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ESDM Part 2

ST Competency

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This presentation is for informational purposes only and does not constitute clinical or legal advice. Follow up with a BCBA or BCBA-D. It is recommended to develop a specific plan for your child or student.

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Objectives

Main Objectives

1. ESDM assessment & selecting objectives
2. Writing objectives & setting up a data sheet
3. Fidelity scoring
4. Incorporating into session
5. Behavioural analysis of routines

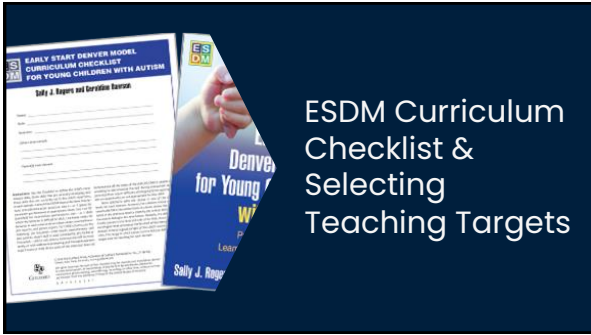
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ESDM Curriculum Checklist & Selecting Teaching Targets

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ESDM Curriculum Checklist for Young Children with Autism

1. 10 domains
2. 4 Levels
3. Assessed upon entry and every 12 weeks
4. Assess based on child's level, not necessarily the entire tool
5. Administered in context of play routines
6. 1-1.5 hours to complete

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ESDM Curriculum Checklist for Young Children with Autism

- | Scoring | Final codes |
|--|---------------------------------------|
| 1. P or += pass (consistent performance or mastery) | 1. A = Acquired |
| 2. P/F or +/- = pass/fail (inconsistent performance) | 2. P = Partial |
| 3. F or - = fail (behaviour not seen or difficult to elicit) | 3. N = Unwilling/Unable |
| 4. N/O = No opportunity | 4. X = No opportunity/Not appropriate |

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ESDM Curriculum Checklist for Young Children with Autism


Skill	Level	Observed	Parent Report	Other Teacher Report	CODE
Reciprocal Communication					
1	Locates to sounds by turning toward sound source.				
2	Looks to play if sound playfully continues, withdraws.				
3	Responds to voice by turning toward person.				
4	Looks at intentional gestures or adult points to play with a book.				
5	Follows a gestural point to place objects in containers, place plates, etc.				
6	Looks up to follow an object and hand, "Where, look."				
7	Looks to perform when named a label.				
8	Follows a gestural point to object or location.				
9	Follows other voice to remove toys.				
10	Looks, reaches, or points in response to adult gestures and voice to social partner.				
11	Looks, reaches, smiles, and/or gestures in response to adult language/signature in songs.				
12	Responds by dropping an item intentionally in response to instructor's words (e.g., "Drop that").				
13	Given object as verbally requested when paired with adult's outstretched hand.				
14	Performs a simple, routine, verbal instruction involving body actions paired with demonstration and adult, "Sit down," "Close here," "Open up!"				
15	Performs a one-step, routine verbal instruction involving body actions without accompanying gesture (e.g., "Sit down," "Close here," "Open up!").				

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How to Select Teaching Targets

- Bottom up, fill in gaps
- “+/-” before “-”
- Can combine similar skills within the same domain
- 2-4 objectives per domain
- Completed within a 12 week period
- Reassess every 12 weeks and new objectives added/old ones revised

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Writing Objectives, Teaching Steps & Setting Up a Data Sheet

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ESDM Objectives

1. 2-3 per domain, to be mastered within the next 12 weeks
2. Make sure the objective matches criteria in the book
3. Measurable objective with 4 parts:
 - a. Antecedent
 - b. Expected child response
 - c. Mastery-level criteria
 - d. Generalization
4. Percentage vs. Frequency

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**ESDM
Objectives –
Samples**

Receptive Communication:
Level 1, skill 12 and level 2, skill 2: In response to the adult saying “no”, “stop”, “wait” or other inhibitory words, NAME will stop whatever she was doing completely, look to the adult, and wait for adult instruction, 80% of opportunities, across 3 consecutive sessions and with 2 or more people and settings

Expressive Communication:
Level 1, skill 6, 8, 10 & 11: when an adult holds up 2 objects one in each hand, or 2 objects are visible but out of reach, at a distance of 3-5 feet, NAME will touch or point towards the desired object with first or index finger (not open hand), for 80% of opportunities, across 3 consecutive sessions, with 2 or more different people and settings.

