Questions: Purposes, Functions, Types, Kinds, in Teaching and Learning

Principles of learning

Competency in a subject matter (music) for life long amateruing and being aficionados of music requires:

• Deep foundational knowledge,
• Understanding facts, concepts, and skills in the context of a conceptual framework, and
• Organizing knowledge in ways that facilitate retrieval and application.

Questioning is a teaching tool (and skill) for helping learners become competent in music.

Purpose: What is the purpose of questioning?

To generate, access, extend or refine knowledge.

Function: What is the function of questioning?

It is an interpersonal exchange aimed at achieving a knowledge purpose.

Role in teaching: What is the role of questioning in teaching?

To help students and children to think in generative and complex ways.

Origins and Sources: What are the intellectual, theoretical and research sources of questioning?

Socrates; contemporary versions of constructivist (Dewey, Piaget, Bruner) and social constructionist theories of learning (Dewey, Vygotsky, Lave and Wenger)

Kinds and Types – What kinds and types of questioning are there?

see the following examples.
**Questions for Critical Thinking**


| 1. Questions for clarification | • Why do you say that?  
|                              | • How does this relate to our discussion?  
|                              | • "Are you going to include rhythmic variation in your composition?"  
| 2. Questions that probe assumptions | • What could you/we assume instead?  
|                                 | • How can you verify or disapprove that assumption?  
|                                 | • "Why are you leaving out examples of music making outside the range of classical music?"  
| 3. Questions that probe reasons and evidence | • What would be an example?  
|                                         | • What is....analogous or similar to?  
|                                         | • Where in the piece do you hear this? Why?:  
|                                         | • "What did the composer do to indicate that we express this phrase in a certain way?"  
| 4. Questions about viewpoints and perspectives | • What would be an alternative?  
|                                               | • What is another way to look at it?  
|                                               | • Would you explain why it is necessary or beneficial, and who benefits?  
|                                               | • Why is the best?  
|                                               | • What are the strengths and weaknesses of...?  
|                                               | • How are...and ...similar?  
|                                               | • What is a counterargument for...?  
|                                               | • "Which recording best expresses what you think the piece is trying to express?" Would the audience enjoy our presentation/performance? why/why not?  
| 5. Questions that probe implications and consequences | • What generalizations can you make?  
|                                               | • What are the consequences of that assumption?  
|                                               | • What are you implying?  
|                                               | • How does...affect...?  
|                                               | • How does...tie in with what we learned before?  
|                                               | • "What would happen if...?  
| 6. Questions about the question | • What was the point of this question?  
|                                   | • Why do you think I asked this question?  
|                                   | • What does...mean?  
|                                   | • How does...apply to everyday life?  
|                                   | • "Why do you think the question about the role of lullabies in human music making was asked?"  

Questions for Developing/Assessing Conceptual Understanding


| Conceptual Questions | These questions might be ones that are convergent, divergent, or evaluative in construction — ones that delve deeper and require more sophisticated levels of cognitive processing and thinking.  
What is a song?  
How do people use music?  
What logic does your playlist have?  
What do you need to do to play this piece successfully?  
How can we express the desired emotion of the piece better through our instruments (or singing)?  
How is perception in music related to production in music? |
|----------------------|----------------------------------------------------------------------------------------------------------|
| Essential or Generative Questions | These are questions that are used to motivate/initiate learning and frame content or these are questions that are used to classify or categorize subject matter content.  
How do people express themselves through music?  
What makes music expressive?  
What skills do we (people) need to understand music? |
More Questions for Developing/Assessing Conceptual Understanding


