From Assessment to Instruction for Students with Low Vision

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What "Good" Readers Do as They Read

- automatically recognize words
- sound out words they don't know
- comprehend as they read
- connect ideas while they read
- anticipate and make inferences
- monitor themselves
- ask questions & remember
- have goals for reading
- read aloud with expression
- read different texts differently
- read for pleasure & learning

ECC Areas

- Sensory efficiency
- Compensatory access
- Social interaction
- Recreation and leisure
- (Assistive) technology
- Independent living
- Orientation and mobility
- Career education
- Self-determination
- In the Beginning of the

Assessment Process

- Ensure the student had a clinical low vision evaluation to prescribe glasses/contacts, optical devices, lighting, non-optical aids etc.
- Ensure that the student knows how to use tools acquired through the clinical low vision evaluation.
- Ensures the student understands her etiology, prognosis, and how prescribed tools can increase visual efficiency.
- With the student using the tools, complete a FVA and LMA.

A Study of 79 TSVIs who Shared Their LMA Practices

Research Questions:

- What are the current practices of TSVIs who conduct LMAs?
- What assessment instruments are being used by TSVIs who conduct LMAs?
- How are the results from LMAs used in the practice of teaching individuals with visual impairments?

Rosenblum et al. (submitted)

Findings from a Study of 79 TSVIs who Shared Their LMA Practices

- 86% of the TSVIs usually or always combined the FVA and LMA processes and reports.
- Overwhelmingly the TSVIs agreed that information gathered through the LMA and FVA processes differed and that both processes were important.
- 82% of the TSVIs reported they used at least one published tool during the LMA process. The most commonly used tools were *Learning Media Assessment of Students with Visual Impairments: A Resource Guide for Teachers* (Koenig & Holbrook, 1995)
- TSVIs who worked with young children or children with complex needs often reported using information gathered through the *CVI Range* (Roman-Lantzy, 2007; Roman-Lantzy, 2018) and the *Oregon Project for Preschool Children who are Blind or Visually Impaired* (Anderson et al., 2007).
- Neither of *CVI Range* or the *Oregon Project* were designed to be used as part of the LMA process.

Questions that Arose from this Study

- By calling the assessment "LMA" are we as a field confusing the evaluation of learning media needs with the original published tool by Koenig and Holbrook?
- What data are being collected as part of the LMA process to determine if the student's preferred sensory channels are his/her most efficient literacy modalities?
- How could the published tools be supplemented to better address the technology needs of students, including those with complex needs?
- What content must be included within the LMA report to ensure that educational teams have the necessary data to make informed decision?

Considerations for Creating Meaningful Goals and Objectives

- Select goals where student need is the greatest.
- Do not let a TSVI's schedule dictate what goals and objectives are included on the IEP.
- Consider both current and future needs.
- Consider how the selected goals link to state standards
- Identify multiple areas of the ECC that can be addressed through one goal.
- Design measurable goals and objectives.
- Recognize that too many goals and objectives are counterproductive.

Zebehazy & Wright, 2017

Purposes of Progress Monitoring, AKA Data Collection

- Determine when the student has mastered the skill and it is time to move on.
- Determine if the student needs more practice to master the skill.
- Determine when it is time to take a step back and try a different approach because the student has not mastered the skill.
    - Sometimes this is because the approach **<u>you</u>** are taking to teach the student the skill is not effective for this student at this time.

Ways to Collect Data to Monitor Progress

- Frequency: how often the student performs a task or engages in an activity
- Latency: how long it takes for a student to begin a behavior after being given a prompt (i.e., amount of wait time)
- Duration: the amount of time the student spends engaged in a behavior (i.e., time on task)
- Rate: increase or decrease the amount the student accomplishes during a specific period of time
- Percentage: percentage of trials completed correctly
- Prompt level: how many prompts the student is given when doing a task.

Student X will use a magnifying glass to scan large busy pages for small details, finding the requested item 3 out of 4 times, by date.

Skill	Date:				Date:			
	1	2	3	4	1	2	3	4
Knows purpose of device								
Aware of dominant eye								
Place magnifier on worksheet/book so that it is resting flat on the surface								
Slide the magnifier over the object using hand until the center of the round dome is on top of the area you want to magnify								
Look directly into the top center of the dome to read the magnified text/image								
Using device, copies: • Symbols								
• Words								
• Sentences								
Storage/Maintenance								
Determine safe location to store device at school								
Handle the device correctly								
Initiate the use of the device								
Communicate to others the purpose								
Uses appropriate materials to clean the device								

I = Independent, **SI** = Semi Independent (self-initiates; requires minimal assistance), **AN** = Assistance Needed **U** = Unable to perform.

Data Sheet Example Courtesy of Elizabeth Eagan <eleagan@gmail.com>

By IEP completion [date] the student will learn about his eye condition and acuities to aid him in advocating for himself with 80% accuracy.

Skill	Date:	Date:
States visual acuity (20/200)		
Explains what the visual acuity means in his own words		
States visual anomaly or eye disease (Stargardt)		
Defines visual anomaly or eye disease in his own words		
Able to differentiate what to say about visual impairment to: • Peer • Classroom Teacher • Gym Teacher • Other Service Providers • Parents • Medical Experts		

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Data Sheet Example Courtesy of Elizabeth Eagan <eleagan@gmail.com>

While in the school setting, Student X will solicit assistance in regards to his vision needs from his classroom teachers with 85 percent accuracy.

