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A Summary of Research-Based Principles of Effective Teaching

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General teaching skills are used by all teachers, regardless of subject-matter specialty. These include skills such as clarity of instruction, the use of questioning, and classroom management techniques. It is critical for teachers to be well prepared in general teaching skills as well as the subject in which they specialize.

This article is a summary of findings in several areas of education research. Many of the studies have been conducted in disciplines other than music, and the majority involve elementary and junior high school students. The principles of teaching that are addressed, however, are applicable to almost any level and any academic discipline. The collection of information presented here provides an overview of some of the important teaching skills necessary for effective teaching, as well as some specific applications to the art of teaching music. The article is not an exhaustive list of examples; instead, it provides selected examples in the hope that the information will stimulate the reader's thoughts and creativity in applying the skills to his or her own teaching situation.

A complete teaching cycle (teacher presentation, student response, and teacher feedback) serves as the basis for the organization of this collection (Becker, Engelmann, & Thomas, 1976). Each of the three sections contains a variety of research-based teaching tips. A complete resource list is provided at the end of the article.

Much recent educational research has focused on teaching cycles. Teaching cycles are based on the premise that the art of teaching involves three basic parts: (1) teacher presentation of a task or information, (2) student response, and (3) teacher feedback. Sometimes these are referred to as (1) antecedent or preceding stimuli—events that precede the student response; (2) response; and (3) consequent stimuli or consequents—these stimuli can either strengthen responses (approval) or weaken responses (disapproval) (Becker, Engelmann, & Thomas, 1976).

Researchers have demonstrated the effectiveness of this three-part model in teaching mathematics and English (Becker & Engelmann, 1976; Berliner & Rosenshine, 1976; Brophy & Evertson, 1974; Rosenshine, 1979). Complete teaching cycles have also been observed and documented in music education (Moore, 1981; Price, 1983; Rosenthal, 1981; Spradling, 1980; Thurman, 1976; Wagner & Strul, 1979; Yarbrough & Price, 1981). Complete teaching units have been found to result in musical performance gains and high student ratings in university symphonic band rehearsals (Price, 1983). Although teaching cycles have been observed in a variety of music education settings, further research is needed to determine the most desirable and effective cycles, or sequences of instruction, for particular areas and settings.

TEACHER PRESENTATION Classroom Rules and Signals

Teacher behaviors are involved in many aspects of organization and management of the classroom. One area of teacher behavior that is critical to successful classroom management is the use of signals. Signals can be divided into three basic categories: (1) attention signals, (2) "do-it" signals, and (3) responses signals. An attention signal is used to gain the students' attention and to help them focus on the matter at hand. This signal may be verbal (e.g., "Boys and girls, please look up here") or nonverbal (e.g., holding up one hand or flicking the lights off, then on). Do-it signals indicate when students should respond to a teacher question or directive (e.g., "Ready? Play" or "Jane?"). Response signals indicate how a student or group of students should respond to a teacher question or directive; they draw on previously paired signals or information to provide prompts that assist students in answering correctly (e.g., when students are asked what instrument is playing a particular passage in a recording, the teacher may pretend to play that instrument, thereby providing a visual prompt for the student. The prompt may also be verbal, as in providing the starting sound of a desired word).

A teacher's use of signals and rate of presentation have been found to be related to student achievement (Carnine & Fink, 1978). It is important to formulate constructive classroom rules, to be able to communicate these rules to the students, and to use signals to help implement the rules.

1. Research has shown that effective elementary teachers integrate rules and procedures into a workable system and systematically teach this system to the students. The rules and procedures are concrete and functional, and contribute to classroom order and work accomplishment. Signals are used to indicate to students when actions should be carried out or stopped, and time is spent rehearsing these procedures (Emmer, Evertson, & Anderson, 1980).
2. Appropriate use of signals and explicit information is important, particularly in the early grades, and at the beginning of the year, as a means of helping students learn the classroom environment (Schultz & Florio, 1979).
3. When presenting rules and procedures, effective elementary teachers avoid information overload. They start with immediate concerns (rules/procedures), then introduce more procedures as needed. They are able to anticipate problems and have procedures ready to handle these situations. They remind students of rules during the first weeks of school. These teach-

ers closely monitor their classes and stop inappropriate behavior promptly (Emmer, Evertson, & Anderson, 1980).

