

THE

TEACHING

DIMENSION

A COMPILATION OF ARTICLES BY
JOAN E. HEATON

Joan E. Heaton

Joan has been a ski instructor since 1976. She is Level II Certified by the Professional Ski Instructors of America – Eastern Division (PSIA-E). She has published many articles in PSIA journals on teaching and learning styles, feedback, and class management. Her first article, "How Do I Teach? That is the Question!" written in 1979, proved to be her benchmark article that brought national attention to the 'teaching aspect' of ski teaching. In her work that resulted from the overwhelming response to this article, Joan became a pioneer in the educational application of teaching methods in ski teaching. She has been the keynote speaker at many of PSIA's training seminars, namely the PSIA National Academy in Snowbird, Utah. During the 1980's, Joan traveled to ski schools across the country to conduct both indoor and on-snow presentations about the practical application of the 'Styles of Teaching' in ski teaching. In 1983 Joan's book, *A National Survey On Teacher Behavior in Ski Teaching*, was published by PSIA.



In 1995, Joan retired from the Teacher Education Division of the Health & Physical Education Department of the City University of New York, The City College. During her tenure there, Joan re-wrote the Professional Preparation of Teachers Elementary School Physical Education Curriculum to focus more on the individualized approach of Movement Education.

Joan is presently working at the Windham Mountain Snow Sports School as a Teacher Trainer and Education Consultant. She has served as PSIA-E's Education Committee Chairperson for two terms and is now serving as the Coordinator of the PSIA-E Area Representative Program.

STYLES OF TEACHING*

JOAN E. HEATON

INTRODUCTION

Teacher behaviors employed when conducting a lesson are conscious and deliberate behaviors. They are a series of actions that can be learned and mastered. Specifically defined, a teacher's behavior is a series of actions executed through some form of communication about a particular subject/topic and addressed to learners to assist them in accomplishing a specific outcome/goal.¹ There is general agreement that the skills of teaching are *learned* behaviors that we can vary and modify to accomplish the goals of a particular learning situation. And, just as one learns to ski/ride – one can also learn to teach. And, just as in any other learning situation, people learn at different rates and each will reach his/her own level of performance. But, what is important is that our efforts should be directed to preparing ourselves to be the best skiers/riders and the best teachers that we can be. In developing one's teaching skills, one will learn to behave in a variety of ways. The teacher's choice of behaviors in a particular situation will depend upon the objective of the lesson, the outcome for which one is striving, the situation, the students, and the atmosphere one wants to create. Teachers need to have a variety of behaviors from which to choose if they are to accommodate the many learning styles that exist among our students.

TEACHING STYLES

A style of teaching is defined as all the decisions that are made during the teaching-learning process. *All* these decisions are categorized into three major sets of decisions: Pre-Class or Pre-Impact Decisions, Execution or Impact Decisions, and Evaluation or Post-Impact Decisions. These three groupings describe the decisions that are made during the teaching-learning process. The shifting or sharing of the decisions in these three areas to the teacher and/or to the student is what creates alternative styles of teaching.

The first style of teaching is the COMMAND STYLE. It holds the title of the *traditional* style and continues to be the dominant style in the teaching of motor skills. It consists of: **Explanation, Demonstration, Execution, and Evaluation**. In this style, the teacher makes all three sets of decisions. The role of the student is to respond to the teacher.

TASK/PRACTICE TEACHING (Sharing the **Execution Decisions**)

In the Task/Practice style of teaching, the style clings to the Command Style; but, when the component of doing, of performing the activity is reached, the student is encouraged

to perform on his/her own. Once a task/outcome has been discussed, explained, and demonstrated, students start the performance on their own in a space they have chosen. (Parameters are set by the teacher) Students will perform at their own speed, their own designated number of repetitions, their own determined duration of time, and/or their own decision to stop. The sharing of the Execution Decisions affords the teacher a new freedom in which individualized attention can be given to students. Keep in mind that just because tasks are being used in a lesson does not necessarily make the style of teaching in that lesson the Task/Practice Style. The style of teaching is determined by which set(s) of decisions the teacher is making and which the student is making. In this case, it is the shifting of Execution Decisions to the student that makes this style of teaching, *Task/Practice Style*.

"Random organization improves communication. If you choose to demonstrate, you have a better chance of being seen by all when the students are randomly organized. The straight-line arrangement usually curtails the field of vision..."² A technique appropriate to this style is to designate the terrain needed for the demonstration and then ask students to stand where *they can see* the best.

In summary: **(TASK/PRACTICE)**

1. Assemble students near the teacher.
2. Explain, discuss, and demonstrate the task/outcome as in Command Style.
3. Designate boundaries of the practice area and point out safety considerations.
4. Execution Decisions are shared with the students.
5. Instruct students to find their space and begin practice.
6. While practice/performance goes on, teacher should move about, observe individuals, and offer informational feedback. Contact with each and every student should be a goal in the lesson.

Note: In order to facilitate individualized instruction, the Task/Practice Style accommodates presenting a new task/outcome to individual students as each student demonstrates proficiency in the performance of the first task/outcome given to the entire class. This style also allows for presenting the class with several tasks/outcomes that permit each member of the class to progress at his/her own speed of learning.

