The "Marshmallow Principle" introduced in this paper is stated as follows: "External pressure exerted on an organization to change its basic structure will, for as long as that pressure is applied, cause the organization's structure to bend and assume a new shape. Once the pressure is removed, the organization will reassume its original shape. Basic change in organizational structure is accomplished only when the key functionaries within that organization make an internal commitment to change." The author believes that when applied to American education, this principle addresses the need for internal changes in commitment among professional educators. How the principle is being accommodated in 11 basic strategies for accomplishing change embodied in the career education concept (which is seen as a positive application of the principle) is illustrated. Finally, a plea is made for continuing collaborative efforts on behalf of career education, which if successful will motivate professional educators and the public to decide for themselves to change the nature, structure, format, and delivery system of American education at all levels. (TA)
CAREER EDUCATION AND THE MARSHMALLOW PRINCIPLE

Kenneth B. Hoyt
Director, Office of Career Education
United States Office of Education

Introduction

"Principles", unlike "laws" or "maxims", do not always hold true. Still, because they do have wide applicability, they are useful in helping those faced with day-to-day operational problems view such problems in a broader context. The career education effort, at this stage in its conceptual evolution, is badly in need of such a basic guiding principle. Thus, I have decided to invent one and to seek to discover the degree to which it meets with acceptance.

For reasons which, hopefully, will soon become obvious, I have chosen to call this new principle the "Marshmallow Principle." This principle can be stated in the following manner: External pressure exerted on an organization to change its basic structure will, for as long as that pressure is applied, cause the organization's structure to bend and assume a new shape. Once the pressure is removed, the organization will reassume its original shape. Basic change in organizational structure is accomplished only when the key functionaries within that organization make an internal commitment to change.

When the "Marshmallow Principle" is applied to that organization referred to as American education, it should be immediately apparent that it speaks to the need for internal changes in commitment among professional educators. Moreover, since the great bulk of professional remarks prepared for presentation to the Georgia Personnel and Guidance Association's Winter Conference. Macon, Georgia, January 23, 1976
educators are classroom teachers, the importance of "teacher power", if this principle holds, cannot be over-emphasized. It is my firm belief that, if any basic change is to come to American education, it will grow out of changes in the professional commitments of classroom teachers. Unless that change can be seen in the classroom, it is not real change.

Career education, from the outset, has been pictured as a reform movement in American education. The basic reform being sought is one aimed at making education, as preparation for work, a major (although not an exclusive) goal of all who teach and of all who learn at all levels of American education. In championing this basic purpose as a basis for reform, career education has contended that, if it can be accomplished, American education will better serve both the needs of individual students and the needs of the larger society. As a reform movement, career education aims at accomplishing permanent change in the fabric, structure, and operation of American education. It is, in no way, a plea for temporary accommodation to a series of current, short-range, problems.

In this paper, an attempt will be made to illustrate how the "Marshmallow Principle" is being accommodated in the basic strategies for accomplishing change embodied in the career education concept. To do so demands that other attempts to increase education/work relationships be recognized and contrasted with career education. Following this, the basic conceptual strategy for effecting change through career education will be described. Finally, a plea will be made for continuing collaborative efforts on behalf of career education.
Other Current Attempts to Improve Education/Work Relationships

The call to improve relationships between the "world of schooling" and the "world of paid employment" did not originate with the invention of the term "career education." For several years, a wide variety of agencies and organizations have initiated and operated systematic, national efforts aimed at helping youth make a more successful transition from school to work. Both their efforts and their contributions have been, and continue to be, positive and significant. Viewed in one way, each can be considered an attempt to move toward implementation of career education's goals - and so to become part of the career education movement. Viewed in another way, it can be said that career education seeks to create conditions, within formal education, which will help each of these efforts become even more effective in the future than it has been in the past.

The list of possible organizations and agencies being referred to here would, if chronicled completely, be very long indeed. Rather than attempt to make such a complete listing, the following names will illustrate the kinds of efforts being referred to here:

1. Junior Achievement
2. National Alliance of Businessmen
3. Boy Scouts of America (including Explorer Scouts)
4. Girl Scouts of America
5. National Association for Industry-Education Cooperation
6. Young Women's Christian Association
7. Chamber of Commerce of the United States of America
8. General Electric Company
9. American Telephone & Telegraph Company
10. National service clubs (Kiwanis, Rotary, Lions)
11. National Council of Business and Professional Women's Clubs
12. National Council of Churches

Each of these, and many additional organizations outside the structure of formal education, have initiated and currently operate programs aimed at helping youth understand and capitalize on the changing relationships between education and work. Within the national government structure, important and major efforts, aimed at this same broad goal, have been launched and continue to operate under the auspices of both the Department of Labor and the Department of Defense.

