### ROCHESTER REGIONAL CENTER FOR AUTISM SPECTRUM DISORDERS

### **SELF-STUDY GUIDE**

CD TRAINING SERIES – Volume 1

# DAILY VISUAL SCHEDULE BY

Caroline I. Magyar, Ph.D.

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#### INTRODUCTION

The DAILY VISUAL SCHEDULE CD is one in a series of training CD's developed, produced and distributed by the Rochester Regional Center for Autism Spectrum Disorders, University of Rochester. This product is designed for community education specific to the assessment and treatment of individuals with an autism spectrum disorder. Information provided at the time of this production is based on the best available evidence for effective assessment and treatment practices in autism spectrum disorders. This CD is provided for informational purposes only.

#### **PURPOSE**

The purpose of this CD is to assist viewers caring for or educating individuals with an autism spectrum disorder to acquire the skill of assessing for and developing a DAILY VISUAL SCHEDULE. This CD is designed for self-study by viewers.

#### **DISCLAIMER**

The CD or its associated training materials ("Materials") are designed to help viewers develop effective teaching strategies for children with an autism spectrum disorder. The technical application of any of the information or guidance contained in the Materials may vary widely based on the specific facts involved and are not an exhaustive resource on the topic covered in the Materials. Therefore, the Materials should not be used as a substitute for professional assessment and judgment. Although the information is believed to be accurate and reliable, all Material is provided "AS IS" WITHOUT WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE. The University of Rochester shall not be liable for any damages, including direct, indirect, special or consequential damages, which may arise out of the use of these Materials.

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# Daily Visual Schedule

### What it is & How to do it

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- Increase **knowledge** of how a daily visual schedule can assist an individual with an autism spectrum disorder to be more independent
  - Learn the process for assessing the need for a daily visual schedule
  - Learn the steps to **developing** a daily visual schedule
  - Learn how to **teach** following a daily visual schedule
  - Learn how to **evaluate** independent schedule following behavior

### **NOTES:**

# Pre-Training Knowledge Questionnaire Test Your Knowledge

- Turn to page 29, Appendix A, of your SELF-STUDY guide.
- Complete the PRE-TRAINING knowledge questionnaire.
- Pause the CD while you complete the questionnaire.

Pause CD

Identify how a Daily Visual Schedule can support an individual with an autism spectrum disorder

# Why is a Daily Visual Schedule an Effective Environmental Support for an Individual with an Autism Spectrum Disorder?

- Schedules establish **routines** 
  - Predictability
- Schedules allow individuals with ASD to become more independent
  - Make clear expectations, obligations, commitments, and activities to be accomplished
- Schedules allow individuals with ASD to become more self-sufficient
  - Choice making
  - Self-determination
- Schedules create **framework** for the individual to engage in social interaction

### **NOTES:**

Learn how to assess the need for a Daily Visual Schedule

### Is a Daily Visual Schedule Appropriate for *All* Individuals with an Autism Spectrum Disorder?

### **Assessing Need & Readiness**

Answer the Following Questions:

- Does the individual need assistance with independent routine following, task completion?
- Can he/she discriminate a visual cue from the background?
- Can he/she match object to object?
- Can he/she match picture or word to object?
- Will the individual allow someone to initially assist him/her to develop and/or use the schedule?

Pause the CD and review the *Inventory of Need Form* on page 30, Appendix B.

### **KEY POINTS**

-need to assess for pre-requisite skills
-need to determine if the individual requires a daily visual schedule

Identify the steps to developing a Daily Visual Schedule

# Once You Have Determined That a Daily Schedule Would be Beneficial to an Individual What Do You Do Next?

- Identify the sequence of activities to be performed
- Label each of the activities
- Select the format for each schedule
  - Potential Formats:
    - Objects, Pictures or Symbols, Picture/Symbol-Word, Word only, Combination
  - Potential Alignments:
    - Horizontal (left to right) or vertical (top to bottom) layout
  - Location:
    - Location chosen based on access and ease of use
- Identify a reinforcement system (if necessary)

TURN TO PAGES 31 & 32, Appendix C & D OF YOUR SELF-STUDY GUIDE. There you will find the SEQUENTIAL ANALYSIS FORM AND PLANNING WORKSHEET.

