Visual Supports for Persons with Autism

Module developed by Dr. Marjorie Bock, Ed.D. and Dr. Jessica Stallings, ATR-BC, LIMHP, LMH
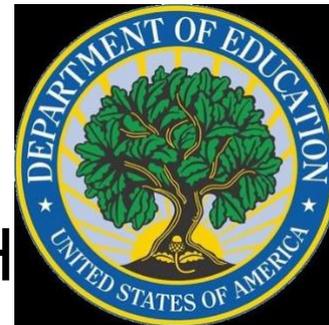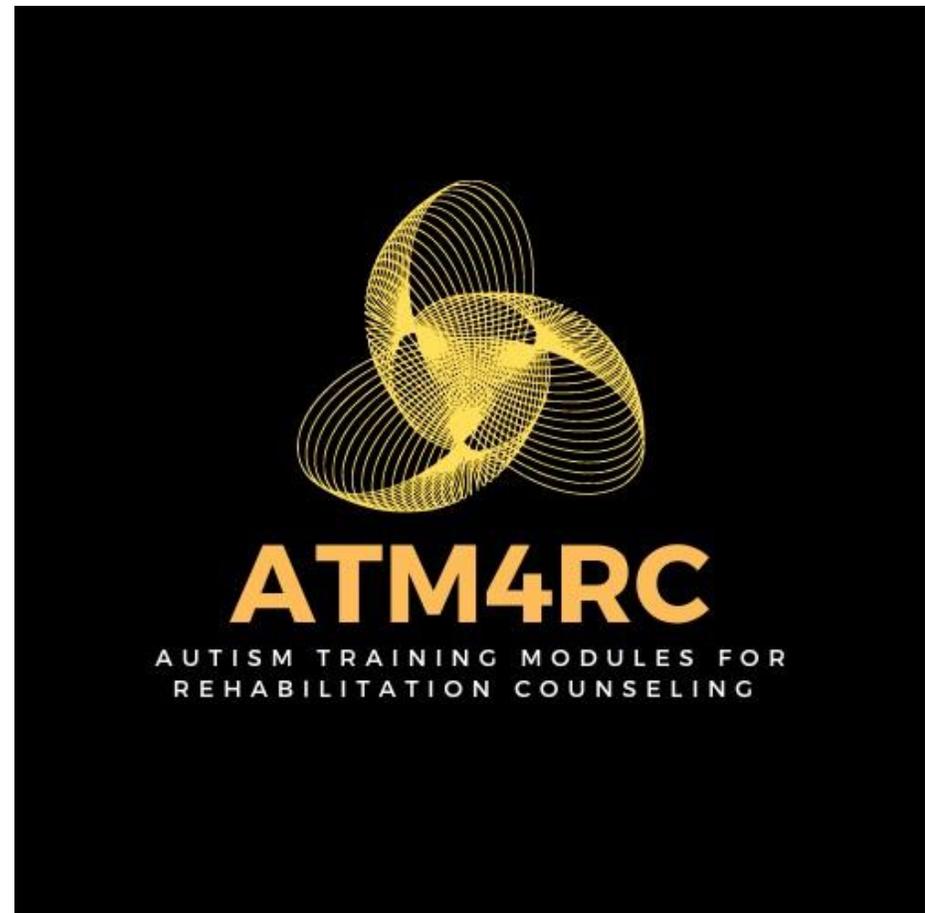
Module Objectives
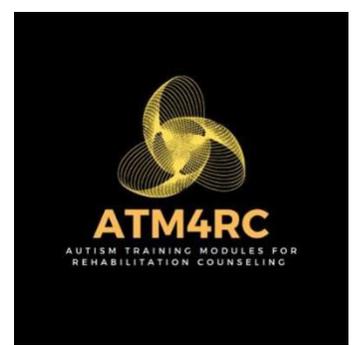
By the end of this module, participants will be able to:

