Discovering the Wonders of Blunders: Developing flexible mindsets for cooperative problem-solving in early childhood

10th Annual Social Thinking Global Providers’ Conference

Julie Dunstan-Brewer, PhD & Susannah Cole, MEd

TODAY’S EXPLORATION

- What is a Flexible Mindset?
- Transforming Blunders to Wonders
- I think I can, I Can!
- Together, we solve problems

Julie Dunstan-Brewer, PhD: Disclosure

- Consults to The Reading Clinic & receives consulting fees (www.readingclinic.bm)
- Wrote the children’s storybooks referred to in this presentation & may potentially benefit from future sales of said books

Susannah Cole, MEd: Disclosure

- Consults to The Reading Clinic & receives consulting fees (www.readingclinic.bm)
- Provides Executive Function Coaching as a private practitioner & receives fees for service

SEEING STARS

- What is a Flexible Mindset?
- Transforming Blunders to Wonders
- I think I can, I Can!
- Together, we solve problems

GRADUATES LACK

- Oral & written communication skills
- Critical thinking & problem-solving
- Professionalism & work ethic
- Teamwork & collaboration
- Applying technology
- Leadership & project management
EXECUTIVE FUNCTION
The set of interrelated processes that govern a person’s awareness of and direction of emotions, behaviours and learning towards setting and achieving goals.

GROWTH MINDSETS
Beliefs that you can grow intelligence:
- Practice
- Perseverance
- Resiliency
- Grit


A flexible mindset is the ability to shift perspectives & adapt while learning, by capitalizing on the executive function tools and constructive self-perceptions that promote effort, persistence & flexible strategy use.

Components of the Flexible Mindsets Model
Please refer to Handout #2

Self-directed learners focus mental energy on their goals, even when challenged; they are driven by curiosity, a desire to grow and the love of learning!

Adapted from: Guglielmino, 1977

COMMONALITIES
MESSY MESSAGES

Children need what we rarely give them in school - time for “Messing About.”
- John Holt

I think I can, I Can!

Listen to the MUSTN’TS, child, Listen to the DON’TS
Listen to the SHOULDN’TS, the IMPOSSIBLES, the WON’TS
Listen to the NEVER HAVES then listen close to me - Anything can happen, child, ANYTHING can be
- Shel Silverstein
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Handout #1: Seeing Stars

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Handout #2: Components of the Flexible Mindsets Model

Executive Function Tools

Goal-setting
Planning & Prioritizing
Organizing
Working Memory
Shifting Flexibly
Self-Monitoring & Checking

Flexible Mindsets

Mistakes are for Learning
Effort & Persistence anchor Learning

Constructive Self-Perceptions

Abilities can be “Grown”

SELF-DIRECTED LEARNING

Developing flexible mindsets for self-directed learning

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Handout #3: Flexible Mindset Language

<table>
<thead>
<tr>
<th>Feedback Language Strand</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Effort &amp; Persistence</strong></td>
<td>You’re trying hard and its working! This is tough - you CAN learn to do it if we break it into steps. You didn’t give up and you got it! When it’s tricky like this is when our brains get stronger.</td>
</tr>
<tr>
<td><strong>2. Progress</strong> (only use when child is actually making progress)</td>
<td>I’m seeing great progress on…. What improvements do you see? Let’s share with _______ how much progress you’ve made. You’ve been practicing a lot and so now you can _______. Tell me about how you’ve gotten so much better at ________.</td>
</tr>
<tr>
<td><strong>3. Strategy Use</strong></td>
<td>I see you’re using a _______ strategy and its working! Let’s share the strategies we used… What is our plan? What do we need? You didn’t reach your goal of…That’s Ok, what did you learn? What could you do differently next time?</td>
</tr>
<tr>
<td><strong>4. Reframing Mistakes</strong> (transforming Blunders to Wonders)</td>
<td>I hear you telling me you’re stuck – what have you tried? Mistakes belong here - our brains grow from mistakes. What did you learn from this mistake and what choice would you make next time? Tell me about a mistake that made something wonderful happen.</td>
</tr>
</tbody>
</table>
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Handout #4: Messy Messages about Mistakes

