Lesson Segment: Addressing Content
Design Question: #2 – Helping Students Interact with New Knowledge

Element 9: Chunking Content into “Digestible Bites”

A teacher’s growth in using instructional strategies can be tracked along the developmental scale. Coaching and growth needs vary for each developmental category on this scale. A teacher at the “beginning” level on the development scale has very different needs than a teacher at the “applying” level. Therefore, in order to track a teacher’s growth in using this strategy, it is important to begin by pinpointing his/her current level of use.

Monitoring for the desired effect of a strategy is a critical component addressed in the developmental scale. Monitoring is the teacher act of checking evidence for desired student learning of critical content during instruction, which includes student action and teacher witnessing of that action.

For this element, based on student evidence, the teacher breaks the content into small chunks (i.e., digestible bites) of information that can be easily processed by students to generate a clear conclusion.

The desired effect of this element states that students process and learn information in appropriate chunks.

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<th>Developmental Scale</th>
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<td><strong>Beginning</strong></td>
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<td>Uses strategy incorrectly or with parts missing.</td>
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<td><strong>Developing</strong></td>
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<td>Breaks input experiences into small chunks based on student needs, but the majority of students are either not monitored for or not displaying the desired effect of the strategy.</td>
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<td>Breaks input experiences into small chunks based on student needs and monitors for evidence of the extent to which the chunks are appropriate.</td>
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<td>Adapts and creates new strategies for unique student needs and situations in order for the desired effect to be evident in all students.</td>
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The following scale has been enhanced to demonstrate common mistakes, examples and non-examples, along with ideas for scaffolding and extended learning.

**BEGINNING** – Uses strategy incorrectly or with parts missing.

Some common mistakes include:

- The teacher chunks information into pieces containing more concepts and information than the students can readily process.
- The teacher puts breaks in the content in ways that hinder processing of information.
- The teacher presents procedural knowledge in small chunks but does not provide opportunities for students to process the new knowledge.
- The teacher chunks content inconsistently such that students aren’t successful at processing all of the information.
- The teacher chunks information based on factors such as textbook headings, and as such, students are not able to process the chunk of information.

**DEVELOPING** – Breaks input experiences into small chunks based on student needs, but the majority of students are either not monitored for or not displaying the desired effect of the strategy.

Some examples of typical, correct use of the strategy include:

- The teacher uses preassessment data to determine which knowledge must be presented in smaller chunks and which knowledge may be presented in larger chunks.
- The teacher chunks declarative knowledge into small bites of concepts and details that logically support each other.
- The teacher chunks procedural knowledge into small steps that go together.
- The teacher stops at strategic points in a verbal presentation, demonstration, multimedia or reading.
- The teacher makes adjustments to the size of the chunks based on student responses.
- The teacher uses appropriate questioning to determine if content chunks are appropriate.
### APPLYING

Breaks input experiences into small chunks based on student needs and monitors for evidence of the extent to which the chunks are appropriate.

At this point in development, the teacher uses the strategy with increased accuracy and fluency while staying focused on student outcome, or desired effect. At the “applying” level, the teacher must provide opportunity for students to demonstrate that the strategy is having the desired effect – in this case, students process and learn new information in small chunks. Planning for the implementation of this strategy allows the teacher to identify how he/she will monitor for the desired effect. Some examples of monitoring may include:

- The teacher watches and listens to student reactions to ensure that they can process the chunk of information.
- The teacher asks students to explain why they are stopping at certain points.
- The teacher questions students about the declarative knowledge taught in order to ensure that they understand what was conveyed in the chunk of information.
- The teacher watches as students work on procedural knowledge to ensure that they are able to perform the steps that were taught in the chunk of information.
- The teacher uses a learner response system to monitor students’ levels of understanding with each chunk.

### INNOVATING

Adapts and creates new strategies for unique student needs and situations in order for the desired effect to be evident in all students. In order to do this, the teacher scaffolds, extends, and/or creates a macrostrategy as necessary. As a result of this, **ALL** students process and learn new information in small chunks.

Examples of providing unique support to meet the individual needs of all students include:

- The teacher briefly overviews each chunk before continuing with the details.
- The teacher provides guiding questions to the student to assist in their processing of new information.
- The teacher chunks content in different sizes by utilizing different texts with the same information but at appropriate scaffolded reading levels to introduce the content.
- The teacher provides smaller chunks of information such that students are processing less information in each chunk.
- The teacher uses stories or video clips to build background knowledge.
- The teacher provides a bulleted list of reminders relevant to the content chunk to assist students as they process.

Examples of extension include:

- The teacher has students identify a content chunk they would like to investigate in greater detail.
- The teacher has students identify the connections of each chunk of new information to the larger ideas and concepts of the learning goal.
- The teacher chunks content in different sizes by utilizing different texts with the same information but at higher reading levels to introduce the content.
- The teacher provides larger chunks of information such that students are processing more information in each chunk.
- The teacher establishes a signal students can use to indicate whether the content is too boring or overwhelming due to the size of the content chunk.