RECIPROCAL TEACHING (Sharing the **Evaluation Decisions**)

It is difficult for one teacher to accurately observe and evaluate the immediate performance of a number of students; therefore, some parts of the evaluation process can be shared with the student. Allow students to form pairs. The teacher should assist only where and when the students need assistance in making pairs. If there is an odd number of students, arrange for one small group of three students. The student partners/group choose and assume the roles of performer, observer, corrector, and/or reinforcer. It is important that the **teacher does not pair off with a student or group**. It is the job of the teacher to *teach* the whole class and not just one of the partners or group. As in the Task/Practice Style, the teacher finds new freedom to circulate through the class to make personal contact and to give more individual feedback. This style is particularly effective

with large groups. It also offers an excellent opportunity to enhance the social climate in a class by creating the situation where one student is actually working with a peer.

Similar to the Task/Practice Style, a single task/outcome is explained, discussed, and demonstrated. The teacher designates boundaries of an area in which students will work. Teacher and students arrive at specific things to look for in the partner's performance. Depending on the skill level of the class, *what* you ask the observer to look for in his/her partner's performance should be within his/her framework of ability level. Students decide who is the performer and who is the observer, where they will work in the designated areas, and when they will start. Teacher determines when partners should change roles.

At first, the teacher observes and assists both the performer and the observer in learning their roles. Once the style is understood, the teacher speaks to the observer only. This shift in behavior is intended to give support to the role of the observer so the observer feels the importance and responsibility of that role. The observer should be encouraged to mention the good things about the performance of a task/outcome. Many students may think that working with others means only pointing out errors.

Once the students become familiar with the Reciprocal Style, several tasks/outcomes can be presented to the class at one time. This permits students to experience longer periods of independence in performance and working with a larger quantity of subject matter. This style also facilitates individualized instruction.

Keep in mind that just because partners are being used in a lesson does not necessarily make the style of teaching in that lesson the Reciprocal Style. The style of teaching is determined by which set(s) of decisions the teacher is making and which the student is making. In this case, it is the shifting of the Evaluation Decisions to the student that makes the style of teaching, *Reciprocal Style*.

In summary: **(RECIPROCAL)**

1. All points in Task/Practice summary apply in Reciprocal Style.
2. Evaluation Decisions are shared with the students.
3. Class chooses partners and the teacher explains the roles of the performer and the observer.
4. Give as much assistance to observer as possible without taking over his/her role. List specific things in the performance of the task/outcome to look for.
5. Call class together periodically to discuss the task/outcome, to answer questions, to share suggestions, and to ensure the execution of the style.

USE OF SMALL GROUPS

This style is a variation of the two previous styles. This style simply calls for more than two people to participate in the process of performer, observation, mutual correction, and reinforcement. Teacher and students decide if the task/outcome requires two observers

and one performer or one observer and two performers. In using the Reciprocal style of teaching, if the number of students in the class is uneven, the use of a small group can be incorporated.

Please note that in the use of either Reciprocal or Small Group Styles, **the teacher does not pair off with a student or become a member of the 'group'**. It is extremely difficult to teach effectively if the teacher is a participant. It is the teacher's responsibility *to teach the entire class*.

GUIDED DISCOVERY

In Guided Discovery, the move is toward a *process-centered* teaching procedure. "This style embodies a process of systematically getting to a target. It is actually a process of training students to use selection procedures in making small decisions in a definite sequence"² In this sequence, there are questions, clues, or outcomes (tasks) arranged in a manner, which slowly, gradually, and securely lead the student to the answer (a fact, a concept, or a particular outcome). Each step in the sequence is based on the response/task/outcome in the previous step. There is only one answer and the teacher is responsible for leading the students to discover it. The teacher does not tell the answer: s/he waits for the student's response and reinforces that response. However, if class time is such that students do not respond with the correct answer; the answer should be given before students leave the class.

Question, clues, or tasks/outcomes are formulated so that a minimum number of alternative responses are possible. In preparation, the teacher needs to anticipate all possible responses. If the clue evokes too many responses, the clue needs reworking. A smaller step that is closer to the previous one will help to minimize the number of responses. Serious failure among the students to respond properly indicates inadequate design of the clues or the sequence as a whole. Just because a teacher 'asks questions' does not mean that Guided Discovery is being used. Remember, Guided Discovery is a series of clues concerned with one topic. These clues gradually and systematically lead the student to the one answer already known by the teacher.

Experience has shown us that it is extremely difficult to spontaneously think of effective questions, clues, or outcomes (tasks) in a series that will affectively move the learner to arrive at a desired answer. Guided Discovery may be better used in the season-long programs i.e. Adult, Freestyle, Junior Development where it is possible to pre-plan lessons. In the classes of these programs, the teacher has, for the most part, the same students every week and can plan ahead based on knowledge of student performance from previous classes. From this regular, weekly contact with the same students, the teacher acquires valuable information that a teacher in the regular lineup class situation would need class time to acquire. Without the time to adequately prepare, it is risky to attempt a Guided Discovery lesson in these situations.

