



WORKSHOP D-7

Motivation to Learn: Utilizing Preference and Learning Style Assessment

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Track: Educators/Clinicians

ABSTRACT:

General and special education teachers constantly work together to prepare meaningful lessons for all students. Best practices encourage reinforcement for motivation for students for students with special needs. However, motivation to learn does not guarantee the maximization of learning if student learning styles are not taken into account. This presentation links scientifically validated preference assessments and learning style assessments to find the best fit for students. The presenters will then explore how to translate the results of these assessment into the classroom with discussion surrounding using this procedure with different populations in different environments.

OBJECTIVES:

1. Participants will be able to understand the types of preference and learning style assessments.
2. Participants will be able to understand how these assessments link to best practices.
3. Participants will be able to translate assessment results to instructional opportunities.
4. Participants will be able to explore the further implications of utilizing this procedure in different classrooms.

Jennifer Gonda, MEd

received her graduate degree in special education in autism and related disabilities at Youngstown State University and completed her coursework toward becoming a BCBA at Penn State University. She is currently finishing her supervised fieldwork with Dr. Gongola out of YSU. Her bachelor's degree was completed at New York University specializing in educational policy. She currently works in a 13-18 self-contained math and science classroom at Youngstown Summit Academy Secondary as part of a program designed to maximize the academic and life skill success for students with autism. Her interests include functional communication training for older students, social skills for teenagers and utilizing ABA strategies to promote learning and successful classroom behavior.

Natasha Walski, BSEd

is a general education teacher working with students with autism for six years in a school setting. She holds her teacher license in math and science for grade 4-9 with a reading endorsement completed at Youngstown State University. Within her classroom, she utilizes positive behavior support systems in conjunction with humor to academically stimulate students. She currently works in a 13-18 self-contained math and science classroom at Youngstown Summit Academy Secondary as part of a program to maximize the academic and life skill progress for students with autism. Her research interests include incorporating the Ohio Alternate Learning Content Standards and Common Core standards to differentiate instruction for students.

Carrie Fiol, BA

is a recent graduate of Youngstown State University and is an Intervention Specialist certified for grades K-12. Carrie is continuing her education at Youngstown State to receive her Master's in autism and related disabilities. She recently taught at Robert Bycroft in Lisbon in a classroom with students who have a variety of disabilities, as well as challenging behaviors. Carrie also taught at Camp Sunshine of Aurora for students with severe disabilities. She is currently working under Dr. Gongola as her Graduate Assistant and continues to work as an ABA. Carrie started

Motivation to Learn: Utilizing Preference and Learning Style Assessment

Gonda, MEd; Walski, BSEd; Fiol, BA

MOTIVATION TO LEARN: UTILIZING PREFERENCE AND LEARNING STYLE ASSESSMENT

Milestones Conference
Cleveland, Ohio

Jennifer Gonda, MEd
Natasha Walski, BSEd
Carrie Fiol, BA

Motivation to Learn

Common challenges when working with the student with autism...

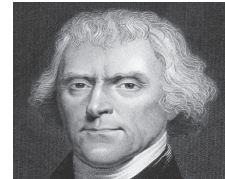
- "If I know the answer, why do I have to write it down?"
- "I'm done"
- "I already did"
- "I'm too lazy to do that"
- "I'd rather starve"
- "Make someone else do it"
- "If I do it, then I'm going to burn it"
- "I don't do that"
- "I want to be alone now"
- Off topic conversations

Motivation to Learn

- Learning style instruction has shown positive affects in achievement, attitudes, and behaviors for students with special needs in inclusion setting (Fine, 2003).
- When individuals are task involved, they see more effort as leading to more mastery and higher ability. That is, tasks should be most attractive where one's highest likely level of competence might be demonstrated (Nicholls, 1984).

Motivation to Learn

"Freedom is the right to choose: the right to create for oneself the alternatives of choice. Without the possibility of choice, and the exercise of choice, a man is not a man but a member, an instrument, a thing."- **Thomas Jefferson**



Outline

- Why look at preference and learning style assessments together?
- Setting
- Student profiles
- Types of preference and learning style assessments
- How does this link to best practices?
- Procedures for this intervention
- Outcomes
- How to translate assessment results to instructional opportunities?
- Further implications
- References

Why Look at Preference and Learning Style Assessments Together?

