Meet Our Presenters

Jackie Walsh and Beth Sattes developed the QUILT process. They have both been teachers at many levels and have both been associated with the Appalachia Educational Laboratory in Charleston, West Virginia. Together Jackie and Beth have trained thousands of educators on how to incorporate effective questioning to stimulate learning and thinking.

Questions: Tools For Learning and Thinking

Questions are so much a part of the classroom routine that they are seldom recognized as gold nuggets in the stream of activity we call learning. Low level questions on worksheets and at the end of chapters, the same few students who answer them, and a lack of wait time for learner responses are all common educational maladies.

The fourth issue in Volume Eight of The Video Journal of Education takes a new look at a very old practice. Effective questioning can indeed be the springboard to powerful learning and higher level thinking. These videotapes clearly illustrate the following:

- A framework for an effective questioning process
- Strategies to actively engage ALL students in response to effective questions
- Feedback to student responses that enhance thinking and self-esteem
- Ideas to elicit quality student questions
- Steps for teacher self-assessment and the conscious, intentional planning of effective questioning

Suggestions For Using This Issue

Become acquainted with the program material.
- Utilize the guidebook.
- Listen to the audiotapes.
- Watch the videotapes.

Plan staff development activities.
- Choose questions to enhance understanding.
- Engage the viewer in discussion.
- Duplicate pages in the guidebook.

Use the videotapes for maximum benefit.
- Show part of a video, stop, and discuss.
- Allow individuals or small groups to watch the videotapes.
- Watch the tapes repeatedly for greater understanding.
- Include parents and community leaders.

Discussions generated from watching these programs provide the greatest benefit.
Videotape 1
Questioning to Stimulate Learning and Thinking
Featuring the QUILT Model

Content Outline to Facilitate Viewing
If you plan to watch only a specific segment, look for the colored icon indicated below and found at the time listed. In the videotape, the icon will appear in the lower right-hand corner of the screen.

<table>
<thead>
<tr>
<th>Time</th>
<th>Program Outline</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>Beginning of Program</td>
</tr>
<tr>
<td></td>
<td>Introduction to Issue</td>
</tr>
<tr>
<td></td>
<td>Questioning and Understanding to Improve Learning and Thinking</td>
</tr>
<tr>
<td></td>
<td>Introduction of Five Stages</td>
</tr>
<tr>
<td></td>
<td>First Program: Stage One</td>
</tr>
<tr>
<td></td>
<td>Second Program: Stages Two and Three</td>
</tr>
<tr>
<td></td>
<td>Third Program: Stages Four and Five and classroom examples</td>
</tr>
<tr>
<td>3:50</td>
<td>Research establishes connections between effective questioning and learning.</td>
</tr>
<tr>
<td></td>
<td>Introduction of Presenters and Theory</td>
</tr>
<tr>
<td>10:15</td>
<td>Stage One: Prepare the Question</td>
</tr>
<tr>
<td></td>
<td>Definition of Educati ve Question</td>
</tr>
<tr>
<td>12:25</td>
<td>First Behavior:</td>
</tr>
<tr>
<td></td>
<td>Identify instructional purpose.</td>
</tr>
<tr>
<td></td>
<td>The differences between recitation questions and discussion questions are presented.</td>
</tr>
<tr>
<td></td>
<td>Convergent questions are related to recitation questions.</td>
</tr>
<tr>
<td></td>
<td>Divergent questions are related to discussion questions.</td>
</tr>
<tr>
<td>23:45</td>
<td>Second Behavior:</td>
</tr>
<tr>
<td></td>
<td>Determine content focus.</td>
</tr>
<tr>
<td></td>
<td>The pivotal question addresses a principal fact or concept.</td>
</tr>
</tbody>
</table>
Third Behavior:
Select cognitive level.

Bloom’s Taxonomy helps teachers select a cognitive level and formulate questions that promote higher level thinking.

Fourth Behavior:
Consider wording and syntax.

Educative QUILT questions must be clear, specific, and precise.

End of Videotape 1

Testimonials from educators and examples of classrooms are featured throughout this program.

Why is it necessary to write effective questions before the lesson is given?
Discussion Questions

Videotape 1 - Questioning to Stimulate Learning and Thinking
Featuring the QUILT Model

These questions are designed to help educators probe deeper into the information presented and to process the ideas provided in the program. Consider using selected questions for discussion to stimulate thinking before viewing the videotape.

1. What role do questions play in the learning process?

2. Describe a convergent question. Give an example of one from a unit you are now teaching. What is the purpose of convergent questions?

3. Why is it important for students to learn to develop and share stimulating questions?

4. Give an example of a divergent question. How could divergent questions be effective in a math class?

5. What beliefs about students and learning are reflected in the kinds of questions teachers ask during instructional time? How will a change in beliefs effect the way a teacher formulates questions for student learning?

6. What is the connection between Bloom’s Taxonomy and questions designed to improve student thinking?

7. “Student questions determine student learning”. Discuss the meaning of this quote and support your ideas with specific examples from your own teaching.

