

The Research Literature: Academic Feedback

The term academic feedback refers to those procedures a teacher uses to provide students with information on the accuracy of their oral or written responses to academic questions. Academic feedback is "strongly and consistently related to student achievement" (Filby & Cahen, 1985). The importance of academic feedback has been stressed by researchers studying effective teachers at all grade levels in all basic skills areas. Questions are one of the major vehicles for academic feedback. Brophy and Good (1986) reported that one of the differences between effective and less effective teachers was the frequency of questions. The effective teachers asked approximately three times as many questions as the less effective teachers.

In discussing the findings from a major study, the researchers (Fisher et al., 1980) made the following observation on the nature and importance of academic feedback:

Many different specific behaviors fulfilled this function, including answering questions in class, checking papers, using programmed texts, and listening to oral reading. The percentage of instructional time during which the student received feedback was positively related to student engagement rate and to achievement [p. 20].

In investigating the behavior of effective elementary teachers, Stallings, Cory, Fairweather, and Needels (1977) noted that teachers of classes that made the greatest gains gave more instruction, asked more academic questions, and provided more feedback. In a study of junior high and high school teachers, Stallings, Cory, Fairweather, and Needels (1978) reported that the effective teachers provided more opportunities for academic responses, praised student successes, and provided support and corrective feedback when students did not respond correctly. In contrast, the less successful teachers spent less time interacting with students and more time in organizing rather than instructing.

In summarizing the findings from a series of studies, Brophy and Good (1986) made the following observation, stressing the importance of a strong academic orientation in interactions with students:

. . . teachers who produced the most achievement were businesslike and task oriented. They enjoyed working with students but interacted with them primarily within a teacher-student relationship. They operated their classrooms as learning environments, spending most time on academic activities. Teachers who produced the least achievement usually showed either of two contrasting orientations. One was a heavily affective approach in which the teachers were more concerned with personal relationships and affective objectives. The other (fortunately, least common) pattern was seen in disillusioned or bitter teachers who disliked their students and concentrated on authority and discipline in their interviews [p. 341].

Academic Feedback Concepts

Much of the research on academic feedback and effective teachers has stressed the importance of (a) feedback opportunities, (b) question types, (c) delivering the questions, and (d) reacting to student responses.

Feedback Opportunities.

If students are to receive extensive and appropriate academic feedback, a basic prerequisite is a strong emphasis on increasing the amount of academic instruction. It is possible for students to receive a large amount of feedback unrelated to instruction in a specific skill. Feedback on student misbehavior and feedback on nonacademic tasks are not positively correlated with increased achievement. Indeed, extensive feedback related to misconduct is usually correlated negatively with instructional effectiveness. Brophy and Good (1986) reported that a large amount of criticism for misconduct "almost invariably correlates negatively with achievement, and indicates classroom organization and management difficulties" (p. 338).

If the teacher is to create opportunities for academic feedback, consideration must be given to both increasing the amount of instructional time and structuring the academic instruction to facilitate academic feedback opportunities. If the academic instruction is presented in rather large steps and loosely supervised, the opportunity for academic feedback is limited. If the teacher presents information in small steps and intensively supervises the students, the opportunities for academic feedback are increased. Small steps mean that students are generating more academic responses per lesson. Intense supervision is important; teachers cannot provide feedback if they do not know what students are doing or where the students should be going academically.

In analyzing the practices of more effective teachers, Good, Grouws, and Ebneier (1983) noted that they were far more likely to assign homework and far more likely to provide feedback on the homework. In discussing the attitudinal reactions of students, the researchers reported, "It would seem that the emphasis upon variables, like review and homework (when done in the context of meaningful and successful practice), does not necessarily lower attitudes, as it is sometimes argued" (p. 77).

In summary, because academic feedback is so closely integrated with other time management and instructional presentation skills, a decision to increase the amount of academic feedback could involve a wide range of changes. To increase the quality and quantity of academic feedback, the teacher must first create an environment in which academic feedback is an integral and important part of the teaching process. When academic feedback is associated with such important teaching functions as daily reviewing, guided practice, and reteaching, it is not just feedback to the student, but for the teacher as well. Student performance is a measure of instructional effectiveness, and higher error rates should signal the teacher to modify instructional procedures (see Figure 1).

