus.

- 3) **Inclusive Individual Support Model:** Students receive individualized services (i.e., educational coach, tutor, technology) and are enrolled in college classes, certificate programs and/or degree programs (for credit or audit). This model is not program based, but is integrated into the existing college structure, for example, courses are selected based on students' career goals and employment experiences including internships, apprenticeships, or work-based learning.

Expectations

As students enter postsecondary education, they are expected to become fully responsible for managing their college career. Therefore, it is important to understand what this involves and consider how the student with ASD will handle these.

Changes to Expect

- ★ **Less contact with instructors**
- ★ **Expectations of higher levels of academic capability**
- ★ **Fewer tests covering a larger amount of material**
- ★ **Changes in the support systems that students previously had in high school**
- ★ **Higher expectations to achieve independently**
- ★ **Changes in social and independent living demands**

Challenges created by the aforementioned may also be paired with some unique challenges for a student with ASD such as learning how to act appropriately in classes, how to manage their course load, and the social environment unique to college with roommates and increased independence. The more informed students and those involved in transition are about the changes in responsibility and the demands of college, the smoother the transition from secondary to postsecondary education will be.

Four Year Colleges and Universities

Students with ASD who are preparing for traditional college experience and those advising them must be sure to take the following points under consideration.

Upfront Considerations

- ★ *Consider courses student needs to meet academic requirements to enter college or university; including mathematics, science, and language and foreign language requirements*
- ★ *Consider placement tests or other entrance requirements that the student may be required to complete in order to enter college or university*
- ★ *Review all university policies on waiving or substituting these requirements for students with disabilities*
- ★ *Review university policies on accessing accommodations and modifications in coursework and testing*
- ★ *Research and provide all requested materials and reports to qualify as a student with a disability at the chosen university or college*
- ★ *Assess the student's ability to request and advocate for their own accommodations and modifications, even though a student may have access to an accommodation or modification, they frequently have to request those supports from every instructor and sometimes with every event where the modification is approved*

Trying to find a campus that meets the unique needs of a student with ASD can take time and effort. Whenever possible, individuals should visit potential schools to learn more about a school. No matter how the information is obtained whether by review of a Web site, telephone interview, face-to-face meetings or a combination of these, the student will want to learn more about the following.

Considerations for Choosing a College

Campus climate: Is the campus accepting of students with differences in learning styles? Are students encouraged to participate in a variety of campus-life activities?

Program philosophy: Does the college offer a specialized program for students with a specific type of disability?

Academic adjustments: How are academic adjustments coordinated? What are the types of services typically provided to students with disabilities on campus?

Waivers and substitutions: Are there written policies and procedures for waivers and substitutions? What kind of documentation is required? Who assists in the process of requesting a waiver or substitution? What is the probability that waivers or substitutions are granted?

Course load and graduation time: Is it possible to maintain a reduced course load? Is priority registration available for students with disabilities?

Student support activities or groups: Are there specific activities that are designed to assist students with disabilities to network with other students on campus? Are there student leadership/mentoring programs to help students feel connected with other students with disabilities on campus?

Support services: What support services are available to all students? Does the campus have support services specifically for students with certain types of disabilities?

Orientation: Are orientation sessions designed to address disability specific needs of students prior to entering the college?

Two Year or Community Colleges

Two year colleges or community colleges provide both vocational programs and academic curricula. These colleges offer associate degrees and certificates in various occupational fields. They also offer programs or transfer courses that prepare individuals to continue their studies at a four year institution. Admission to community colleges significantly differs from a four year university or college. Community colleges typically enroll individuals who have a high school diploma or the equivalent (GED certificate) or an individual who is at least 18-years-old and able to benefit from instruction at the college. It is important to note that the admission requirements for community colleges vary from state to state depending on the standards set by the state. Once the student is enrolled at a two- or four-year college or university, there are typically placement tests to determine if remedial courses are needed. In both two- or four-year colleges and universities, documentation is required for students with disabilities to determine eligibility for support services for the placement tests and in the classroom.

Services and Supports

Colleges and universities vary in the types of supports and services provided to students with disabilities. Some of the most commonly requested supports by students with disabilities include those listed below.

Examples of Services and Support

- ★ Textbooks on tape
- ★ Note takers
- ★ Extended time on tests
- ★ Limited distraction environments for test taking
- ★ Use of calculators
- ★ Permission to tape lectures
- ★ Excused from group projects
- ★ Preferential seating to suit any auditory or visual sensitivity

Note:

Students with ASD will also need to explore services that are available on campus for all students like counseling services, writing or mathematics labs, study skills or time management classes offered either through a counseling center or other entities on campus.

Most, if not all, universities and colleges have a documentation policy or procedure in place to determine if students are eligible for services. This process details the documentation required to determine eligibility. Most college campuses also have a specific office to handle the request for accommodations. Typically these offices are called Disability Support Services (DSS) and are the offices that determine the eligibility for accommodations for students. If a student is eligible for services, there are no costs associated with the services that the college provides. However, some colleges will offer programs that provide additional services beyond what the university or college can provide through their Disability Services office. Sometimes there is a fee for these additional services or specialized programs.

A Word on Disclosure

- ★ *Colleges and universities cannot include questions about disability on applications*
- ★ *Disclosing disability is only required once student is accepted and seeking accommodations*
- ★ *Some disclose as part of their essay to demonstrate what they have accomplished; others have used their essay to explain discrepancies in grades or standardized test scores*
- ★ *In general, college essays or letters are used to provide college admission officers more personal side or picture of the applicant*

Going to College

Other critical skills and services that contribute to the transition and retention of students with ASD attending postsecondary education programs include those listed in the table below. Students with ASD should focus on developing these skills throughout their education. In addition, depending upon a student's accomplishments, some may need to consider locating a college or university that will support the ongoing development of these skills.

Critical Skills and Possible Services or Supports

Self-Determination Skills: a set of personal or interpersonal skills that includes understanding which support services are needed; knowing how to describe one's disability, solving problems, making plans, and identifying the need for certain supports and using all of these skills to overcome obstacles

Possible Services or Supports: support groups comprised of college students with disabilities, training modules on self-determination skills, or peer mentors

Self-Management Skills: in such areas as time management, organizational skills, goal setting and study skills

Possible Services or Supports: professionals work with students to develop skills or use of peer-based coaching models

Assistive Technology: may help some students compensate for their disability-related issues

Possible Services and Supports: technologies that could benefit students with ASD who are visual learners include visual planners and schedules, graphic organization software, personal digital assistants, highlighters, color overlays, word prediction, and graphing paper. Other technologies that are also beneficial include

voice output communication aids, text-to-speech software, and talking calculators.

Internships or Other Career Related

Experiences: provide students with opportunities to understand how their academic accommodations or supports transfer to the employment setting, and learn how to network with professionals in their fields to build a successful résumé of experiences as they move from postsecondary education into their chosen careers

Support Services and Supports: Some students with ASD cannot fully benefit from traditional career planning services and are in need of a more comprehensive

Additional Information and Resources

www.ThinkCollege.net
www.transitiontocollege.net
www.transitioncoalition.org
www.going-to-college.org
www.vacollegequest.org
www.vawizard.org
www.imdetermined.org
www.virginiaselfadvocacy.org
www.vaboard.org
<http://education.ou.edu/zarrow/>

career planning support. For example, some students do not have the grade point average to qualify for an internship through the university, creating an obstacle for them to gain the work site experience they need, or need assistance to practice appropriate behaviors in work environments. Student services that help arrange internships and other career-related experiences create an important link for students with disabilities to apply the knowledge and skills they acquire in college to a work environment.