4. Rules and procedures are important at the junior high as well as at the elementary level. Effective junior high school teachers are rated higher than less effective teachers on clarity of directions and information. They state desired behaviors and attitudes clearly, present clear explanations for students, respond consistently to appropriate and inappropriate behavior, stop disruptive behavior sooner, and use rules and procedures more frequently to handle disruptive behavior (Doyle, 1986; Evertson & Emmer, 1982).
5. A teacher's use of signals and rate of presentation can be increased (and this new level maintained) with training (Carnine & Fink, 1978).

Rules of conduct and classroom procedures are an important aspect of the general music classroom. Commonly used rules include: entering the room in an orderly manner; not touching instruments until instructed to do so; taking an assigned seat; and responding to preestablished signals for attention.

Classroom rules are an equally important aspect of the ensemble rehearsal setting. Establishing rules can be very important, especially when teaching a large ensemble. Commonly used rules for ensemble rehearsals include: entering the room in an orderly manner, obtaining music and/or instrument; taking an assigned seat; warming-up responsibly; and being quiet when the director steps in front of the group.

Here are several tips on establishing rules:

- Move from general to specific (i.e., start with the most immediate and important concerns then move to more subtle concerns).
- Although rules and procedures are important aspects of classroom management, one should avoid having too many rules. An excessive number of rules makes enforcing them more difficult, and may result in information overload and student confusion.
- Remind students of the rules throughout the year as necessary.
- Be consistent.
- Follow through with consequences for students who do not obey rules.
- Be sure to notice and comment on appropriate behavior.

Presenting Information and Instruction

Teachers present both academic and social information and instructions on a daily basis. This initial part of the teaching cycle is extremely important, as it sets the stage for what is to follow. Obviously, the teacher must have a thorough knowledge of the subject matter to be taught; however, the teacher must also have the ability to organize the content of the lesson and present it clearly and effectively to the students.

1. In general, when effective teachers teach well-structured subjects, they:
 - begin a lesson with a short review of previous, prerequisite learning.

- begin a lesson with a short statement of goals.
- present new material in small steps, with student practice after each step.
- give clear and detailed instructions and explanations.
- provide a high level of active practice for all students.
- ask a large number of questions, check for student understanding, and obtain responses from all students.
- guide students during initial practice.
- provide systematic feedback and corrections.
- provide explicit instructions and practice for seatwork exercises, and where necessary, monitor students during seatwork (Rosenshine & Stevens, 1986, p. 377).

2. The procedures listed above are most applicable to the "well-structured" parts of any content area (i.e., where the objective is to master a body of knowledge or learn a skill that can be taught in a step-by-step manner. This approach can also be used to teach processes or skills that students are expected to apply to new problems or situations.) These procedures are least applicable to "ill-structured" parts of any content area, (i.e., where the skills to be taught do not follow explicit steps) or areas that lack a general skill that is applied repeatedly [Rosenshine & Stevens, 1986; Simon, 1973, (cited in Rosenshine & Stevens, 1986)].
3. When presenting new information, teachers should be careful not to present too much information at once. There are limits to the amount of information learners can attend to and process effectively. When teaching new material, it is suggested that the teacher proceed in small steps and provide practice on one step before adding another (Beck, 1978; Miller, 1956; Rosenshine & Stevens, 1986).

These teaching tips on presenting information are perhaps most easily applied to classroom music settings such as general music or music theory. The importance of the presentation of information is often overlooked in the rehearsal setting. Directors of ensembles can also begin the rehearsal with a statement or review of previous learning (through discussion, questioning, or performance), then briefly state the goals for that day's rehearsal. During the rehearsal the director will isolate places in the music that need to be improved. He or she will explain the appropriate concept in small steps, provide practice after each step (through performing, questioning, etc.), and give feedback and corrections as necessary. Obviously, asking a large number of questions may not be feasible or desirable in a large-group setting. Some questioning, however, is important—it provides a means of checking for student understanding, it serves to reinforce learning, and it often helps to keep students on-task.

Clarity of Instruction

When presenting information or instructions, the teacher should be aware of the clarity of the presenta-

tion. Clarity includes the structure and sequence of the content, and explaining the material in an understandable manner. Clarity is also affected by the clearness or preciseness of one's speech. Effective teachers are rated higher than are less effective teachers in the clarity of their instructions (Evertson & Emmer, 1982). Clarity has been found to correlate positively with student achievement [Rosenshine, 1971 (cited in Brophy & Good, 1986)].

