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ABSTRACT
            This paper examines higher education faculty vitality
from the perspective of the individual faculty member by taking a
closer look at the individual differences among faculty which might
be related to faculty vitality and by linking issues of adult
development to the continuing professional development of faculty.
First the paper uses data from recent national studies to determine
the characteristics of college faculty. Those studies show that
full-time faculty in higher education are predominantly white, male,
tenured, over 45, working in four year institutions, and holding
doctorate degrees. Next the paper examines the development of faculty
careers including the differences in careers which may be gender
related and the varying tasks over a faculty career. In a third
section individual factors which are associated with faculty vitality
such as self-motivation and careers with variety in their work are
examined and contrasted with the characteristics typical of burnout
and lack of vitality: lack of new challenges and lack of intrinsic
motivation. A conclusion offers suggestions to institutions for an
approach to faculty development which takes into account the
individual differences and needs of each faculty member. Over 90
references are included. (JB)

Linking Faculty Development with Adult Development:

An Individualized Approach to

Professional Growth and Renewal

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Educat'on 434
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Linking Faculty Development with Adult Development:
An Individualized Approach to Professional Growth and Renewal

Faculty vitality is an important issue in higher education. Although institutions have always been concerned about the vitality of their faculty, with increasing accountability for student success and decreasing funds for higher education, it is even more critical for institutions to have vital faculty: faculty who are up-to-date in their fields, and who provide excellent instruction for students. In studies of faculty, age has often been linked with the faculty vitality. There is an underlying assumption that older faculty are the "deadwood," and that younger faculty are more "vital." If this is true and given that a significant proportion of college faculty are nearing retirement, colleges could be faced with an interesting predicament: faculty vitality is critical to the success of institutions in a time of greater accountability and diminishing funds, but faculty vitality may be generally lower because most of the faculty are older.

In order to resolve these issues, it is necessary to examine the underlying assumptions about faculty vitality. First, is it necessarily true that "older" faculty are less vital than younger faculty? And second, whether or not age is related to vitality, what other individual factors might account for the variations in vitality among faculty? This paper will examine faculty vitality from the perspective of the individual faculty member by taking a closer look at the individual differences among faculty which might be related to faculty vitality. By linking issues of adult development to the continuing professional development of faculty, it may be possible to enhance the vitality of faculty throughout their careers.

This paper is organized into four parts. First, some background information on the characteristics of college faculty will be provided from recent national studies of faculty. Second, the development of faculty careers will be examined, including the differences in faculty careers which may be gender-related, and the varying tasks over the faculty career. Third, individual factors which are associated with faculty vitality will be examined and contrasted with the characteristics typical of burnout and lack of vitality. Finally, the conclusion will offer some suggestions to institutions for an individualized approach to faculty development which might enhance faculty vitality throughout the career.

Background on Faculty Characteristics

In order to gain a better understanding of faculty vitality, and the individual factors which might contribute to vitality, it is first necessary to examine the characteristics of faculty. By answering the question, "Who are the faculty?", it will be easier to draw relevant conclusions from studies of specific groups of faculty. The following faculty characteristics will be examined: age, ethnicity, gender, educational attainment, higher education setting, tenure status, and faculty attrition estimates.

Age. According to a 1987 national study of college faculty, the average age of full-time college faculty is 47 and one quarter of all faculty is age 55 and older. Thirty-four percent of faculty are between the ages of 45 and 54. Only two percent of college faculty are under age 30. The age group of 30-44 makes up the largest cohort: 40 percent of all faculty (National Center for Education Statistics, 1990, p. 9).

Ethnicity. Faculty in higher education are predominantly white. In 1987, 89 percent of all full-time faculty across all types of institutions were white. Asians made up four percent, Blacks three percent, Hispanics two percent, and American Indians one percent of all faculty. In public two-year colleges, there is a slightly higher percentage of White faculty (91 percent), and Hispanic faculty (3 percent), but fewer Asians (2 percent) (National Center for Education Statistics, 1990, p. 11).