Complete these forms as directed.

### **Press Pause Now**

Identify the various options you have to choose from in format and alignment

### **EXAMPLES OF SCHEDULES**

- Formatting Examples
  - Objects
  - Pictures or Photos
  - Symbols
  - Written
  - Combination
- Alignment Examples
  - Vertical
  - Horizontal

### **NOTES:**

### Example: Symbol Format & Vertical Alignment

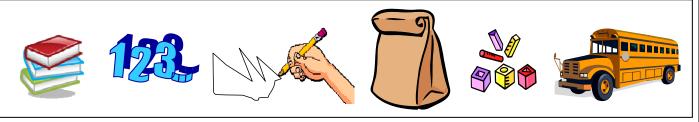


# Example: Written Word Format & Vertical Alignment

Schedule for Monday, October 5th

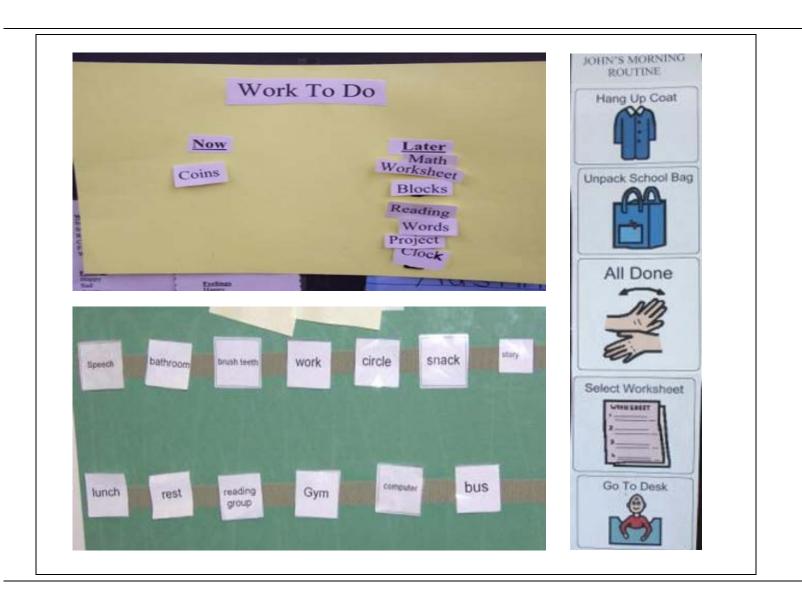
- Homeroom
- Science
- Resource Room
- Math
- Lunch
- Nurse
- Social Studies
- ELA
- Resource Room
- Home

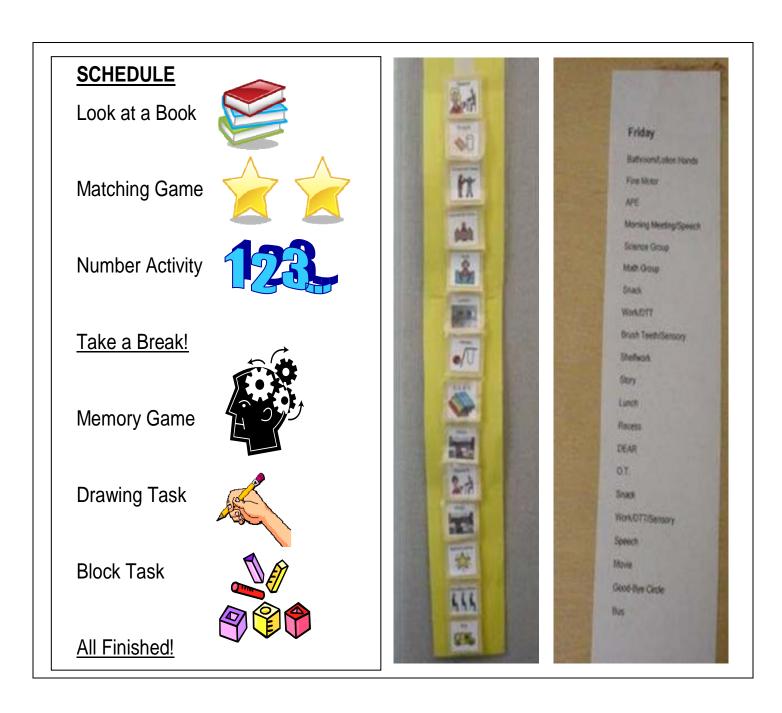
### Examples:

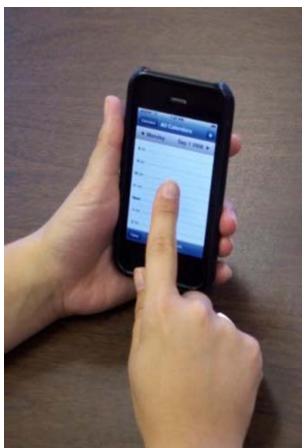


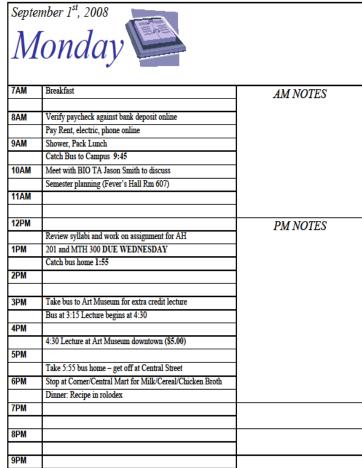












Identify considerations in setting up the schedule

# Now That I Have Planned The Schedule, What Do I Do Next?

- Develop the materials
- Assemble the schedule
- Determine the location for each of the schedules
- Review the schedule(s) with the individual and revise as necessary

### **NOTES:**

**Tip:** Remember that the materials, format and location of where you place the schedule should be determined based on your assessment of the **individual's needs** and abilities, and **the situation and context** in which the individual will use the schedule.

Identify methods for teaching the schedule

### How Do I Teach the Individual to use his/her Schedule?

- There are 2 general methods for teaching schedule following
  - Direct Instruction: verbal instruction & modeling
  - Shadowing with Graduated Guidance and Spatial Fading
    - Review schedule when first establishing it, but
    - NO TALKING WHEN TRAINING!!!

**NOTES:** 

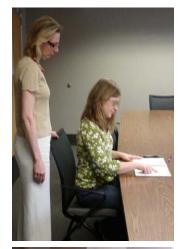
Identify the method of direct instruction

### Examples Direct Instruction





Review
the
schedule;
verbal
instruction
with
gesture
and
prompt.





Provide the individual the opportunity to independently review the schedule.