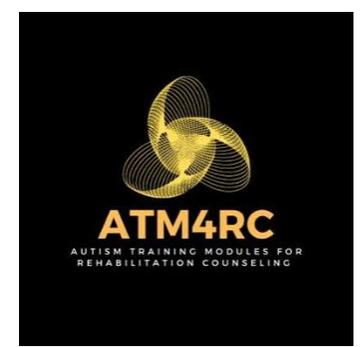1. Describe the benefits of visual supports for individuals with autism

2. Identify key types of visual supports that can be used in the workplace

3. Describe the implementation steps for planning, using, and monitoring visual supports with individuals with Autism

Temple Grandin

"I THINK IN PICTURES. Words are like a second language to me...One of the most profound mysteries of autism has been the remarkable ability of most autistic people to excel at visual spatial skills while performing so poorly at verbal skills." Temple Grandin (2006; autistic adult and autism expert)
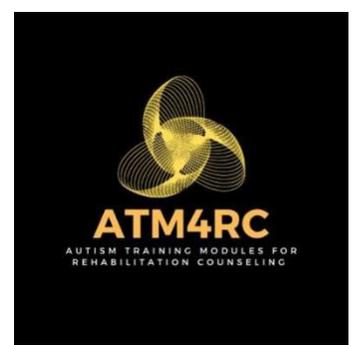
Please review Temple's story here: https://www.upr.org/utah-news/2022-11-23/temple-grandin-discusses-the-importance-of-neurodiversity-in-her-new-book

Visual Supports Introduction

- Visual supports are helpful for many of us- such as written notes, planners, elements of smart phone apps.
- Visual schedules and other visual supports are also commonly used with autistic people.
- Research and anecdotal evidence support the usefulness of visual supports and prevalence of visual thinking among autistic people (Evers, Noens, Steyaert, & Wagemans, 2011; Grandin, 2016; Kana, Keller, Cherkassky, Minshew, and Just, 2006; O'Riordan, 2024) .

# Visual Supports: An Evidence-Based Practice for Persons with Autism
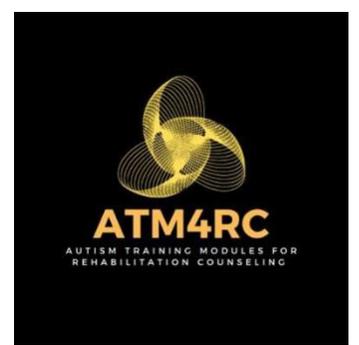
- Based upon the 2023 updated review (Steinbrenner, et al.), visual supports are an evidence-based practice supported by 63 studies (62 single case design and 3 group design).
  - Preschoolers (ages 3 to 5) through young adults (ages 15 to 22) have benefitted from visual supports.
  - Visual supports have improved social, communication, behavior, cognition, motor, and play for autistic persons. In addition, they have improved academic, and adaptive skills for these persons.
  - Most of the studies involving persons ages 15 through 22 used visual supports to improve social interactions. Thus, visual supports may best be used to support social interactions for autistic adolescents and young adults.

Visual Supports for Autistic People
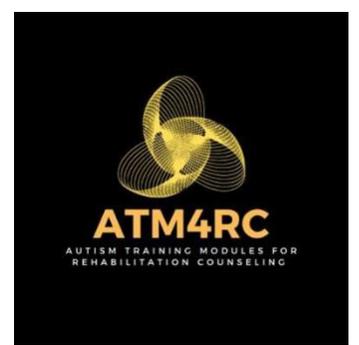
- Please review the National Autistic Society's (NAS, 2020) Visual Supports for Autistic people which can be found here https://inspire.org.mt/wp-content/uploads/2020/04/visual-supports.pdf before proceeding.