- Choice as a motivator
- "Once the teacher can understand the disability and the preferred learning styles of the student, they can better adapt to that student" (Sze, 2009).
- Cannot only use questionnaires (Snider, 1990).

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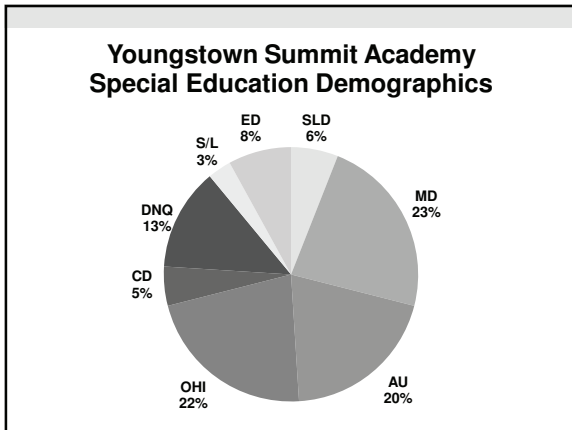
Why Look at Preference and Learning Style Assessments Together?

INSTRUCTIONAL PLANNING				
	Ineffective	Developing	Proficient	Accomplished
FOCUS FOR LEARNING (Standard 4: Instruction) Sources of Evidence: Pre-Conference	The teacher does not have a clear focus for student learning or the objective is too general to guide lesson planning or the objective is inappropriate for the students.	The teacher clearly communicates a focus for student learning that is appropriate for students.	The teacher develops a measurable goal for student learning that aligns with the Ohio standards. The teacher can explain the importance of the goal and its appropriateness for students.	The teacher establishes challenging and measurable goal(s) for student learning that aligns with the Ohio standards. The goal(s) reflect a range of student learner needs. Teacher can explain how the goal(s) fit(s) into the broader unit and course goals for student learning and skills.
ASSESSMENT DATA (Standard 5: Assessment) Sources of Evidence: Pre-Conference	The teacher plans instruction without engaging student learning data.	The teacher demonstrates an understanding that assessment is a means of evaluating and supporting student learning. There is evidence of more than one measure of student performance. The teacher may, however, have difficulty analyzing data to effectively inform instructional planning and delivery.	The teacher can explain the on- and off- and limitations (potential disadvantages) of various data formats, and summative and formative, and summative use. Artifacts (Instructional plans, or etc.) document that the teacher uses a variety of formal and informal techniques to collect evidence of student knowledge and skills.	The teacher purposefully plans assessments and differentiates assessment choices to match the full range of student needs, abilities, and learning styles. Evidence indicates that student learning needs were accurately identified and that the teacher uses assessment data to identify student strengths and areas for student growth.

- Ohio Teacher Evaluation System (OTES) Rubric
- Meaningful instructional planning


Setting: School

- Youngstown City Schools: 4 years of academic emergency
- Youngstown Summit Academy Demographics
 - 34% Female, 66% Male
 - 50% Black, 39% White, 8% Multiracial, 3% Hispanic
 - 100% Free Lunch

Setting: Classrooms


- 22 students**
 - Ages 13-18
 - Learning levels K-8th grade
- Two classrooms**
 - 73% with autism
 - 9% with a communication disorder
 - 18% with multiple disabilities



"Roughly 50% to 70% of children with ASD have an IQ greater than 70" (Schaefer-Whitby, Travers, & Harnik, 2009).


Setting: Classrooms

- Classroom based token economy
 - Based on Michelle Garcia Winner expected and unexpected behavior
 - Students receive "checks" which are teacher initials
 - Rewards differentiated at either end of interval, half and end of day, or just end of day.



Setting: Classrooms

- School wide token economy
 - Students receive "Knight Bucks" based on exceeding expectations
 - Monthly incentive

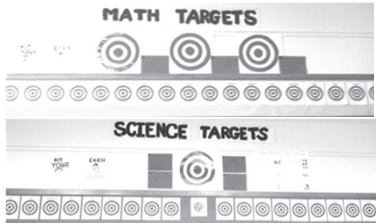


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Setting: Classrooms

- Individualized learning targets
 - Based on Ohio Academic Content Standards Extended
 - Academic incentive




Student Profile

- “Louis”
 - Age 16
 - 4th grade math skills
 - Diagnosis of autism
 - Learning target: moving numbers left to right on a number line