Employment in the Community

When intensive community-based instruction and finely crafted transition IEPs are implemented, each student should become employed in the community. Work is the eventual outcome for all students with ASD after they complete their schooling. In order to be successful at work many students with ASD will need some support. The level, type, and intensity of the support needed will vary from one student to the next and may range from instruction on how to search for and apply for a job in the community to intensive one-to-one services like those offered through a supported employment approach. This section will take a closer look at some vocational support options to assist ALL students with ASD to become competitively employed.

In this Guide, when we refer to 'work' we mean the same types of jobs that individuals without disabilities seek. These **do not** include:

- ★ Job in sheltered workshops or day activity centers
- ★ Jobs where a group of individuals with

disabilities complete a menial task in enclaves or mobile work crews

Instead, employment for individuals with ASD should include jobs that anyone without disabilities would consider desirable. It is real work for real pay in the community; not some special place or program for individuals with more severe disabilities. This means a student may be going to work at:

- ★ a local retailer,
- ★ manufacturer,
- ★ distributor,
- ★ hospital,
- ★ university,
- ★ government,
- ★ other community-based employer, or
- ★ become self-employed.

Two practices that offer support to students with disabilities who want to work are supported employment and customized employment. Let's take a closer look at these approaches. Table 16, (below) describes each approach and lists some considerations for teams supporting individuals with ASD.

Table 16
Employment Practices to Support Individuals with ASD at Work

Best Practice	What It Is	How It Works
Supported Employment	Individualized vocational service is reserved for students who require extensive instruction, frequently with one-on-one instruction or support in areas like personal or home management, time or fiscal management, transportation, communication skills and more.	A vocational rehabilitation professional, often called an employment specialist or job coach, provides a variety of services to assist individuals with ASD in gaining and maintaining employment.
Customized Employment	A service that allows an individual with ASD and their team members to develop an individually tailored job that may be carved from an existing job or developed through an entrepreneurial self-employment plan for an individual.	After a discovery phase where the person with ASD and their team identify a person's strengths, needs, and long-term goals, a person negotiates a job or develops an entrepreneurial enterprise on behalf of the person with ASD.

Table 17, below, describes the phases of employment under supported employment and customized employment.

Table 17
Implementing Supported and Customized Employment

<i>Supported Employment</i>	<i>Customized Employment</i>
Phase 1 Initiating Supported Employment: The job coach gets to know the job seeker to learn about the job seeker's vocational strengths, interests and potential support needs.	Phase 1 Discovery: Generally, a group of people get together to share information about the person with a disability's background and history, dreams, fears, needs, and what is important to him or her. Then this is used to help make plans for the person's future. The result is often a life plan which includes goals for work and living in the community.
Phase 2 Finding a Job: The coach uses the information to target potential places of employment. The coach meets with employer's to learn about their needs and then uses this information to find a job for the student.	Phase 2 Job Negotiation: A job is negotiated by someone who is working on the job seeker's behalf. Negotiations take place between the Job Negotiator and the employer to personalize a job description for the individual with a disability.
Phase 3 Customizing Supports and Developing the Job: Based upon the employer's receptiveness, the job coach discusses the potential job with the job seeker and, if applicable, family. Then, if interested, the student is supported when completing the job application and interviewing for a position.	Phase 3 Beginning Work: If negotiations are successful the person is hired. Then, additional support may be provided using supported employment.
Phase 4 Supporting Work: The job coach provides workplace support to help the new hire succeed at work. Workplace supports vary from one person to the next. Support continues until the new employee is able to work without assistance.	
Phase 5 Fading Supports: Over time, as the new employee with ASD performs the job to the employer's standards, the job coach begins to gradually fade from the job site. However, as long as the person is employed the job coach is available to provide more support as needed.	

While these are the major supports provided to individuals with ASD who seek employment, there are some new work models that may be helpful to individuals with ASD as well. They are referred to as,

telework, self employment, and "Business Leading the Way" and are described in Table 18. Additional detailed information is available beginning on page 52.

Table 18
New Employment Models for Individuals with ASD

<i>Employment Model</i>	<i>Definition</i>	<i>Example</i>
Telework	Working from home often requires the use of computing and communications technology to perform the job and stay connected to the employer Arrangements: Either the employee is a home-based employee or a contractor. A home-based employee is on a company's payroll and abides by their rules. A contractor is self-employed.	Customer service representative, word processors, collectors, and marketing specialist
Self-Employment	The person with the disability does not have to be able to run and operate the business independently for this to be a viable option. Instead, as with other approaches, the individual receives varying levels and degrees of support from start-up activities to day-to-day operations. Crucial to the success of this approach is developing an idea that will use the person with disabilities strengths while appealing to or meeting a market niche.	Operating a business where the person tends plants in a major office park, selling self-styled art or stationery through online sales.
Business Leading the Way	Business finding new ways to include individuals with disabilities in the work force	Walgreens set out to hire individuals with disabilities into at least one-third of the 600 jobs at two distribution plants in 2006. Today, Walgreens continues to hire individuals with disabilities and works with schools to establish community-based vocational education programs. Cincinnati Children's Hospital Project SEARCH offers employment training and education opportunities for individuals with significant disabilities in a hospital setting. The program takes place in a healthcare or business setting. Daily activities for students usually include: classroom instruction on topics related to employment and independent living skills as well as rotation through various work areas to experience various job tasks. Once rotations are completed, job opportunities are developed, both at the site and in the community. Then once hired, as needed, a student with ASD may receive job site support like job coaching and other workplace supports.

These evidenced-based employment support practices and innovative employment models are increasing the opportunities that individuals with ASD have to achieve successful employment once they exit school. The next section will review the supports that are frequently necessary to support individuals with ASD at work. By understanding these supports and implementing them during high school, school teams can provide extensive information about necessary supports to employment support providers.

Workplace Challenges and Supports

No matter which approach is used prior to seeking work, when developing job opportunities and when the student becomes employed it is important to think through some of the potential challenges the student with ASD may face and possible supports to address those challenges. Below is a list of some of the challenges that may occur and supports that may apply.

Communication Needs

Some individuals with ASD may be able to hold a conversation using complex sentences. Others may not be able to speak or only know a few words. Over time, if a worker with ASD does not learn to speak enough words to communicate on the job, a manager or coworker may become frustrated and uncomfortable enough to know the worker's needs. Then as needed the worker can help the person communicate with others on the job.

Social Behavior Needs

Some students with ASD may have difficulty identifying adaptive social skills and may engage in disruptive or job threatening social interactions. These behaviors could lead to termination from work. The level of support a worker will need on the job will depend upon the nature of the behavior and how often it happens. Disruptive, frequently occurring, inappropriate social behaviors require support.

Accepting Changes in Routine and Adapting to the Sensory Environment at Work

Some students with ASD have a difficult time with change. These individuals may need increased levels of supports during times of change. This requires advance notice that change will take place so the proper support can be put in place in time to prevent a problem. Other students may struggle with and respond differently to the sensory aspects of the workplace. For example, a person with ASD may be highly distracted by conversations near their workstation. Such persons will require environmental modification to decrease the adverse effects of sensory distracters.