- Visual supports may augment or replace language, are by nature portable and can be reworked to improve their success

- Visual supports provide improved communication and structure which can increase confidence and lower frustration autistic individuals and those that live and/or work with them (NAS, 2020)

Types of Visual Supports
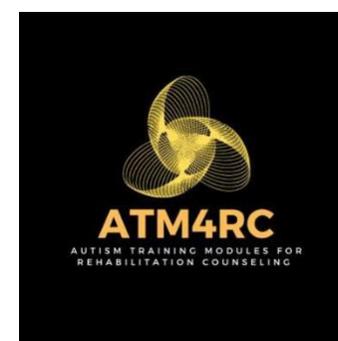
• Visual supports come in a variety of forms which may include:
- Images such as photos or drawings
- Objects-mini or full size
- Videos
- Colored cards
- Words
- Labeled mats such as in the picture on the right

•Visual supports may be paper based, tangible objects, or through apps on phones or tablets (NAS, 2020)
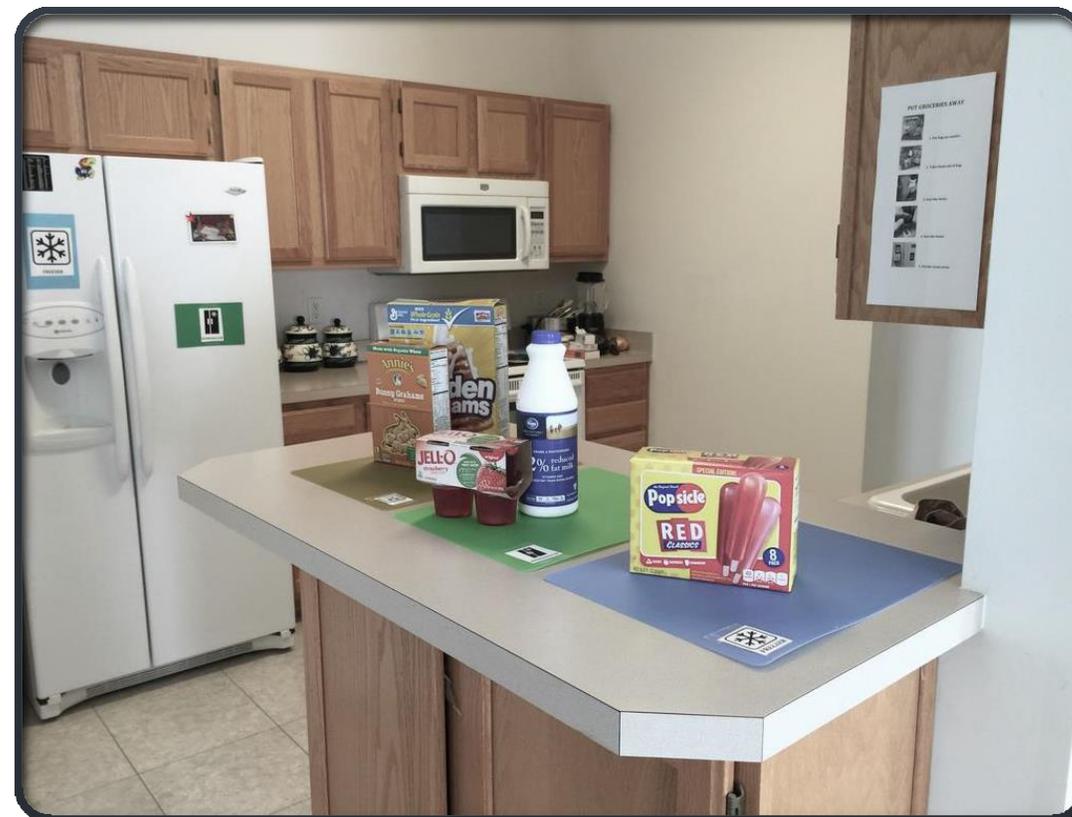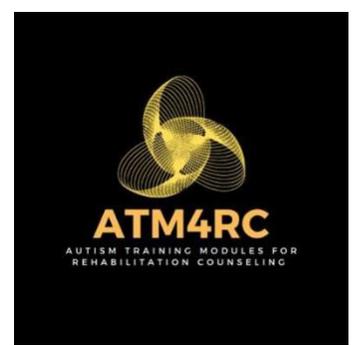
Self-Questioning Activity

- What visual supports do you see in this grocery produce isle?