For obvious and, in a democracy such as the USA, very important reasons, none of these efforts have been aimed at the reform of American education itself. Instead, each is more properly viewed as an attempt to cooperate with education, in providing resources and/or training opportunities, to professional educators. Their primary efforts have correctly concentrated on increasing the availability of data and resources needed by youth in career development and in the transition from school to work. While each has probably hoped that its efforts would also result in internal changes within educators, this has not, by and large, been their primary goal.

At this point in time, each of these organizations has three broad options with respect to career education: (a) career education could be ignored and the organization could continue to operate "as usual;" (b) career education could be perceived as an internal effort of education to do what the organization had been trying to do for years - and thus as excuse for
the organization to cease its own operations in this area; or (c) the organization could elect to move, through career education, from a cooperative to a collaborative relationship with formal education. Those of us in career education very much hope the third option will be selected for use.

Within the structure of formal education itself, previous efforts to emphasize, and to help students capitalize on the changing education/work relationships have been largely limited to vocational education programs at the secondary school level, to vocational-technical programs at the postsecondary, sub-baccalaureate degree level, and to programs of professional preparation at the college and university level. In recent years, these efforts have been supplemented by an increased emphasis on various forms of work experience and a renewed emphasis on providing career guidance, counseling, placement, and follow up services to students. Like the external organizations and agencies mentioned above, these efforts, while important and successful in emphasizing the education/work area as one of major importance, have not succeeded in changing the basic nature and goals of American education for the system as a whole.

While applauding and supporting such "internal" efforts, career education has raised such questions as the following in its efforts to stimulate basic educational reform: (a) why should only vocational education be considered as "hire" education?; (b) why should career guidance be considered as a unique function of professional counselors?; (c) why should education, as preparation for work, be limited to paid employment?; (d) why should "work experience" be considered a program for a minority of students instead of a general educational methodology available to all students?; and (e) why should not education, as preparation for work, be
as concerned about providing students with adaptability skills required to help them cope with change as it is with providing students with job specific skills that will help them gain initial entry into the occupational society?

As with the kinds of external organizations previously discussed, these "internal" elements within formal education have a number of options with respect to career education including: (a) ignoring career education and hoping it will go away; (b) competing with career education and proclaiming themselves as more important; or (c) becoming an integral and essential part of career education as a reform movement. Those of us in career education have operated under an assumption that the third of these options will be the one selected.

Strategies for Educational Reform Through Career Education

Had educational reform been the goal, it should be obvious that both the "external" and the "internal" efforts described above have illustrated the possible negative consequences specified in the "Marshmallow Principle." Career education is dedicated to accomplishing educational reform, and so to emphasizing the positive potential for accomplishing change enunciated in the "Marshmallow Principle." To do so, career education has adopted a number of basic strategies for attaining change. While none can be adequately discussed here, each can be specified and briefly described.

Strategy 1: Use public opinion polls and research data illustrating current youth problems and societal need as a rational for reform.

Such data are in plentiful supply. They clearly indicate a desire on the part of youth, parents, the business-labor-industry community, and the general public for education to increase its emphasis on education as preparation for work. Both the need and the call for this approach to
educational reform is clear and strong. This strategy has, hopefully, made clear that career education is more than a "new fad" which will soon disappear, through its emphasis on the growing problems associated with education/work relationships that are certain to increase in the years ahead.

**Strategy 2: Emphasize the system-wide need for career education.** The career education concept has been purposely pictured in ways that apply to education at every level, in every State, in every educational institution, and to every educator. While the nature and degree of reform will obviously vary, there is no part of American education that can remain untouched if reform of the system is to be accomplished.

**Strategy 3: Utilize an infusion approach to reform.** Real reform cannot be attained through a strategy of "add ons" that leave the rest of the system "as is." Thus, career education has not asked to become a new educational specialty, a new part of the curriculum, nor a new program requiring extensive additions of space and new staff members. Instead, the strategy has been to reform current educators and current educational programs through infusing a conscious emphasis on education, as preparation for work, throughout the entire system of formal education.

**Strategy 4: Don't try to "take over" all of education.** There is a huge difference between emphasizing that education, as preparation for work, represents a goal applicable to all educators as contrasted with claiming this to be the only goal of education. In championing its particular goal, career education has purposely sought to avoid demeaning or detracting from other worthy goals of education. Rather, it has sought, as part of reform, to instill a sense of purpose and purposiveness among all persons - teachers
and students alike - in ways that will emphasize the multiple goals of American education.

**Strategy 5: Emphasize "work", but do so in humanistic terms.** If career education is to represent a viable response to those calling for educational reform, it must centralize its conceptual efforts around the word, "work". If career education is to appeal to today's educators, it must be perceived in a humanistic form. Rather than viewing this as an unsolvable dilemma, career education has attempted to re-define "work" in humanistic terms related to the human need of all human beings to do - to accomplish - to produce - to achieve. This effort has allowed unpaid work, as well as the entire world of paid employment, to be included in the career education concept. Moreover, it has allowed all educators multiple ways of relating work to their substantive instructional content.