Harmful or Destructive Behavior

Some behaviors may not be dangerous or lead to property damage but are viewed as socially unacceptable. Even if the behavior is not dangerous, verbal outbursts, noise making, and hyperactivity may threaten employment. Planning for enough support for behavioral problems is very important. Since there is no way to predict in advance all the necessary supports that may be needed, when in doubt, staff should lean towards providing more support with an eye towards fading or removing it as soon as possible. In addition, if a behavior is considered dangerous then continuous on the job support should be in place until more appropriate behaviors are learned and it can be decreased.

Consequently, the level of support a student with ASD will need with locating, learning, and keeping a job will vary. Some will need job coaching or assistance on the job, even on an occasional basis. Then again, others will need very intensive on the job support by a job coach in an ongoing way. Regardless of the level of support required, supported employment requires that supports should eventually be faded to some degree when possible.

General Workplace Supports

In addition to the support discussed above, individuals with ASD frequently benefit from specific workplace supports described below:

Workplace Supports

Applied Behavior Analysis

The purpose of ABA is to increase or decrease a given behavior. This can include increasing work behaviors or decreasing interfering behaviors. It includes training using a formal and systematic framework.

Changes in the Environment

This might include changes in physical surroundings. For example, minimizing certain visual (e.g.: light, movement, reflection, background patterns) or auditory distractions (e.g.: machinery, music, talking) to increase a worker's attention to their job. If a worker cannot filter out the distracters the trainer needs to find ways to minimize these.

Visual Schedule

This can range from all of the day, part of the day, or one activity at a time. Creating daily schedules that use visual cues to tell the worker when the task will occur and the sequence in which work will be completed may be helpful.

Structuring Work Routine

Whenever possible, structuring the way work is done to make sure the worker can ascertain what work is to be done, when it is finished, and what happens next. Routines help make work become more familiar. In addition, often a checklist or flowchart can be used to help keep the worker on track.

Visual Instructions and Cues

Train the worker to use existing signs or other visual cues in the environment or create and implement visual instructions that show the worker what to do (including what to do with materials). Capitalizing on visual strengths can help the worker focus on the relevant information to get the job done.

Manipulation of or altering of antecedent events that signal behaviors

This may mean a change in the routine or environment; using alternative communication device, teaching the worker to request a break or use a relaxation strategy, or how the behavior impacts others. If verbal directions are given, these should be minimal and it is important to follow through with the action if the behavior does not change.

Reactive strategies that manipulate or alter the consequence of the behavior

This may include extinction or ignoring a behavior, interrupting a behavior to stop self-stimulations, redirection to a task where the undesirable behavior is not observed, or for individuals who are higher functioning contracting may work.

Telework

Today, more and more people with disabilities are looking for some other kinds of work options like telework or work from home. As needed, support is provided.

Definition: working from home often requires the use of computing and communications technology to perform the job and stay connected to the employer

Arrangements: Either the employee is a home-based employee or a contractor. A home-based employee is on a company's payroll and abides by their rules. A contractor is self-employed.

Examples: customer service rep, word processors, collectors, and marketing specialist

Advantages: barrier free workplace, lower stress levels, ability to manage work schedule, break times, control over work setting (i.e., sound, interruptions, temperature) and reduced expenses (i.e., clothes, gas, car, coffee, lunch).

Self-Employment

Self-employment is a growing trend for people with disabilities. The person with the disability does not have to be able to run and operate the business independently for this to be a viable option. Instead, as with other approaches, the individual receives varying levels and degrees of support from start-up activities to day-to-day operations. Crucial to the success of this approach is developing an idea that will use the person with disabilities strengths while appealing to or meeting a market niche.

One way to promote self-employment is through resource ownership. Resource ownership is acquiring materials, equipment, or skills that an employer uses to make a profit. Owning resources gives a person with a disability an edge in business start-up, particularly in the instance of establishing a micro enterprise or a business within a business.

Vocational rehabilitation counselors can use their general case service and supported employment dollars for self-employment. Through the Rehabilitation Act of 1973 (PL 92-112) and its amendments and the Workforce Investment Act of 1998 (PL 105-220) people with disabilities can get assistance with purchasing business equipment and/or assistive technology, training and the supports necessary to run his or her business. Business ownership may also be promoted under a Social Security work incentive, known as a Plan for Achieving Self Support (PASS). This financial provides operating cash to businesses (Griffin and Hammis 2003).

Business Leading the Way

Every day more and more businesses are finding new ways to include individuals with disabilities in the work force. Consider the following examples of innovative practices.

Innovative Practices where Businesses are Leading the Way

Walgreens set out to hire individuals with disabilities into at least one-third of the 600 jobs at two distribution plants in 2006. During an interview, Senior Vice President of Distribution and Logistics Randy Lewis was asked about how the idea for the initiative came about. He stated the decision was based on awareness. As a parent of a son with autism over the years he has seen his own son and other children with disabilities deal with and overcome challenges. This led to seeing each one as an individual and a growing concern about what would happen when the students left school. Today, Walgreens continues to hire individuals with disabilities and works with schools to establish community-based vocational education programs. Some students have moved on to become Walgreen employees or work elsewhere in the community. The company Web site provides information on how to apply for jobs and tips on ways to establish a relationship with store management for organizations that are seeking to assist individuals with disabilities with employment.

Cincinnati Children's Hospital Project SEARCH offers employment training and education opportunities for individuals with significant disabilities in a hospital setting. The program takes place in a healthcare or business setting. Daily activities for students usually include: classroom instruction on topics related to employment and independent living skills as well as rotation through various work areas to experience various job tasks. Once rotations are completed, job opportunities are developed, both at the site and in the community. Then once hired, as needed, a student with ASD may receive job site support like job coaching and other workplace supports.

Home Living Skills

One of the most difficult transitions for adults with ASD can be finding a home or apartment in their home community. Historically, society has assumed people with severe disabilities would live at home with family members. However, public opinion and policies about housing for individuals with disabilities has changed. This change in attitudes has resulted in more communities offering variety and choice of living arrangements for individuals with ASD. This gives individuals with disabilities and families greater choice in housing which can positively add to quality of life.

The basic question to answer in a supported living approach is “What support does the person need to live the most independently in the community setting of his or her choice?” Answering this question is the first step toward developing creative living arrangements that are best suited to the individual’s personal needs, wants and dreams. Then, potential supports can be identified and eventually provided or facilitated in flexible ways to meet the unique needs of the individual. It may be noted that this type of support sounds similar to the way individuals with disabilities are supported in the workplace. Some of the guiding principles include:

- ★ Individuals with disabilities do not have to live in segregated or congregated settings when individual support is available;
- ★ Readiness to live independently cannot be predicted in advance;
- ★ One size does not fit all; skills training and supports should be flexible and tailored to meet each student’s needs; and
- ★ Skills training should occur in natural environments.

To live independently or to get as close as possible prior to exiting school youth with ASD require early and effective instruction. Without it youth with ASD may not leave home or have to live somewhere that

significantly limits personal choice, growth, and independence. This section takes a brief look at some of the options.

Community Living Options

Today, individuals with ASD and families have greater choice in housing options such as those listed below.

Supported Apartment Living

The apartments are located in community complexes. Depending upon the level of support the resident requires the dwellings may be clustered close together in close proximity or when less support is required the housing units may be dispersed and located randomly throughout an apartment complex. Support levels vary throughout the day and night depending on individual needs. Generally, the person has a roommate who also has a disability. Group and one-to-one skills training may be offered to further enhance home living skills. Group recreational opportunities may be offered.