Keep in mind that Guided Discovery **is not just asking questions**; and, more importantly, it should not be presented in a way that it is perceived as a "fishing expedition."

In summary: **(GUIDED DISCOVERY)**

1. Focus is on the student.
2. Use questions, clues, tasks/outcomes arranged in a manner, which, slowly, gradually, and securely lead the student to the desired outcome.
3. There is only one answer.
4. Wait for the answer.
5. Do not tell the answer. (However, student should not leave the class without knowing the answer.)
6. Elicit higher levels of thinking.
7. Cognitive acquiescence - cognitive dissonance - inquiry - discovery

GUIDED EXPLORATION

Guided Discovery and Guided Exploration have similar characteristics but they are, indeed, different. Both styles have the *guiding* characteristic, but Guided Discovery is very linear and direct as it guides. The teacher moves the student from the broad base of a pyramid to the tip where the student discovers the one desired answer. The student moves systematically along an arranged path that leads to the desired answer/outcome.

Guided Exploration is more indirect in its approach offering no *step-by-step* guidance clues. Guided Exploration presents two or three possible choices to explore; and as the student explores these possible choices, s/he explores/discovers the desired answer/outcome. In this style, the learner is engaged in reasoning, using the rules of logic, critical thinking, and *trial and error* in order to discover the *one* correct answer/outcome to a question or the *one* solution to a problem. For example: When working with fore/aft balance, the teacher might say: "First try leaning far forward, then far backward, then somewhere in the middle. Where is the best balance point for you on your skis?"

The student examines the feelings/sensations s/he receives from performing the three possible choices suggested in fore/aft balance, organizes this information, and then draws conclusions about each position. As a result of this exploration, hopefully, the student will decide that being in the *middle* or being *centered* feels balanced. However, if the student does not come up with *the* answer, the teacher needs to find *another way* to bring that student around to the *one* desired answer.

In Summary: **(GUIDED EXPLORATION)**

1. Focus is on the student.
2. Teacher offers two or three possible choices, with one being the desired answer.
3. As students work – teacher waits, observes, encourages.
4. Elicit higher levels of cognitive operation.
5. Style seeks to develop the ability to explore the possible choices and select the *one* desired answer/outcome.
6. Student is significantly autonomous as s/he explores.

PROBLEM SOLVING

Problem Solving is also a *process-centered* teaching procedure. The teacher poses problems for the students to solve. The student is expected to seek out answers/outcomes on his/her own as s/he works within the framework of the problem set forth by the teacher. There can be several acceptable answers/outcomes to one problem as long as they meet the requirements of the problem stated. This style "---seeks to develop the ability to find alternatives, explore them, and select the appropriate ones."² The time provided to solve and explore alternative answers to the problem is the most important part of this style. Allow for that time.

Unlike Guided Discovery, where the student's response depends upon the teacher's clues, Problem Solving expects the student to seek out answers/outcomes on his/her own. Unlike Guided Discovery that seeks a single response, Problem Solving seeks to develop the ability to find any number of the answers or outcomes to a problem. It is an open-ended process in that there is always the possibility of *another* solution to the problem, possibly one not thought of even by the teacher. However, like Guided Discovery, Problem Solving elicits the higher levels of thinking.

In summary: **(PROBLEM SOLVING)**

1. Pose problem for students to solve.
2. Allow students to seek out answers/outcomes on their own, working within the framework set forth by the teacher.
3. Accept all answers that meet the requirements set forth in the problem.
4. A single problem may have several solutions.
5. As students work – teacher waits, observes, encourages.
6. Elicit higher levels of cognitive operation.
7. Style seeks to develop the ability to find numerous alternatives, explore them, and select the most appropriate solution.

INDIVIDUAL

The ultimate goal of teaching is **individualized learning**. It is understood that learning is the affair of the individual. The design of the individual program is such that the learner makes most of the decisions regarding the time frame for the learning sequence, the geography of where the learning will occur, and when the self-assessments and monitored assessments will take place. The subject matter is designed in such a manner as to give the learner full responsibility for his/her learning. The success of this style is determined by the desire, self-motivation, and self-discipline of the learner. It should be noted that the skillful teacher could employ individualized learning to some degree in all the styles except Command style of teaching; however, individual programming offers the most comprehensive approach to individualized learning.

In examining modern day ski/snowboard teaching methodology, the Personal Development Plans being set forth by snowsports schools are excellent examples of such individualized programs.

In summary: **(INDIVIDUAL)**

1. Statement of individual desired goals.
2. Selection and design of subject matter by teacher and student.
3. Design of subject matter has opportunities for a variety of entry and exit levels. The design provides for practice, self-assessing tasks, and periodic evaluations.
4. Leadership assistance is made available in the form of 'buddies', mentors, monitors, teachers, and/or evaluators.