Following are some common elements that distract from clarity:

- **Vagueness of terms**—The vague terms are italicized in the following example: “*Actually, this might help you to understand a little more about some things we usually call characteristics of Baroque music. Most of you probably...*” (Smith & Land, 1981).
- **Mazes**—false starts, pauses in speech, or repeated words. The mazes are italicized in the following example: “Today, let’s *re,...um*, let’s play section number five. But before we do that let’s look at chorale *number ... number 19*” (Hiller, Fisher, & Kaess, 1969).
- **Discontinuity**—interrupting the flow of the lesson by interjecting irrelevant content or mentioning relevant content at an inappropriate time, resulting in the loss of momentum in the lesson (Kounin, 1970; Land & Smith, 1979; Smith & Cotten, 1980).
- **Frequent use of the word, “uh.”** This generally is not an isolated factor; it is most often associated with one of the other elements that distract from clarity (Brophy & Good, 1986; Land & Smith, 1979; Smith 1977).

Teachers often are not aware of their speech patterns and any problems or idiosyncrasies they might have developed. One of the best ways to evaluate and monitor speech habits (or other mannerisms) is to audiotape or videotape several lessons. Listen to the tape and evaluate your speech. Is it clear? Are you speaking at an appropriate speed? Are you projecting your voice so that all the students can hear you? Are there inflections in your speech, or is it monotonic? Do you use mazes, discontinuity, vague terms, or many “uhs” or “ums?”

Be honest when evaluating yourself. If you do detect problems, work on improving one aspect at a time, rather than many at once. Give yourself some time to implement these changes, then videotape another lesson. Although watching yourself on videotape may be difficult or uncomfortable, research has shown that the self-monitoring technique is effective in assisting people in changing some speech habits.

Demonstration

Demonstration is an important teaching tool. Teachers in all disciplines often demonstrate new skills or materials. Demonstration is easily and widely used in general, vocal, and instrumental music classes. This demonstration may be aural (singing, playing), or visual (modeling hand position, posture). When using demonstration, it is important for the teacher to remember to not only demonstrate the new skill or behavior, but to explain the principles in-

involved, and the importance of acquiring this skill/behavior. Students should not only be able to imitate the teacher, but should also understand the principles being taught (see p. 7, “Checking for Student Understanding”). This is especially important, since the ultimate goal of education is independent learning.

For a demonstration to be effective, the student should be able to discriminate among the characteristics being modeled. For instance, a teacher may provide both an appropriate and inappropriate model for students so they are able to see or hear the difference and understand why one model is more appropriate. The difference between the two models may be very obvious (e.g., *piano* versus *forte*), or it may be more subtle (e.g., *piano* versus *pianissimo*). This difference will depend upon the age and ability level of the students and the material being taught. Another approach that is often used is for a teacher to provide several models, then ask the students to select the one they believe to be most appropriate and to justify their decisions. They may also discuss why the other models were inappropriate. These types of exercises provide students with the opportunity to develop important discrimination skills.

1. All teachers demonstrate new skills and materials. Results of recent research, however have indicated that more effective teachers in some subject areas spend more time in demonstration than less effective teachers do. For example, effective math teachers in Grades 4–8 spend more time in demonstration than do less effective teachers. In one study, researchers found a consistent trend in math classes favoring spending at least 50% of the time on demonstration and guided practice (Evertson, Emmer, & Brophy, 1980; Good & Grouws, 1979; Good, Grouws, & Ebmeier, 1983; Stallings, Needles, & Stayrook, 1979).
2. Teachers in some subject areas are more able to use demonstration than others. For example, it is seldom used in teaching reading comprehension. Demonstration is considered to be such an important teaching tool that researchers are trying to provide teachers with demonstration procedures for reading comprehension skills (Durkin, 1981; Rosenshine & Stevens, 1986).

Questioning

Questioning is another important and widely used teaching tool. It is one of the teacher behaviors that has consistently correlated positively with student achievement. Asking clear, appropriate questions at the right time is not always easy. Some guidelines for using the tool of questioning are given below.