Group Homes

Group homes are purchased or rented and usually house four or more students who are supported by on-site house managers and/or staff. Residents often have assignments to complete as a member of the household. Recreation and leisure activities are scheduled in advance and may be attended. Transportation may be provided during certain times of day.

Supported Independent Living

In supported living, the person with a disability receives a different combination of supports (including direct service and/or skills training) based upon his or her existing skills and abilities; wherever he or she chooses to live. For example, a person may be purchasing a house and have paid supplemental staff support like a personal assistant to come in and assist with certain activities throughout the week or a life skills coach in to offer training. Some individuals may require more frequent and intensive support

throughout the day and evenings. The person who offers support may exchange service for payment and/or room and board.

Due to the nature of the challenges that some ASD individuals face an array of residential options are needed. It is important, however, to note that the various options listed should not be viewed as the most to least desirable, instead a variety of individual and interacting factors must be considered when thinking about the housing. These, too, are the factors that impact transition planning. To design an effective plan, educators need to talk to the student and those who know him or her best in order to investigate the following.

- ★ Where does the student want to live? Why?
- ★ Where does the family want the student to live? Why?
- ★ What is the student's current level of performance in home living skills?
- ★ What skills are currently being taught at home?
- ★ What strategies are being used to teach new skills at home?
- ★ When did the training begin?
- ★ How often does training occur?
- ★ What, if any, supports are used?
- ★ What existing skills need to be further developed to move the student closer to independent living in the community?
- ★ What new skills need to be developed to move the student closer to independent living in the community?
- ★ What are the major challenges the student may face; what strategies may help overcome or support these?

At some point in time, if a young adult with ASD and/or their family decide to pursue a supported living option, they should investigate the following issues to determine if a particular setting is a "good place" to live.

Considerations for Choosing a Residence

Is the location of residence desirable (distance to family, safety, convenience to shopping or recreation)?

Does the person determine their own daily schedules, what to wear, what to eat, where to go, etc.?

Are different levels of support provided based upon individual needs and desires?

Where can the resident go for time alone?

What are the house rules and what happens if a resident does not comply?

How are resident complaints handled?

What is the background, training, and experience of the staff?

Are students encouraged to do what they can for themselves and taught new skills to move towards more independent living?

Are residents required to participate in "group" outings to shop, leisure activities, etc... or are leisure activities planned to meet each individual's desires or requests?

If currently employed, will the setting impact employment? What is the commute time to and from work? If unemployed, will the setting promote employment (business and industry in the area, transportation available, etc.)?

In addition, to touring the home and interviewing staff to answer these questions, the current residents'

level of satisfaction should also be obtained. There may also be annual reports required by funding sources that can provide useful information. It must also be noted that there may be waiting list for these types of house options.

As in other areas of life, supports must be flexible and change as the person's needs change. For example, over time, an individual with ASD may learn new skills that increase his or her competency to live in a more independent setting like an apartment with a roommate and minimal supports. However, again, the educational team should set transition goals in this area that strive for the maximum level of independence.

There are a number of excellent resources online about housing options available to Virginians. Be sure to check out and book mark the two resources described below.

Select Resources

There is no need to search further. Virginia EasyAccess offers links to a wide array of Virginia housing resources including housing registry to help find apartment, where to go and ways to fund home modifications, details on how to get help from the federal (Section 8) voucher program, a home ownership education program and information on the Medicaid Home and Community-Based Waiver. Links to the major federal programs can also be accessed from EasyAccess. This one stop site offers access to various community resources and is made possible by a public private partnership with the Commonwealth of Virginia, SeniorNavigator, and 2-1-1 Virginia <http://www.easyaccess.virginia.gov/housing.shtml>

Disability Gov Information about housing rights, tax credits, making a home accessible, and supportive housing services that can help people with disabilities live independent, self-directed lives. <http://www.disability.gov/housing>

Transition Planning: Home Living Skills

Learning to live on one's own requires being able to complete a number of complex activities. Therefore, students with ASD should begin to learn skills early on. For optimal impact, skills training should be a coordinated effort that takes place across major life settings where the student with ASD spends most of his or her time. This typically includes: home, school and various community settings like restaurants, stores, gyms, and recreational centers. Given that much of the student's day is spent in the school setting, educators play a major role in assisting students with ASD with developing home living skills.

For students with ASD, and like many of the other skills discussed in this Guide, encouraging independence in home living requires early planning and intensive teaching. Waiting until the last few years of school or upon graduation to focus on home living skills is just simply too little, too late. Therefore, during transition planning educators should work with each student and his or her family to explore future residential options and determine specific goals to enhance independent living. During school, students should receive skills training, then later, as needed, supports can be put in place to further promote independence.

Below is an inventory that can be used to guide a student and parent interview or sent home for the family to complete in privacy. The purpose of this list is to provide educators with a comprehensive tool to assist them in developing IEP Transition Goals in the area of Independent Home and Community living.

Sample of Home Living Skills

Maintaining good hygiene

- ☐ Bathing or showering
- ☐ Brushing teeth
- ☐ Hair care
- ☐ Gender specific care (deodorant, shaving, feminine hygiene, etc.)

Comments:

Getting Dressed

- ☐ Selecting appropriate clothing for season
- ☐ Dressing independently

Comments:

Staying on schedule

- ☐ Departing and arriving on time
- ☐ Using calendar
- ☐ Telling time (devices used)

Comments:

Communicating with others

- ☐ Asking for help
- ☐ Asking for a break
- ☐ Expressing preferences and needs
- ☐ Engaging in conversation

Comments:

Creating Safe Environment

- ☐ Dialing 911
- ☐ Evacuating house
- ☐ Seeking help if sick
- ☐ Maintaining a safe environment (locking doors and windows)
- ☐ Answering door

Comments:

Household cleaning

- ☐ Maintaining living areas
- ☐ Developing and following regular cleaning schedule
- ☐ Using cleaning equipment (mop, broom, vacuum)

- ☐ Using cleaning products (i.e., ammonia, Comet, etc...)

Comments:

Laundry

- ☐ Washing and drying clothes (in home or laundromat)
- ☐ Developing and maintaining a laundry schedule
- ☐ Using laundry appliances (note type front or top loading)
- ☐ Using laundry products
- ☐ Folding and storing clothes

Comments:

Home Maintenance

- ☐ Changes light bulbs
- ☐ Completing simple repairs
- ☐ Calling repairpersons for larger repairs
- ☐ Completing lawn care tasks

Comments:

Meal Preparation

- ☐ Preparing meals (breakfast, lunch, dinner, snacks)
- ☐ Following meal preparation schedule
- ☐ Using kitchen equipment (microwave, stove top, toaster, mixer, oven, can opener)
- ☐ Shopping for food
- ☐ Storing food safely

Comments:

Shopping

- ☐ Identifying needed items
- ☐ Identifying the right store and scheduling a time to shop
- ☐ Developing a list
- ☐ Paying for item (tender used: credit card, cash, coins)

Comments:

Transportation

- ☐ Mapping/finding way to destination
- ☐ Identifying mode of transportation (driving or getting driven, taking public transportation, taxi, or disability specific transportation)
- ☐ Riding bike

Comments:

Street Crossing

- ☐ Identifying type of crossing (controlled by light, controlled by stop sign, uncontrolled)
- ☐ Identifying amount of traffic on street, (busy street versus quiet street)
- ☐ Following safe street crossing procedures

Comments:

Financial management

- ☐ Making budget
- ☐ Maintaining own checking or savings accounts
- ☐ Paying bills online
- ☐ Paying bills using mail
- ☐ Writing check

- ☐ Balancing banking accounts

Comments:

Home Leisure

- ☐ Socializing with others
- ☐ Engaging in hobbies
- ☐ Operating personal and household electronics (TV, DVD, video game console, personal music devices, cell phones, etc.)