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**ESDM
Objectives –
Samples**

Social Skills:
Level 1, skills 4 & 7: In response to adult’s pause during SSRs/activities, NAME will actively participate/show interest by approaching, observing, or actively participating and requesting continuation of routine through eye contact, gestures (e.g. reaching, imitating), and vocalizations, 2 or more times during the routine, remaining engaged for 2 minutes for 4 opportunities per hour, over 3 consecutive sessions, demonstrating engagement in 8 different SSR’s with 2 or more people and settings.

Imitation:
Level 1, skill 1: When the adult models an action with an object, NAME will imitate the action within 5 seconds of the model, 80% of opportunities, for 8 or more actions, at least 2 actions per activity, for 5-8 activities, across 3 days and with 2 or more adults and settings.

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ESDM Teaching Steps

- 1. Clearly define child expected response
- 2. First step at or slightly above baseline
- 3. Work towards independence (80%) and then increase variety of response
- 4. Last teaching step is your objective
- 5. Shape up independence/spontaneous responses
- 6. Targetting 2 similar but different skills together
- 7. Percentage start at 50%. Use frequency for anything below
- 8. Don't be too specific in materials
- 9. Prompts
- 10. 4-6 steps per objective

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ESDM Teaching Steps- Samples

Expressive Communication
 Level 1, skill 4: When an adult vocalizes and/or babbles while looking at NAME, she will respond by taking turns vocalizing and/or babbling with eye contact for at least 2 rounds, 80% of opportunities, across 3 consecutive sessions, with 2 or more different people and settings.

Steps	Date Started	Date Mastered
1 Takes turns vocalizing with adult for 1 round, 50% of opportunities		
2 Takes turns vocalizing with adult, 1 round, 80% of opps		
3 Takes turns vocalizing with an adult for at least 2 rounds, 80% of opportunities		
4 Takes turns vocalizing with an adult for at least 2 rounds, with eye contact 80% of opportunities		
5 Take turns vocalizing and/or babbling with eye contact for at least 2 rounds, 80% of opportunities, and generalization		

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ESDM Teaching Steps- Samples

Imitation
 Level 1, skill 1: When the adult models an action with an object, NAME will imitate the action within 5 seconds of the model, 80% of opportunities, for 8 or more actions, at least 2 actions per activity, for 5-8 activities, across 3 days and with 2 or more adults and settings.

Steps	Date Started	Date Mastered
1 1-2 actions with objects, in 1-2 activities, 50% of opportunities		
2 1-2 actions with objects, in 1-2 activities, 80% of opportunities		
3 2-3 actions, in 2-3 activities, 80% of opportunities		
4 4-5 actions in 4-5 activities, at least 2 actions per activity 80%		
5 6-7 actions in 5-6 activities, at least 2 actions per activity, 80%		
6 8 or more actions, in 5-8 activities, at least 2 actions per activity, 80% of opportunities and generalization		

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ESDM Teaching Steps- Samples

Cognition
 Level 1, skills 1 & 2: in response to adult's model or verbal or physical cues to start, NAME will independently complete matching/sorting activities for at least 5 different identical object pairs and 5 different identical picture pairs at 80% accuracy, over 3 consecutive sessions, with 2 or more adults and settings.

Steps	Date Started	Date Mastered
1. Matches/sorts 2 different pictures and/or objects with prompts		
2. Matches/sorts 2 different pictures and/or objects independently		
3. Matches/sorts 3 different pictures and/or objects		
4. Matches/sorts 4 different pictures and objects		
5. Matches/sort 5 or more different pictures and objects, generalized		

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ESDM Data Sheet

The data sheet is a grid with columns for 'Mon', 'Wed', and 'Fri' under 'Teaching Days' and 'Observation Days'. It includes checkboxes for 'Independent', 'Prompted/Assisted/No response', and 'No-Response'. The grid is divided into four quadrants for different objectives.