- What additional visual supports would make this grocery produce section more autism-friendly?
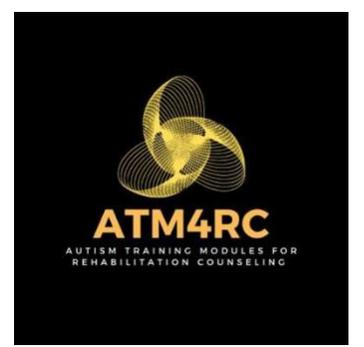
Use of Visual Supports

•Visual supports may, but are not limited to:
- Contain "a single message"
- "In combination" such as a schedule
- To facilitate making choices or picking preferences
- To teach skills and concepts such as reviewing a social interaction/practicing a conversation (NAS, 2020, p. 4).

This Photo by Unknown Author is licensed under CC BY-NC-ND
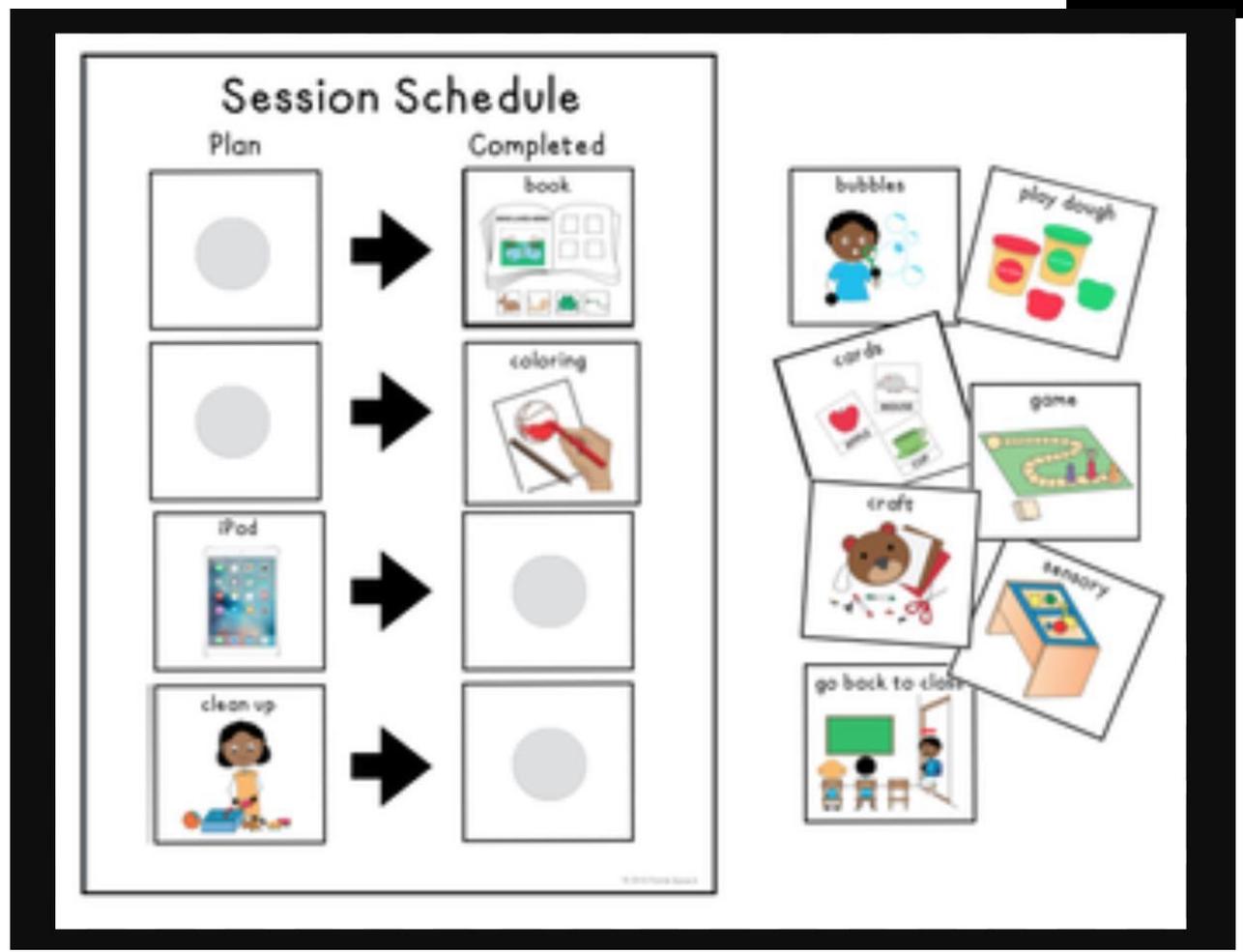
Visual Schedule (slide 1 of 2)