Comments:

Health

- ☐ Seeking help when sick
- ☐ Making appointments
- ☐ Administering own medication
- ☐ Exercising regularly

Comments:

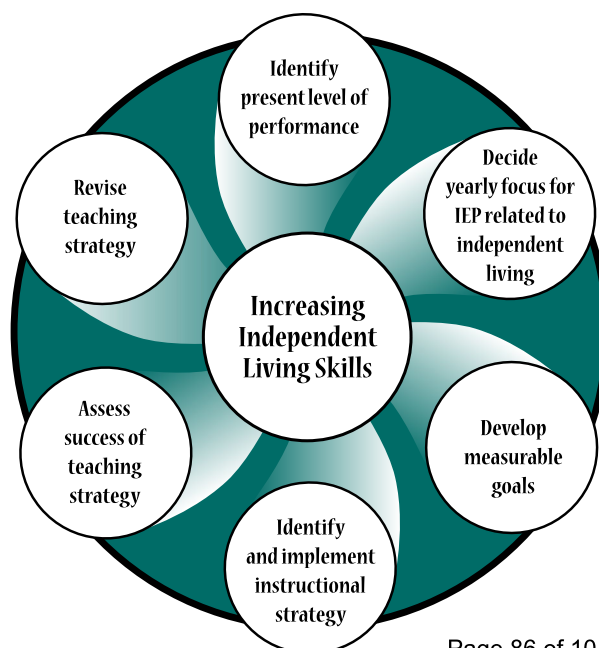
Other Skills

- ☐ Taking care of household pets
- ☐ Taking care of other household members (siblings or older adults)

Comments:

In order to implement a sound transition plan related to independent living, educators should follow the steps in Figure 7:

Figure 7
Steps for Increasing Independent Living Skills



Individualizing the Home Living Skills Curriculum

Once the areas of focus and IEP goals are developed, the teacher needs to develop an instructional strategy that is individualized to the student and based on the environment where the student will use the skill. In order to do this, the teacher must consider the current and future home living environment to develop the specific skills needed by the student. This approach, often referred to as an ecological inventory, involves the following steps:

- 1) Identifying and surveying current and future home living environments.
- 2) Dividing the home living environments in to sub-environments or places where activities occur.
- 3) Inventorying the sub-environments by listing relevant activities performed there.
- 4) Determining the skills needed in each sub-environment that are required for performance of those activities.

A partial ecological inventory for apartment living is provided below in Table 19.

Table 19
Partial Ecological Inventory for Independent Living

Environment	Activity	Skills
Den	Vacuuming	Deciding when to dust, locating products, putting products away
	Socializing with others	Inviting friends over, greeting others, talking about shared interests, asking for help from others
Kitchen	Preparing food on the stove top	Selecting what to cook, operating oven to cook item according to instructions, removing item from oven

As seen in Table 19, there are many skills a student with ASD needs to learn to increase their independence. Preparation and practice are critical to learning the skills. The student, his or her family and the team must work together to ensure goals to develop specific skills are in the student's plan. Building these skills and accessing the appropriate resources will help ensure a smooth transition for the student with ASD from living at home with parents into the community. When planning for independence, independent home living is an important curriculum area that must be included in the Transition IEP.

The Importance of Recreation and Leisure Skills in the Healthy Adult Life

One important aspect of adult living is the cultivation of an active life with self-determined variety of recreation and leisure. With adequate supports, students with ASD can participate in a wide range of recreation and leisure activities. These students can be helped to expand their areas of interest, make broader choices and participate in a variety of activities. Because the students themselves might be limited in their interests, and because they may be resistant to new experiences, it might fall to the transition team to target expansion of their choice-making skills and the range of opportunities. Transition teams would benefit from compiling lists of recreation and leisure activities in the school and local community that the student with ASD can be guided to participate in.

School Activities

High schools have dozens of clubs and recreation activities such as trips, sports events and dances that students with ASD might enjoy. Often these students do not participate in these activities because they lack the interest, the choice-making skills or the support to attend. The school is the first place to look to help expand the recreation and leisure opportunities for students with ASD.

Activities sponsored by private facilities and public organizations

Most communities have private and public recreational facilities. These can include neighborhood swimming pools, public parks and recreational facilities, Ys, health and fitness clubs, and programs through local universities and community colleges. Students with ASD may find fully integrated activities or activities specifically designed for students with developmental disabilities.

Trips and Outings

Leisure activities can involve trips to places of interest or special events. These include trips to restaurants, movies, concerts, theater, sporting events or special events such as the county fair.

Exercise and Sports

Students with ASD can be fully integrated into local health clubs and fitness centers. Alternatively, they can attend adaptive exercise classes designed for individuals with disabilities. Maria, from our case studies enjoys an aerobics class. The aerobics class at the local fitness center was too fast-paced for her and she responded by retreating into the corner and reciting dialogues from Nemo. However, when the local county recreation center offered adapted aerobics for individuals with developmental disabilities, Maria joined. This class was more to her liking and she was able participate.

Hobbies, Games, Crafts, and Art

Students without disabilities often have a variety of hobbies, games and art projects that they enjoy. Students with ASD often will not seek these experiences out, but with guidance and support can come to enjoy and even excel in these pursuits. Larry is a good example. He did not have the resources to choose art as a hobby. However, with guidance from his family he came to enjoy art and eventually to develop to the point of being able to sell his art work.

Social Events

Even though a popular image of autism is that it sends people into “their own little world,” the truth is that many students with ASD enjoy the company of other people. Dances, parties, barbecues and social events can be special and enjoyable occasions. Learning how to host these events by planning, issuing invitations and holding the event can be an achievable goal for many students with ASD.

Trivial Pursuits

Many students with ASD have their own areas of intense interest. Oftentimes their enjoyment extends to the most trivial aspects of the object of their interests, such as the time a certain train arrives in a certain city on Saturdays (not their train, or their city). Students with ASD need not be deprived of their areas of interest. Rather, their team needs to focus on teaching the student to enjoy these interests within certain boundaries and limits.

Students with ASD often need support to broaden and enjoy their range of recreation and leisure opportunities. Transition planning needs to include these supports in the student's education plan. The team must recognize that without proper supports the student's development in the area of recreation and leisure will be stunted.

Social Security and Benefits Planning

Effective planning for successful transition from school to adult life for youth with ASD includes a review of the critical issues surrounding the receipt of disability benefits provided by the Social Security Administration (SSA). For many students with significant disabilities the monthly cash payments provided by SSA disability programs represent an important source of monetary support. The associated public health insurance benefits such as Medicaid and/or Medicare frequently pay for essential medical equipment and services. While

the SSA disability benefit programs offer youth with disabilities a significant financial resource that can work to facilitate transition, fear of benefit loss potentially caused by paid employment also serves as a major barrier to this process (NCD Report, 2005).

Work and receipt of disability benefits are not mutually exclusive. The SSA disability programs include numerous provisions known as “work incentives” that are designed to ease the transition from dependence on benefits to greater economic self-sufficiency. These work incentives offer transition age beneficiaries exciting opportunities to participate in postsecondary education and to purchase the workplace services and supports necessary to fully accommodate disability in the performance of essential job functions. Receipt of SSA disability should be viewed as a potential advantage that can be utilized in a strategic fashion to achieve transition goals, including paid work in community businesses.