1. Questions should be asked one at a time, and they should be clear and of the appropriate level of difficulty (Hughes, 1973; Nuthall & Church, 1973; Wright & Nuthall, 1970).
2. Effective teachers often interweave explanations with questions (Good & Grouws, 1977).
3. “One paradox of the question/answer sequence is that pupil answers are essential for the

progress of the lesson, and yet the answer expected by the teachers is rarely obvious" (Cazden, 1986, p. 440). Even a seemingly simple question such as "Who is that?" has many potential answers. Many teachers use the following two strategies to assist students in providing the desired response:

- *Preformulating*—prefacing the question with a couple of sentences that orient the student to the relevant material.
 - *Reformulating*—(done when the initial answer is incorrect). Gradually making the questions more specific (and therefore simpler) to assist the student in focusing on the relevant material and providing the correct answer (Cazden, 1986; French & MacLure, 1981).
4. "Asking questions that help the students provide the expected answers has three important functions:
 - Enabling the lesson to proceed as planned.
 - Helping students learn how to accomplish an academic task.
 - Helping teachers assess learning" (Cazden, 1986, p. 441).
 5. It has been found that the questioning behavior of preservice, as well as inservice teachers, can be changed through a relatively brief training program. The changes in questioning behavior include amounts of higher and lower order questions, wait time, and signalling for responses. The use of demonstration in this training is very important, as is the use of microteaching with videotaping and feedback (Crain, 1970; Downs, 1972; Merrell, 1973; D. B. Richards, 1981; M. D. Richards, 1981; Wright, 1979, Yeotis, 1978).

The use of questioning is most often associated with classroom settings such as general music or music theory. Questioning can and should be used in the large group rehearsal. Questions may be addressed to an individual, section, or the entire group. Obviously, rules for answering questions need to be established (e.g., raising of hands) in order to avoid disruptive behavior. Examples of questions that might be asked in a rehearsal include: "Who remembers the name of this section of the piece?" "Alto, what key are we in?" "Who can tell me how to count the rhythm at letter H?"

Types of Questions

1. Questions are usually classified as higher-order or lower-order, or open or closed. Lower-order or closed questions are factual or recall questions. Higher-order or open questions require the student to synthesize, analyze, or apply material. Bloom's taxonomy for the cognitive domain is frequently used to categorize teacher questions. In determining which level of question to use, one must consider the context, the placement of the question in the lesson, the readiness of the students, and the follow-up that will take place.
2. The educational benefits of asking higher-order questions has been validated (Redfield &

Rousseau, 1981). It is interesting to note, however, that a predominance of lower-order questions is associated with high achievement gains, even on items dealing with higher-order content (Clark et al., 1979).

3. Although teachers are encouraged to ask higher-order questions, they seldom demonstrate how to answer these types of questions (nor are they taught how to provide this demonstration). It is important for the teacher to be able to demonstrate how to appropriately answer both higher- and lower-order questions (Rosenshine & Stevens, 1986).

How Many Questions Should Be Asked?

1. Effective teachers ask more questions than less successful teachers do (Coker, Lorentz, & Coker, 1980; Soar, 1973; Stallings, Gory, Fairweather, & Needles, 1977; Stallings, Needles, & Stayrook, 1979).
2. Researchers have found that it is more beneficial to ask one question at a time instead of a series of two or more questions (Nuthall & Church, 1973; Wright & Nuthall, 1970).
3. Effective teachers ask fewer questions that yield failures to respond or incorrect answers. This is probably due to selecting the appropriate level and wording of the question, as well as the clarity of instruction. When errors or response failures do occur, these teachers are twice as likely to give process feedback (explain the steps involved in developing the answer) as they are to merely supply the correct answer (Good & Grouws, 1977).

Wait Time

A common concern of teachers is how long to wait for a student to respond to a question. Sometimes a few seconds can seem like an eternity when waiting for a student to respond. It is important to be patient and wait, since studies have shown that the opportunity to respond and a certain length of wait time have been linked to higher student achievement.

A teacher should wait approximately 3 seconds before asking a student to respond to a question. The 3-second wait time has been linked with higher student achievement (Brophy & Good, 1986). Obviously, a higher-order question will require a slightly longer wait time than will a lower-order question.

Guided Practice

Guided practice is a term used to describe student practice in the classroom that is guided by the teacher. This is a common practice in a variety of subject areas and with various class sizes.

1. The amount of time spent in presenting information, and student practice (both individual and guided), will vary with the age and maturity of the students and the difficulty of the material. It is important to assess (either formally or informally) the students' baseline knowledge

and skills to assure the selection of appropriate material.

