belonging to this profession. If it is to be used as a control or restraint on competition, it will doomed to failure.

The concept of certification should be considered as a milestone of achievement and not as a "loftier than thou" attitude. The purpose is to upgrade the ability of practitioners. Good competition will widen the market. Exclusion of bad competitors will never occur as a result of certification.

Public awareness is a necessary ingredient and

a publicity campaign should be a simultaneous effort. This again should be positive in approach.

The ISA should take the leadership role in promoting consistent certification that can be regionally administered. The more broadly based the program, the more credible it will become.

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DEVELOPING ADMINISTRATIVE SKILLS¹

by Dennis L. Lynch

Abstract. Arboriculture in the public or private sector consists of more than tree care. It includes the administration of all services provided by a company or agency. These services are a combination of the technical, human, and conceptual skill resources of the employer and employees. These skills can be identified for arboriculture activities and obtained by recruiting formally trained people or can be developed through a variety of training programs.

If someone outside the professions of arboriculture and urban forestry asks you, "What type of work do you do?" you probably have a ready response. It may be, "I provide tree care for clients," or "my company provides total land-scape care," or "my agency assists citizens with urban tree management and planning." Those and similar responses might describe in a very brief way what you do, but, if you think about it you really do much more than that. You most certainly

coordinate people, equipment, materials, and resources to provide useable services and products. That requires a great deal of administrative skill if you are to be successful. When you invest in a piece of machinery to improve tree care, you carefully investigate its construction and performance to make sure it can do the job safely, correctly, and efficiently. Have you ever examined your administrative skills or the skills of your employees in the same way? After all, it is not just machinery that insures success, but its proper use, its coordination with other operations, and the way the whole job is accomplished.

Categories of Administrative Skills

In the management of a private business or the administration of a public agency there are three categories of skills that are important to recognize. Katz (1974) identified these as

^{1.} Presented at the annual conference of the International Society of Arboriculture in Quebec City, Canada in August 1984.

technical, human, and conceptual skills. He suggested that the categorization of these skills could provide "a more useful approach to the selection and development of administrators." His approach is based not on what good administrators are (their innate traits and characteristics) but rather on what good administrators do (the kinds of skills they use in successfully carrying out their jobs). The wisdom in this approach is that while desirable traits and characteristics may be difficult to copy or mimic, skills can be taught and learned.

In arboriculture, technical skills are extremely important to the completion of a professional job of tree care. McPherson (1984) found in his survey of arborists and urban foresters in the Mountain West Region of the Society that technical skills were perceived as the most important skills needed by professionals entering arboriculture. Such skills included tree surgery, transplanting, pruning, tree removal, cabling and bracing, insect/disease control, fertilization, tree problem diagnosis, safety procedures, and equipment operation. In other words, these are the skills needed to actually do a specific tree care job. These are not, however, the only skills needed in a successful business or agency program. If they were, then every technically competent graduate of an arboriculture program would automatically be successful. That, unfortunately, is not always the case.

Human skills are also important in arboriculture. These are the skills that involve dealing with people. Examples include public relations, personnel management, resolving interpersonal conflicts, motivating, teaching, and communicating. McPherson (1984) found these skills frequently lacking in individuals that secure positions as arborists and urban foresters. Many administrators feel that human relation skills are second only to technical skills in their importance to total success. Gruenfeld (1978) noted that very few foresters are ever dismissed from the job for lack of technical skills but the lack of human skills is the most frequent reason for termination. The development of human relations skills is not, however, an important part of the educational program of arborists or urban foresters. Coursework involving human relations may be entirely absent from the curricula of most schools. How many

times are you confronted with "people problems" versus technical problems?

Conceptual skills involve policy making, goal setting, planning, and organization coordination. Problem solving as it relates to organization direction and coordination may also be considered to be a part of conceptual skills. The ability to set clear goals and objectives is a key to organizational progress, but it is often neglected under pressure to accomplish more "important" tasks. Naisbitt (1982) stresses how important it is to exercise vision and clarity in setting goals and direction for firms and agencies. He suggests, "If you don't know what business you are in, conceptualize what business it would be useful for you to think you are in." That suggestion merits consideration in the field of arboriculture. Perhaps the ready response, "I provide tree care" could use some rethinking. Is that really the business you are in? Or do you think you are in the business of providing a living environment for people that reflects their concept of image, status, and quality of life?

Chuck Morgan of Swingle Tree Services, Denver, cites the case of a lady who somewhat cautiously contracted to have some overgrown shrubs trimmed. She called back later to request more work on the landscape because "it made her house look younger." Does she want landscape care or does she want image? Doesn't that raise some questions about how a firm decides on its purpose and direction? Goal setting and planning, therefore, have a lot to do with the way services are marketed, landscape programs are performed, and people are recruited and trained to do the work.

Technical, human, and conceptual skills together make up the scope of administrative skills of a successful arborist or urban forester. The proportion or "mix" of these skills is not the same, however, for every position level within the firm or agency. In a generalized way this mix is depicted in Figure 1.