Gender. Males represent 73 percent of all full-time faculty across all institutions. However, gender distributions vary somewhat according to the type of institution. For instance, in private research universities 81 percent of the faculty are male, but in public two-year colleges males represent 62 percent of all full-time faculty (National Center for Education Statistics, 1990, p. 13). However, in all types of institutions, males make up the majority of faculty.

Educational Attainment. It is often assumed that all faculty in higher education hold a Ph. D. or terminal professional degree. However, in reality the educational attainment of the faculty varies widely from one type of institution to another. Across all institutional types, 67 percent hold a Ph.D. or professional degree. But in private research universities, 93 percent hold Ph.D.s, while in public two-year institutions only 19 percent of faculty have earned a Ph.D. or professional degree (National Center for Education Statistics, 1990, p. 14).

Higher Education Setting. Most of the studies of faculty in higher education focus on faculty in four-year colleges. In fact, the majority of faculty, 81 percent, are found in four-year institutions, and only 19 percent in public two-year colleges. Faculty in public and private Research institutions account for over one quarter of all faculty, and faculty in Liberal Arts colleges account for only eight percent of faculty across all types of institutions (National Center for Education Statistics, 1990, p. 15).

Tenure Status. Because the faculty are older, a large percentage of faculty holds tenure. Across all institutions, 60 percent of the full-time faculty hold tenure, 22 percent are in tenure-track positions, and nine percent are in institutions with no tenure system. In public two-year colleges, 60 percent of faculty also hold tenure, but only 9 percent are in tenure-track positions, and 25 percent report that there is no system of tenure at the institution (National Center for Education Statistics, 1990, p. 15).

Faculty Attrition and Estimates of Faculty Appointments to 2010. It has been estimated that faculty attrition due to retirement and mortality could be as high as 2.75 percent each year. In addition, it is estimated that 3.25 percent of faculty leave academe for other reasons. At the same time, it is anticipated that student enrollments will increase due to the baby boomlet and returning adult students. These two simultaneous events could result in faculty appointments in the twenty-five years from 1985 to 2010 that would equal about two-thirds of the existing faculty in 1985 (Bowen & Schuster, 1986, p. 198).

Summary of Faculty Characteristics. Full-time faculty in higher education are predominantly white, male, and tenured. The majority of faculty are age 45 and older. Most faculty work in four-year institutions. The majority of faculty in four-year institutions hold a Ph.D. or professional degree, and most faculty in two-year colleges do not. However, because it is likely that a large number of new faculty will be hired over the next twenty years, the characteristics of the faculty are likely to change. If affirmative action guidelines are followed, it is likely that the faculty will include more women and more ethnic minorities. Because of the increased demand for faculty, it is possible that fewer will hold a Ph. D. at the time of their appointments. Although the large cohort of faculty who are currently age 35-44 are likely to be in the institution in twenty years, it is likely that the faculty will be generally younger, and fewer may hold tenure. All of these factors have important implications for the development of faculty.

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Faculty Career Development

In reviewing the literature of faculty careers, four questions will be addressed: 1) How do the theories of adult development relate to the faculty career development? 2) Are there discernable career patterns among college faculty?; 3) How do men's and women's faculty careers differ?; and 4) What are the tasks of a faculty career, and do these tasks tend to change over time? But before exploring these questions, it is important to first consider the limitations of the literature on faculty careers.

Limitations of the literature. Although some interesting conclusions may be drawn from the literature on faculty careers, it is important to consider the validity of the findings. Most studies of college faculty were done with four-year faculty, so many of the findings may not be applicable to faculty in two-year colleges. Although faculty liberal arts colleges represent only eight percent of all faculty, many of the faculty studies were done at liberal arts colleges. It is doubtful whether these findings would be valid for faculty at other types of institutions. Most of the studies selected white male faculty as their subjects. Although this is consistent with the current faculty population, the findings might be quite different if the subjects of the studies had been females or ethnic minorities.