These following slide includes two visual schedule examples once depicts a classroom schedule utilized for a group of children, the other an individualized schedule

See NAS (2020) Visual Supports for more examples
https://inspire.org.mt/wp-content/uploads/2020/04/visual-supports.pdf

Visual Schedule (slide 2 of 2)

First / Then Visual Supports

Visual Supports Tips
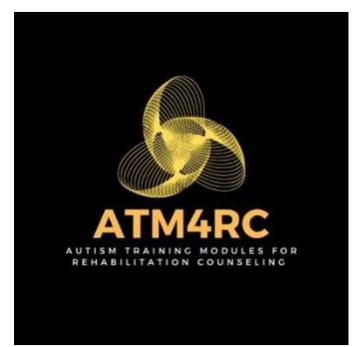
As indicated by National Autistic Society (2020, pp 5-6) Visual Supports should be:

• Portable

• Durable

• Easy to locate

• Personalized

• Consistent

Implementation Steps

Plan	Use	Monitor
• Identify Target Skills	• Teach How to Use Visual Supports	• Collect Data on Target Behavior and Use of Visual Supports
• Identify Needed Visual Supports	• Fade Prompting as Soon as Possible	• Adjust to Ensure Fidelity if Needed
• Create Visual Supports Based on Learner Assessment	• Generalize Use of Visual Supports Across All Settings and Activities	• Determine Next Steps Sam, A., & AFIRM Team. (2015).

Implementation Checklist
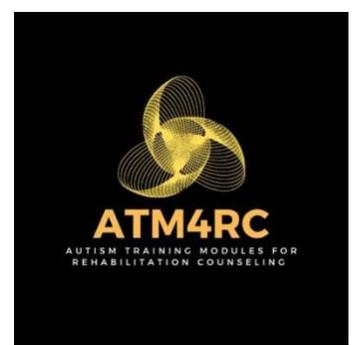
Review the Implementation Checklist for Visual Supports compiled by the National Professional Development Center on Autism Spectrum Disorders (2010) based on the work of Hume and Smith (2009) and found here:

https://csesa.fpg.unc.edu/sites/csesa.fpg.unc.edu/files/ebpbriefs/VisualSupports_Checklist.pdf .

Video: Visual Supports Demonstration
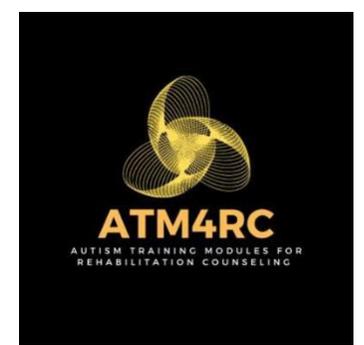
Find the video Introducing and Using Visual Supports produced by Brothers of Charity Services Ireland at
https://www.youtube.com/watch?v=_79pJy3t91M

This one-hour video provides an in-depth description of visual supports and how to use them with persons with autism. Two speech and language pathologists share their knowledge and experience using visual supports with their clients, including clients with autism.