Student Profile

- “Keenan”
 - Age 14
 - 7th grade math skills
 - Diagnosis of autism (previously Asperger’s)
 - Learning target: adding and subtracting numbers on a number line



Types of Learning Style Assessments

- Questionnaires
- Norm referenced tests
- Interest inventories



Types of Preference Assessments

Stimulus Preference Assessment			Reinforcer Assessment
Ask	Free-Operant	Trial-Based	
Person	Contrived observation	Single stimulus	Concurrent schedules
Significant others	Naturalistic observation	Paired stimuli	Multiple schedules
Pretask choice		Multiple stimuli	Progressive ratio schedules

Figure 11.9 Stimulus preference assessment and reinforcer assessment methods for identifying potential reinforcers.

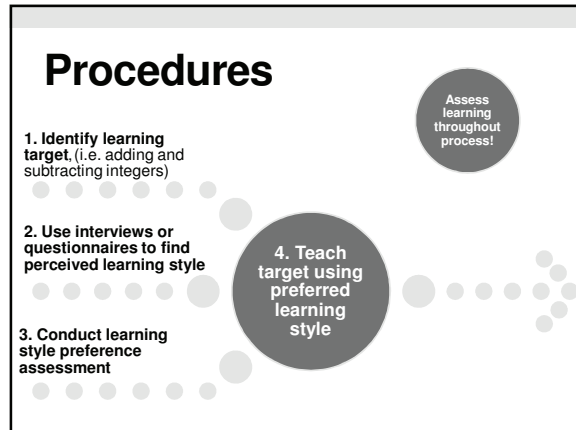
(Cooper, Heron, & Heward, 2007)

Choice Equals Motivation

- Choice is an integral part to any antecedent package to either increase appropriate behavior or decrease inappropriate behavior (National Autism Council, 2009).
- Students enjoy, prefer, and to persist at activities that provide them with the opportunity to make choices, to control their own outcomes, and to determine their own fate (Lyengar & Lepper, 1999).

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Step 1

Determine measurable target

- Ohio Academic Content Standards Extended
- Functional life skill
- ABLLS or VB-MAPP target
- IEP objective
- Social skills goal

Step 2

- Barsch Learning Style Inventory*
 - VAK
- Online questionnaires
- Interviews
 - “Do you like listening, using your hands, reading notes or something on the smartboard?”
 - “Would you rather learn from the computer, read a book, or listen to your teacher talk?”
 - “What do you like to do in your free time?”
 - “Do you like to listen to directions or read directions?”
 - “What was the best lesson you ever had?”

Step 2: Student Profiles

“Louis”

- 1. “I like to listen”
- 2. “I pick computer”
- 3. “relax, tv, play, video games, sometimes read.”
- 4. “one at a time directions out loud”
- 5. “rotation, translation, reflection geometry worksheet”

“Keenan”

- 1. “Listening”
- 2. “Computer—reading on the computer”
- 3. “use the computer”
- 4. “directions written down”
- 5. “making a volcano”

Step 3: Learning Style Preference Assessment

- Have all items/supplies within reach of the student
- Use a ten minute interval
- Track only appropriate use of the material
 - May require explanation (Roane, Vollmer, Ringdahl, & Marcus, 1998)

Step 3

Free operant preference assessment directions example:

- “You will have 10 minutes to pick and work on these activities:
- You need to work for the whole 10 minutes
- You can work on one thing for the whole time or work on different things
- You do not have to be finished in 10 minutes, you just need to be doing an activity the whole time
- I will be here to ask for help, but this is for you to choose which way you want to learn”

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Video of Step 3: "Louis"

Video

Video of Step 3: "Keenan"

Video

Data Sheet

Student Initials	V for visual task					A for auditory task					K for kinesthetic task									
	0-:30	:30-1:00	1:00-1:30	1:30-2:00	2:00-2:30	2:30-3:00	3:00-3:30	3:30-4:00	4:00-4:30	4:30-5:00	5:00-5:30	5:30-6:00	6:00-6:30	6:30-7:00	7:00-7:30	7:30-8:00	8:00-8:30	8:30-9:00	9:00-9:30	9:30-10:00

Interesting observation: Most students worked to completion on each task!