### **KEY POINTS**

-Instructor instructs-Student practices

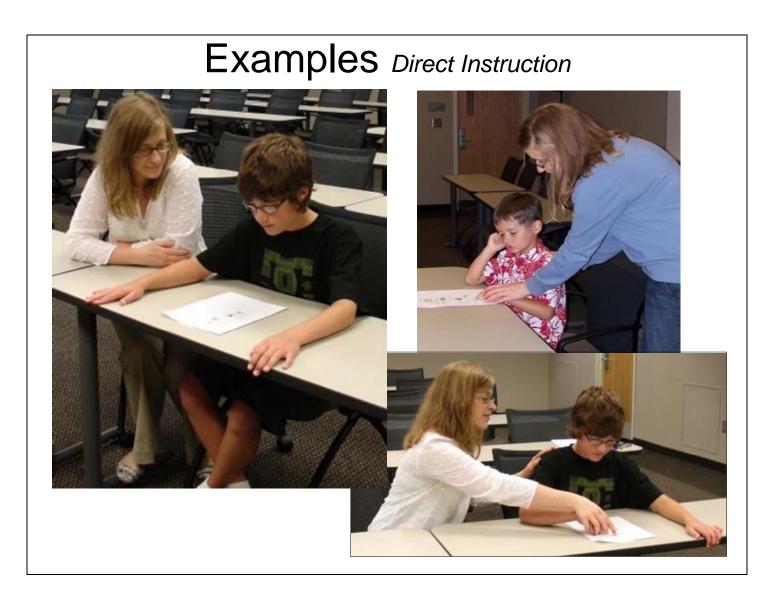
### Example Direct Instruction

Instructor Reviews... Individual Practices





Identify the method of Direct Instruction



### **KEY POINTS**

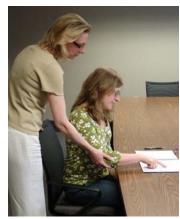
Instructor provides correction and feedback to assist the individual in learning his schedule

Identify the method of shadowing with graduated guidance and spatial fading

### **Examples**

Shadowing with Graduated Guidance and Spatial Fading















### **KEY POINTS**

-Note the distance between the instructor and the individual -Note the relative placement of hand support as the instructor fades physical assistance

-No verbal prompts or instruction

### **Examples**

Shadowing with Graduated Guidance and Spatial Fading











### **KEY POINT**

Adjust your position to maximize assistance with the least restrictive prompt

### Examples

Shadowing with Graduated Guidance and Spatial Fading















### **NOTES:**

Identify a method for evaluating progress

## How Do I Know When the Individual No Longer Requires Assistance to Follow the Schedule?

- Evaluation is essential
- Start with a baseline assessment
  - Record which part of the task analysis/sequence the individual can complete independently or with a prompt
- Collect data each time the individual uses his/her schedule
- When the individual's performance reaches a predetermined criterion (e.g., >/= 95% total independence for 1 month) then fade assistance

Turn to page 31, Appendix C of your Self Study Guide for a Sample Sequential Analysis Form and Data Sheet

Identify the steps to developing and using a Daily Visual Schedule

# Summary Steps to Developing & Training a Daily Visual Schedule

- Assess
- Develop Schedule
- Train/Instruct
- Evaluate

Turn to page 32, Appendix D of your Self Study Guide to review a Planning Worksheet.

PRESS PAUSE NOW

### **Post-Training Knowledge Questionnaire**

- Turn to page 33, Appendix E of your SELF-STUDY guide.
- Press pause now.
- Complete the POST-TRAINING knowledge questionnaire.
- Score both pre and post-training questionnaires using the answer key found on page 34, Appendix F of your SELF-STUDY guide.
- Compare your scores.
- Return to the CD for review if needed.

## Thank you to the many supporters and contributors to this Training CD

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- S.U.N.Y at Albany, Center for Autism and Related Disabilities
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### Reference:

McClannahan, L.E., & Krantz, P.J. (1999). *Activity schedules for children with autism: Teaching independent behavior*. Bethesda, MD: Woodbine House.

### Appendix A Test Your Knowledge: DAILY SCHEDULE

### **Pre-Training Knowledge Questionnaire**

| Nan         | e: Date:  |
|-------------|---|
| <u>Dir</u>  | etions: for each question circle the best answer.   |
| 1. I        | dividuals with ASD often benefit from a Daily Schedule because it:  a. Allows individuals with ASD to look at pictures  b. Establishes routines  c. Promotes independence in completing personal and social responsibilities  d. Answer choices b & c |
| 2. <i>A</i> | Il individuals with ASD can use a Daily Schedule?   |
|             | True False  |
| 3<br>Dai    | is the procedure that needs to be completed prior to developing a Schedule for a specific routine.  a. Sequential analysis b. Step plan c. Routine planning d. None of the above  |
| 4. V        | That are the primary methods used when teaching a Daily Schedule?  a. Verbal prompting until the individual follows the routine b. Shadowing c. Graduated guidance and spatial fading d. Answer choices b & c   |
|             | erformance data needs to be used to determine when the individual has reached bendence in following his/her schedule?  True  False  |

Do not Score.

