A Non-traditional Faculty Development Program

Ronald E. Terry
Chemical Engineering
Brigham Young University
Provo, Utah 84602

Kurt Sandholtz
Novations Group, Inc.
Provo, Utah 84603

Abstract *- The authors have used a research-based framework developed by Professors Gene Dalton and Paul Thompson called the Four Stages$_{SM}$ Model to construct a faculty development program. The program has been designed to teach faculty a method by which they can manage their careers to remain highly satisfied with their work and to experience growth that builds new skills and abilities throughout their lives and still meet the needs of their institutions.*

Nevitt Sanford's *The American College* and Arthur Chickering's *Education and Identity* helped focus educators' attention to the fact that traditional higher education institutions were not meeting the developmental needs of their students [1,2]. Faculty development programs were initiated in large part to assist faculty in addressing these student development needs [3]. Nearly half of US colleges and universities had faculty development programs in place by the mid-1970s. Most of these were and continue to be focused on improving the teaching skills of faculty in order to enhance student development and learning [4].

The faculty development program discussed in this paper takes a different approach. The approach is modeled after a highly successful career development program that has been widely implemented in industry [5]. Research has shown that when individuals in industry initiate their own development plans with support from management, they feel greater job satisfaction and are more productive [6]. Faculty implementing such a plan could find it useful in avoiding the 'burn out' frequently experienced during mid-career.

Table 1 contains a sample agenda for a 4-hour workshop designed by the authors to present the program. The workshop begins by asking faculty to consider a time when they were both enjoying their work and making a significant contribution to their department and/or to their field of specialty. These times are referred to as 'career bests'. Career bests are characterized by [6]:

1. Being true to one's genius. Staying true to a person's genius means doing things that are in line with his/her talents and interests. Understanding that genius helps define assignments or roles in which a person will be satisfied and productive. Paying attention to feedback from a variety of sources will help provide a clear picture of the types of roles and assignments that should be sought.
2. Contributing significantly to the institution's mission. Faculty may be happy with their roles and assignments but if they aren't contributing to their institution's mission, they will not be happy in the long run.
3. Looking for challenge. Selecting the 'right' action plan is critical for successful development. The activities that are right are those that bring new and different challenges as well as satisfying personal genius and institution mission. Doing things that are more complex, seeking more interdependence with others, or putting one in a position or role that requires a change in perspective are all ways of building in challenge.

When these three items are in alignment, faculty feels highly satisfied with their work and experience growth that builds new skills and abilities. The institution benefits also from a career best since a productive and motivated faculty member is meeting its needs. The only problem with career bests is that too often they happen by chance. The objective of the workshop is to teach faculty a method by which they can manage their careers in such a way to achieve career bests frequently throughout their lives. During the workshop, participants are taught how to write a development plan to help implement the method.

Learning how to design a career best involves learning about an individual's passion [7]. People are motivated by different ideals. Some are motivated by a desire to get ahead. Others are more concerned about balancing their lives between work, family, church, and/or civic responsibilities. Knowing and understanding what motivates them will help people put in alignment the three aspects of a career best as defined above.

In contrast to the idea of a career best is the notion of plateauing [8]. Plateauing has become one of the standard terms in the development vocabulary. This is unfortunate, because the word itself is freighted with negative connotations. Geologists and geographers use the word to describe an elevated tract of more or less level land. This is not a pleasant metaphor for one's career. It conveys the end of the climb. If a career was supposed to take us to the top of the mountain, a plateau indicates we took a wrong turn, missed the trail, and were denied the spectacular view from the peak.

Developmental psychologists use "plateau" to define "a period in which an individual's learning rate does not improve" [8]. In the context of careers, plateauing occurs when a person reaches a state of no growth and/or movement. There are two kinds of plateauing:

- position - the end of promotions (i.e., no significant increases in level, status, or formal power).
- contribution - stagnation in terms of personal growth and hence, contribution.

Position plateauing will happen to everyone, even the university president will run out of positions to climb. This kind of plateauing doesn't bother everyone since not all people are anxious to move up the administrative ladder.