In analyzing faculty career patterns, the studies are cross-sectional rather than longitudinal. For this reason, the cohort effect probably has an important impact on the findings. In other words, the faculty career pattern of someone who is 60 years old today may not necessarily be consistent with the experience of a 40-year old faculty member twenty years from now.

Finally, the literature tends to make assumptions about faculty careers which are linked closely to age. Because the reports provided by the National Center on Education Statistics does not break down the data to indicate the relationships between age, gender, ethnicity, length of time as a faculty member, and academic rank, assumptions about faculty career patterns may not be accurate. For instance, a female faculty member may be over 50, but may not yet have tenure if she delayed her career to raise a family. Others may have taken longer to earn the degrees necessary to begin a faculty career, and others may have come into academe from other careers. For this reason, in reviewing the studies of faculty careers, it is important to separate age-related issues from career development issues which may not be related to age.

How do the theories of adult development relate to faculty career development? There are many different types of theories of adult development: some are stage theories which are linked to age, others are progressive stage theories not linked to age, and others rely on critical life events. The relevance of each adult development theory to faculty career development will be examined.

Of the stage theories, Erikson's developmental theory is probably the most widely quoted. Briefly, Erikson describes eight life stages from infancy through old age. The last three stages address adult development: stage 6 is "Young Adulthood;" stage 7 is "Adulthood;" and stage 8 is "Old Age" (Erikson, 1982). According to the theory, people must complete the tasks of one stage before moving on to the next stage, or dissonance results. Erikson's theory presumes that certain tasks will be completed at specific ages, and that conflicts will be resolved in the process of development. Because this theory relies heavily on age-related tasks, and assumes a homogeneous lifestyle, this is probably not a theory which is relevant for examining faculty careers.

Daniel Levinson (1978) developed a stage theory in which, like Erikson's, the tasks are age-related. The four major stages of Levinson's theory are, 1) Childhood and Adolescence, 2) Early Adulthood, 3) Middle Adulthood, and 4) Late Adulthood. One major departure from Erikson is the incorporation of a transition period in between each stage. These transition periods are normal phases of re-evaluation which may sometimes be somewhat tumultuous, such as the "Mid-life Transition." Like Erikson, Levinson proposes the idea of the resolution of the tasks of one stage before entering the next stage. Levinson based his stage theory on the study of a small group of middle-class, middle-aged men.

Although Levinson's theory is based on a narrow and homogeneous group of men, Levine (March 1989) believes that certain broad aspects of his theory may be applied to faculty development. For instance, in Early Adulthood, the enthusiasm of new faculty may be tapped by encouraging them to become involved in a variety of activities. Because they are likely to be testing their careers, they need room to experiment in order to grow. In Middle Adulthood, some faculty may feel "stuck" if their career goals or personal goals have not been fulfilled. Levine suggests that faculty at this stage be encouraged to develop new "Dreams," and to begin to build a "legacy." It is also important to recognize that this may be a period of confusion in

which polarities are pulling faculty in different directions. For this reason, a variety of opportunities for development and growth may be needed. In Late Adulthood, faculty may desire the opportunity to provide nurturing to other younger faculty. In addition, adults at this stage are likely to be interested in issues of health and retirement.

Furniss (1981) also used Levinson's theory to devise a three-stage model of faculty careers. In the first stage, "Early Career," the tasks of a faculty career include having a mentor, getting tenure, and settling down in the career. In the second stage, "Mid-Career," faculty gain more autonomy, they become a mentor, and they broaden their range of interests. The third stage, "Late Career," involves continuing to broaden the range of interests, becoming less competitive, and being called upon for experience and wisdom. However, Furniss clearly states that these "stages" may not necessarily be age related: "Entry on a faculty career is most common for the young, but it is also possible for the middle-aged or ... for the old" (p. 84).