Step 4

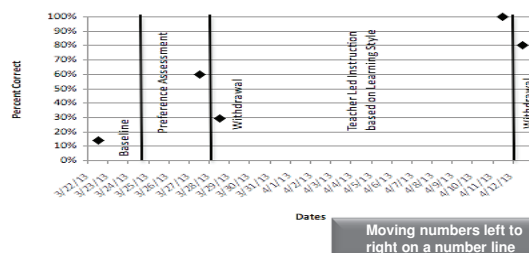
- Teacher led lesson catered to learning style
- Based on the learning style, we presented questions that the students were expected to answer to demonstrate their knowledge of their learning target.
- Depending on their learning targets and/or learning styles, they could either use materials provided for them, verbally state their answers or write them down if they chose to do so. They were prompted to their learning style.
- They were to answer 5 questions with the assistance of the teacher if they needed it; then they were to answer 5 questions independently.

Outcomes

Student Initials	Preference Assessment Learning Style Used	V for visual task		A for auditory task		K for kinesthetic		Withdrawal Percentage	Learning style preference teacher used	Instruction with teacher prompts	Withdrawal Percentage
		Percent Correct	Instruction with teacher prompts	Percent Correct	Instruction with teacher prompts	Percent Correct	Instruction with teacher prompts				
DB	1 out of 2	29%	A, V	V, K	V50%, K40%	60%	29%	V	100%	80%	
AD	0 out of 2	0%	A, K	K	K 100%	60%	57%	K	80%	100%	
ES	0 out of 2	14%	K, V	K	K 100%	50%	28%	K	60%	100%	
NB	0 out of 2	0%	K, A	K	K 18%, A 82%	66%	29%	A, K	80%	100%	
GF	1 out of 2	57%	A, V	V	V 100%	100%	30%	V	40%	40%	
MI	2 out of 2	71%	K, A	V	V 100%	0%	29%	V			
SK	0 out of 2	29%	K, V	V	K 100%	0%	29%	V			
RL	1 out of 2	14%	A, K	A, K	V 70%, K 30%	36%	57%	V	40%	100%	
TB	2 out of 2	29%	K, V	V	V 100%	100%	30%	V			
LB	2 out of 2	9%	K, A	V	V 100%	100%	30%	V			
QH	2 out of 2	43%	V, K	K	V 35%, K 65%	55%	57%	K	80%	60%	
BF	2 out of 2	43%	K	K	K 60%, V 20%	65%	57%	K			
H5	2 out of 2	43%	V, A	K	V 100%	93%	86%	V	80%	80%	
DT	2 out of 2	43%	A, K	A, K	V 80%, K 20%	90%	42%	V			
DS	2 out of 2	71%	A, K	A, K	V 80%, K 20%	90%	42%	V			
JB	2 out of 2	43%	V, K	V	V 80%, K 20%	74%	71%	K	80%	100%	
ER	0 out of 2	0%	K	K	K 60%, V 40%	90%	57%	K	80%	100%	
GH	2 out of 2	29%	K	K	V 100%	100%	30%	V			
TH	2 out of 2	57%	A, V	A	V 100%	100%	30%	V			
AH	1 out of 2	29%	A, K	A, K	V 100%	100%	30%	V			
HH	1 out of 2	29%	A, K	A, K	V 100%	100%	30%	V			

Outcomes

"Louis" Learning Target Accuracy

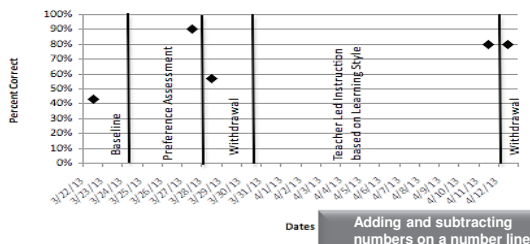


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Outcomes

"Keenan" Learning Target Accuracy



How to Translate Assessment Results to Instructional Opportunities?

- Center based learning where students have choice to pick activity for their learning style
- Starting class everyday with a different mini lesson that appeals to the different learning styles
- Planning activities that utilize all 3 learning styles
- Grouping students according to learning style
- Teaching the different learning styles to the students and make them become aware of their learning style so they can choose activities where they will be most successful

Further Implications

- Students with autism being served in general education setting need teachers to understand their academic profile (Schaefer-Whitby, Travers, & Harnik, 2009).
- Clear differences between Asperger's learning styles and High Functioning Autism learning styles, but will new DSM complicate differentiation? (Rubin, 2007).
- Meaningful instructional grouping (Fine, 2003).

Thoughts and Questions

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