CONCLUSION

It simply is not good enough that good teaching should happen by chance. With all the information on the teaching-learning process available, excellence in teaching should be happening because it is planned that way. Learning happens all the time both intentionally and accidentally; however, it is expected that the *best* conditions for learning will be present in a *lesson/class* situation. Keep in mind that teaching is an art and a science - it is intuitive and extremely personal, yet it needs to reflect what is known from research and theory. Excellence in ski/snowboard teaching is an ongoing objective of professional snowsports instructors.

*This article is based on the work of Muska Mosston in his book Teaching Physical Education: From Command to Discovery. Charles E. Merrill Books, Inc., Ohio, 1966. In this article, I offer various applications of these styles for comprehensive use in the teaching of skiing and snowboarding.

Bibliography

¹ Anderson, William G. Analysis of Teaching Physical Education. Mosby, St. Louis, 1980.

² Mosston, Muska. Teaching Physical Education: From Command to Discovery. Charles E. Merrill Books, Inc. Ohio, 1966.

HOW DO PEOPLE LEARN? THAT IS THE QUESTION!

JOAN E. HEATON

“How do people learn?” is certainly a popular question among those of us involved in the teaching/learning process: a question that teachers in every arena should be able to answer. The purpose of this article is to address the answer to this question in order to assist in the professional preparation of snowsports-teaching professionals. If we are to be effective teachers, we are responsible for knowing, understanding, and applying the known principles of learning. Learning happens all the time both intentionally and accidentally; however, we expect that the best conditions for learning would be present in a *class/lesson* situation. These lessons should reflect that which is known about learning and learners.

Let's examine a few areas within learning that should direct us in our teaching.

LEARNING STYLES:

A learning style is the cognitive mode of a learner: it is a person's preferred technique in approaching learning. It is the way a person processes information; the way a person's sensory, perceptual, memorial, decision-making, and feedback mechanisms operate. The learner's motivation, previous training, readiness, age, and ability to process information influence this *way*.

“THE FEELER”:

Values CONCRETE EXPERIENCE.⁵ People of this nature are receptive learners; they learn predominantly through *gut* intuition. They try many things to find a way. They tend to be emotional. They learn by doing and by evaluating on the way.¹

"THE FEELER" is also *doing-oriented*, though s/he will be very sensitive to the connection between what s/he does and its outcomes. This type of learner is aware of similarities and differences of experiences. S/he is particularly kinesthetic and will learn sports relatively easily because of this strong sensory awareness. If instruction gets too analytical, this student will quickly lose interest.

“THE WATCHER”:

Values REFLECTIVE OBSERVATION.⁵ People in this category like to *set the picture*. They like to know the purpose of practice. They need to watch others, are good listeners, and are introspective and contemplative.¹

“THE WATCHER” tends to *hang back*, studying everyone’s performance. This provides him/her with essential information: s/he emulates what s/he sees. Talk will be largely useless with a learner like this, unless the talk creates images for him/her to visualize. This type of learner will do well if allowed to position him/herself where s/he can best *watch* the teacher. When the classic school line is used, s/he would be happiest skiing/riding directly behind the teacher. However, when *taking turns* is the *modus operandi*, s/he would probably prefer to be last so s/he can garner as many visual references as possible.

“THE THINKER”:

Values ABSTRACT CONCEPTUALIZATION.⁵ Such people are analytical, logical, thorough, and theoretical. They would rather read than listen to lectures, they are often loners or dreamers. At times they are meticulous to a level of obsession.¹

“THE THINKER” reads books and magazines about skiing/snowboarding long before taking a lesson. S/he may be full of *shoulds* and *oughts*. Detailed explanations are needed in order for him/her to understand what needs to be done. Riding up on the chair lift with the instructor will become welcome opportunities for this learner to *squeeze* the teacher for more verbal information.

"THE DOER":

Values ACTIVE EXPERIMENTATION.⁵ People in this category tend to be pragmatic, practical, and functional. They are searchers who see a purpose in learning. They are good problem-solvers and work well with others.¹

“THE DOER” is constantly active. Being idle is not for him/her; skiers will be seen poking holes in the snow with their ski poles while boarders will be seen drawing figures in the snow or tossing snowballs at their boards until finally it is their turn or it is time to actually ski/ride. Extensive talking tends to frustrate this learner.

A thorough knowledge of the learning styles and the ability to recognize the student behaviors that accompany each style is paramount to one’s teaching expertise. Some students have a very defined dominant learning style while others are comfortable learning in more than one style. The professional teacher needs to have an extensive repertoire of behaviors that can accommodate all of the learning styles that students bring to class.

TYPES OF LEARNING:

The domains in which the teaching/learning process can function are:

- Psychomotor - to do, to perform
- Cognitive - to know, to think
- Affective - to feel, emotions, attitudes

Traditionally, in the teaching/learning process of motor skills, the psychomotor domain has received the most attention. However, a greater emphasis in the cognitive and affective domains offers exciting new avenues for learning to take place. Certainly, in teaching snowsports, if we are to reach all of the learning styles, attention needs to be given to the cognitive and affective domains.