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Managing Challenging Behaviour

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  graph LR
    A[Identify the Function] --> B[Behavior Guidelines & Data Collection]
    B --> C[Antecedent Strategies]
    C --> D[Replacement Behaviours, Prompting & Reinforcement]
  
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ESDM Fidelity

- Assess adult's mastery of teaching practices
- 5-point likert-based scale
 - 1 = very poor
 - 5 = optimal example
- Competency = 80% or higher overall, consistent scores of 4 or 5, no scores under 3
- Need to have fidelity score definition and child objectives
- Can score from a video or live
- Aborted routines not scored
- Score up

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ESDM Fidelity

**UC Davis MIND Institute
ESDM Training Program**

Early Start Denver Model Fidelity Coding Sheet

Observer	Master and Date	Child	Session Name	Session Number	Day/No
Item	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5
1. Management of adult-child interaction					
2. Use of language					
3. Use of nonverbal communication					
4. Use of nonverbal communication (e.g., eye contact, facial expression, gesture)					
5. Use of nonverbal communication (e.g., eye contact, facial expression, gesture)					
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Antecedents unclear Verbal antecedents added when they shouldn't be	Reinforcement - delivered too slow, for the wrong behaviour, or not strong enough	Ability to shape skills, fade prompts and differentially reinforce
Common Teaching Problems		
Too much time on mastered vs. current skills or vice versa	Skill taught in artificial or highly structured, adult-directed context	Data not collected, collected incorrectly, or not used to make decisions
Too few teaching trials and/or missed teaching opportunities		

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Incorporating
Into a Session

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Assessment & Curriculum Guide

Assessment Tool	Description
EBIC	Updated on an ongoing basis by the ST Have one printed per client Summarize in reports Assessment & curriculum guide
VBMAPP	Completed within first 30 days of service and every 6 months ongoing Summarize in reports Milestones assessment Academic, fine and gross motor sections can be used as a curriculum guide to supplement the EBIC
ESDM Checklist	Can use AB's shortened checklist or the full checklist May not be necessary for clients in the Advanced EBIC curriculum Completed every 12 weeks and objectives updated
Self-Care Checklist	Can use AB's checklist that combines the VBMAPP self-care checklist with the Personal Independence sections of the ESDM checklist Completed every 6 months Summarize in reports

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Session Structure

	ABA clients:	Early Intervention/ ESDM Clients
Assessments/ Curriculums	<ul style="list-style-type: none"> EBIC VBMAPP Shortened ESDM checklist Self-Care 	<ul style="list-style-type: none"> Full ESDM checklist EBIC VBMAPP Self-care
Teaching Format	<ul style="list-style-type: none"> DTT - # of programs depends on learner and session length (e.g. 10-15, 15-20) Include JARs/SSRs program with 5-6 objectives 	<ul style="list-style-type: none"> ESDM - 2-4 objectives per domain DTT - programs to target skills learner is not making as many gains in as a result of ESDM alone

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Sample Session Schedule - Higher Ratio ESDM

- | | |
|------------------------------|------------------------------|
| 1. Greeting Hello | 7. Snack |
| 2. Object Activity 1 | 8. Motor Movement Activity 2 |
| 3. Sensory Social 1 | 9. Books |
| 4. Motor Movement Activity 1 | 10. Object Activity 3 |
| 5. Object Activity 2 | 11. Greeting Goodbye |
| 6. Sensory Social 2 | |

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Sample Session Schedule - Mix ESDM/DTT

Time	Activity	Notes/Programs to Focus on
8:30-8:45 (15 mins)	Arrival/set-up	Entry and greetings
8:45-9:15 (30 mins)	ESDM programming (2 data points)	All ESDM objectives
9:15-9:30 (15 mins)	DTT	All DTT
9:30-10:00 (30 mins)	ESDM programming (2 data points)	All ESDM objectives
10:00-10:15 (15 mins)	Snack	Washing hands, eating programs
10:15-10:30 (15 mins)	DTT	All DTT
10:30-11:15 (45 mins)	ESDM programming (3 data points)	All ESDM objectives
11:15-11:30 (15 mins)	Clean up and graphing	IT completes paperwork. Child and IT put away materials