Feedback for Both Student and Teacher

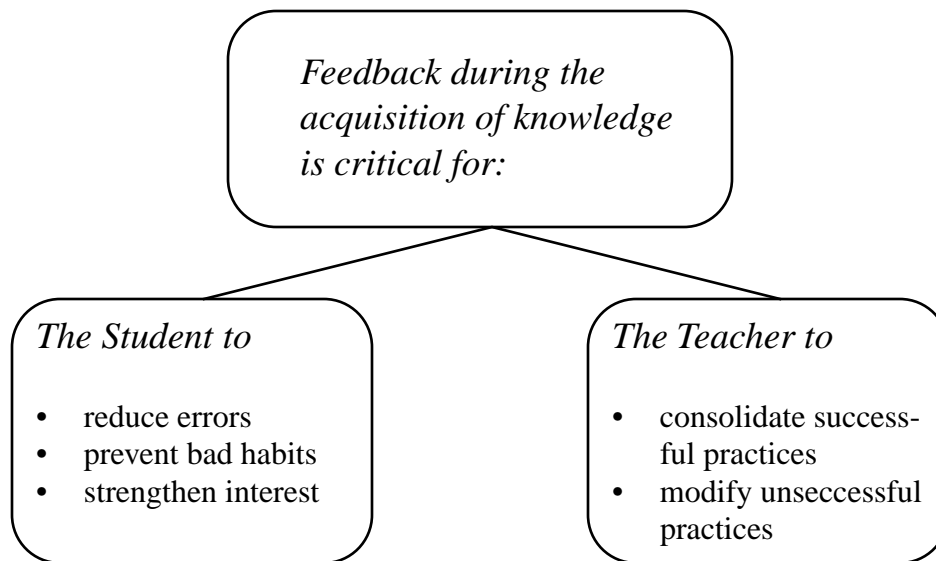


Figure 1

Question Types.

A teacher's questions can be varied by such practices as changing the difficulty level, changing the cognitive level, and varying the clarity.

Question difficulty. There is a common trend in the level of difficulty of the question asked by effective teachers. Success rates tend to be in the 80 to 90 percent range for the more effective teachers and in the 60 to 70 percent range for the less successful teachers (Brophy & Good, 1986). Rosenshine and Stevens (1986) summed up the issue of question difficulty with the recommendation quoted below:

The frequency of teacher questions is not the only important factor, because the percentage of correct student responses also plays a role in successful learning. The importance of a high percentage of rapid ("automatic"), correct responses is a relatively new idea resulting from recent research. Although there are not scientific guidelines as to exactly what the percentage of correct answers should be, a reasonable recommendation at the present time is an 80 percent success rate when practicing new material. When reviewing, the success rate should be very high, perhaps 90 percent, and the student responses should be rapid, smooth, and confident [p. 383].

Cognitive level.

The cognitive level of a question is usually treated separately from the difficulty level. It was once assumed that instruction would be more effective if the teacher's questions required the student to use more complex mental processes, such as inductive reasoning.

Low-level questions are typically "What?", "Where?", and "When?" questions. An example of a low-level question would be "What is the first step in adding decimal numbers?" High-level questions are typically "Why?" and "How" questions. An example of a high-level question would be "How do we find the sale price if we know the discount?"

Although the research on cognitive levels contains inconsistencies, some conclusions can be stated with a reasonable level of confidence. Brophy and Good (1986) have listed the following observations, based on their review of the research.

The data do refute the simplistic (but frequently assumed) notion that higher-level questions are categorically better than lower-level questions. Several studies indicate that lower-level questions facilitate learning, even learning of higher-level objectives. Furthermore, even when the frequency of higher-level questions correlates positively with achievement, the absolute numbers on which these correlations are based typically show that only about 25 percent of the questions asked were classified as higher level. Thus, in general, we should expect teachers to ask more lower-level than higher-level questions, even when dealing with higher-level content and seeking to promote higher-level objectives [p. 363].

Question clarity.

Brophy and Good (1986) wrote, "In general, clarity of presentation is one of the more consistent correlates of achievement" (p. 355). Clarity can be reduced if the teacher

3. Uses vague or ambiguous questions.

4. Uses disjointed questions, particularly ones that are interrupted by inserting additional background information.

5. Speaks too quietly or incoherently, or addresses the blackboard rather than the students.

6. Asks two or more questions without stopping to get an answer to the first one.

7. Fails to get student attention before posing the question.

Delivering the Questions.

Questions should facilitate student engagement in academic learning tasks. Questions should also serve to provide feedback to the teacher on the effectiveness of the instruction. A few well-placed questions will tell the teacher if reteaching is necessary. Teacher questions can be directed to groups or individuals.

In their summary of the research on effective questioning, Rosenshine and Stevens (1986) noted, "One technique for obtaining a high frequency of responses in a minimum amount of time is through group choral responses" (p. 384). For choral responding to be effective, the teacher has to use some type of signal to ensure that students respond at the same time. A consistent and

briskly paced presentation style is a way of signaling students. Rosenshine and Stevens (1986) further noted, "Choral responses can be an effective way to conduct guided practice" (p. 385).

There appears to be considerable support for a questioning strategy that uses a combination of choral and individual responding. The choral responses are stressed in the earlier stages of guided practice, and individual responses are stressed in the latter stages, when the success rate is higher.