In support of this emphasis on the cognitive domain, an examination of Bloom's Taxonomy of Education Objectives is helpful. Bloom describes six levels of cognitive operation starting with "Knowledge" as the lowest level:

1. **Knowledge** - recall, remembering
2. **Comprehension** - to grasp the meaning and intent of material, interpretation
3. **Application** - to apply appropriate use of knowledge without having to be shown
4. **Analysis** - breakdown of material into its constituent parts and of the way they are organized
5. **Synthesis** - the putting together of elements and parts so as to form a whole
6. **Evaluation** - making of judgments²

Assuredly, the inclusion of working in all three domains in the teaching/learning process and in Bloom's levels of cognitive operation will not only improve the quality of learning; but, will make learning more meaningful and more enjoyable.

STAGES OF LEARNING:

First - **COGNITIVE STAGE**: students make attempts to understand the nature of the activity to be learned. Learners are heavily involved with thought processes at this stage. They are busy converting directions into meaningful behaviors; as a result, strategies evolve, errors are made, and great improvement is shown.³

Second - **ASSOCIATIVE STAGE**: students concentrate on the organization and timing of the parts of a movement. External or extrinsic feedback is needed to decrease errors. Students are making associations between the correct responses and what it feels like to perform a particular movement. They are busy learning to recognize the intrinsic feedback associated with the correct performance of a movement.³

Third - AUTONOMOUS STAGE: students are able to process information easily with minimal interference from other on-going activities. There is minimal conscious control over the movement.³ The skills used in driving a car are, for the most part for most people, AUTONOMOUS...

Unquestionably, for the teaching of skiing and snowboarding, the knowledge and implications of these three stages of learning should become part of every snowsports teacher's modus operandi. Most assuredly, unless we see our students through the second stage of learning (ASSOCIATIVE STAGE), that which was thought to be learned will surely be lost. Before students leave their lesson, they need to be able to recognize the intrinsic feedback of the correct movement so they are able to continue correct practice on their own. Their feelings of accomplishment beyond the lesson will reflect positive feelings about their snowsports lesson; and, hopefully, these feelings will make them want to come back for more lessons. On the other hand, if students are presented with too much information and are not guided out of the first stage of learning, (COGNITIVE STAGE) and through the second stage of learning (ASSOCIATIVE STAGE), the chances of positive carry-over after the lesson will be questionable. Strangely enough, a student's performance of the initiation phase of the turn could be in the AUTONOMOUS STAGE OF LEARNING while the completion phase could still be in the ASSOCIATIVE STAGE OF LEARNING.

LEARNING ENVIRONMENT:

Barbara Knapp, in her book Skill in Sport, presents an extensive study of skill and its acquisition. She defines skill as the "learned ability to bring about predetermined results with maximum certainty, often with the minimum outlay of time or energy or both."⁴ An examination of motor skills indicates that all skills do not require the same environment for learning. Since skills can be categorized according to the requirements of their performance, the environment created for learning should reflect the characteristics of the skill's category. Knapp classifies skills in the broad categories of *open* and *closed*. The characteristics of the *open* category indicate that perceptual skills require a learning environment that offers both predictable and unpredictable stimuli. The characteristics of the *closed* category indicate that habitual skills require a constant and predictable learning environment. The skills of skiing and snowboarding are, for the most part, categorized as having both predictable and unpredictable stimuli. Because both types of stimuli can be present in the skills of both these snowsports, these skills are categorized as *open* skills. Therefore, snowsports teachers should create learning environments that offer both predictable and unpredictable stimuli.

CONCLUSION:

Indeed, there is much to learn about learning: styles, types, stages, and environment. There is a need to study what we know about learning and learners and to actively use that information in our teaching.

Bibliography

¹ Abraham, Horst. Skiing Right. Boulder: Johnson Books, 1983.

² Bloom, Benjamin S. "Handbook 1: Cognitive Domain." Taxonomy of Educational Objectives. Ed. Benjamin S. Bloom. New York: David McKay, Inc., 1956.

³ Kerr, Robert. Psychomotor Learning. New York: CBS College Publishing, 1982.

⁴Knapp, Barbara. Skill in Sport. London: Routledge & Kegan Paul, Ltd., 1967.

⁵ Kolb, David A. and Fry, R. "Toward an Applied Theory of Experiential Learning," in Cary Cooper, ed., *Theories of Group Processes*. London/New York: John Wiley & Sons, 1975.

THE MANY FACES OF FEEDBACK

JOAN E. HEATON

A crucial factor affecting the acquisition of motor skill is feedback. Feedback is described by Marteniuk as, "...a general, all-inclusive term referring to the information a performer receives about the performance of a skill either while s/he is performing it or after the skill is completed."³ In most learning situations, feedback is both intrinsic and extrinsic. Intrinsic feedback is all the information the performer receives when performing a movement: this includes information from all sensory receptors. Extrinsic feedback is information provided from an external source. Extrinsic feedback, also known as artificial, augmented, or supplementary feedback, is information the learner receives from external sources, e.g. the teacher. It is the extrinsic feedback that augments the intrinsic feedback. The purpose, according to Drowatsky, is, "...to call attention to the critical, intrinsic cues and to aid the student in properly using them as a guide to his/her performance."¹