On the other hand, contribution plateauing does not have to happen to anyone and it is more damaging to both the individual and the institution. Individuals are hurt because they stop learning and growing. Institutions are damaged because productivity and motivation drop. Too many faculty members have reached this point in their academic careers. For these individuals, frequently teaching ratings have dropped and/or scholarly output has declined or ceased. The faculty development workshop is designed to help faculty establish a plan that will prevent this from occurring.

07803-5643-8/99/$10.00 c 1999IEEE **November 10 - 13, 1999 San Juan, Puerto Rico**
29th ASEE/IEEE Frontiers in Education Conference

The workshop also includes a discussion of feedback and how to use it to initiate change [9]. Research has shown that individuals are required to make changes in abilities, relationships, and perspectives during their careers in order to remain highly valued within their organization [10]. The responsibility to change lies with the individuals, not with the institutions with which they work. To facilitate change, it is helpful for people to become aware of how others see them. Feedback allows people to compare their own perceptions of their performance with the perceptions of their supervisors and others. The workshop addresses how to accept feedback and how to use it to help make appropriate changes that will help faculty to better manage their own careers.

The workshop culminates with a module on how to conduct a development discussion with a fellow colleague who is asked to serve as a mentor or coach. The faculty member, acting as the initiator, prepares an agenda for the development discussion, which consists primarily of the initiator and mentor reviewing the faculty development plan that he/she has created. The development discussion is not a performance review that is initiated by a department chair or dean to review the past performance of a faculty member. Rather, it is a means to allow a faculty member to become proactive in the management and development of his/her own career.

Review of Four Stages$_{SM}$ Model

In the late 1960s, Harvard Business Professors, Gene Dalton and Paul Thompson, began a study of performance measures of professional people in organizations [10]. Their original research, which included over 2500 engineers and has been replicated repeatedly over the past 20 years, showed the following [5,11-15]:

1. The average performance ratings of engineers rose steadily until the mid to late thirties and then began to decline as shown in Figure 1. The most recent data show that the peak has shifted to the early forties.
2. Many individuals were able to remain highly valued contributors throughout their careers.
3. Individuals perceived as high performers in the later stages of their careers performed different functions than those perceived as high performers in the early stages of their careers -- and that these late-career functions had less to do with technical brilliance than with organizational influence and technical leadership.

These observations led to the development of the Four Stages$_{SM}$ Model. The stages reflect the needs of organizations to have varying job assignments performed by individuals as they earn trust and respect from their peers and supervisors over the length of their careers. The stages differ in tasks, in the types of relationships that individuals form, and in the perspective that they have. Table 2 summarizes the characteristics of each stage.

Learning how to follow comes before learning how to lead. That's the essence of Stage I. In Stage I, a person is expected to accept supervision and direction willingly and to exercise initiative and creativity within a well-defined area. Ideally, a mentor is provided to help teach the approaches, the organizational savvy, and the judgment not found in textbooks. While it is important to stay in Stage I long enough to build a solid foundation and to earn the trust of others, people who stay in this stage indefinitely will, over time, become less and less valued in the organization. People can't spend an entire career in Stage I unless they want to be a perpetual 'intern'.

Most individuals look forward to having their own projects or areas of responsibility. Earning this opportunity and taking advantage of it moves a person into Stage II. Think of Stage II as the time to build a solid technical foundation -- essential for building a long-term career. In this stage, peer relationships take on greater importance, especially in a team context. People in Stage II are true team players, pulling their weight without the need for a lot of guidance, and willingly sharing information with their fellow team members. Stage II individuals rely less on their supervisor or mentor for direction, and more on their fellow team members. In fact, they begin to resent being "micromanaged." This stage is an extremely important step in one's development. People should resist the temptation to rush through Stage II. If they move too fast into a management or leadership role, they'll find they don't have the credibility necessary to make broader contributions. Stage II is a key decision point in a career, however. Many people find that they prefer a "leave me alone and let me do my work" type of role. Indeed, the most readily identifiable role in most organizations is the independent contributor -- the expert or specialist working as a member of a team. This "hired gun" philosophy is fraught with peril, however. Continued recognition and reward requires staying at the "cutting edge" of the discipline, and the continued strategic importance of that discipline to the organization. A person may be able to control the former, but the latter is beyond his/her influence.