When using individual questions, care must be taken to pose the question before selecting a student. Care should also be taken to ensure that all students are equally involved in the questions. It is very common for a teacher to give the majority of questions to those few students who are eager to respond.

Reactions to Student Responses.

Rosenshine and Stevens (1986) have noted that most students' responses to questions can be grouped in four categories:

1. Correct, quick, and firm
2. Correct, but hesitant
3. Incorrect, but a careless error
4. Incorrect, suggesting lack of knowledge of facts or a process

Correct and firm responses

When the student answer is correct and confident, the instructor should not break the momentum with a lengthy statement or extensive praise. A quick "Right," and the presentation of the next question should follow a correct and highly confident student response.

Correct and hesitant responses

If the student is in the initial stages of learning and gives a correct but hesitant response, the teacher should take the time to praise the student for the correct response and review the reasons for the correct answer or the steps associated with finding the correct answer. This quick review will be particularly important if the teacher feels that there are other class members who are also in the initial stages of learning the skill.

Incorrect and careless responses

When the student makes a careless error, the teacher should respond with a quick and simple correction and allow the student to provide the correct answer. The student should not be berated, but the teacher's feedback should make it clear to the student and the whole class what the correct answer should be. The feedback need not provide the reasons why the answer is correct.

Incorrect due to lack of knowledge

If the student's response indicates that the student lacks knowledge of the facts or procedures necessary to arrive at the correct answer, Rosenshine and Stevens (1986) suggested two options:

1. Provide the students with prompts or hints to lead them to the correct answer.
2. Reteach the material to the students who do not understand [p. 385].

They further noted: "Both of these approaches to error correction—that is, prompting and reteaching—have been used successfully in experimental research and in effective instructional programs" (p. 385).

Reteaching and prompting in response to a student's demonstrated lack of knowledge is sometimes termed a correction procedure. The quality of a teacher's correction procedures reflects the quality of all procedures used to present new content. If the teacher is not providing students with elegant rules and practical problem-solving strategies, such rules and strategies will not be available to use in correction procedures for specific errors. Indicators that a teacher may not be providing students with elegant rules and practical problem-solving strategies would include the use of correction procedures characterized by inconsistent responses to different students for the same error, long and convoluted explanations, or explanations that add nothing but tension (e.g., "You wouldn't give a stupid answer if you were thinking").

A correction procedure should, where possible, finish with the student supplying the correct answer. Such a procedure should leave the student with dignity intact.

Questions, dignity, and momentum

As the more effective teachers present new content, they use briskly paced, question-packed, attention-demanding presentations, with a student success rate of 80 percent or better on written problems and oral questions. To ensure continued student involvement, there must be a large number of questions and high rate of success. To preserve both the instructional momentum and individual student dignity, a teacher needs a systematic set of strategies for preventing and dealing with student errors in responding to questions. The previously listed suggestions for responding to different correct and incorrect student responses should be supplemented with a range of strategies to prevent errors, maintain momentum, and protect student dignity.

One of the best error-prevention procedures involves careful rehearsal of questions with choral responses and targeted individual questions. Choral responses are an excellent vehicle for questions and feedback without threatening individual egos. If the choral responses are followed by individual questions, to higher-performing students first and then to lower-performing students, the probability of success will be higher.

If a student makes an error, quickly rephrase the question with additional prompting and a reduced level of difficulty. Do not prolong this correction process, or you will lose instructional momentum and add to student embarrassment. You should plan to review the question later on in the lesson, also to return to that student with a question that he or she can answer (see Figure 2).