Within extrinsic feedback are two types of feedback: Knowledge of Results (KOR) and Knowledge of Performance (KOP). Knowledge of results is the information concerning the outcome of the performance, the extent to which some external goal is achieved. Recently, the term Knowledge of Performance has been added to the motor learning literature to further delineate "feedback". It is defined as information about the performance, "...the feedback that an individual receives, about the actual performance or execution of movement."³ Skiing and snowboarding, in general, use knowledge of performance feedback; however, competitive events in both skiing and snowboarding use knowledge of results feedback. In all cases, feedback does provide information, it can act as a reinforcer, and it can provide motivation. It is a recognized fact that feedback is critically important in skill acquisition and in improving and/or maintaining performance levels.

EXTRINSIC FEEDBACK **(ARTIFICIAL, AUGMENTED, SUPPLEMENTARY)**

A closer look at extrinsic feedback, information the learner receives from an external source, points to the teacher as the major external source for supplying informational feedback. This feedback can be supplied in the following ways:

INDIVIDUAL AND GROUP FEEDBACK

Feedback can be given on an individual and/or group basis. "Individual", meaning that information given specifically to one person. "Group" meaning that information given to the class noting commonalities within the class. However, in the latter situation, each performer is expected to consider the instructor's comments and, in the learner's best

judgment, decide which of the instructor's comments pertains to "his/her" performance. There is considerable doubt that many students have the ability to be so discerning. Individualized information can serve the learner better than general information given to the group. It is more specific and clearly given to a particular individual. This information serves as a guide to the learner in subsequent trials and assists him/her in analyzing the results of his/her actions. The effectiveness of individualized feedback is dependent upon its proper administration. Extreme caution should always be taken so as not to embarrass or discourage the learner.

Group feedback can be useful. If many students in a class are doing the same thing or if time is limited, giving group feedback would be the efficient approach. The shortcoming of group feedback lies in its vagueness. The instructor is counting on the learner to have the ability to know whether or not the feedback applies to him/her. For the most part, confusion occurs and the wrong students change their performance. In light of the information available pertaining to the effectiveness of group feedback, it is thought that individual feedback is more conducive to effective learning. Certainly, both individual and group feedback can be useful, and each can contribute significantly to learning.

POSITIVE AND NEGATIVE FEEDBACK

Feedback can be expressed in positive and negative terms: "Positive", referring to the use of terms describing desired action in the performance, ex. "Flex your front ankle while making your toe turn" and "Negative", referring to the use of terms stating what should not occur in the action, ex. "Don't lock your front ankle when you make a toe turn." Simply, instead of telling a student what not to do, tell him/her what s/he should try to do. Educators are in support of the use of positive feedback because of its favorable effect upon the atmosphere of the class and its beneficial effect upon the student's attitude toward subsequent learning. Traditionally, "Don't do this." and "You didn't do that." is heard to the point that students become so discouraged that they resent and avoid the instructor. It is just as easy to say, "Stay on your edge!" as it is to say, "Don't slip!"

It is also noted that all too often only the mistakes in a performance are mentioned. Somehow, the correctness in a performance is understated and the errors become the main discourse with students. It is unfortunate when a student's only communication with the teacher is when the learner does something "wrong". There is a need for instructors to note the achievements of the learner as well as to make more mention of the successes. This supportive role coupled with the use of positively stated corrections can change the attitude of the student from discouraged to encouraged, from defeated to challenged, from quitting to taking future snowsports school lessons!

CONCURRENT, TERMINAL, IMMEDIATE, DELAYED FEEDBACK

Feedback can be supplied during the action or after the action is completed. "Concurrent" refers to that information given to the learner during the performance of the task. "Terminal" refers to that information given when the learner has completed the task. Terminal feedback can be administered immediately or any time after the task has been performed as long as no intervening activities have occurred. Students receiving feedback after the instructor has watched all members of a class ski/ride down the hill are receiving terminal feedback. If the last student is the first to receive feedback, then his feedback is terminal and immediate - all others would be receiving terminal feedback. If students were to engage in subsequent trials before the instructor gives them feedback on the original trial, that feedback is referred to as "Delayed".

Feedback given immediately upon the completion of a performance is recommended. "...experiments in practical skill agree that the learner should be given as specific and as immediate information as possible."² (Emphasis added) Since the performer has just gone through the motions of the skill, s/he can reflect on his/her actions in light of the instructor's comments. It is especially true in the performance of motor skills that, as time elapses, both the learner's and the instructor's recollections of the performance become increasingly vague. The effectiveness of the well-intended feedback is further jeopardized when subsequent trials or other intervening activities are allowed to occur before feedback is given. In delayed feedback, it becomes increasingly difficult for the learner to recall the particular trial to which the instructor is addressing his/her comments. It has also been noted that concurrent feedback can be distracting to the performer. The instructor's intended helpful cues can interrupt or break the performer's concentration. Once again, the manner in which feedback is given is extremely important. Certainly the right word at just the right time can do wonders! "The closer the exclamation is to the good movement or to the error, the easier it is for the learner to identify the right and wrong actions."²

The use of videotaping can be an extremely helpful tool for providing feedback information. It enables the student to see in his/her performance what s/he may be unaware of or unable to feel as s/he performs. Videotapes also enable the instructor more opportunities to view the performance and thereby analyze more extensively and with greater accuracy. "In many complex skills, action is too fast for the detail to be observed by the human eye and other aids to analysis are necessary."² In order to make the best use of videotapes, it is important to view the tapes as soon after the performance as possible. After viewing and analyzing the taped performances, time should then be provided for the students to try the skill as the instructor watches. The sooner these trials occur after the viewing of the tapes, the better!