Visual Supports Activity: Creating Visual Supports for Adults with Autism

Purpose: To create visual supports (e.g., visual labels, workplace task schedules, daily schedules) for adults with autism.

Description: Using Hume, K. and Smith, S. (2009) Implementation Checklist for Visual Supports, you will create, implement, and evaluate a visual support for one of your clients.

Directions: See next slide.

Visual Supports Activity: Creating Visual Supports for Adults with Autism Continued

Directions:

1. Select one of your clients for whom you think visual supports will improve their work performance.
2. Assess the client to determine which visual supports will work best for them.
3. Based on this assessment identify the visual support that will best enhance your client's workplace performance.
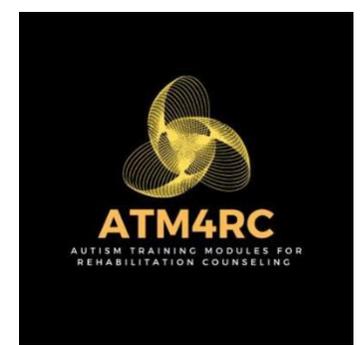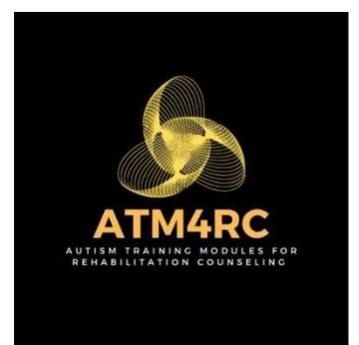4. Using the Visual Supports Implementation Checklist (found here https://csesa.fpg.unc.edu/sites/csesa.fpg.unc.edu/files/ebpbriefs/VisualSupports_Checklist.pdf), create, implement, and monitor the visual support you created.
5. Evaluate the overall efficacy of the visual support you created.

Additional Resources: AFIRM
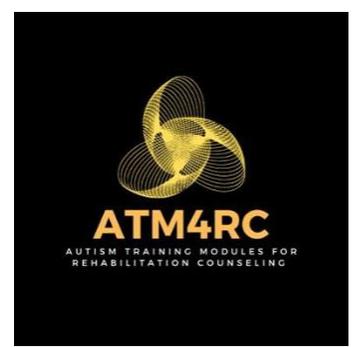
Autism Focused Intervention Resources & Modules (AFIRM)

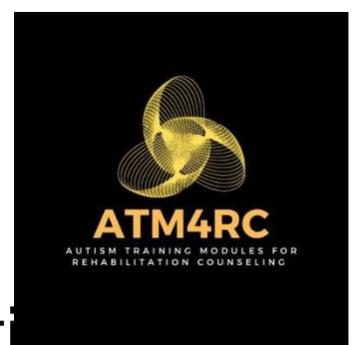- This interactive module provides in-depth training on visual supports for autistic persons.
- The module is an Open Educational Resource (OER) https://afirm.fpg.unc.edu/visual-supports

- American Psychiatric Association (2022). Diagnostic and statistical manual of mental disorders (5th ed, text rev) (DSM-5TR). American Psychiatric Association Publishing.

- Evers, K., Noens, I., Steyaert, J., & Wagemans, J. (2011). Combining strengths and weaknesses in visual perception of children with an autism spectrum disorder: Perceptual matching of facial expressions. Research in Autism Spectrum Disorders, 5(4), 1327-1342. https://doi.org/10.1016/j.rasd.2011.01.004

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- Hume, K. (2013). Visual supports (VS) fact sheet. Chapel Hill: The
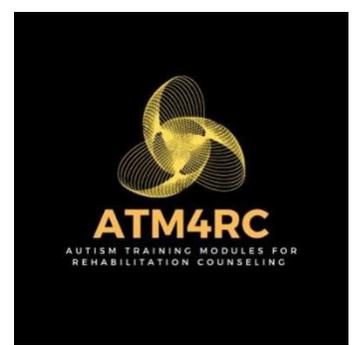
- Hume, K., & Smith, S. (2009). Implementation checklist for visual supports. Chapel Hill, NC: The National Professional Development Center on Autism Spectrum Disorders, Frank Porter Graham Child Development Institute, The University of North Carolina.