The key to Stage III is the ability to "contribute through others". This doesn't necessarily mean managing or supervising other people. Recent research from 10 technical organizations shows that non-supervisors outnumber supervisors five to one in this stage. The roles most often played by people in Stage III are: coach; informal mentor; project or team leader; idea leader; and internal consultant. As Table 2 shows, a move into Stage III requires shifts in multiple activities including: developing a greater breadth of technical skills and then applying those skills in several areas; building a network of people outside the workgroup and using the network to help get work accomplished; and becoming involved in the development of people. Stage III requires strong interpersonal skills. A person needs to be able to build the confidence of co-workers and not feel threatened by the success of others. One dilemma for technical Stage III's is that they'll find themselves pulling away from technical work. The question is: How far? Some make a great effort to stay close to their field. Keeping a foot in each camp is hard to do long-term. Eventually, they'll have to let go of some of the hands-on technical work in order to be successful in a broader Stage III role.

Not many people progress beyond Stage III but employers need some to in order to provide the high-level leadership that will define the future. Table 2 lists the characteristics of what it takes to move into Stage IV. Many technical contributors find ways to play a Stage IV role without moving into management. These include:

1. The idea innovator. These people influence the future of the organization through original concepts that often lead the organization to change the way it does its work. Their influence is based on a reputation for achievement and a keen sense of what builds the organization's ability to compete in the marketplace.

2. Internal entrepreneur. These high-energy people are adept at seeing new business opportunities, then assembling the buy-in, money, and staff to pursue new product ideas and other business objectives.
3. Sponsor. Sponsors influence the direction of the organization through the selection and development of key people. A sponsor keeps an eye out for competent people, then gets them placed in key positions where they will be tested, challenged, and have the opportunity to prove themselves capable of making decisions affecting the organization's future. In comparison to the mentor role in Stage III, the sponsor role requires less frequent contact and is probably a more distant relationship.

Often, individual contributors who are in Stage IV have a reputation outside the organization through their achievements and/or publication. Another characteristic of people in Stage IV is their extensive network of relationships outside the organization. A critical shift for those moving into this stage is a broadening of perspective and a lengthening of time horizons.

Most people find it easy to understand the stages model. Somewhat less clear is the process by which a person moves from one stage to another. Such transitions are by no means automatic. Moving from one development stage to another requires taking a new approach to one's job—in effect, renegotiating one's role in the organization. Such role renegotiations require a change in relationships, tasks, perspective, knowledge, skills, and abilities.

This transition process is called a "novation." It has to be driven by the individual. The organization can promote, demote, hire, fire, transfer, reassign, or outsource individuals. But it cannot "novate" them. They have to do that themselves by taking a different approach to the way they accomplish work in the organization.

Implications of the Four Stages$_{SM}$ Model to Academic Careers

The stages model provides an interesting way to look at professorial careers. Most faculty begin learning the fundamentals of teaching and research during their own student years, particularly as they work through a doctoral program. This phase correlates with the characteristics of Stage I. A new assistant professor begins a career typically in Stage II. The novation to Stage III occurs when faculty begin to take on a broader vision of their assignments. This could mean engaging in activities such as becoming involved with college and university wide issues, developing an interdisciplinary research program, or teaching honors courses for a wider audience then simply their own departmental students. A significant fraction of associate and full professors work in Stage III. Those that become actively involved in university issues need to make the novation to Stage IV.

The notion of contribution plateauing relates directly to the mid-career crisis in which many faculty find themselves. The routine work of preparing lectures and teaching the same class over and over again has become a drudgery for many individuals in academia. They have reached a period of no growth and feel bored and unchallenged.

The faculty development plan, shown in Figure 2, and the development discussion provide an effective tool for post-tenure and even pre-tenure review sessions. The responsibility and initiative are on the individual faculty members to manage their careers. If all faculty had the skills and the motivation to construct their own career development plan and then seek guidance from a respected mentor, the cases of contribution plateauing could be significantly reduced.

Results from Piloting the Workshop

The workshop was initially piloted with a small number of faculty after the annual Rocky Mountain ASEE Section meeting. Overall, the participants commented positively about the material and of the contribution that it could make to the faculty in their institutions.

A few of the participants' specific comments are listed here.