DESCRIPTIVE AND PRESCRIPTIVE FEEDBACK

Feedback can also be described in terms that are “Descriptive” and “Prescriptive”. In ski teaching, it has traditionally been referred to as “detection and correction”. “Descriptive” refers to the feedback that describes the performance as it was executed by the student. In essence, the teacher's words are a mirror of the student’s performance. “Prescriptive” refers to the instructor’s recommendations for future performances. Examples: Descriptive - “You turned your skis very sharply because you exerted your pressure suddenly at one point in the turn.” Prescriptive: “Next time, smooth out your turn by applying your pressure evenly as you ski a big letter ‘C’”. With this information, the learner knows what s/he did, what s/he should try to do, and how s/he can go about doing it. An effort should be made to state both descriptive and prescriptive feedback in positive terms.

The quality of the instructor’s comments is also extremely important in effective feedback. Comments such as: “Try harder.” and “Do it again.” are simply not good enough. To say, “In order to flatten the ski, rotate the uphill knee into the hill by pushing the knee outward.” is more meaningful than, “Flatten the ski.” Instructors need to have considerable depth of knowledge of a particular skill so as to be able to analyze the performance of their students and to give helpful, meaningful feedback.

CONCLUSION

Feedback is paramount to learning. On those occasions, when the learner has sufficient information available from his/her efforts and knows how to use it, the information supplied by the teacher can serve to reinforce and/or to motivate. However, it is hoped that on those occasions when feedback is inadequate for the learner or s/he is not able to interpret or use the feedback effectively, that we as teachers are prepared to do the job required. In this circumstance, the teacher will provide extrinsic feedback, which will augment the intrinsic feedback received by the learner. If learning is to be facilitated, attention to feedback is a necessary part of the professional preparation of teachers - a major task indeed!

References

- Kerr, Robert. Psychomotor Learning. New York: CBS College Publishing, 1982.
Singer, Robert N. The Learning of Motor Skills. New York: Macmillan Publishing Co. Inc., 1982.

Bibliography

- ¹ Drowatzky, John N. Motor Learning: Principles and Practices. Minneapolis: Burgess Publishing Company, 1975.
² Knapp, Barbara. Skill in Sport. London: Routledge & Kegan Paul, Ltd., 1967.
³ Marteniuk, R.G. Information Processing in Motor Skills. New York: Holt, Rinehart, and Winston, 1975.

DELIVERY SYSTEMS SKILLS¹

JOAN E. HEATON

Becoming proficient in the *way* a lesson is presented/conducted, in order to achieve a specific outcome, requires a broad repertoire of teaching skills. The more *formidable* one's knowledge of teaching skills/styles, the greater one's chances are of accommodating the variety of learning abilities students bring to a class. Following are some suggestions as to how instructors can become more skillful in *delivering* snowsports lessons:

1. Based on student input, set goals/plan for the lesson.
2. Use a variety of teaching styles: Command, Task/Practice, Reciprocal, Small Group, Individual, Guided Discovery, Guided Exploration, and Problem Solving.
3. Be careful about prefacing statements with: "I am going to...", "Now I will...", "I want...". Instead of saying: "I want you to practice your turns from here to the blue trail marker." Simply say: "Practice your turns from here to the blue trail marker."
4. Avoid routine, canned, and repetitious ways of saying and doing things.
5. Use both verbal and non-verbal means of communication (eye contact, and facial, hand, and body gestures).
6. Ask effective questions that stimulate student participation.
7. Explain purpose, need, and importance of each exercise as it relates to the performance of a particular skill.
8. Give only barest essentials when presenting a new skill. Supply detailed information as practice is in progress.
9. Give relevant, accurate, correct feedback, and reinforcement (verbal/non-verbal): emphasize positive feedback.
10. Make transitions from one activity/practice to the next efficiently and effectively. Make changes in class formations by informing students simply and concisely of your intentions.
11. Use *pausing* in preparation of an important statement. Make use of *focusing* (call special attention to a particular point).
12. Shift use of sensory channels to hold attention (auditory, visual, and kinetic).
13. Be *mobile* (as students work, move through class in order to give individual attention).