Questions and Errors

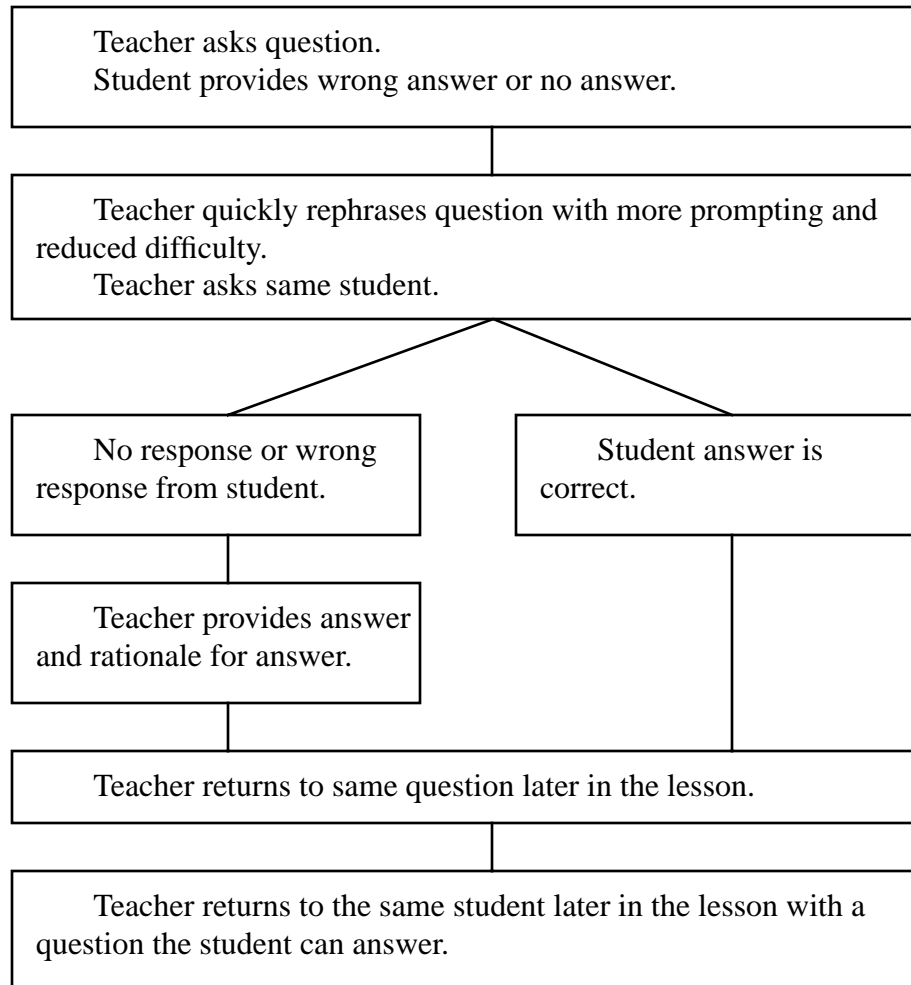


Figure 2

Psychological climates for errors

One of the more difficult aspects of giving feedback to students who have made errors relates to the importance of creating a classroom climate where errors are a natural part of the learning process rather than "sins" to be taken personally by teacher or student. Some teachers are reluctant to give feedback on the academic errors for fear of "hurting the student's feelings." Such an approach indicates that the teacher has not created a healthy climate for dealing with errors.

Some teachers will help create a healthy climate by deliberately making errors themselves so that they can model appropriate reactions and demonstrate that there is nothing morally wrong with errors. These deliberate errors are usually made when students have demonstrated high levels of mastery. At such time, the probability of students detecting the error is high, and the risk of student confusion is low. Few things increase student interest more than the possibility of detecting a teacher error.

The teacher who reacts defensively to a student's identification of a teacher error creates a punishing environment for feedback. The teacher who praises a student for detecting a teacher error creates a healthy climate for feedback. Nothing is more destructive to group activities than the presence of individuals who react defensively to feedback. The teacher who models appropriate reactions to feedback from students will be teaching an invaluable social survival skill of life-long value.

Regardless of what procedures are used, teachers should systematically work for a psychological climate in which feedback to students and from students can be given directly and honestly without the risk of "hurt feelings."

Academic Feedback and Independent Practice

Fisher et al. (1980) noted that a high frequency of "explanation specifically in response to student need" was negatively related to student achievement. They reported that the presence of extensive individual feedback during seatwork may be an indicator that the instruction has structural deficits. This would certainly be the case if students are prematurely placed in independent practice. Fisher et al. (1980) made the following observation with regard to a high frequency of explanation in response to student need during seatwork: "Frequent need for explanation may be a signal that changes are needed in the student's instructional program, either in the difficulty of the assignments or in preparation for seatwork" (p. 21).

A Dilemma.

Filby and Cahen (1985) noted that feedback is "one aspect of a basic teacher's dilemma." They described the dilemma as follows:

A teacher can maximize instructional contact by having whole-class instruction. However, this means that the same content must be taught to all students at the same time. If the class is heterogeneous in terms of skill levels or instructional needs, whole-class instruction may mean inappropriate instructional content for some students. . . . In pursuit of appropriate instruction to meet individual needs, a teacher may establish groups in the classroom. Grouping immediately increases the complexity of the management tasks and is likely to decrease student attention [p. 213].

The fact that whole-class instruction tends to be more highly correlated with student achievement than the more individualized settings is testimony to the importance of the cycle of presentation, monitoring, and feedback—as well as the fact that it is facilitated in group settings.