Although SSA disability benefits have a significant role to play in promoting successful transition to adult life, the impact of these benefits on youth with disabilities is seldom considered during the formal transition planning process conducted by public school personnel. While this oversight is attributable to numerous factors, it represents a significant “missed opportunity” to educate students with disabilities and their families. Social Security benefits may serve as a valuable resource to eligible students as they transition from school to adult life since they offer not only cash payments and health insurance, but also include numerous provisions specifically designed to increase employment and earnings capacity during and after secondary education. Furthermore, in some cases failure to focus on Social Security benefits during transition is not just a missed opportunity, but may potentially cause harm when students and family members are not educated about nor prepared for the changes that earned income may have on cash benefits and medical insurance. (Miller & O'Mara, 2003)

Benefits Programs

If work incentives associated with the SSA disability benefits are to be used strategically to achieve goals such as maintaining paid employment or pursuing postsecondary education, beneficiaries and their family members need to understand how the benefit programs function and how employment affects these benefits. Unfortunately, the SSA disability benefit programs and the associated health insurance (Medicaid and Medicare) are terribly complex. Few beneficiaries or disability professionals understand the Social Security work incentive provisions and how these provisions can be used to facilitate successful transition planning. Furthermore, SSA disability benefit expertise is generally not available within the special education system, the State Vocational Rehabilitation system, community rehabilitation programs, or within the larger disability services community. While SSA personnel certainly understand how the disability benefits function, they simply do not have the time to counsel individual beneficiaries on how to best utilize work incentives to achieve an employment or community living goals.

To help address the need for effective benefits planning, the Social Security Administration in May 2006 issued a new competitive Request for Application (RFA) for the former Benefits Planning Assistance and Outreach (BPAO) Program. Due to an increased emphasis on work incentives, return to work supports and jobs for beneficiaries, the program was redesigned and renamed the Work Incentives Planning and Assistance (WIPA) Program. The new program became effective September 30, 2006, and SSA currently maintains cooperative agreements with 104 WIPA projects. In most communities, the only available source of reliable benefits planning services will be from the designated SSA funded Work Incentives Planning and Assistance (WIPA) Project. To locate the WIPA provider in any given area, go to SSA's Web site at this URL: <http://www.socialsecurity.gov/work/ServiceProviders/WIPADirectory.html>. States vary significantly in terms of the availability of this new service; some states will only have the SSA funded

WIPA projects, while others may have multiple options for accessing benefits or work incentives planning services. To find the various options available in a given community for benefits planning or work incentives advisement, the best place to start is with the designated WIPA project. WIPA project staff will be familiar with any additional sources of assistance with benefits, what these services consist of, and the eligibility requirements, if any.

Benefits Planning Services

WIPA projects are a reliable source of benefits planning services. It is important to understand that SSA restricts WIPA services to individuals who are at least age 14, but not yet full retirement age (currently age sixty-five), disabled per SSA's definition, and already receiving Social Security benefits based on disability (SSI or a Title II disability benefits such as SSDI, CDB or DWB). This means that students under the age of 14 or youth who

Work Incentives Planning and Assistance (WIPA) Services

- ★ Analysis of current benefit status, verification of all benefits received and identification of other available benefits the individual might be eligible for;
- ★ Assistance with identifying, selecting and/or clarifying career goals as well as assistance with determining what specific services, supports or accommodations may be necessary to achieve the desired career goal;
- ★ Explanation of SSA's Ticket-to-Work program and the full array of vocational services and supports available to individuals with disabilities in the local WIPA service area;
- ★ Through explanation of how paid employment will affect all public benefits received;
- ★ Individualized work incentives planning and assistance designed to promote achievement of employment and other transition goals;
- ★ Counseling on wage reporting requirements for SSA benefits;
- ★ Counseling on available health insurance options and advisement on how health insurance is affected by paid employment;
- ★ Proactive follow-up services to ensure that work incentives are properly applied or to resolve problems related to employment and benefits;
- ★ Long-term work incentives management provided on a scheduled, continuous basis, as needed to support employment efforts;
- ★ Assisting beneficiaries with disabilities to resolve problems related to work efforts, higher education, occupational skills training, and work attainment or continuation of work.

Note: WIPA projects are not permitted to assist students with making initial application for SSA disability benefits and are prohibited from representing individuals in the SSA appeals process.

have not yet applied for or have been denied SSA benefits based upon disability will not be eligible for benefits planning services from WIPA Projects. To receive WIPA services, a beneficiary does not have to be working, or even actively seeking work, even though these individuals would be considered a high priority. Students and their family members who are just starting to think about work also need accurate information about work incentives and the effect that working will have on public benefits. Transition-age youth with disabilities who are in the initial stages of exploring the possibility of employment are very appropriate WIPA referrals, and some WIPA projects prioritize this population. Services may include the list on page 62.

Social Security Benefits and Transition-Aged Youth

There are a host of specific SSA benefits issues that may affect school age youth with ASD; some of these issues are related to employment or postsecondary education, while others are not. However, all of these issues are important within the realm of transition planning and most will require professional intervention from trained and experienced benefits specialists to reap the maximum advantage for the student. While all of these issues cannot be explored in detail within the confines of this chapter, the most critical ones will be identified and explained in summary fashion. The issues fall in two broad age group categories: (1) younger students with disabilities under age 18, and (2) students age 18 and older.

A Word about Social Security Benefits for Young People with Disabilities

There is a common misconception that all students with disabilities receiving cash benefits from the Social Security Administration are getting a type of benefits called Supplemental Security Income (SSI). Although the majority of students with disabilities would be receiving SSI payments, by no means does this apply to all students. A small percentage of transition-age youth will be receiving Social Security

disability benefits authorized under Title II of the Social Security Act. These include Social Security Disability Insurance (SSDI) or more commonly Childhood Disability Benefits (CDB), while still others receive a Social Security child's benefit that is completely unrelated to disability known as "Child's Benefits." To further complicate matters, some youth receive both SSI and a Title II SSA benefit.

The problem with this confusion is that neither parents nor school personnel understand that different Social Security benefit programs exist, or that these benefits vary widely in how they function. In addition, SSI and the Title II benefits are affected by paid employment in completely different ways. It is critical that students and family members know which type of benefits they receive so that correct advice on work incentives may be provided! A benefits specialist can help get this information from SSA.

Youth Under Age 18

If you asked parents of school-aged children with severe disabilities what their number one concern is, many would express frustration with trying to establish or maintain eligibility for the Supplemental Security Income program and Medicaid. While for some of these families, the need for an SSI cash payment is of paramount importance, most will tell you that the Medicaid coverage is their most critical need. Some children with disabilities have significant medical involvement requiring expensive treatments, services, and medications. Often, these medical interventions are not covered by private insurance or the existing coverage involves high premiums, co-payments or deductibles that families can ill afford. The quest for affordable health insurance that covers needed services is often the driving force behind the desire to establish SSI eligibility for school-aged youth.