The crew leader needs to be most competent in the technical areas he or she is responsible for. That is important to insure the job is done safely and correctly, the crew is trained properly, and all the equipment runs efficiently. Next in importance is the management of the crew. A good crew leader gets work done *through* the crew not in spite of the crew. Thus motivating, challenging, and making the work interesting is a key part of a crew leader's job as well as the resolving of disputes or the occasional discipline of a crew member. Where do those skills come from?

We have already noted the general lack of these in school curricula, but their importance is readily apparent. A good crew leader also gets involved in setting objectives for the crew and planning for the accomplishment of those goals. These are conceptual skills reduced in scale and job content but, never the less, important to the crew's success. Where do these skills come from? Are they in the curricula? Who trains the crew leader?

Consider, on the other hand, top management in an agency or firm. It may have been a long time since they ran the spray truck or did the tree climbing. Top managers need to understand how these things are done generally, but not in specific detail. They also manage people, but not in the same way crew leaders do. Relationships are often somewhat more established in the day to day routine, but questions about employee incentives, training, and recruitment become increasingly important. These are less "face to face" and in some cases less immediate than in the crew leader's situation. Conceptual skills, however, play a large and important role in the top manager's work. The direction or "vision" for the firm or agency must come from them. Recognition of and reaction to change in society before it is too late is important.

The coordination of the different parts of the firm to mesh together toward a common goal is easier said than done. The planning for the future, considering all aspects of finance, personnel,

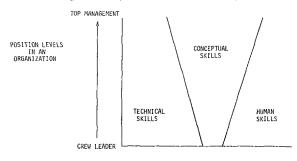


Figure 1. Total mix of administrative skills.

markets, and company purpose is essential to continued success. Where does the technically trained arborist or urban forester get these skills? Do these skills just "grow" into our lives or must these be learned, nurtured, and cultivated?

A Training Program

There are two basic ways to secure the technical, human, and conceptual skills needed in your organization. You can recruit people who already possess the needed skills or you can train the people you have.

Recruitment can provide the technical skills component in most cases but even here some training usually must occur on the job. Human and conceptual skills are another story. The technical school or college graduate typically lacks these. If people who do have the human, conceptual skills are recruited then chances are they lack the very important technical skills.

A training program is essential, therefore, for any organization interested in developing administrative skills. If the organization consists of one person, or 100 or more, some type of training program needs to be considered to insure future success. The program can be very formal and structured or it can consist of a list of a few "things to learn," but it must be planned, scheduled, and implemented or it will never happen.

Training can be accomplished through several methods, such as on-the-job training, one day seminars, short courses, college courses, and professional meetings. When considering on-the-job training for administrative skills, remember that studies have shown that typically a person's managerial style is most influenced by their first boss or management training course. Do you really want your new employee to manage like your present crew leader?

Short courses for administrative skills flourish like weeds in an unkept lawn. These are often expensive one-day seminars taught by visiting "experts" who have a gift of gab, and an exciting speaking delivery. The course is usually stimulating, but perhaps somewhat abstract and general enough to fit all position levels in an organization. Some seminars are excellent and could be useful, but be wary.

College courses offer standard texts and infor-

mation on the accepted methods for managing firms and agencies. The course can be exciting or boring depending on the instructor. Courses typically extend over many weeks, which can make job scheduling difficult if courses are offered during the day. Keep in mind that training is often seen as a "reward" or a special compliment by employees and can be a part of an overall motivation program suggested by Haston (1984). A drawback of college coursework is that it is not always available in smaller cities and towns. Some schools are now providing short courses for outlying areas and it would be worthwhile to contact business and public administration schools in your College course costs are usually reasonable considering the time spent and the subject matter provided. A problem with some courses is their applicability to the specific situation the firm or employee is in.

Professional meetings of the Society are another way to develop administrative skills. Training can be designed to make the meeting attractive and to insure the information is applicable to the people attending. Such meetings may also recruit new members who are seeking a source of such information. It might even be a good idea for the Society to consider a formal continuing education program in administrative skills as a part of its service to members. This has been very successful in a number of other professional societies.

Conclusion

Technical, human, and conceptual skills are needed at every level of the firms and agencies engaged in arboriculture and urban forestry. These skills are not "natural," in the sense that people are born with them, but rather they must be learned and practiced. Since human and conceptual skills are typically lacking in most formal education programs, some type of continuing education program is needed. Such programs must fit the needs of the person at the particular position level they occupy. Training programs are available but need to be selected with care from a variety of available sources. Perhaps the guestion, "what business is the International Society of Arboriculture really in?" raises the opportunity for a dynamic continuing education program to meet the administrative skills needs of arborists and urban foresters.

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ABSTRACT

HUDAK, J. 1984. Plants that tolerate dryness, wind and sun. Am. Nurseryman 159(3): 40-42, 44-45.

The recent spread of extended drought conditions over vast areas of the country has made it necessary for nurserymen to become aware of shrubs with greater-than-average tolerance to dryness, wind, and sun. Even without a drought to battle, we will find that knowing which shrubs tolerate dryness is helpful, as almost any site at some time experiences dry conditions. This is especially true with the root zones of shallow-rooted, large trees, or with sandy soils exposed to bright sunlight and drying winds. The generous inclusion of moisture-holding organic materials in the initial planting pit, together with deep soil preparation, can forestall some of the consequences of drought. But it is the choice of the most reliable plant type that overcomes the basic drought problem.