2. Purpose of guided practice:
 - To guide initial practice.
 - To correct errors.
 - To reteach material if necessary.
 - To provide sufficient practice so that students can ultimately work independently (Rosenshine & Stevens, 1986, p. 382).
3. Principles for using guided student practice:
 - Ask a large number of questions.
 - Guide students in practicing the new material by initially using prompts to lead students to the response, then reduce the number of prompts when students respond correctly.
 - Check for student understanding.
 - Provide feedback.
 - Correct errors.
 - Reteach when necessary.
 - Provide a large number of successful repetitions (Rosenshine & Stevens, 1986, p. 382).
4. How to reduce student error during practice:
 - Proceed in small steps, providing practice before the next level.
 - Provide explicit demonstration when possible.
 - Intersperse demonstration with questions to maintain student attention and to check for student understanding.
 - With especially confusing material, provide precorrections (advise students in advance about particularly confusing areas).
 - Reteach material when necessary (Rosenshine & Stevens, 1986, p. 383).

There are a variety of ways to check for student understanding in a music setting, including performance, written work, and oral questioning.

Checking for Student Understanding

Checking for student understanding is a critical aspect of guided practice. Student responses help the teacher determine the next logical step in the teaching sequence. If students are having difficulty, the teacher may need to reteach the material or provide additional practice, perhaps with more prompts. The teacher should also be willing to examine the clarity of his or her presentation to be sure that student misunderstandings are not a result of unclear instructions. There are a variety of ways to check for student understanding in a music setting, including performance, written work, and oral questioning. Following are some guidelines for using questioning to check for student understanding:

- Prepare many oral questions.
- Call on students who don't volunteer as well as those who do.

- Check for understanding. Do not simply assume that if there are no questions, the students understand the material.
- Have students summarize material in their own words (Rosenshine & Stevens, 1986).

Following Instructions

Some research has been done on how well students follow instructions. Reading in this area may help the teacher to know how complex to make his or her instructions. Attention should be given to the number of behaviors required to carry out the instruction and the number of instructions given at once.

1. Attending to students when they follow an instruction increases their instruction-following, or attentive, behavior (Schutte & Hopkins, 1970).
2. There is a significant increase in children's ability to process increasingly complex directions, with performance improving steadily from kindergarten through Grade 3, and leveling off at Grades 4 and 5 (Kaplan, 1979).

STUDENT RESPONSE

Experimenters in recent research in music education have demonstrated that providing students with opportunities to respond to teacher questions and directives seems highly important to the perception of effective classroom instruction and would seem to further engage the student in participation (Wolfe, 1989, p. 3).

1. The percentage of student responses plays an important role in learning. A high percentage of rapid, correct responses plays a role in successful learning, however, there are no guidelines as yet for the most beneficial percentage of correct answers (Anderson, Evertson, & Brophy, 1979; Brophy, 1980; Fisher et al., 1978; Samuels, 1981). Brophy (1980) recommends an 80% success rate when practicing new material, and a 95% success rate when reviewing.
2. Students should know who is expected to answer the question. Did the teacher address the question to the entire class and expect a group response, or did the teacher ask a question and want one individual to respond? This relates to the clarity of instructions and questions.
3. A technique for obtaining a high frequency of student responses in a minimum amount of time is through group choral responses. This is particularly useful when students are learning material that needs to be "overlearned" (e.g., number, facts). This technique promotes higher student engagement rates, and provides more practice as well as opportunities to respond. It is important for the teacher to use a signal so all students will respond at the same time. If a signal is not used, and students do not respond at the same time, then some students may only echo the faster students. This can result in lower student achievement gain

(Becker, 1977; Brophy & Evertson, 1976; McKenzie, 1979; Reid, 1978–82).

4. Listed below are four basic types of student responses and suggestions for attending to each:
 - Correct, quick, and firm—usually occurs in the latter stages of learning or review. The teacher should simply ask a new question, thus maintaining the momentum of the lesson. It is also suggested that the teacher make use of short statements of reinforcement (e.g., “correct” or “that’s right”) that do not disturb the momentum of the lesson.
 - Correct, but hesitant—occurs during the initial stages of learning. Researchers suggest that the teacher provide short statements of feedback such as “right” or “good.” The teacher should also provide moderate amounts of process feedback, re-explaining the steps used to arrive at the correct answer (Anderson, Evertson, & Brophy, 1979; Good & Grouws, 1979).
 - Incorrect, but careless—when this occurs during drill, review, or reading, the teacher should simply correct the student and move on.
 - Incorrect due to lack of knowledge of the facts or the process—usually occurs during the initial stages of learning new material. The teacher has two options: (1) provide students with the correct answer, or (2) reteach the material to the students who do not understand (Rosenshine & Stevens, 1986, p. 385).