<table>
<thead>
<tr>
<th>Situation</th>
<th>Child’s Message to Self</th>
<th>Flexible Mindset Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>A child is carrying some materials to a table for an art activity. She drops a brush and paint is smudged across the floor. Another child says, “Look what you did! You made a BIG mess!”</td>
<td>“Oh no, I messed everything up!”</td>
<td></td>
</tr>
<tr>
<td>A child is working on a puzzle. He has one piece that he is repeatedly attempting to fit into the incorrect section. Suddenly, he throws the piece across the floor.</td>
<td>“I can’t do it!”</td>
<td></td>
</tr>
<tr>
<td>You are reading a story to a small group of children. In the story, a brain suddenly appears and you ask the children, “What do you think this could be?” One child exclaims “That’s a bubbalicious!” Another child says, “No, silly – that’s a brain!”</td>
<td>“I’m so stupid!”</td>
<td></td>
</tr>
</tbody>
</table>
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Handout #5: Flexible Mindsets Stages of Productive Puzzling

<table>
<thead>
<tr>
<th>Stage</th>
<th>Unstructured Exploration</th>
<th>Circumstantial Learning</th>
<th>Productive Puzzling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasoning</td>
<td>Concrete – thinking of objects and concepts as they appear</td>
<td>Representational – thinking of objects and concepts within a context that is relevant to everyday situations</td>
<td>Symbolic/Divergent – abstract reasoning that promotes creativity and collaborative problem-solving</td>
</tr>
<tr>
<td>Interactions</td>
<td>Solitary – immersed in meeting own needs with minimal functional interactions</td>
<td>Associative – connected activities with some perspective-taking</td>
<td>Cooperative – dynamic engagement to meet common interests and shared goals</td>
</tr>
<tr>
<td>Social conventions</td>
<td>None</td>
<td>Modelled – rules are explicit and facilitated by a leader</td>
<td>Internalized – rules and codes are implicit and regulated within the group</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Unarticulated – actions based on immediate needs and not sustained</td>
<td>Personal – sustained individual goals related to task</td>
<td>Mutual – sustained, shared and purposeful goals</td>
</tr>
<tr>
<td>Roles</td>
<td>Unassigned</td>
<td>Designated – assigned by an adult</td>
<td>Consensus-based – assigned by the group</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>Unregulated – simple trial and error</td>
<td>Facilitated – strategies modelled by a leader</td>
<td>Collaborative – strategies generated, attempted, evaluated and revised by the group</td>
</tr>
<tr>
<td>Source of direction</td>
<td>Unstructured</td>
<td>Supported – directed by a leader</td>
<td>Collective</td>
</tr>
<tr>
<td>Adult’s verbal responses</td>
<td>Ambiguous – non-specific questions or direct instructions</td>
<td>Directed – leading directions and questions</td>
<td>Extending - questions that build on and afford time for student thinking</td>
</tr>
</tbody>
</table>
1) Please watch the video of the children’s dramatic play.

2) Using the scale provided below, please rate the quality of the children’s dramatic play on each of the dimensions of play.

### Dimensions of Productive Puzzling

<table>
<thead>
<tr>
<th></th>
<th>UNSTRUCTURED EXPLORATION</th>
<th>CIRCUMSTANTIAL LEARNING</th>
<th>PRODUCTIVE PUZZLING</th>
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</thead>
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<tr>
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<td>symbolic/divergent</td>
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<td>2. INTERACTIONS</td>
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<td>associative</td>
<td>cooperative</td>
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<tr>
<td>3. SOCIAL CONVENTIONS</td>
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<td>modelled</td>
<td>internalized</td>
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<tr>
<td>4. OUTCOMES</td>
<td>unarticulated</td>
<td>personal</td>
<td>mutual</td>
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<tr>
<td>5. ROLES</td>
<td>unassigned</td>
<td>designated</td>
<td>consensus-based</td>
</tr>
<tr>
<td>6. PROBLEM-SOLVING</td>
<td>unregulated</td>
<td>facilitated</td>
<td>collaborative</td>
</tr>
<tr>
<td>7. SOURCE OF DIRECTION</td>
<td>unstructured</td>
<td>adult supported</td>
<td>collective</td>
</tr>
<tr>
<td>8. ADULT RESPONSES</td>
<td>ambiguous</td>
<td>directed</td>
<td>extending</td>
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</tbody>
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COMMENTS: __________________________________________________________
_________________________________________________________________
_________________________________________________________________