8. A pivotal question addresses the key concept or principal idea in the learning. Write and share two examples of pivotal questions from a unit you are teaching.

9. Effective questions lose influence when only a few students in the class make a response. Share strategies which engage all students in responding to given questions.

10. Evaluate questions posed on quizzes and tests. What kinds of thinking do they require? Improve three questions on your next test to increase student thinking and learning.
Write an EDUCATIVE QUESTION for a lesson you are anticipating.

In the circle, compose an educative question keeping in mind the four points outlined by J.T. Dillon.* Make it purposeful, clearly focused, carefully conceived, and well formulated. As you think of the lesson, and the students you will present it to, remember that an educative question stimulates student thinking. As you formulate the question, study the next two pages of the guidebook.

Share your question with others to see if it is a quality educative question.
STAGE ONE BEHAVIORS of QUILT: Prepare the Question

Consider these behaviors as you formulate your educative question on page 5.

PURPOSE
Identify instructional purpose.
What do you hope your students will learn from the question?

CONTENT FOCUS
Determine content focus.
What specifically is your question going to be about?

COGNITIVE LEVEL
Select cognitive level.
Study Bloom’s Cognitive Taxonomy on next page to help you write a question that will move students to a higher level of thinking.

WORDING AND SYNTAX
Consider wording and syntax.
Your question must be clear, specific, and precise.

Use These Pages To Help You Write An Educative Question on Page 5
Consider these various levels of knowledge in formulating questions. The educative question should challenge students at the higher levels of evaluation, synthesis and analysis. However, teachers must not forget the importance of the lower cognitive levels for a basis of performing at the higher levels.
Content Outline to Facilitate Viewing

If you plan to watch only a specific segment, look for the colored icon indicated below and found at the time listed. In the videotape, the icon will appear in the lower right-hand corner of the screen.

<table>
<thead>
<tr>
<th>Time</th>
<th>Program Outline</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td><strong>Beginning of Program</strong></td>
</tr>
<tr>
<td></td>
<td>Review of Videotape 1</td>
</tr>
<tr>
<td></td>
<td>Review of Stage One</td>
</tr>
<tr>
<td></td>
<td><strong>Introduction</strong> of Videotape 2</td>
</tr>
<tr>
<td></td>
<td>Stages Two and Three</td>
</tr>
<tr>
<td>1:52</td>
<td><strong>Stage Two:</strong></td>
</tr>
<tr>
<td></td>
<td>Present the Question</td>
</tr>
<tr>
<td></td>
<td><strong>Behaviors:</strong></td>
</tr>
<tr>
<td></td>
<td>Indicate response format.</td>
</tr>
<tr>
<td></td>
<td>Possible responses include oral, thumbs-up, flash cards, and choral.</td>
</tr>
<tr>
<td></td>
<td>Ask the question.</td>
</tr>
<tr>
<td></td>
<td>Select respondent.</td>
</tr>
<tr>
<td></td>
<td>The <strong>undirected</strong> question to any or all students is used primarily in <strong>discussion</strong>.</td>
</tr>
<tr>
<td></td>
<td>The <strong>directed</strong> question to particular students is used primarily in <strong>recitation</strong>.</td>
</tr>
<tr>
<td></td>
<td>The <strong>action zone</strong> is identified to help teachers draw all students into the questioning episode.</td>
</tr>
</tbody>
</table>
How do students benefit when teachers pause a few seconds after the student answers a question?

Testimonials from educators and examples of classrooms are featured throughout this program.
1. Identify and discuss various strategies presented in the videotape to actively involve ALL students in the questioning process. Which particularly appealed to you? Why?

2. Consider the “Wait Time I” strategy following a question directed to students. Why is it important? What factors determine it’s appropriate use?

3. Compare the strategies “Wait Time I and II”. How are they the same? Different? Why is it important for students to understand the reason these strategies are used?

4. List purposes, advantages, limitations, and examples of probing.

5. Discuss this fact from educational research: High achieving students get a disproportionate amount of air time in classrooms. Reflect on your own experience and support your conclusion.

6. Share specifics from the videotape that you have questions about or want clarified.

**Activity**

Consider the behaviors on the next page and discuss with a colleague the challenges you will face in implementing them.
STAGE TWO BEHAVIORS: Present the Question

- **RESPONSE FORMAT**
  - Indicate response format.
  - Traditional student hand raising is inadequate.
  - Consider signals, work samples, and choral responses.

- **ASK THE QUESTION**
  - Ask the question.
  - Ask slow and easy, showing interest in student’s answers.

- **SELECT RESPONDENT**
  - Select respondent.
  - Work beyond the action zone.

STAGE THREE BEHAVIORS: Prompt Student Response

- **Pause after asking question.**
  - Wait 3 to 5 seconds after asking the question.

- **Assist nonrespondent.**
  - Help the nonrespondent or assist the respondent who gives an incorrect answer.

- **Pause following student response.**
  - Wait 3 to 5 seconds after the student response before reacting.
Videotape 3
Questioning to Stimulate Learning and Thinking
Featuring the QUILT Model

Content Outline to Facilitate Viewing
If you plan to watch only a specific segment, look for the colored icon indicated below and found at the time listed. In the videotape, the icon will appear in the lower right-hand corner of the screen.