If a teacher understands that some instructional functions are more easily supported in group and individual settings, serious management errors can be prevented. A serious error occurs when a teacher fails to exploit the strength of a setting or fails to minimize the weakness of a setting. For example, the teacher who talks excessively and fails to question extensively during whole-class instruction does not take advantage of the opportunity for extensive feedback present in the whole-class setting. The teacher that has all students working on exactly the same task during individual seatwork (e.g., independent practice on the same problem) is not using the strength of that setting and adjusting learning tasks to individual needs. In the latter case, the students lose in two ways, because the tasks may be inappropriate and the feedback limited. The teacher, who initiates small-group instruction without the extensive preparation and clear instructions needed to reduce management problems, will negate strengths of the small-group setting (see Table 1).

Table 2: Appropriate Tasks and Feedback: A Dilemma

Instructional Setting	Feedback Potential	Management	Appropriateness of Tasks
Whole Class	Extensive opportunities	Easiest	Difficult for content Easy for experience
Small Group	Moderate opportunities	Difficult	Moderate difficulties for content Moderate difficulties for experience
Individual Seatwork	Limited opportunities	Difficult to do right	Easy for content Difficult for experience

The whole-class setting is a difficult one if the teacher wishes to vary the task content for different learners. However, it is well suited to providing the needed range of student learning experiences—new content presentation, guided practice, and independent practice. In individual settings, the reverse is true. It is easier to vary the content of learning tasks but very difficult to provide the needed range of learning experiences. Too often the student will not receive the needed guided practice and feedback because of the management problems associated with the individual instructional setting. For a learning task to be appropriate, both the content and the learning experience have to be appropriate. For example, a learning task might consist of guided practice (the learning experience) on multiplication problems with one-place decimals and two-digit numbers (the task content).

One of the advantages of using group instruction first and finishing a class with individual seatwork (as shown in Table 1 of Teaching Functions) is the teacher's increased capacity to monitor students during the first part of the lesson to determine which ones should be receiving guided practice on problem areas during the individual seatwork. The most effective teachers using whole-class instruction will maximize opportunities for feedback and conduct timely, well-targeted reteaching to reduce student errors and minimize the individual differences in knowledge deficits.

Practice and Feedback.

Berliner and Fisher (1985) stated that "Practice, by itself, is not always the best way to learn a complex skill" (p. 336). This will certainly apply if students receive extensive unsuccessful independent practice. If only extensive practice were needed, then college faculty would have more legible handwriting than upper elementary students. Every master teacher of the early elementary grades is aware that a small amount of carefully supervised handwriting practice, with extensive feedback on all the complex processes involved, is far more effective than large amounts of loosely supervised practice. Loosely supervised handwriting practice in the early grades will generate poor habits that will handicap individuals for the rest of their lives.

Some third-grade teachers can teach time telling to one-minute intervals in two weeks; others take all year. One of the key differences lies in the intensity and quality of the practice and associated feedback. The master teacher will select one method (e.g., the 2:45 method) and teach it to mastery. The teacher may even contact parents to ensure that students receive no conflicting feedback (e.g., by using the 15 till 3:00 method) during the critical skill-acquisition period.

In the early stages of teaching word problems, the student will need feedback on the accuracy of the answer and feedback on the quality of the problem-solving strategies used to arrive at the answer. The more complex the task and the earlier the stage of knowledge acquisition, the more sensitive, targeted, and intensive the feedback must be. Proficiency in this complex aspect of the teaching craft has important implications for increased attitudinal and achievement outcomes in students and reduced remedial workloads for the teacher.

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Expectations, Participation, and Feedback

The use of effective academic feedback procedures helps create high expectations for all students. It has been noted that "Teachers who set and communicate high expectations to all their students obtain greater academic performance than teachers who set low expectations" (U.S. Department of Education, 1986, p. 32).

Indicators that low expectations have been established for certain students include:

1. Students are seated farther away from the teacher.
2. Students receive less direct instruction.
3. Students have fewer opportunities to learn new material.
4. Students are asked to do less work.
5. Teachers call on these students less often.

The academic feedback procedures are an important component in an integrated set of procedures. The level of implementation of the feedback procedures reflects the degree to which a teacher has mastered the total set of integrated procedures and the degree to which the teacher is committed to meeting the needs of all students.

Knowledge Quiz: Academic Feedback

Multiple Choice

Question 1: Research has shown that effective teachers

- 1. ask as many questions as less effective teachers.
- 2. ask 10 percent more questions than less effective teachers.
- 3. ask 150 percent more questions than less effective teachers.
- 4. ask 300 percent more questions than less effective teachers.

Question 2: A firm, correct response by a student should be followed by

- 1. extensive praise and quick movement to the next question.
- 2. prompting or reteaching.
- 3. a short confirmation and quick movement to the next question.
- 4. a praise statement and quick review of the reasons why the answer was correct.

Question 3: A hesitant, correct response by a student should be followed by

- 1. extensive praise and quick movement to the next question.
- 2. prompting and reteaching.
- 3. a short praise statement and quick movement to the next question.
- 4. a praise statement and a quick review of the reasons the answer was correct.