Because SSI is a means-tested program, many children with severe disabilities are not found eligible due to parental income or resources. In other cases, families have trouble obtaining the evidence needed to facilitate a positive disability determination. Either way, it is essential to

recognize that a great deal of time, energy and effort may have been expended to secure the student's SSI benefit. Parents who have fought a long, exhausting battle to establish SSI eligibility are particularly loath to risk benefits. In most situations, paid employment is viewed by parents as a significant potential risk to these hard-earned benefits. When families are this insecure in their understanding of very basic benefits concepts, it is unreasonable to expect them to embrace the idea of having their sons and daughters with disabilities participate in paid community-based employment programs. Education on the facts about how employment affects benefits must take place before that first paying job is secured!

Benefits specialists can provide individualized counseling on how families of students with disabilities can get help to pay for postsecondary education, as well as how money can be saved for educational purposes without risking loss of SSI benefits due to excess resources and parental deeming.

Critical Considerations at 18th Birthday

The eighteenth birthday is a turning point for all youth because it marks the beginning of legal adulthood in our society. Once the youth with ASD turns 18, parental rights transfer to the student unless the parents have petitioned a court for either limited or full guardianship. For youth with disabilities, turning 18 brings up all the usual adulthood issues, as well as some profound changes in the way SSA handles disability benefits. The specific changes students and their families have to deal with will vary greatly depending upon the circumstances of the student. In most cases, students, families and teachers have no idea that the eighteenth birthday can cause such upheaval in a student's benefits and they are often completely blindsided by the events that take place. Along with considering the impact of the transfer of parental rights, it is important for families to consider the impact of this transfer as it relates to financial decision making.

The age of 18 is a critical transition point within the Social Security system in several ways. In the SSI

program, turning 18 means that the definition of what it means to be "disabled" changes. During the eighteenth year, all SSI recipients are re-assessed under the new and tougher adult standard. A substantial proportion of these youngsters (more than one-third) fail to meet the new adult disability criteria. Students who are not determined to be disabled as adults are then terminated from SSI cash benefits and generally lose Medicaid coverage. This process is known as the "Age-18 Redetermination" and it will be covered in detail in the following section.

Another critical age-eighteen event is the beginning of eligibility for a type of Title II Social Security benefits called "Childhood Disability Benefits" or CDB. Students who become eligible for this type of benefit when they turn 18 often lose eligibility for the SSI program. That CDB check is viewed as unearned income by the SSI program which may exceed the allowable limit. Sometimes these students mistakenly lose their Medicaid coverage, even though laws do exist to prevent this from happening.

Fortunately, not all Social Security changes that occur at the age of 18 are negative. In fact, there are some really positive changes that can occur at this juncture. For example, there are many students who failed to qualify for any Social Security benefit as children. Most of the time this happens because the parents have excess income and/or resources that disqualify the child from SSI. Once the child turns 18, SSA views them as an adult and no longer counts the income from the parents. This is true even when the parents have obtained legal guardianship of the child through the court system. It is not uncommon for the eighteenth birthday to mark the beginning of SSI eligibility, if the student applies.

SSI Age-18 Redetermination Process

Under the current legislation, SSI recipients who turn 18-years-of-age must have their eligibility reviewed as if they were applying for adult SSI for the first time, without consideration of previous disability determinations. This review process is called the "age-18 redetermination" and it is performed because the childhood definition of

disability varies greatly from the adult standard in the SSI program with the adult standard being more stringent.

The age-18 redetermination occurs at some point after the eighteenth birthday. It may occur at a regularly scheduled Continuing Disability Review (CDR), or at another point as determined by SSA. In general practice, the age-18 redetermination usually occurs within twelve months after the eighteenth birthday, although this is not required by regulation. An individual who is NOT determined eligible for SSI benefits as an adult will get a written notice that they are no longer qualified to receive benefits. These individuals are entitled to receive two more months of payments after the date of this notice. Overpayment may occur if an ineligible individual continues to receive payments after the two-month grace period.

Individuals found ineligible under the adult rules, are NOT required to pay back all SSI payments received after the birthday month! SSA will only seek to recover those payments received after the determination is made and the two grace months are over. It is important to help families understand this point since it causes a great deal of needless worry when the redetermination is conducted some months after the eighteenth birthday. The most difficult aspect of the age-18 redetermination is that SSI cash payments and Medicaid will eventually stop if the student is NOT found eligible under the adult disability standard. This is bewildering for students and their families that are suddenly declared to be ineligible for a benefit they may have received for many years even though there has been no change in medical condition or ability to function since being found eligible for childhood SSI benefits. While there is nothing an SSI recipient can do to avoid the age-18 redetermination process, there are ways to minimize any potential adverse impact this process may have. Involving a skilled benefits specialist in the seventeenth year to plan and prepare for the age-eighteen redetermination is a crucial first step. The benefits specialist can provide factual information about the redetermination process and dispel many of the myths which teachers, parents

and other disability professionals have about this critical transition issue.

First, many people are under the mistaken impression that SSI recipients must not be working at any level when the redetermination occurs. Normally, when an individual applies for SSI, Social Security looks to see whether the person is working and if so, if the earnings are over a specified limit they refer to as "Substantial Gainful Activity" or SGA. In 2008, the SGA guideline is \$940 per month of gross earnings for an individual who is disabled and \$1,570 for an individual who is blind. Under normal circumstances, individuals who are working at a level that would count as SGA would not be eligible for SSI or any other form of SSA disability benefits. However, during the age-18 redetermination, the SGA test of the eligibility determination process is waived. Transition-age youth may have countable earnings above the current SGA guideline and still be found eligible for SSI under the adult rules as long as the disability standard and all other SSI eligibility criteria are met. Because the SGA test is waived, there is no reason to hold back on paid employment until after the student successfully completes the age-18 redetermination. There is no reason not to engage in paid employment before, during or after the redetermination! (VCU-BARC Age 18 Redetermination Key Facts, 2003).

Students who are Vulnerable during Age-18 Redeterminations

Social Security estimates that 37 percent of all young adults who are redetermined at the age of 18 fail to meet the adult disability standards. Unfortunately, the age-18 redetermination process impacts some disabilities more than others. Here are some examples of disabling conditions which historically have heightened vulnerability during the age-18 redetermination process:

- ★ Students with respiratory, endocrine, and cardiovascular disabilities;
- ★ Students who had to appeal their initial SSI determination due to failure to meet the childhood disability standard. (These

individuals would logically be assumed to be at risk during redetermination since they struggled to meet even the less stringent child's standard);

- ★ Youngsters who have experienced an improvement in their medical condition; or
- ★ Students with certain behavioral disorders such as ADHD or Asperger's Syndrome may have difficulty meeting the adult disability standard without additional disabling conditions or secondary diagnoses.

Continuing SSI Eligibility under Section 301 Provisions

It is possible for certain young people to continue to receive SSI payments even though they were not found to meet the adult definition of disability if eligibility can be established for "Section 301" status. This phrase loosely refers to several parts of the Social Security Act that allow continued disability benefits to individuals who have medically improved – meaning they no longer meet the disability standard – under certain prescribed circumstances.

Current Social Security Administration regulations for the Section 301 program include provisions that are highly beneficial for students with disabilities receiving special education services. For example, approved programs of vocational rehabilitation include participation in the Ticket to Work and Self-Sufficiency Program with an approved Employment Network (EN), a state VR program, or other programs of VR or employment services. An approved program may also include participation in school for students aged eighteen to twenty-two as long as the student receives services under an Individualized Education Plan (IEP) or an Individualized Transition Plan (ITP). Participation in the educational program is defined as taking part in activities or services outlined in the IEP/ITP. It is most important to note that many VR counselors and school personnel are completely unaware of the Section 301 provisions. Students at risk of termination due to the age-18 redetermination need to receive information about Section 301 continuation of benefits after medical

recovery very early on. These students will need to access vocational rehabilitation services prior to turning 18 if Section 301 is a possibility. A trained benefits specialist will need to act as a coordinator to facilitate a successful Section 301 determination since the local SSA Field Office may not have experience with these rather rare cases and the other involved parties (state VR agency, private VR provider, and school) may not know this provision exists. (Miller, 2006).