Return to page 7 of your Study Guide.

### Appendix B Inventory of Need: Daily Schedule

| Child/Adult Name:                                | Evaluator:                   | Date:                   |               |  |  |  |
|--|------------------------------|-------------------------|---------------|--|--|--|
| <b>Directions:</b> Read each question and answer | r based on your knowledge    | of the individual you a | re assessing. |  |  |  |
| Follow teaching suggestions for determining      | ng what the individual's sch | nedule needs are.       |               |  |  |  |

|    | SKILL   | Y/N | Prompt Level | Teaching Suggestions                               |
|----|---|-----|--------------|--|
|    | PREREQUISITES                                   |     | •            |  |
| 1  | Can he/she identify a picture from the          |     |              | If N=teach skill first                             |
|    | background?                                     |     |              | If Y=assess #2                                     |
| 2  | Can he/she identify <i>identical objects</i> ?  |     |              | If N=teach skill first                             |
|    |   |     |              | If Y=assess #3                                     |
| 3  | Can he/she identify picture-object              |     |              | If N=teach skill & use <i>objects</i> in schedule  |
|    | correspondence?                                 |     |              | If Y=assess #4                                     |
| 4  | Can he/she identify written word                |     |              | If N=teach skill & use <i>pictures</i> in schedule |
|    | object/picture correspondence?                  |     |              | (#4)   |
|    |   |     |              | If Y=assess #5                                     |
| 5  | Does he/she allow physical/manual               |     |              | If N=teach improved tolerance for                  |
|    | assistance to complete activities?              |     |              | physical/manual assistance                         |
|    |   |     |              | If Y=assess #6 & #7                                |
|    | LEVEL OF INDEPENDENCE                           |     |              |  |
| 6  | Does he/she <i>initiate</i> routines on         |     |              | If N=assess #8                                     |
|    | his/her own without prompting?                  |     |              | If Y=assess #7                                     |
| 7  | Does he/she <i>complete</i> routines on         |     |              | If N=assess #9                                     |
|    | his/her own without prompting?                  |     |              | If Y=assess #10                                    |
| 8  | If he/she requires some prompting to            |     | Few          | Begin teaching at current prompt level using       |
|    | <i>initiate</i> routines, indicate the level of |     | Moderate     | graduated guidance and spatial fading.             |
|    | prompting he/she requires.                      |     | All the time |  |
|    |   |     | (circle best |  |
|    |   |     | choice)      |  |
| 9  | If he/she requires some prompting to            |     | Few          | Begin teaching at current prompt level using       |
|    | complete routines, indicate the level           |     | Moderate     | graduated guidance and spatial fading.             |
|    | of prompting he/she requires.                   |     | All the time |  |
|    |   |     | (circle best |  |
| 10 |   |     | choice)      | 7037   |
| 10 | Does he/she start <i>new</i> activities or      |     |              | If N=assess #11                                    |
|    | routines without prompting?                     |     |              | If Y=assess #12                                    |
| 11 | If he/she requires some prompting to            |     | Few          | Begin teaching at current prompt level using       |
|    | initiate new activities or routines,            |     | Moderate     | graduated guidance and spatial fading.             |
|    | indicate the level of prompting he/she          |     | All the time |  |
|    | requires.                                       |     | (circle best |  |
| 10 | Desche/descend                                  |     | choice)      | ICNI #12   |
| 12 | Does he/she complete <i>new</i> activities      |     |              | If N=assess #13                                    |
| 12 | or routines without prompting?                  |     | F            | If Y=doesn't need daily schedule at this time      |
| 13 | If he/she requires some prompting to            |     | Few          | Begin teaching at current prompt level using       |
|    | complete new activities or routines,            |     | Moderate     | graduated guidance and spatial fading.             |
|    | indicate the level of prompting he/she          |     | All the time |  |
|    | requires.                                       |     | (circle best |  |
|    |   |     | choice)      |  |

