

The Technical Approach to Teamwork lee hockey provides the metaphor that drives this

perspective on teamwork and its relationship with the work of technical educators.

By MICHAEL A. BERGER

ong-time Chicago Blackhawk fans agree that the most exciting hockey play occurred when Stan Mikita fed the puck to Bobby Hull who was racing down the left side of the rink. Hull, the "Golden Jet," would take the puck at full speed, draw his stick back and send a ferocious slapshot on goal. Handcuffed by the sheer velocity of the play, the opposing goalie would attempt to save-but it would be too late. The puck would explode into the net, the red goal light would come on, the Chicago fans erupting in delirium. It could take 15 minutes for the ushers to clear the ice after the celebration.

The game of hockey was different then. You had the power of Bobby Hull, the speed of Bobby Orr and the strength of Gordie Howe. The biggest star today— Wayne Gretzky—has none of these qualities. He is not more powerful, faster, or stronger than his contemporaries. Yet, he might become the best hockey player of all time. His greatness comes from a careful blend of technical skill and uncommon artistry: art in action.

Another art form, the process of teamwork, thrives in action. Teamwork demands technical skills that can be

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Technical educators are better equipped

I believe that HRD professionals with a technical education background have greater potential to build effective teams than those who do not. Why is this so?

Technical educators appreciate the "science" of getting something to work. "They are accustomed to analyzing features, identifying precautions, understanding parts and their function, following a prescribed set of activities and applying the latest scientific principles to ensure that equipment operates properly.

At the same time, technical educators are aware that effective operation is an "art" as well. The art comes from understanding that equipment will not always operate as planned. Parts wear out or go out of adjustment, maintenance becomes critical, bugs appear and, at times, one has to tighten something, loosen something, nudge something or bump something just to keep the equipment going. Thus, technical educators are especially suited to be effective team leaders because the principles of teamwork are analogous to the art and science of operating a piece of equipment.

Many managers and HRD professionals incorrectly think that teamwork is a mystical process. From extensive research on group dynamics and the process of team building, we know a great deal about how teams operate. For instance, we know that teams go through relatively predictable stages. These stages are not hard and fast, but they suggest the sequence of activities in building a team. In addition, research and practical experience have identified the factors—the characteristics—that distinguish successful teams from unsuccessful ones.

The science of teamwork

Technical educators know that trainees must learn not only various tasks (skills) but also the order in which these tasks must be performed. Sequence is important when the technology is complex and one set of tasks depends on the execution of some others. Teamwork also has its own natural order and leadership tasks within each of the following phases:

Preparing for work. This stage, often called testing, forming or struggling for inclusion, is marked by team members' attempts to find a place in the group. The critical team leader tasks include: allowing members to get to know each other, legitimizing and affirming the distinctive abilities of each participant, clarifying work expectations and rules that will govern team interaction, and agreeing on the major mission and objectives of the team. To the extent that these requirements are satisfied, the team will progress to the next stage. On the other hand, failure to perform these tasks may cause team members to be stuck at this stage.

• *Challenging authority*. Once the various team members understand their role and the mission of the team, coalitions will

form among like-minded individuals, and a struggle will ensue to determine who will control the team and how that control will be expressed. The focus of the initial challenge will be the team leader, but the conflict will spread to other potential leaders or coalitions.

Experts have called this stage infighting, storming or struggling for control. The leadership tasks should include: listening and responding fairly and calmly to member challenges, renegotiating inappropriate expectations, mediating between divergent factions, and dividing the work based on member preferences and distinctive resources. If the leader displays these skills with some degree of mastery, the team will progress to the next stage. If, however, there is a prolonged challenge or an inability to mediate successfully between two polarized factions, the splits may become permanent and the team will disintegrate.

■ Getting down to business. When individual members feel relatively comfortable with each other and believe that mechanisms are in place for dividing the labor and resolving differences in an equitable way, the team will enter a productivity stage where the quality and quantity of work will increase dramatically. attraction, enjoyment and comradeship among team members. The cohesion stems from a delicate integration of an individual's search for autonomy and control on the one hand, and participation in a successful, larger group on the other. Athletic teams-at the moment of victory in the final game of a championshipprovide evidence of this feeling. Team members literally "come together" in a physical and emotional way to rejoice in their accomplishment. In this final stage, and not many teams reach this point, the leadership tasks are: providing opportunities for celebration, acknowledging the distinctive contributions of the various team members, sharing the recognition and rewards of team success, and basking in the glow of a job well-done. This last assignment is serious; enjoying the fruits of one's labor is also an important skill.

Successful teams

Not all teams experience the productivity, success and closeness described above. Some teams move through all four stages, while others founder and even regress. The science of teamwork has evolved to such an extent that we now can identify, with some certainty, the factors that distinguish successful from unsuc-

The principles of teamwork are analogous to the operation of a piece of equipment

This does not mean that members have not been working until now. Instead, it suggests that now work will not be affected by team (process) issues that drain time and energy. In effect, team members know what they are supposed to do and do it with a minimum of distraction. Some have called this phase norming or getting organized. The leadership tasks include: continuing to monitor and support team expectations and standards, exploring new ways to support individual performance, facilitating the resolution of problems, and finding innovative methods to inject fun and variety into the work situation. Once again, mastery of these tasks will enable the team to accomplish a significant amount of work and move to the next stage. A failure of leadership will result in boredom, game playing and a preoccupation with non work related issues.

Getting close. Productive, successful teams often experience deep feelings of

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cessful teams. Some of the essential characteristics are:

■ Consistent and appropriate leadership. Research has shown that effective leadership fits itself to the situation. This does not mean that leaders always should be democratic. Sometimes a participative style is appropriate and sometimes it is not. A leader should consider the stage a team has reached and exercise the type of leadership that will enable the team to achieve its goals.