Establishing Entitlement for Childhood Disability Benefits (CDB)

As mentioned previously, turning 18 can also have implications related to eligibility for SSA disability benefits authorized under Title II of the Social Security Act. The most common form of these benefits provided to transition-age youth is called "Childhood Disability Benefits" (CDB). Individuals who receive CDB payments are adults with disabilities who do not have sufficient work credits of their own to establish insured status for SSA disability benefits, but receive a Title II benefit based upon a parent's insured status. This program was previously referred to as "Disabled Adult Child" or DAC benefits and some SSA employees may continue to use this phrase when referring to CDB payments. A benefits specialist or CWIC can explain the critical provisions income and medical benefits for the CDB program and may need to provide support to families to make certain the provisions are applied properly. In some states and locales, the agency administering Medicaid programs routinely fails to identify eligibility for this special category of Medicaid coverage. For more information about the work incentives that apply to the CDB program, refer to SSA's 2007 Redbook: A Summary Guide to Employment Support for Individuals with Disabilities under the Social Security Disability Insurance and Supplemental Security Income Programs Accessed at the SSA Web site on December 6, 2007, at: <http://www.ssa.gov/redbook/eng/main.htm>. Also, Appendix C to this chapter details information on indicators for quality benefits

planning services for transition-age youth and the importance of an age 18 benefits review.

Transition-age youth with disabilities are poised at a critical juncture in their lives unlike any other they may experience. This juncture presents some unique challenges as well as opportunities related to work incentives planning and assistance. The challenges include being members of larger family systems with needs beyond those of beneficiary, facing the upheaval of the SSA disability program changes that occur at age 18, and the turbulence of simply planning for adulthood. The technical benefits information provided in this Chapter may seem a bit overwhelming, but the most important concept to grasp is that SSA disability benefits planning does have an important role to play in facilitating successful transition from school to adult life for students with disabilities. While parents and

teachers may be confused about all the different disability benefits, their associated work incentives and how they may be utilized to achieve transition goals, there is a reliable source of help available for many students. It is up to special education professionals to avail themselves of this assistance in the transition planning process! Introducing the power of work incentives planning early on has tremendous benefits in terms of avoiding some of the fear and inertia that can ensnare older beneficiaries into a lifetime of dependency on public benefits. The chance to focus on teaching and mentoring to build long-term benefits literacy and independence is another tremendous advantage offered by this youthful group. Delivering work incentives planning and assistance to youth in transition is preventative medicine in its purest form and if it is performed competently and consistently, will pay dividends far into the future.

References

- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text revision). Washington, DC: Author.
- Cooper, J. O., Heron, T. E., & Heward, W. L., (2007). *Applied Behavior Analysis*, (2nd ed.). Upper Saddle River, NJ: Pearson, Merrill Prentice Hall.
- Dunlap, G., Iovannone, R., English, C., Kincaid, D., Wilson, K., Christiansen, K., & Strain, P. (2010). *Prevent-Teach-Reinforce: The School Based Model of Individualized Positive Behavior Support*. Baltimore: Brookes.
- Harrower, J. K., & Dunlap, G. (2001). Including children with autism in general education settings: A review of effective strategies. *Behavior Modification*, 25, 762-784.
- Howlin, P., Goode, S., Hutton, J., & Rutter, M. (2004). Adult outcomes for children with autism. *Journal of Child Psychology and Psychiatry*. 45, 212-229.
- Individuals with Disabilities Education Improvement Act (IDEA) of 2004, 20 U.S.C. § 1400 et seq. (2004) (Reauthorization of the Individuals with Disabilities Education Act of 1990). Retrieved on November 15, 2007, from <http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CtopicalBrief%2C17%2C>.
- Jennes-Coussens, M., Magill-Evans, J., & Koning, C. (2006). The quality of life of young men with asperger's syndrome. *Autism*, 10, 403-414.
- Joint Legislative Audit and Review Commission. (2009). *Assessment of Services for Virginians with Autism Spectrum Disorders*. Richmond: Commonwealth of Virginia.
- Kluth, P. (2003). *"You're going to love this kid!": Teaching students with autism in the inclusive classroom*. Baltimore: Paul Brookes Publishing Co.
- Leconte, P. J. (2006). The evolution of career, vocational, and transition assessment: implications for the summary of performance. *Career Development for Exceptional Individuals*, 29, 114-124.
- National Longitudinal Transition Study (April 2007), 2, U.S. Department of Education, Washington, D.C.
- O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional Assessment and Program Development for Problem Behavior: A Practical Handbook*, (2nd ed.). Boston: Brooks/Cole Publishing Co.
- The National Professional Development Center on Autism Spectrum Disorders. (No Date) Evidence-Based Practice Briefs. Retrieved on March 1, 2010 from <http://autismpdc.fpg.unc.edu/content/briefs>.
- Schall, C., Doval, E., Targett, P., & Wehman, P. (2006). Application for youth with autism spectrum disorder. In P. Wehman (Ed.). *Life Beyond the Classroom: Transition Strategies for Young People with Disabilities*, 3rd Ed. Baltimore: Brookes.
- Schall, C. & Wehman, P. (2009). Understanding the transition from school to adulthood for students with autism. In P. Wehman, M. D. Smith, & C. Schall (Eds.) *Autism and the Transition to Adulthood: Success Beyond the Classroom*. Baltimore: Brookes.
- Schaller, J., & Yang, N.K. (2005). Competitive employment for people with autism: Correlates of successful closure of competitive and supported employment. *Rehabilitation Counseling Bulletin*, 49, 4-16.
- Sitlington, P. L., & Clark, G. M. (2007). The transition assessment process and IDEA 2004. *Assessment for Effective Intervention*, 32, 133-142.

- Sitlington, P. L., Neubert, D. A., Begun, W., Lombard, R., & Leconte, P. (2007). Assess for Success: A Practitioners Handbook on Transition Assessment (2nd ed.) Thousand Oaks, CA: Corwin Press.
- Snell, M. E. & Brown, F. (2006). Designing and implementing instructional programs. In M. E. Snell & F. Brown (Eds.) *Instruction of Students with Severe Disabilities, 6th Ed.* Upper Saddle River, NJ: Prentice Hall
- Tsatsanis, K. D. (2003). Outcome research in asperger syndrome and autism. *Child and Adolescent Psychiatric Clinics*, 12, 47-63.
- Wehman, P., Inge, K. J., Revell, W. G., Jr., Brooke, V. A. (2007). *Real work for real pay: Inclusive Employment for people with disabilities*. Baltimore: Paul Brookes Publishing Co.
- Wehman, P., Targett, P., and Young, C. (2007). Off to work for individuals with autism: A supported employment approach. *Autism Advocate*, 46 (1), 54-58.
- Wehman, P. & Wittig, K. M. (2009). *Transition IEPs*. (3rd edition), Austin, TX: PRO-ED, Inc.

Notes

Notes

Notes



© 2010 Commonwealth of Virginia Department of Education

The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.