14. Make use of interactional styles:
 - a. **Teacher-Group:** Teacher carries on dialogue with the entire class: discusses topic with whole group, not with any one individual.
 - b. **Teacher-Student:** Teacher directs a statement or question to a student, receives an answer, and follows with a series of questions to the same student.
 - c. **Student-Student:** After asking a question of a student, teacher refrains comment in order to redirect the question to another student for the sole purpose of achieving inter-student dialogue. Teacher becomes a moderator.
15. Be willing to make adjustments in your lesson plan if something just is not working or if students make a valid suggestion.
16. Give enough time to practice skills to be learned.
- 17. Provide For A Lot Of Skiing and Riding!**
18. Provide opportunities for maximum student participation. Keep *most students active* rather than *most students waiting/watching*.
19. Avoid partiality based on student's abilities. Give each member of the class equal time and attention.
20. At the end of the lesson, summarize what was taught, what was to be learned, and inform *what* and *how* to practice.

Bibliography

¹ PSIA-E Educational Workbook: Professional Ski Instructors of America – Eastern Division. Albany, N.Y., 1995.

INSTRUCTIONAL SEGMENT¹

JOAN E. HEATON

Providing the *conditions* in a class that bring about efficient and effective learning takes a conscious awareness of the students' Comfort Zone - their feelings and emotions. Following are some suggestions as to how instructors can create learning environments that promote feelings of being comfortable, confident, and safe:

1. Create a safe, fun, relaxed atmosphere in the class.
2. Keep class and lesson *moving*. Avoid getting bogged down with *over talk* or attempts to be *too thorough*. Keep pace of lesson lively!
3. Use ATS as an educational framework. If there are special teaching guidelines or progressions that are used at your resort, implement them within the ATS framework. Blending elements of your resort teaching system (if you have one) with ATS educational guidelines for class levels 1-9 will produce optimal results with your students.
4. Establish goals/a plan for the lesson by giving students the opportunity to state their goals. Have children help plan, too!
5. Inform students when you are going to assess their abilities (e.g. during free runs or class exercises).
6. Use a variety of learning activities that directly relate to the stated goals and that provide for individual differences (learning styles, physical characteristics, age, gender, personality).
7. Use exercises that are in direct relation and preparation for the skill being taught.
8. Use terrain relevant to skill level. Ski/Ride at speeds that are within the class level's ability.
9. Be alert to accommodate unusual situations in class such as changing weather conditions, student behavior, etc.
10. Use vocabulary appropriate to students in a particular class.
11. Repeat questions asked by students so all can hear.
12. Set up demonstrations so that everyone can see. Demonstrate frequently and from different angles to the class.
13. Periodically, assess whether your students seem to be relaxed and operating in their Comfort Zones.
14. Organize class so that when explanation/demonstration is completed, activity can begin.
15. Allow time for students *to think* or *to decide* before you expect a response.

16. Be aware of your *teacher position* in relation to all students in your class. Be sure students are *in front* of you when you give major instructions/directions.
17. Avoid the use of sarcasm and the show of irritation or impatience.
18. Ask for student permission before using manual guidance and any demonstration or activity that would involve teacher touching student or student touching student.

Bibliography

¹ PSIA-E Educational Workbook: Professional Ski Instructors of America – Eastern Division. Albany, N.Y., 1995.

THE PROFESSIONAL TOUCH¹

JOAN E. HEATON

The Winning Edge - How To Win Friends And Influence Customers:

1. **Develop The Right Attitude** toward your job, your co-workers, your boss, and your customers. Remember, your attitude is always showing.
2. **Have Fun!** Above all, have fun while teaching. Maintain a sense of humor. *People who feel good about themselves produce good results.*
3. **Sell Yourself.** Dress and act professionally, smile, be punctual. First impressions are lasting.
4. **Be Courteous.** Show respect for all the students, avoid superior mannerisms, and handle all situations so as not to embarrass.
5. **Be Patient.** Be willing to spend time on a skill or task until students get it.
6. **Demonstrate And Maintain A Positive Attitude** toward students and toward your own teaching abilities, especially if student actions or reactions are different from what you expected.
7. **Understand Your Customers.** Take time to **find** out each student's wants, needs, and goals. Structure your lesson to meet these desires.
8. **Make The Customer Feel Important.** Show interest, sensitivity, and alertness toward students. Always respond to students with relevant information.
9. **Use Good Listening Skills.** Give undivided attention. Look at the speaker. Physically listen. Ask questions.
10. **Practice Remembering Names.** Enunciate. Associate. Repeat.
11. **Be Free Of Bad Habits And Irritating Mannerisms** such as negative body language, chewing gum, or smoking during class.
12. **Do Not Neglect Customers By Socializing** with friends or others who may come up to you while you are teaching.
13. **Keep Yourself Physically And Mentally Fit.** Avoid job burnout.
14. **Speak Clearly And Loudly** enough so that everyone in the class can hear. Use patterns of speech that are grammatically correct, and avoid over-using words and phrases such as: *OK, All right, and I want.*
15. **Be A Member Of The Team.** Enjoy and work as a team player with your co-workers and supervisors: you all have the same goals.
16. **Be A Professional.** Continue to grow, achieve, and learn.

Bibliography

¹ PSIA-E Educational Workbook: Professional Ski Instructors of America – Eastern Division. Albany, N.Y., 1995