Baldwin's widely quoted model of faculty careers is based on Levinson's and Gould's theories of adult development, and on his 1979 study of male faculty in liberal arts colleges. Baldwin agrees with Levinson's idea of passing through stages progressively by completing the necessary tasks of one stage before moving on to the next stage. Baldwin's model includes five stages: 1) New Assistant Professor (0-3 years); 2) Assistant Professor (over three years to tenure); 3) Associate Professor; 4) Full Professor; 5) Full Professor within five years of retirement. The two most difficult periods of a faculty career, according to this model, are the first three years (stage 1) and the period leading to a tenure decision (stage 2). Baldwin found that career re-evaluation is most likely to occur during stage 2, before gaining tenure, and stage 4, when faculty may feel that there is nothing left to strive for. In general, Baldwin found that satisfaction with the faculty career tends to increase with each stage, and is highest at stage 5. In 1990, Baldwin updated his views on faculty career patterns by stating that because of the increased diversity of faculty, it is difficult to classify them into specific stages as his earlier model had done. However, he still believes that there are particular successive events which are still common to most faculty careers.

Two other researchers of faculty, Mathis and Lawrence, devised models of faculty careers which were very similar to Baldwin's model. In her research on faculty age and teaching, Lawrence developed a four stage model which combines Baldwin's first two stages into one "Pre-Tenure" stage. The remaining three stages are the same as Baldwin's. Lawrence notes that although Baldwin's stage model is useful for looking at age-group differences in faculty, she agrees that because the data is cross-sectional "there is little or no empirical evidence that changes in values and performance are age related and recur across generations of professors" (p. 57). Mathis (1979) also used a four-stage model of faculty careers in his research on interventions which can influence the future course of the career. One notable addition to Baldwin's model is a pre-career stage: graduate preparation for a faculty career. The second stage is the initial years of a first faculty appointment, or first years of subsequent appointments. The third stage includes the middle and later years of a faculty career, and the fourth stage is the retirement preparation phase.

Sheehy's popular book, Passages (1976) proposed a theory of adult development which is similar to Levinson's theory, although her book also included aspects of women's development. Like Levinson, she proposed the idea of a "mid-life crisis" as a period in which people may re-evaluate their lives, and may make changes in their lives. Unlike Levinson, however, Sheehy proposed that adults revisit conflicts throughout their lives rather than resolving the conflict before moving on to the next stage of development. This "dialectical" approach (Wrightsman, 1988) assumes that change is normal, and that people continue to develop by going through changes and conflicts throughout their lives. Unlike Levinson's and Erikson's stage theories, the dialectical approach does not assume that there are periods of stability in the normal development of an adult life.

Hodgkinson (1974) combined Levinson's and Sheehy's models of adult development and applied them to faculty careers. Although he uses age as a basis for his model, Hodgkinson warns against placing individuals in boxes strictly according to age, because he feels this might lead to self-fulfilling prophecies which might impair individual development. Hodgkinson's model of faculty careers includes the following seven stages: 1) Entering the Adult World (ages 22-29), in which young adults test careers, find a mentor, and develop "the Dream;" 2) Age 30 Transition, in which the agendas are likely to be different for

men and women, depending on whether or not they are married; 3) Settling Down (ages 30-35), during which faculty are likely to be working toward gaining tenure; 4) Becoming One's Own Man (ages 35-39), in which, assuming tenure had been earned, the tasks include shedding the mentor, increased research and publishing activities, and increased campus responsibilities; 5) Middlescence (ages 39-43), during which "the Dream" is usually revised downward and the faculty career may be re-evaluated ("now that I've achieved tenure, what is left to strive for?"); 6) Restabilization (ages 43-50), in which the mid-life crises have been resolved, there is a renewed loyalty to the institution, a desire to become a mentor, and a general broadening of campus activities; 7) Later Years (after age 50), in which there is an awareness of physical decline and an attitude of "hanging on" to retirement because there are no other options, or a peak of satisfaction and productivity may be reached through a broadened perspective.