Question 4: If using a combination of choral and individual responses,

- 1. stress individual responses in the initial stages of learning.
- 2. stress choral responses in the initial stages of learning.
- 3. use choral responses only with independent practice.
- 4. use choral responses only with guided practice.

Question 5: For questions to be effective,

- 1. all questions should be "high-level" questions.
- 2. the majority of the questions should be "high-level" questions.
- 3. "high-level" questions can be in the minority.
- 4. "low-level" questions can be in the minority.

Question 6: Academic feedback refers to

- 1. questions only.
- 2. teachers' oral feedback on academic issues.
- 3. academic tests.

___ 4. a range of written and oral interactions between teacher and student.

Question 7: An effective correction procedure is often characterized by

- ___ 1. reteaching and prompting.
- ___ 2. a teacher response to student misbehavior.
- ___ 3. teaching students to correct other students.
- ___ 4. inconsistent responses to different students for the same error.

Question 8: Students seated farther away and receiving less direct instruction often

- ___ 1. are the most independent students.
- ___ 2. are the most successful students.
- ___ 3. have low teacher expectations.
- ___ 4. have high teacher expectations.

Question 9. The use of elegant rules and practical problem-solving strategies facilitates

- ___ 1. effective correction procedures.
- ___ 2. students' errors.
- ___ 3. confusion in low achievers.
- ___ 4. long explanations.

Question 10: "What," "where," and "when" questions would be characterized as

- ___ 1. high-level questions.
- ___ 2. low-level questions.
- ___ 3. difficult questions.
- ___ 4. easy questions.

Fill in the Blanks

Question 11:

A teacher asks a question. The student response is incorrect. The teacher rephrases the question and simplifies it. The student response is incorrect. What does the teacher do next?

What else should the teacher do before the end of the lesson?

6.

7.

Question 12:

With individual seatwork, it is reasonably easy to vary the _____ for each student, but more difficult to provide the needed range of _____, such as new content presentation and guided practice.

Question 13:

In the whole-class setting, it is easier to provide the range of _____, but more difficult to vary the _____.

Question 14:

Management is _____ in small-group settings and _____ in whole-class settings.

Question 15:

Feedback opportunities are often _____ in individual seatwork.

Practical Suggestions: Academic Feedback

The practical suggestions in this section represent a collection of ideas based on classroom observations, experience, and a review of the effective teaching literature and teacher journals. Feel free to incorporate any of the suggestions that work for you.

Question Types

Difficulty Level of Questions.

8. Check to see that at least 75 percent of the questions you ask elicit correct responses.

9. Check to see that the other 25 percent of the questions you ask elicit some type of response (incorrect or incomplete). Be alert to situations where students fail to respond at all.

10. Ask more low-order questions (Who, What, When, Where). Lower-order questions facilitate learning, even learning of higher-level objectives (Why).

11. Concentrate on academic content; don't overdo questions about personal experiences.

12. Design recitation questions to help students encode and remember recently presented information. Design discussion questions to induce students to process information at higher cognitive levels (application, analysis, synthesis, evaluation). Design review and drill questions to prepare students for tests or to verify that they have mastered the material.

Clarity of Questions.

1. Ask questions one at a time.

2. Check to make certain that the students understand the questions you ask.

3. Ask a large number of questions, and keep the questions simple.

4. Ask some questions in an ordered-turn fashion. This procedure ensures that all students will have opportunities to participate, and it simplifies group management. Keep a copy of your class list handy; check off names as questions are asked of individual students. Make notes about students who need help.

5. Organize questions in a sequence that is designed to accomplish some particular instructional purpose. Questions should not be asked in a haphazard manner.

Delivering the Questions

Wait for Students to Answer.

1. Be sensitive to the length of time you wait for a response from a student after asking a question. The length of the time you should wait depends on the difficulty of the question being asked.

2. For a drill-and-practice type of question, the response time should be one second or less.

3. For a question at a higher cognitive level, you may need to wait three to five seconds in order to give the students time to process the question and think about answering it.

4. Make sure that your questions have a maximum impact in terms of stimulating the students to think about the content. Address your questions to the class as a whole; that is, do not single out one individual.

Guidelines for Using Criticism.

1. Use correction, not criticism.

2. When correcting, focus on academic content; don't confront the student personally.

3. Make sure that only about 1 percent of your feedback is criticism.

4. Specify the desired alternative behavior. Tell students what you want them to do.

Increasing Praise.

1. Everyone knows that a little praise goes a long way in any classroom, but "a little praise" needs to be more than the same few phrases repeated over and over, ad nauseam. Your students need more than the traditional "Good," "Very good," and "Fine" if encouragement is in the cards. Here are some additional possibilities:

That's very nice

Wow!