- When asked what they found most useful, two of the participants responded: "The idea of planning career development is novel for academics" and "breaking down current status and setting goals to respond to needs – how to do this". As with most people, careers seem to 'just happen' to faculty. Most faculty are not instructed on how to manage their development and make adjustments in their behavior to further their careers. The workshop provides faculty with a way of becoming proactive in their own development. The participants saw this as a positive outcome of the workshop.
- One participant commented that "this would be useful for our department chairs, could you come to our place and present it". He made this comment during the discussion of contribution plateauing. He thought that the material could be helpful to chairs as they interact with faculty that have reached the point in their careers where "work had ceased to be fun" and that have stagnated in their assignments.
- Two participants spoke of the usefulness of the workshop for younger faculty as they begin their careers and how the workshop material could provide direction for them. A significant fraction of individuals entering the professorial ranks are given little guidance. These participants spoke of how the workshop could be a great resource to new faculty members and of how helpful the information would have been to them when they first started.
- One participant commented that the material was "good and timely" and spoke of how the material could help all faculty be more responsive and accountable to pressure from constituents, i.e., state legislatures, boards of regents or trustees, parents, and industry recruiters.

Conclusions

The authors have used a research-based framework called the Four Stages$_{SM}$ Model to construct a faculty development program. The program consists of a 4-hour workshop that has been designed to help faculty plan their careers to reach greater satisfaction for themselves and the institutions that they serve.

Participants in a small pilot commented that the workshop could provide particular benefit regarding the following issues:

1. Teaching faculty how to be proactive in their own career development.
2. Teaching chairs how to help faculty that have contribution plateaued.
3. Providing direction for individuals beginning their academic careers.

4. Helping faculty be more responsive and accountable to their constituency, i.e., state legislatures, boards of regents, parents, industry representatives, etc.

References

1. Sanford, N. (editor), *The American College*, Wiley, New York, New York, 1962.
2. Chickering, A.W., *Education and Identity*, Jossey-Bass, San Francisco, Calif., 1969.
3. Bergquist, W.H., *The Four Cultures of the Academy*, Jossey-Bass, San Francisco, Calif. 1992.
4. Wadsworth, E.C. (editor), *A Handbook for New Practitioners*, The Professional & Organizational Development Network in Higher Education, 1988.
5. Younger, J. and Sandholtz, K., "Building a Successful R&D Career", *Chemtech*, April 1998.
6. unpublished results of research conducted by The Novations Group.
7. Derr, C.B., *Managing the New Careerists*, Jossey-Bass, San Fransisco, Calif., 1986.
8. Bardwick, J. M., *The Plateauing Trap: How to Avoid It in Your Career and in Your Life*, Amacom, New York, New York, 1986.
9. Folkman, J.R., *Making Feedback Work*, Novations Group, Inc., Provo, Utah, 1998.
10. Dalton, G.W. and Thompson, P.H., *Novations: Strategies for Career Management*, Scott, Foresman and Co., Glenview, Ill., 1986.
11. Dalton, G.W. and Thompson, P.H., "Accelerating Obsolescence of Older Engineers", *Harvard Business Review*, September-October 1971.
12. Thompson, P.H., Dalton, G.W., and Kopelman, R., "But What Have You Done for Me Lately?–The Boss", *IEEE Spectrum*, October 1974.
13. Dalton, G.W., Thompson, P.H., and Wilson, I., "An EE for All Seasons", *IEEE Spectrum*, December 1976.
14. Dalton, G.W., Thompson, P.H., and Price, R.L., "The Four Stages of Professional Careers", *Organizational Dynamics*, Summer 1977.
15. Dalton, G.W. and Thompson, P.H., "The Stages of an Engineer's Career", *Chemical Engineering*, September 1, 1986.