In his six-stage theory of development, Kegan (1982) takes a "constructive-developmental" approach which traces the development of "meaning-constructing." Kegan believes that the process of development is a "sucression of qualitative differentiations of the self from the world" (p. 77). Although Kegan uses some age-related examples in his descriptions of the six stages, it is possible for adults to be at any of the stages. The four stages which may be found in adults are "Imperial;" "Interpersonal;" "Institutional;" and "Interindividual." According to this theory, change is an evolutionary process of lifelong adaptation: "an active process of increasingly organizing the relationship of self to the environment" (p. 113). Kegan believes that it is possible to understand the motivations of people and the logic of their decisions by knowing where they are in their evolution and how they define "self" and "other." Although this is not an age-related theory, it is similar to Erikson's theory in that it is a hierarchical theory of development in which the optimum stage of development is the last stage.

However, Loevinger states, "Probably it is a mistake to idealize any stage. Every stage has its weaknesses, its problems, and its paradoxes which provide both a potential for maladjustments and a potential for growth" (Levine, 1989, p. 90). For this reason, although Loevinger's theory proposes a sequence of development, she does not define one stage as better than another, and does not believe in a highest stage of development. Loevinger's milestones of ego development include three stages which are

characteristic of infants and young children, one stage, "Self-protective," which may be more characteristic of adolescents but can occur in adulthood, and six stages which usually occur in adulthood: "Conformist;" "Conscientious-Conformist;" "Conscientious;" "Individualistic;" "Autonomous;" and "Integrated." Loevinger believes that people move through the stages in a progressive manner, although she states that, like Kegan's stages, an individual can function at several different stages at once, particularly in different areas of their lives.

Levine (March, 1989) applied Kegan's and Loevinger's theories to the development of teachers who work in schools. According to Levine, a new teacher is likely to be in Loevinger's "conformist" or "conscientious-conformist" stages, or Kegan's "Imperial" or "Interpersonal" stages: they may feel threatened; they may be dependent on others (other teachers) for their self-identity; and want others to like their work. However, as teachers gain confidence in their teaching skills, they are likely to move into the next stages of development as a teacher in which they are no longer threatened by other viewpoints, they have a feeling of competence, and they are likely to desire more collaboration. Levine believes that the professional development of teachers can be traced through these models of adult development, despite the fact that teachers' own personal developmental stage is likely to be different from their stage of professional development.

Freedman (1979) developed a five-stage model for faculty development which combined Loevinger's theory with other similar theories. In Stage One the faculty member is characterized by a simple view of their role, and they are likely to identify strongly with colleagues in their discipline. Their views of students and teaching are also relatively uncomplicated: "education consist of pouring facts into an empty vessel, the student, who assimilates a body of knowledge" (p. 97). In addition, they believe that there is a right way and a wrong way to carry out the procedures of teaching and grading. Faculty in Stage Two have a more complex view of knowledge and teaching, and tend to be somewhat more open to varying viewpoints. They are more interested in helpful ways to teach students, although they still emphasize the acquisition of facts. In Stage Three the faculty have developed better insights into their interpersonal relations with students and with other faculty. As a result, they have a better understanding of the motivations of others,

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and have developed a greater sense of responsibility and conscientiousness. Stage Four faculty have a greater sense of freedom, and have developed a more personal way of functioning. Unlike faculty in the previous three stages, these faculty see the educational process as a reciprocal one in which the teacher can also learn from the students, and they believe that students should be encouraged to discover their own answers. Finally, in Stage Five faculty are likely to have formed their own philosophy of education which includes a concern for student learning. They are at a point in their cognitive development where they can accept more complexity, contradiction, and ambivalence than those in the other stages. Freedman believes that these stages of development as a faculty member should be considered when developing programs of professional development which meet the needs of faculty at the various levels. Through a better understanding of the development as faculty, it is possible to assist faculty in their own desire for growth and development in their careers.