Date	Communicated with:			Comments
	Student	Teacher	Other	

Data Sheet Example Courtesy of Elizabeth Eagan <eleagan@gmail.com>

Week of 10/8	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Math 7	Grades are good He can't see Smart Board: contacted AT Dept All board work published online after class and accessible to student, but I hoped to get real time access. He often snaps picture with iPad and enlarges as he needs	AT used a music stand with student. Student told them it was OK. but later told me he could not see the iPad, as it was in front of the desk, not close enough. (Needs 3 inches from face)	Tried music stand next to desk. Looks like a gawky IV stand to me, can't put it directly in front of him where he needs it. MATT Connect is new to him and I don't want to add something new at this point.	Met with AT, who was surprised their idea didn't work (student said it was OK). They suggested enlarging the image, (but he NEEDS it 3 inches from face) Suggests Pad with stand on desk as iPad kept falling off the stand. Contacted AT to repair the shattered iPad screen	AT met with teacher to show her Chromecast again, gave suggestions for trouble shooting if it doesn't work the first time IPad, and Chromebook fit on desk
English	ALL Materials posted in Google Classroom		He forgot how to download books on Bookshare		

			(AT specialist helped him)		
PE/Family and Consumer Science	PE OK	FACS Push in: needs measuring spoons and cups marked with Sharpie with large letters. Seems a bit lost in the busyness of his partners. Needed an assist getting spices out of a bottle: Kept putting the spoon in vertically and pulling it out. I demonstrated holding the bottle at an angle and digging the spoon into the bottle, and sliding out Needs recipes in Large print, as it is not wise to have ipad in kitchen	PE	FACS Dropped off spoons and measuring cups	PE

Using Photos and Video as Part of Your Progress Monitoring Toolbox

Reasons to use pictures/videos

- Assessment
- Documentation
- IEP recommendation explanations
- Progress monitoring (short term/long term)
- Conversations with students, teachers, parents, service providers, and outside agencies (with parental approval)
- Parent communications

Comments Liz Eagan has Received

- "The pictures helped me understand the vision recommendations" (teacher)
- "I showed my writing teacher the picture of me with the CCTV and she's gonna let me use it in class now. Even though she told you no!" (student)
- "I can share with my mom what I'm doing and that I'm not lying." (student)
- "…so THAT's how she needs her materials placed." (teacher
- "I didn't understand high contrast meant until now…wow!" (teacher)

Before you embark, get a media release!!!

How Often Should Progress be Monitored?

- How quickly do you anticipate the student will achieve the goal?
- How frequently will the student have an opportunity to work on skills leading to achievement of the goal

Considerations with Infusing Optical Devices and/or Technology into the Student's Program

- Review assessment data with the educational team.
- Discuss with the educational team goals developed for instruction and when instruction will take place.
- Ensure the student and others know how to use and care for the optical devices and technology.
- Give the student reasons to use the optical devices and technology.
- Take data to determine progress on learning skills and functional usage of optical devices and technology.

When Performing the Task the Student Needs to Consider if She…

- Performs the task with materials "as is"
- Uses prescribed optical devices (e.g., video magnifier) when doing the task
- Uses nonoptical devices (e.g., reading stand, filters) when doing the task
- Uses technology (e.g., iPad) when doing the task
- Accesses the task using tactile skills
- Accesses the task using auditory skills

Considerations When Deciding on an Instructional Sequence

- Are there skills that need to be taught before other skills can be started?
- Are there skills that group well together that can be addressed within the same lesson?
- Are the main "types" of lessons that are needed that can progress in complexity?
- Does the sequence and progression of the general plan add complexity while ensuring retention and adequate practice?
- Do some lessons overlap between different goals?

Zebehazy & Wright, 2017

Considerations for Designing Effective Instruction

- Identify a clear lesson objective based on the student's learning behavior.
- Know what the teacher will do to promote learning during the lesson.
- Use meaningful and motivational material to engage the student.
- Use an anticipatory set to connect the lesson to past learning.
- Model for the student during the lesson.
- Check the student's understanding during the lesson.
- Provide short, meaningful opportunities for the student to practice.
- Build in opportunities for the student to use higher order thinking skills and to promote habits of independent learning.

A Final Thought on the Connection Between the ECC and the Core Curriculum

"When linking IEP goals to grade-level standards, it is important for the TSVI to focus on goals which will provide the student with the skills to access the core curriculum as well as develop disability-specific skills in the ECC. IEP goals should reflect that focus rather than focus on teaching the core curriculum. Sometimes a direct link is not apparent between a priority need in the ECC and grade-level standards. In this case it can be helpful to think about broader standards that focus on independence, social responsibility, problem-solving or other broad priorities in education that link with ECC areas."

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References

Rosenblum, L. P., Herzberg, T. S., Mason, L., Anderson, D. L., Reisman, T., Edstrand, K., Abner, G., & Carter, M. (submitted). Learning media assessment: Experiences of 79 teachers of students with visual impairments, *Journal of Visual Impairment & Blindness*.

TSBVI Goals and Objectives

https://www.tsbvi.edu/instructional-resources/109-resources/instructional-resources/2783-vi-goals-and-objectives

Zebehazy, K. T. & McCarthy, T. (2017). Moving from assessment to instruction, In M. C. Holbrook, C. Kamei-Hannan, & T. McCarthy (Eds.), *Foundations of Education: Volume II Instructional Strategies for Teaching Children and Youths with Visual Impairments (3rd ed.),* (pp. 165-202). New York: AFB Press.