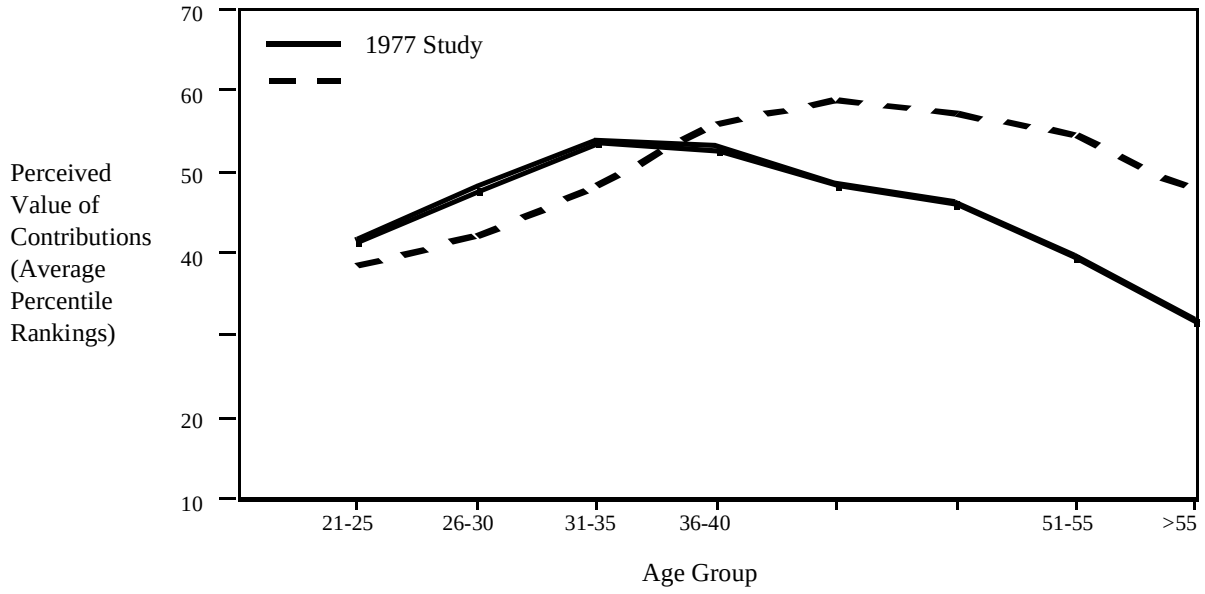

Figure 1. Managers' Assessment of Employee Contribution versus Age Group

Table 1. Faculty Development Workshop Agenda

Module 1 - Introduction
- Workshop Overview
- A Look at Career Bests
- The TOP$_{SM}$ Model
- More on Career Orientations
- The Faculty Development Plan

Module 2 - A Model for Avoiding Plateauing
- Plateauing Defined
- The Four Stages $_{SM}$ Model
  - Stage Characteristics
  - Key Research Findings
- Novations Defined
- Implications for Academic Careers
- Stage Self-Assessment

Module 3 - Using the Feedback Report
- Using Feedback Effectively
- All Feedback can be Helpful
- Understanding Your Feedback Report
- Responding to Those Who Gave You Feedback
- Identifying Strengths and Development Needs

Module 4 - Creating and Planning for a Career Best
- Elements of a Career Best
- Action Planning
- Holding a Development Discussion
- Realistic Division of Responsibilities

Module 5 - Summary and Evaluation
- Applying What You Have Learned
- Workshop Feedback

Table 2. Stage Characteristics

Stage I - Depending on others

Willingly accepts supervision and direction

Demonstrates competence in a portion of a larger project or activity overseen by more senior staff

Effectively performs detailed and routine work

Shows “directed” creativity and initiative

Stage II - Contributing independently

Demonstrates technical competence, credibility, and a reputation for good work

Works independently and produces results

Assumes responsibility for a definable portion of the project, area, or clients

Relies less on the supervisor or mentor, developing his or her own resources to solve problems

Builds collegial relations with co-workers

Stage III - Contributing through others

Demonstrates a breadth of business or technical understanding and insight

Stimulates others through ideas and knowledge

Develops and influences others: as an idea leader, an internal consultant, a mentor to more junior staff, a manager, etc.

Builds a strong network of organizational and industry relationships

Deals with the outside on behalf of those inside the work group (*e.g.* , with clients, other work groups, industry associations, upper management, etc.)

Stage IV - Leading through vision

Shapes the dire ction of the organization

Effectively exercises power for the benefit of the organization by initiating actions, influencing key decisions, or obtaining important resources

Uses the tools of the organization to obtain organization commitment and results

Sponsors promising individuals to test and prepare them for key roles in the organization

Represents the organization both internally and externally