Finally, the "critical event" theory of adult development advocates the idea of a highly individualized pattern of development: adults develop and change as the result of critical life events which are perceived as turning points. Advocates of the "critical event" theory believe that events play a more important role than stages which are presented in the various stage theories. Mann (1987) believes that the application of adult development stages to faculty development provides incorrect information for two reasons: 1) Faculty careers are more diverse today, and are not necessarily linked to age; and 2) Stages can become self-fulfilling prophecies. Mann believes that it is important for adults to periodically look back to see "where you've been" in order to reflect on the meaning and impact of critical life events (1990, November). She believes that researchers of faculty careers should encourage faculty to write "personal life histories" based on critical life events. To meet the current professional development needs of the faculty, Mann believes that it is necessary to do research which includes faculty stress, the impact of aging, and how faculty integrate family and career goals (1987). Through the research on critical events in the lives of faculty, it will be possible to gain a better understanding of faculty career patterns.

Unlike Mann, Levine believes strongly in the importance of using adult development theories to provide professional development which is appropriate to faculty at various stages of development.

Levine writes (1989),

> "Phase theory can provide a guide to the major life tasks and conflicts that preoccupy
> and motivate adults at specific times during the life cycle. Listening closely to teachers
> and administrators using an adult development framework helps to clarify how adults
> are thinking and feeling, and suggest developmentally appropriate responses" (p. 265).

In summary, is it possible to link adult development theories with faculty career development? Yes.
The various theories of adult development are very useful in illuminating different stages, phases,
individual differences, or critical events in the lives of faculty members which are likely to have an
impact on faculty career growth and development, and ultimately on faculty vitality. However, it is also
important to understand that one theory of adult development is probably not sufficient for a full
understanding of faculty lives. Although some faculty may have lives which follow the patterns outlined by
Hodgkinson or Levinson, and others may follow patterns which are not age-related. It is not safe for
faculty developers to assume, for instance, that all faculty who are age 55 or older are interested in
retirement-planning workshops. Those who work in faculty development must understand the diversity of
career and life patterns of faculty in order to provide opportunities for professional growth and
development which take advantage of the unique interests of individual faculty resulting from their life
stages or the critical events they are experiencing. By recognizing the differences in life patterns and
career patterns among faculty, faculty development activities can be offered to meet the needs of faculty
who are at various career and/or life stages. As a result, faculty will be more likely to participate in
professional growth opportunities which are relevant to their interests resulting from the events or
stages of their adult development.

The reason for using theories of adult development in examining faculty careers is to gain a better
understanding of faculty in order to assist them in continuing to grow and develop professionally so that
they might continue to be vital, contributing members of the college. It is possible to find some
similarities in the adult development phases and faculty career phases, but as Hodgkinson and Furniss
point out, it is dangerous to assume a link between age-related issues of adult development and faculty
career phases. In fact, Kegan and Loevinger point out that it may be dangerous to assume that the adult
development theories are strictly age-related. It is likely that the increasing diversity of lifestyles may

make it difficult to generalize by linking specific life events with specific ages. However, Levine's point is a valid one: in order to encourage continuing development, it is important to consider the life events which may be affecting the attitudes and motivations of faculty.

The biggest problem with many of the theories in which age is strictly linked to the development of a career is the fact that the research on which these lock-step theories were based was done with samples which were very homogeneous, such as Levinson's white male sample, or Baldwin's male faculty in liberal arts colleges. Perhaps at the time these studies were done, there was a more predictable pattern to adult development and faculty career development, or perhaps these studies used narrow samples deliberately. However, with such narrow samples it is not possible to generalize many of the theories to "all faculty." More research is needed on faculty careers in which a more diverse sample of faculty is used, including women and ethnic minorities, and faculty in different types of institutions. Through such research it is likely that a wider diversity of faculty career patterns will emerge, and a better understanding of faculty career development will result.