Clear, understood, well-ordered objectives.
Clear, well-understood and agreed-upon objectives are desirable, but not easy to achieve. Successful teams build in ample opportunity for team members to discuss, clarify and negotiate the team's objectives. In this way, each member knows the priorities and how to accomplish them.
Integrated personal and team goals. Team objectives will not elicit commitment by themselves. For a team to work toward a common end, each member must be able

to achieve personal goals within the larger team framework. To the extent that team members can grow and develop while contributing to the team effort, they will be motivated to perform at a high level. *Fair and consistent rules.* The policies that govern team interaction should be fair, consistently applied and subject to change. Successful teams respond to changing conditions by adding new rules and discarding obsolete ones. In the process, they try to ensure that no adverse consequences occur as a result of policy changes.

■ Well qualified, diverse team members. Teams that perform at a consistently high level seem to have every position covered. The blend of different skills and perspectives enables the team to draw on just the right resource for the problem at hand. While the mix will lead to conflict, successful teams manage their differences productively in a way that creates stronger rather than weaker solutions.

■ Appropriate climate. The climate or culture of the team is as important as the process by which the work gets done. Effective teams pay special attention to their team members by attempting to create a culture that emphasizes respect, excellence, innovation and the willingness to try something new.

■ Work hard/play hard. A norm among successful teams seems to be near total commitment—a concept of work hard/play hard. Successful teams work hard by attending to details, anticipating problems, getting organized and following through on intentions. When it is time to relax, the team plays hard through ceremonies, rituals and friendly competition. Far from frivolous, these leisure activities strengthen the bonds between the members and smooth the stresses and strains of work.

The process of teamwork, however, cannot be reduced to techniques and scientific principles. There is another element, barely understood and less easy to describe. To review this topic, we will introduce our final controversial concept.

The art of teamwork

Wayne Gretzky's achievements present us with a curious set of contradictions: he is one of the most prolific scorers, effective team leaders and significant influences in the history of professional hockey, yet he does not skate particularly well, his shot is not overpowering and he is not very physical in his play. What explains his greatness? How does he perform so well without the traits of yesterday's heroes?

Put simply, Gretzky's style is efficient, patient and subtle. Yet, it is his team play that is truly artistic. At least three facets of Gretzky's play have implications for teamwork: waiting for the right moment. working with other team members rather than standing out, and seeing the possibilities.

Waiting for the moment. Great athletes have the ability "to suspend time," That is, they wait for the right moment to act. Gretzky will hold the puck just a little longer than most players, waiting for the play to develop. The effect will be to upset the timing of the goalie and the rhythm of the game. Athletes know that there is a natural timing to events in a game; but, if someone does not follow their natural rhythm, the flow of the game is interrupted and panic creeps in. Gretzky creates this panic when he holds the puck behind the opponent's goal, as defensemen scurry for position. He waits and waits for just the right moment, his moment, then he makes his move.

Technical educators know that a piece of equipment also has a natural rhythm that governs the way it operates. If you speed up or delay the timing, the change will disrupt the system. For example, if one types too fast on an electric typewriter, it will jam. However, experienced typists can sense the timing and type at the fastest possible speed without causing the keys to lock. A team leader must be able to determine the right time to introduce a new rule, identify a new problem or propose a new solution. Acting too quickly or not soon enough will send everyone into a panic. However, if the leader understands the natural rhythm of events and is able to wait until the very last moment, he or she will increase the probability that the intervention will achieve the intended goal.

Combining with other members. Outstanding athletes, by definition, excel. but they also spread their gift to their teammates. Gretzky works his own magic as well. His team set team scoring records for three straight years and won the Stanley Cup last year. Gretzky does not dominate the game the way Hull, Orr and Howe did. To the contrary, his play is subtle and inconspicuous. You do not notice him until it is too late. He blends in effectively with his teammates, passing the puck to a player in a better position, then moving to another position for a return pass. So it goes, back and forth, until suddenly there's a score.

Technical educators appreciate this "combining with" concept. Parts of a machine must interact for smooth operation. One part can not be out of sychronization with the others. When a machine is working efficiently, the individual contribution of the various parts becomes blurred and almost invisible. However, when one part is out of alignment and "doing its own thing," the results can be disastrous.

Blending team members together is analagous to combining machine parts. The artistry of teamwork involves making the assist, passing to someone else who is in a better position for the score and taking a new and improved position to get the job done. With this perspective, team leaders do not stand out in the traditional sense but blend in a mutually supportive role that helps accomplish goals. Seeing the possibilities. Great athletes have another quality that distinguishes them from other players. They know their craft so well that they can see the possibilities of a play as it unfolds. This is not luck but a thorough understanding of the rules of the game, constraints of the situation and the abilities of the other players.

Gretzky "sees" the game differently, too. One time he was helping Edmonton kill off a penalty. His team was shorthanded (they had four players while the other team had five) and Gretzky noticed that there was a momentary lapse when the opponents were substituting players. Drifting to center ice (instead of retreating to defend against the power play), he intercepted a lazy pass and skated the length of the ice to score a goal. Most experts say you cannot score a goal when vou are one man down, but Gretzky did not see it that way.

Technical educators, who know their equipment, have this same quality. They see the potential for a whole set of activities beyond the ones intended. They understand their equipment thoroughly and have the creativity to invent as the technical process unfolds.

The artistry in teamwork comes when the leader evaluates a new way of achieving the goal. He or she has full knowledge of the situation, an appreciation of the possibilities and a willingness to break with convention to get the job done. Where lesser team leaders look at the situation and see only limitations, the artistic team leader searches for new ways to maximize the team's potential. Thus, seeing the possibilities is as much a state of mind as it is a technical skill,