**PERFORMANCE CRITERIA**: Y= greater than or equal to 90% of the time; N=less than 90% of the time

### Return to page 9 of your Study Guide.

#### Appendix C

#### Sequential Analysis Form & Data Sheet: Daily Schedule

| Child/Adult Name: | Evaluator: | Date: |  |
|-------------------|------------|-------|--|
|                   |            |       |  |

#### **Directions for Completing a Sequential Analysis:**

- 1. Identify the *Routine Sequence* you want to teach.
- 2. Complete the routine yourself a few times.
- 3. Write down each step of the routine.

Example:

| #  | Routine Sequence of Activities | +/- |
|----|--------------------------------|-----|
|    | Routine Sequence: School Day   |     |
| 1  | Arrival                        |     |
| 2  | Homeroom                       |     |
| 3  | Earth Science                  |     |
| 4  | Band Practice                  |     |
| 5  | Lunch                          |     |
| 6  | Algebra                        |     |
| 7  | Language Arts                  |     |
| 8  | Home & Careers                 |     |
| 9  | Physical Education             |     |
| 10 | Resource Room                  |     |
| 11 | Homework Club                  |     |
|    | % Completed Independently      |     |

#### **DATA SHEET**

**<u>Directions</u>**: for data collection and progress monitoring complete the following:

- 1. Write in each activity that comprises the routine.
- 2. Each training session, place a + or in the appropriate column for each activity completed independent of prompts or with prompts, respectively.
- 3. Calculate the percentage of each teaching trial.
- 4. Track progress toward Mastery Criteria.

**Mastery Criteria**: completes all steps without assistance 90% of the time or more each day for 1 month

5. Re-assess if the individual is not making progress.

| # | Routine Sequence of Activities | +/- |
|---|--------------------------------|-----|
|   | Routine Sequence:              |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |
|   |                                |     |

#### **Teaching Procedure & Progress Monitoring:**

- 1. Use shadowing, graduate guidance and spatial fading.
- 2. Score + for correct/independent; for incorrect/prompted.
- 3. Graph total percent of steps completed correctly, as calculated by number of +'s over total steps.

IF YOU ARE COMING FROM PAGE 9 OF YOUR SELF-STUDY GUIDE, CONTINUE ONTO THE PLANNING WORKSHEET ON PAGE 32

IF YOU ARE COMING FROM PAGE 25, RETURN TO PAGE 26 OF YOUR SELF-STUDY GUIDE

### Appendix D Planning Worksheet: Daily Schedule

|                   | 0 |             | • |       |
|-------------------|---|-------------|---|-------|
| Child/Adult Name: |   | _ Evaluator | · | Date: |

**<u>Directions</u>**: Answer each question based on your knowledge of the individual and content contained in the training.

| STEPS                                       | PLAN/NOTES |
|---|------------|
| Activity                                    |            |
| What activity or routine are you            |            |
| scheduling? Complete Sequential Analysis    |            |
| Form-Appendix D.                            |            |
| Format                                      |            |
| Will you be using objects, pictures,        |            |
| symbols, words, combination?                |            |
| Alignment                                   |            |
| Will you be using a vertical or horizontal  |            |
| alignment?                                  |            |
| Location(s)                                 |            |
| Where will the schedule be placed?          |            |
| Training Plan                               |            |
| What level of prompting will you begin at?  |            |
| Where will you be training initially?       |            |
| How will you help the individual use the    |            |
| schedule across situations?                 |            |
| Social Opportunity                          |            |
| What is/are the social                      |            |
| opportunity/opportunities that you will     |            |
| embed within the schedule?                  |            |
| Special Considerations                      |            |
| Does the individual require modification to |            |
| the schedule materials because of visual,   |            |
| motor or other impairments?                 |            |
| Evaluation Plan: Progress Monitoring        |            |
| Establish a mastery criteria: completes all |            |
| steps without assistance 90% of the time or |            |
| more each day for 1 month)                  |            |

#### PROBLEM-SOLVING TIPS

If individual is not meeting the criteria, re-assess and modify plan. If the individual demonstrates good acquisition of skill, begin to fade assistance.