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<p>ESDM Program Binder Sections</p>	<ul style="list-style-type: none"> ● Learning objectives and teaching steps ● Blank data sheets ● Completed data sheets ● Communication notes ● Behaviours ● Others
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<p>ESDM Sessions</p>	 <ul style="list-style-type: none"> ● ESDM teaching procedure ● Rotate JARs and SSRs ● Location ● Length of each routine ● Activity choice and learning objectives ● Activities - target objectives from multiple domains and 1+ communication objective ● Prepare the room
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<p>ESDM - Additional Tips</p>
<ol style="list-style-type: none"> 1. The theme is the reinforcer 2. Avoid direct, behaviour specific, social praise 3. Control of items 4. Size or items 5. Shared vs. individual items 6. Introducing new items 7. Routines 8. Extended closing

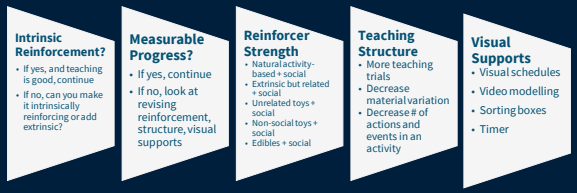
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Advanced Clients

- Many clients in the Advanced EBIC will likely already have many of the skills from the ESDM checklist
- Still may have social deficits in the beginner or intermediate – target these
- More advanced play and social targets in NET and/or ESDM-type routines, as appropriate

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When Children Aren't Progressing



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A Social Chain

- The **change** in the environment functions as a **motivating operation**
- **Observing response** (Catania, 2013) - **Looking** at the mother produces an Sd (her expression or action)
- Two functions in the chain:
 - **conditioned reinforcer** that maintains the observing response
 - **discriminative stimulus** for subsequent approach or avoidance behaviour

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Follow his motivation...

<p>Adapting one's behaviour Based on fluctuations in the child's behaviour (interests) in order to maintain the child in contact with our actions and adult mediated activities</p>	<p>Creating opportunities Making changes to the physical or verbal environment to alter the value of certain stimuli (MO manipulation) and establish the adult and his/her cues (expression, eye-contact, gestures) as a discriminative stimulus for the delivery of the reinforcer. At the same time, we want to be part of that reinforcement, not just givers (vending machines)</p>
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A Social Chain

- Building chains in which the Sds and SRs are mediated by the adult.
- Once the chain is built, look for choice points, the break point of the link in the chain, create a pause or a change to evoke a change in social behaviour (e.g., looking, reaching, seeking assistance, showing)
- Transitive motivating operations (CMO-T)
- Extinction induced variability

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Social Interaction & Social Play

- CMO: an environmental change
 - SD: person
 - R: vocal or non vocal
 - SR: vocal or non vocal action by the person
 - Any response that is evoked by another person and is maintained by the ongoing interaction with another person, that conforms to the rules of the community
- CMO: an environmental change
 - SD: person and toys
 - R: verbal and motor
 - SR: verbal and motor
 - Both the activity and another person are reinforcers. The person increases the value of the activity.

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“Differentiating **between** social reinforcement in which the vocal or non vocal **action of the adult is the reinforcer** - and the delivery of a tangible reinforcer via the adult, in which **the item is the reinforcer** (and in the absence of the adult, the child would be able to access it or produce it)”

- Dr. Francesca degli Espinosa

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Francesca degli Espinosa, Penn State Autism Conference, 2018

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Francesca degli Espinosa, Penn State Autism Conference, 2020

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“Be humble and be bold.
Although we need not go outside our science to explain and potentially alter social responding in children with autism, addressing social behaviour in this population represents a significant challenge, both in analysis and practice.
Be humble and respectful in recognising the achievements and scope of other approaches, and be bold in trusting what a conceptually systematic analysis of behaviour can do: changes in behaviour, including social behaviour, can be explained in terms of contingencies.”
 - Dr. Francesca degli Espinosa

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References

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**Stay
Connected**

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