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<th>Type</th>
<th>Question</th>
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<td><strong>1. Factual</strong></td>
<td>Soliciting reasonably simple, straight forward answers based on facts or awareness. These are usually at the lowest level of cognitive or affective processes and answers are frequently either right or wrong.</td>
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<td>What are the nine functions of music in human society according to Merriam?</td>
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<td><strong>2. Convergent</strong></td>
<td>Answers to these types of questions are usually within a very finite range of acceptable accuracy. These may be at several different levels of cognition — comprehension, application, analysis, or ones where the answerer makes inferences or conjectures based on personal awareness, or on material read, presented or known.</td>
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<td>Reflecting on the role culture plays in music, what are the main justifications for teaching music in the schools using a cultural functions framework?</td>
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<td>(This is not specifically stated in one direct statement in the Merriam reading. Here the reader must make simple inferences as to why schools should teach music using a cultural functions framework.)</td>
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<td><strong>3. Divergent</strong></td>
<td>These questions allow students to explore different avenues and create many different variations and alternative answers or scenarios. Quality of responses may be based on logical projections, may be contextual, or arrived at through basic knowledge, conjecture, inference, projection, creation, intuition, or imagination.</td>
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<td>In a cultural functions framework for teaching music, what options does the teacher have in designing curriculum and planning instruction?</td>
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<td>These types of questions often require students to analyze, evaluate, or synthesize a knowledge base and then project or predict different outcomes. The determined subjectively based on the possibility or probability of the proposed answer. The intent of these types of questions is to stimulate imaginative, creative, or inventive thought, or investigate “cause and effect” relationships.</td>
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<td><strong>4. Evaluative</strong></td>
<td>These types of questions require sophisticated levels of cognitive and/or emotional (affective) judgment. In attempting to answer these types of questions, students may be combining multiple cognitive and/or affective processes or levels, frequently in comparative frameworks. Often an answer is analyzed at multiple levels and from different perspectives before the answerer arrives.</td>
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<td>a. Compare and contrast a cultural functions framework for music teaching with a music-aural skills training program?</td>
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<td>b. What are the similarities and differences between teaching musical forms and musical roles in culture?</td>
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<td>c. Why and how might the concept of Piagetian schema be related to the</td>
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at newly synthesized information or conclusions. | concepts presented in Bruner's "discovery" instructional theory, and why might this be important to consider in teaching and learning?
### Questions Design to Control Outcomes: Seek, Challenge or Funnel Information

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<td><strong>Closed Questions</strong></td>
<td>Closed questions invite a short focused answer—answers to closed questions can often (but not always) be either right or wrong. Closed questions are usually easy to answer—as the choice of answer is limited—they can be effectively used early in conversations to encourage participation and can be very useful in fact-finding scenarios such as research.</td>
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<td><strong>Open Questions</strong></td>
<td>By contrast, to closed questions, open questions allow for much longer responses and therefore potentially more creativity and information. There are lots of different types of open question; some are more closed than others.</td>
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| **Recall and Process Questions** | Questions can also be categorized by whether they are ‘recall’—requiring something to be remembered or recalled, or ‘process’—requiring some deeper thought and/or analysis.  
A simple recall question could be, “What songs do you know?” This requires the respondent to recall some information from memory, a fact. A music teacher may ask recall questions of their pupils, “Of the three songs we have been studying, which one comes from Japan?”  
Process questions require more thought and analysis and/or a sharing of opinion. Examples include, ‘What skills can you use to express the music in a convincing way?’ or ‘What are the advantages and disadvantages of using Youtube tutorials for learning how to play an instrument?’ |
| **Rhetorical Questions** | Rhetorical questions are often humorous and don’t require an answer. ‘If you set out to fail and then succeed have you failed or succeeded?’ Rhetorical questions are used to get people to think. Rhetorical questions are, by design, used to promote thought.  
Politicians, lecturers, priests and others may use rhetorical questions when addressing large audiences to help keep attention. ‘Who would not hope to learn something about themselves in studying music?’, is not a question that requires an answer, but our brains are programmed to think about it thus keeping us more engaged with the speaker. |
| **Funneling** | We can use clever questioning to essentially funnel |
the respondent’s answers – that is ask a series of questions that become more (or less) restrictive at each step, starting with open questions and ending with closed questions or vice-versa.

"Tell me about your most recent listening experiences."
"What did you hear while you were listening?"
"Were there any pieces that stood out?"
"Did you prefer one over another?"
"Did you choose any Classical music?"