I like the way you're working

That's a big improvement

Keep it up

Good job

What neat work
This kind of work pleases me very much
That's right! Good for you
For sure
That's amazing
Keep up the good work
Much better
It's a pleasure to teach when you work like this
You really outdid yourself today
Congratulations. You earned 100 percent today
Terrific
Beautiful
I bet your parents would be proud to see the job you did on this
Excellent work
Very good. Why don't you show the class?
Marvelous
Groovy
Absolutely right
That looks like it's going to be a great report
You're on the right track now
John is in line
Dickie got right down to work
It looks like you put a lot of work into this
Very interesting
That's an interesting way of looking at it
That's the right answer
Exactly right
Superior work
That's a very good observation
Thanks for raising your hand, Charles. What is it?
Out of sight
Far out
That's coming along nicely
I'm very proud of the way you worked today
I appreciate your help
Thank you for (sitting down, being quiet, getting right to work, etc.)
Rad
Sharp
I like the way Tom is working
My goodness, how impressive
That's "A" work
Mary is waiting quietly
Ann is paying attention
That's clever
Very creative
Good thinking

Now you're figured it out
Clifford has it
Now you've got the hang of it
Super
That's a good point
That's an interesting point of view
You're really concentrating
You've got it now
Nice going
You make it look easy
I like the way Bill (the class) has settled down

Reactions to Student Responses.

Feedback for Quick, Firm, Correct Responses.

1. Recognize a correct response with a brief remark such as "Yes," "That's right," or "Correct."

2. Maintain the momentum of practice sessions. Move on to the next question or flashcard after a correct answer.

3. Don't elaborate on correct responses.

4. Repeat answers as a form of acknowledgment.

5. Provide quick, firm, correct responses during the later stages of learning or in a review.

Feedback for Correct but Hesitant Responses.

1. Provide short statements of feedback, such as "Correct," or "Very good," during initial stages of learning (i.e., guided practice).

2. Explain the steps a student used to arrive at the correct answer. Doing so should help other students understand the answer as well.

3. Tailor the instructional feedback that you provide to the type of oral response made by the student.

Feedback for Incorrect Responses Due to Lack of Knowledge.

1. Rephrase the question. Provide clues to the answer. Give the student more time to figure out the answer.

2. Help the student figure out the answer rather than calling on another student to answer the question.

3. Don't merely say, "No" or "That's wrong." Explain why a student's answer is wrong. Help students see what step in the process they missed. Point out the steps they did correctly.

4. Don't give the correct answer immediately.

Feedback for Failing to Respond Due to Lack of Knowledge.

1. Train students to use a phrase such as "I don't know," rather than not responding at all.

2. After waiting for a short period of time, ask the student, "Do you know?" This should serve as a prompt for using the statement, "I don't know."

3. If students frequently fail to respond, it may be necessary to reteach a particular concept.

4. Use different-colored ink pens to record grades in your gradebook. By doing so, you can quickly see how well the group or individual student is doing.

5. Keep contacts brief—thirty seconds or less. Contacts of longer duration are detrimental, because the teacher loses the attention of the rest of the group.

6. Provide remedial instruction during recess, lunch, art, music, physical education, or before or after school.

7. Correct errors early in instruction, because it often becomes more difficult to correct later, and it interferes with learning new information.

Self-evaluation Checklist: Academic Feedback

Rating Scale: 1 – No change 2 – Minor problems 3 – Major problems 4 – Insufficient information

<p>Skill 1. Feedback Opportunities A classroom environment has been created that provides for extensive academic interactions between teacher and students.</p>		
Evaluation Questions	Rating and Notes	
a. Have procedures been used to ensure that a large amount of time is allocated to academic instruction?		
b. Do lessons include appropriate amounts of guided practice and daily reviews?		
c. Is new material presented in small steps with large amounts of academic feedback?		
d. Depending on content, are appropriate amounts of oral and written feedback used?		

<p>Skill 2. Questioning The questions are consistent with the instructional needs.</p>		
Evaluation Questions	Rating and Notes	
a. Are student success rates appropriate for the lesson activity?		
b. Do the questions support the presentation of new content in small steps?		
c. Are questions to individuals posed before the individual is named?		
d. Do questioning procedures maintain instructional momentum?		

Skill 3. Student Responses

Individual responses, group responses, and written responses are used to ensure high levels of involvement from all students.

Evaluation Questions	Rating and Notes	
a. Is the teacher blending choral and individual responses where their use is appropriate?		
b. Are all the students being equally involved during individual questioning?		
c. When appropriate does the teacher require written responses to the most important skills?		

Skill 4. Reacting to Student Responses

Teacher reactions are consistent with student responses to questions.