TEACHER FEEDBACK Approval/Disapproval

Teachers have control over many consequences in the classroom, both positive and negative. On observing a behavior at any given moment (social or academic), a teacher may approve the behavior, disapprove the behavior, or ignore the behavior.

There are many studies dealing with teacher feedback to student behavior. Below are some basic principles regarding feedback:

1. Those behaviors that meet with pleasant consequences (approval) will tend to be repeated.
2. Those behaviors that meet with unpleasant consequences (disapproval) will tend not to be repeated.
3. Those behaviors that are ignored may or may not be repeated depending on what is reinforcing the behavior. If attention is the reinforcer, then ignoring should eliminate that behavior. If the behavior is reinforced by something else, then ignoring will not eliminate the behavior.
4. Teachers should not approve of inappropriate behavior. If students receive positive attention following inappropriate behavior, then they will continue to exhibit that behavior.
5. Teachers should disapprove of inappropriate behavior only when the approach proves to decrease the behavior effectively and does not produce a worse byproduct.

6. Teachers should seek to achieve an 80% approval rate for behaviors occurring in their classrooms.
7. The statement of praise should follow the desired behavior as closely as possible.
8. Statements of praise that are specific (i.e., include or describe the appropriate behavior) are more effective than general praise in increasing student learning. (e.g., “Your tone quality was better because of your breath support” versus “That’s better.”)
9. The following five categories of reinforcers may be useful in selecting forms of approval and disapproval:
 - (a) words (spoken and written),
 - (b) closeness (touching, proximity),
 - (c) bodily expressions (e.g., face, hands),
 - (d) activities, and
 - (e) things.

These reinforcers may be classified into two groups: lower-order and higher-order reinforcers. Lower-order reinforcers, such as activities or things, are more concrete. Higher-order reinforcers, such as words, physical closeness, or bodily expressions, are more subtle or abstract. What reinforcers are used will depend upon the age and maturity level of the student involved. The teacher’s goal should be to assist the student in moving from lower- to higher-order reinforcers. This will help the student to learn to behave and achieve for more intrinsic reasons, and to become more self-motivated. Teachers must select reinforcers (forms of approval) that are functional both in terms of affecting behaviors in the short run, but also in terms of their effects on the long-term goals of education (Madsen & Madsen, 1981).

Teacher Reaction to Student Response

Teacher reactions to student responses that communicate enthusiasm for content and support of the students are more motivating than matter of fact statements (Hughes, 1973; Nuthall & Church, 1973; Wright & Nuthall, 1970).

Teacher Reaction to Incorrect Student Response

1. The teacher should indicate that the response is not correct. Almost always, the negative feedback should be simple negation rather than personal criticism. Criticism may, however, be necessary and appropriate for students who are continually inattentive or unprepared (Brophy & Good, 1986).
2. After indicating that the answer was incorrect the teacher may:
 - rephrase the question or ask simpler questions (the teacher should avoid pressing the student to respond in situations where the question cannot be broken down or the student is too confused or anxious to benefit from further questioning).
 - give hints or prompts (especially when contacts were brief in duration).
 - reteach the material to the student(s) who made the error. This is particularly

appropriate during the initial stages of learning new material. The feasibility of this approach depends, of course, on the size and structure of the class. When students are in ability groups it is often beneficial to reteach the entire group if one or more students are making errors. In a large group, the individual student may have to do seatwork, or perhaps receive peer tutoring in class, or help from the teacher outside of class.

- provide not only the correct answer, but also an explanation for the answer (Anderson, Evertson, & Brophy, 1979; Becker, 1977; Brophy & Good, 1986; Rosenshine & Stevens, 1986; Good & Grouws, 1979; Reid, 1980; Stallings & Kaskowitz, 1974).

Teacher Reaction to No Response

Teachers should train their students to respond overtly to questions. If the student does not know the answer, he or she should respond with "I don't know." If waiting has not produced an overt response, the teacher should probe ("Do you know?"), elicit an overt response, and then follow up by giving feedback, supplying the answer, or calling on someone else (Brophy & Good, 1986).

USING RESEARCH

As more education research becomes available for review, classroom music teachers stand to benefit from the results. The following list of resources may serve as a useful bibliography for those wishing to pursue some of the issues discussed in this article.

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