<table>
<thead>
<tr>
<th>Time</th>
<th>Program Outline</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td><strong>Beginning of Program</strong></td>
</tr>
<tr>
<td></td>
<td>Review of Videotapes 1 and 2</td>
</tr>
<tr>
<td></td>
<td>Introduction of Videotape 3</td>
</tr>
<tr>
<td></td>
<td>Stages Four and Five and classroom example will be presented.</td>
</tr>
</tbody>
</table>

| 1:07 | **Behaviors Reviewed** |
|      | Stage One: Prepare the Question |
|      | Identify instructional purpose. |
|      | Determine content focus. |
|      | Select cognitive level. |
|      | Consider wording and syntax. |
|      | Stage Two: Present the Question |
|      | Indicate response format. |
|      | Ask the question. |
|      | Select respondent. |
|      | Stage Three: Prompt Student Responses |
|      | Pause after asking question. |
|      | [ Wait Time I ] |
|      | Assist nonrespondent. |
|      | Pause following student response. |
|      | [ Wait Time II ] |

<p>| 2:37 | <strong>Stage Four: Process Student Responses</strong> |
|      | Provide appropriate feedback. |
|      | Expand and use correct responses. |
|      | Elicit student reactions and questions. |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Program Outline</th>
</tr>
</thead>
</table>
| 14:08 | **Stage Five: Critique the Questioning Episode**  
|       | Analyze the questions.  
|       | Map respondent selection.  
|       | Evaluate student response patterns.  
|       | Examine teacher and student reactions. |
| 17:13 | **Classroom Example**  
|       | In a complete classroom questioning episode led by a QUILT trained teacher, all of the behaviors of the five stages are exemplified. |
| 38:07 | End of videotape 3 |

**Testimonials from educators and examples of classrooms are featured throughout this program.**

**When a student answers incorrectly, how can a teacher make it a positive experience?**
Discussion Questions

Videotape 3 - Questioning to Stimulate Learning and Thinking
 Featuring the QUILT Model

These questions are designed to help educators probe deeper into the information presented and to process the ideas provided in the program. Consider using selected questions for discussion to stimulate thinking before viewing the videotape.

1. What problems arise with changes in teaching routines? What conditions exist in schools where staff members unitedly “celebrate the storms” caused by change?

2. What evidence did you see in the videotape that the questioning process is a “tool for learning”?

3. Students say the most effective way for teachers to reinforce them is by using their answers to build another point in their learning. What insights into students and the learning process does this provide?

4. Imagine a classroom where students ask more questions than the teacher. Explore ideas to create this kind of classroom setting.

5. Debate the following statement: “Praise can be a hazardous form of feedback”. Share new insights as you reflect on your own use of praise in the classroom.

6. Effective teachers improve the thinking and learning in their classrooms through self-evaluation in four key areas depicted in the videotapes. With a partner, role play this self-evaluation process in a think aloud format.

Activity
Consider the behaviors on the next page and discuss with a colleague the challenges you will face in implementing them.
**STAGE FOUR BEHAVIORS: Process Student Responses**

- Provide appropriate feedback. Move beyond a cursory yes or no. Low achieving students need more positive feedback.

- Expand and use correct responses. Help students elaborate by probing and using their correct comments to build further discussion.

- Elicit student reactions and questions. Teachers should sometimes stop talking to encourage student questions and reactions.

**STAGE FIVE BEHAVIORS: Critique the Questioning Episode**

- Analyze the questions. Reflect on the effectiveness of questions posed.

- Map respondent selection. Think about which students answered.

- Evaluate student response patterns. Is it always student back to teacher, or are there other interactions?

- Examine teacher and student reactions.
Where to Go for More Information on Questioning

**Jackie Walsh**  
Walsh Consulting Group  
1510 Gilmer  
Montgomery, Alabama 36104  
334 832-4222 walshja@aol.com

**Beth Sattes**  
Appalachia Educational Laboratory  
P.O. Box 1348  
Charleston, West Virginia 25325  
800 624-9120 sattesb@ael.org

**Additional Professional Development Opportunities:**

QUILT is a full-scale professional development program, proven effective in hundreds of schools across the country. Schools interested in receiving further training in the QUILT program should contact Jackie Walsh or Beth Sattes. The Appalachia Educational Laboratory offers an annual training-of-trainers each June as well as on-site training services.


---

**Grateful appreciation to the following outstanding school systems and organizations for sharing their experiences and expertise:**

- Appalachia Educational Laboratory  
  Charleston, West Virginia
- Avalon Academy  
  Dillon, South Carolina
- Lumberton Senior High School  
  Lumberton, North Carolina
- North Oldham Middle School  
  Goshen, Kentucky
- Saint James School  
  Montgomery, Alabama
- Saint James Elementary  
  Montgomery, Alabama
- Sidney Lanier High School  
  Montgomery, Alabama
- Spring Valley High School  
  Huntington, West Virginia
- Attleboro High School  
  Attleboro, Massachusetts