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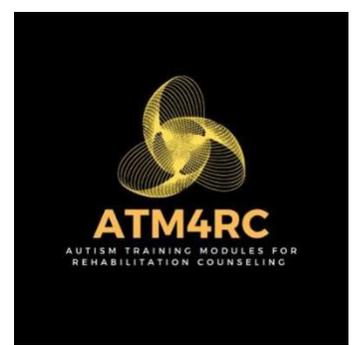
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- National Autistic Society. (2020). Visual supports for autistic people. https://inspire.org.mt/wp-content/uploads/2020/04/visual-supports.pdf

- National Professional Development Center on Autism Spectrum Disorders (2010). Visual Supports: Implementation Checklist. https://csesa.fpg.unc.edu/sites/csesa.fpg.unc.edu/files/ebpbriefs/VisualSupports_Checklist.pdf
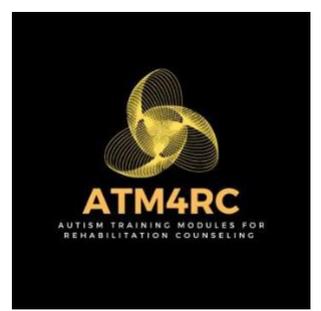
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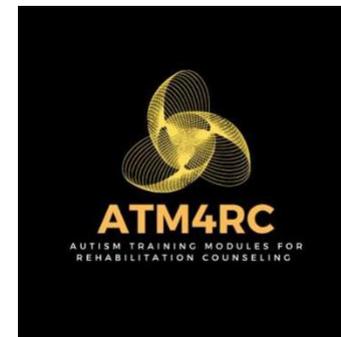- Sam, A., & AFIRM Team. (2015). Visual supports. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from http://afirm.fpg.unc.edu/visual-supports

- Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). Evidence-based practices for children, youth, and young adults with Autism. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.
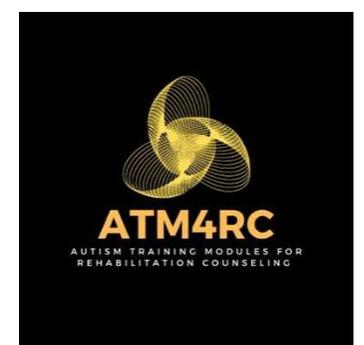
Additional Resources (Websites)

- Colorful Semantics: http://www.integratedtreatmentservices.co.uk/resources/speech-and-language-therapy/

- Do2Lelarn https://do2learn.com

- Go Talk Now https://www.widgit.com/products/third_party/gotalknow/index.htm

- Temple Grandin's Official Website https://www.templegrandin.com/

- Tom Off Accessibility by Design http://www.tomorraccessibility.co.uk/bss.htm

- Widget https://www.widgit.com/index.php

Additional Resources (Apps)

Tiimo Daily Planner

- Created for persons with autism
- Visual timeline
- Visual checklist
- Ongoing reminders (notifications, vibrations & sounds)
- Pre-made routines for common activities
- 3000+ icons suitable for adults
- Joint-Use function
- For more information https://www.tiimoapp.com/blog/get-your-best-start-with-tiimo

Visual Schedule Planner

- View events daily, weekly, monthly
- Custom images (not childish, for adults) & sounds
- Activity Schedules
- Video modeling
- Timer
- Checklist and notes
- For more information https://www.goodkarmaapplications.com/visual-schedule-planner1.html