IF YOU ARE COMING FROM PAGE 9 OF YOUR SELF-STUDY GUIDE, RETURN TO PAGE 10
IF YOU ARE COMING FROM PAGE 26 IN YOUR SELF-STUDY GUIDE, RETURN TO PAGE 27 OF YOUR SELF-STUDY GUIDE

### Appendix E Test Your Knowledge: Daily Schedule

#### Post-Training Knowledge Questionnaire

| N  | ame: Date:   |
|----|--|
| D  | irections: for each question circle the best answer.   |
| 1. | Individuals with ASD often benefit from a Daily Schedule because it:  a. Individuals with ASD like to look at pictures b. Establishes routines c. Promotes independence in completing personal and social responsibilities d. Answer choices b & c |
| 2. | All individuals with ASD can use a Daily Schedule?   |
|    | True False   |
| 3. | is the procedure that needs to be completed prior to developing a  |
| D  | aily Schedule for a specific routine.  a. Sequential analysis  b. Step plan  c. Routine planning  d. None of the above   |
| 4. | What are the primary methods used when teaching a Daily Schedule?  a. Verbal prompting until the individual follows the routine b. Shadowing c. Graduated guidance and spatial fading d. Answer choices b & c                                      |
|    | Performance data needs to be used to determine when the individual has reached dependence in following his/her schedule?  True False   |

Score Pre & Post-Training Knowledge Questionnaire.

# Compare Scores Using the Answer Key, page 34, Appendix F

### Appendix F Test Your Knowledge: Daily Schedule

#### **Answer Key**

| Name:  | Date:   |   |
|--|---|---|
| 1. Individuals with ASD often                                  | benefit from a Daily Schedule because it:                           |   |
|  | D like to look at pictures  |   |
| b. Establishes routines  | 1   |   |
| c. Promotes independen   | nce in completing personal and social responsibilities              |   |
| d. Answer choices b &  | ż c   |   |
| 2. All individuals with ASD ca                                 | nn use a Daily Schedule?  |   |
| True   | False-need to assess to determine if the                            |   |
| individual has the prerequisit                                 | te skills. If not, then teach those skills first before introducing | 5 |
| a Daily Schedule.  |   |   |
|  | is the procedure that needs to be completed prior to developing     | a |
| Daily Schedule for a specific ro                               |   |   |
| a. Sequential analysis   |   |   |
| b. Step plan   |   |   |
| c. Routine planning  |   |   |
| d. None of the above   |   |   |
| 4. What are the primary metho                                  | ds used when teaching a Daily Schedule?                             |   |
| <ol> <li>Verbal prompting un</li> </ol>                        | til the individual follows the routine                              |   |
| b. Shadowing   |   |   |
| c. Graduated guidance  | ±   |   |
| d. Answer choices b &  | z c   |   |
| 5. Performance data needs to be independence in following his/ | be used to determine when the individual has reached her schedule?  |   |
| 1  | void prompt dependency False  |   |

### Appendix G Additional Resources

To assist you with making materials for a Daily Visual Schedule, here are some additional resources that you may want to consider:

- Digital photos taken with any digital camera
- Mayer-Johnson © 2008 picture/symbol materials (retrieved 4/30/29) http://www.mayer-johnson.com/
- Microsoft © 2009 Products such as Clip Art, Outlook etc (Google TM Microsoft)
- Various PDA's