Evaluation Questions	Rating and Notes	
a. Does the hesitant, correct response typically receive stronger praise and a quick review?		
b. For incorrect responses for lack of knowledge, does the teacher rephrase the question or reteach?		
c. Do correction procedures indicate the use of elegant rules and practical problem-solving strategies?		
d. Do teacher's responses to student errors indicate an atmosphere where students are not afraid to make errors?		

Skill 5. Question Clarity

Questions are clearly framed and clearly delivered.

Evaluation Questions	Rating and Notes	
a. Are questions short and precise, or rambling and disjointed?		
b. Are questions delivered clearly and audibly?		
c. Are questions clearly aligned with the content focus of the lesson?		
d. Is student attention gained before questions are posed?		

Self-improvement Plan: Academic Feedback

After completing the self-evaluation checklist (Section C) and reading through the practical suggestions (Section D), you should be prepared to develop a self-improvement plan (SIP). Please complete portion A, entitled "Academic Feedback: Goals and Objectives," on the self-improvement plan, by checking the goal(s) and objective(s) you wish to include in your plan. Also, write a brief narrative describing how you plan to address the requirements in portions B-E. Complete portion F, "Results," after you have completed your self-improvement implementation project. (See Chapter 2, Section E, for a completed self-improvement plan).

Self-improvement Plan: Academic Feedback.

Name _____ Class _____ Date _____

Goals and Objectives

1. Feedback Opportunities

- 1. In-class feedback.
 - 2. Out-of-class feedback.
 - 3. Other _____
-

2. Question Types

- 1. Difficulty levels of questions.
 - 2. Clarity of questions.
 - 3. Other _____
-

3. Deliver the Questions

- 1. Wait for students to answer.
 - 2. Guidelines for using criticism.
 - 3. Increasing praise.
 - 4. Other _____
-

4. Reactions to Student Responses

- 1. Feedback for quick, firm, correct responses.
 - 2. Feedback for correct but hesitant responses.
 - 3. Feedback for incorrect responses due to lack of knowledge.
 - 4. Feedback for failing to respond due to lack of knowledge.
 - 5. Other _____
-

Name _____ Class _____ Date _____

Practical Suggestions

Please indicate which of the practical suggestions you plan to use to meet each of the objectives. (You may include practical suggestions from other sources as well.)

Specific Procedures

Please describe the specific procedures you will use to implement the practical suggestions.

Current and Desired Performance

Please describe your current performance and desired performance in regard to each of the objectives you have selected. You may state the performance in terms of student behavior, such as percentage of engaged time.

Timelines and Change Measures

Please describe your timelines and how you will measure change in relationship to the objective(s) you have selected.

Name _____ **Class** _____ **Date** _____

Results

Upon completion of your self-improvement project, write a brief description of the results of its implementation. Attach any raw data sheets that were used to gather information and describe any changes that were made during your project.

References: Academic Feedback

- Berliner, D. C., & Fisher, C. W. (1985). One more time. In D. C. Berliner & C. W. Fisher (Eds.), *Perspectives on instructional time* (pp. 333-347). (Research on Teaching monograph series). New York: Longman.
- Brophy, J., & Good, T. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching*, 3rd ed. (pp. 328-375). . New York: Macmillan.
- Filby, N. N., & Cahen, L. S. (1985). Teacher accessibility and student attention. In C. W. Fisher & D. C. Berliner (Eds.), *Perspectives on instructional time* (pp. 203-214). (Research on Teaching monograph series.) New York: Longman.
- Fisher, C. W., Berliner, D. C., Filby, N. N., Marliave, R., Cahen, L. S., & Dishaw, M. M. (1980). Teaching behaviors, academic learning time, and student achievement: An overview. In C. Denham & A. Lieberman (Eds.), *Time to learn* (pp. 7-32). Washington, DC: U.S. Department of Education, National Institute of Education.
- Good, T. L., Grouws, D. A., & Edmeier, H. (1983). *Active mathematics teaching*. (Research on Teaching monograph series.) New York: Longman.
- Kubany, E. S. (1972, September). Sixty-five ways to say "Good for you." *Teacher*, 8-10.
- Larrivee, B. (1985). *Effective teaching for successful mainstreaming*. New York: Longman Publishing.
- Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. C. Wittrock (Ed.), *Handbook of research on teaching*, 3rd ed. (pp. 376-391). New York: Macmillan.
- Stallings, J., Cory, F., Fairweather, J., & Needels, M. (1977). *Early childhood education classroom evaluation*. Menlo Park, CA: SRI International.
- Stallings, J., Cory, R., Fairweather, J., & Needels, M. (1978). *A study of basic reading skills taught in secondary schools*. Menlo Park, CA: SRI International.
- U.S. Department of Education. (1986). *What works?* Washington, DC.: U.S. Department of Education.