**Strategy 6: Organize career education efforts around the process of career development.** Career development, as part of human growth and development, covers the entire life span - from the pre-school through the retirement years. Moreover, it encompasses all persons. Finally, it is based in a combination of philosophy and research that emphasizes freedom of choice for the individual. It is the most logical of all possible ways of viewing the total spectrum of education/work relationships.

**Strategy 7: Implement career education primarily around the teaching/learning process.** Until and unless classroom teachers change their approach to the teaching/learning process, there can be no basic reform in American education. Career education has avoided an approach that asks teachers to add more content to an already over-crowded curriculum. Instead, it has centered on the teacher's primary responsibility - i.e., the
imparting of substantive content - and asked "how can the total resources of the community be brought to bear on helping students learn more?" and "how can the substantive content you teach be related to work?"

The essential strategy utilized by career education is one of attempting to reduce worker alienation, on the part of both teachers and students, by increasing the personal autonomy of the teacher, by expanding the variety of learning approaches and learning resources available to the teacher, and by recognizing that both teachers and students are more creative, innovative, and dedicated than the "educational assembly line" has given them credit for being. It is a strategy which, when understood by teachers, appears to work.

**Strategy 8:** Allow teachers the time and the opportunity to be creative.

Career education has sought neither to provide teachers with "canned" approaches to career education nor to force them to use a career education approach. Rather than invest heavily in new specialists or new materials, career education has made its primary investment in providing teachers with the time to think critically and constructively about how career education can help each teacher better attain his/her objectives. Teachers do not have "spare" time. Change - real change - will not come to the classroom if it is ordered by the administration. Teachers need the time and the opportunity to make their own professional decisions. They are very capable of doing so given such opportunities.

**Strategy 9:** Allow teachers to "sell" themselves on career education.

Career education subscribes to the "15-70-15" philosophy that holds it is reasonable to expect about 15% of teachers will become enthusiastic almost immediately, about 15% will reject any new ideas forever, while the remaining 70% will remain as professional skeptics until they have been given time to
think it through for themselves. Career education has sought to capitalize on the 15% who are "enthusiastic supporters" and to use them as the primary role models for helping the 70% become similarly enthusiastic. The kinds of change we seek will not come rapidly.

**Strategy 10: Provide key roles in career education for all professionals in education.** It is hard to be opposed to something if you are a vital part of it. Key and crucial roles in career education, in addition to that outlined for classroom teachers, have been outlined for counselors. School administrators, media specialists, and all other professional educators. Each is being asked to change, as part of the reform attempt, in ways that emphasize helping teachers better serve students. There is no part of American education that is not being asked to change.

**Strategy 11: Recognize the importance of collaboration.** Educational reform cannot be accomplished if the only motivation to change is from the "inside". Moreover, an essential element in the kind of reform advocated by career education is greater use of the total community as a learning resource - an abandonment of the false notion that the best way to prepare students for work is to lock them up in a school house and keep them away from it. Thus, from the outset, career education has said that this reform is not something educators can do by themselves. Instead, we have pictured career education as a collaborative effort involving the formal education system, the business-labor-industry-professional community, and the home and family structure. Collaboration, on the part of all three of these segments of society, is essential to the kind of reform envisioned by career education.
Collectively, these 11 strategies hold high potential for educational reform in America. If successful, career education will motivate professional educators - and the broader public - to decide, for themselves, to change the nature, structure, format, and delivery system of American education at all levels of education - from the pre-school years through the college, university, and adult education years. Career education is a concept built on the positive application of the "Marshmallow Principle."

Because of these 11 strategies, career education must pay the price of appearing, at times, to represent a series of paradoxes. For example, (a) Career education defies a simple definition and so will remain confusing in meaning to many, but a variety of "places to touch the elephant" is inevitable in a movement that seeks reform of all of education; (b) Career education, because it does not depend on creation of a new breed of educational specialist for its success, runs the risk of being accused of having no "constituency" among educators, but, viewed as a movement involving all educators, it could be seen as having a larger constituency than education has ever known; (c) Career education, because it does not cost much money, runs the risk of being considered a low priority in education, but it is time people recognized that the importance of an educational concern cannot be honestly measured simply by counting the number of dollars required for its implementation; and (d) Career education, if successful, will help all previous external and internal approaches to the education/work dilemma, but it cannot be successful unless it has their full support and involvement.

Career education is willing to pay this price of appearing to be paradoxical. It is a price well worth paying if the kind of educational reform we seek can come about.