Of all of the theories of development, those which consider individual development and provide ample opportunities for a diversity of career development experiences are probably the most useful for analyzing faculty development and faculty careers. These include Kegan's theory, Loevinger's theory and Freedman's related theory, and Sheehy's theory which assumes that change is normal and that conflicts are revisited rather than resolved forever. Although Mann's idea of "critical events" is appealing because it recognizes the individuality of each person's life and career, it will require a significant amount of longitudinal qualitative research using the life histories of faculty to determine whether or not this theory provides a valid method for analyzing faculty careers.

Are there discernable career patterns among college faculty? The stage theories of adult development and faculty career development have attempted to predict a sequence of events which faculty are likely to experience over the course of their careers. In reality it is difficult to predict the career patterns of faculty because most of the theories do not allow for much diversity in the development of a career. The theories present an "idealized" career pattern which may not actually exist (Light, et al., 1973).

However, Finkelstein (1984) notes, "A faculty member's institution of employment and, to a lesser extent, his or her discipline define the shape of the course to be run" (p. 43). Despite institutional or disciplinary similarities, faculty careers may develop in haphazard ways, taking unexpected twists and turns which are dependent on individual needs and desires.

Donald Super's stage theory of career development may be more applicable to faculty careers than some of the stage theories of adult development because it emphasizes changes in an individual's self-concept rather than the completion of life "tasks." Super believes that "vocational adjustment is a continuous process throughout the whole of life" (Wrightsman, 1988, p. 152). This is somewhat different from the assumption that each individual will remain in one career field throughout their life. Although career changes are becoming more common, at least one study found that "a direct relationship existed internally between the kind of work they did and enjoyed in their first career and what they chose to do in the second" (Wrightsman, p. 163).

How does the notion of career change apply to faculty career patterns? Wheeler and Schuster (1990) advocate the idea of a "reconceptualized" faculty career in which faculty might take advantage of opportunities within the institution or within the discipline in which they might use their skills in different ways or develop new skills. In a 1979 study of faculty at the State University of New York, Neff and Nyquist found that the largest proportion of faculty seeking opportunities for retraining or respecialization were advanced associate professors and full professors (Finkelstein, 1984). Rather than a predictable faculty career pattern which is generally accepted, a more flexible career pattern is probably not only closer to reality, but also more desirable for promoting the vitality of faculty.

However, it will probably take some time to remove the "myth" of the idealized predictable faculty career pattern to make other career patterns acceptable. Furniss (1981) notes that if faculty believe that there is only one type of faculty career pattern is considered to be "acceptable," their options may be limited. For instance, an English teacher as a new faculty member may teach Freshman English, and over time may move into teaching advanced literature courses. There is an assumption in faculty careers that teaching upper division classes is more desirable than teaching lower division introductory classes, and

that moving "backwards" is an indication of failure. However, the idea of a more flexible career pattern may eventually make it acceptable for mid-career and senior faculty to teach lower level classes if they want to.

Although it is difficult to predict the career patterns of faculty, studies of have shown that faculty do, in fact, appear to have different characteristics, needs, and interests at different points in their careers. These characteristics are not necessarily age-related, but related to their experiences in their career.

New faculty, at any age, experience the stress of being expected to learn many different aspects of the job very quickly. They must develop new course materials, and they must balance the roles of teaching, advising and, in most four-year colleges, research. In addition, they must find out how the college works, learn the values of the institution, and learn about the characteristics of the student population. In general, new faculty often experience the following stresses (Sorcinelli, 1990 November): too many tasks and too little time; inadequate rewards and recognition for their hard work; insufficient support from colleagues and administration; an imbalance between career and personal life; and expectations that are too high too soon -- the institution expects too much of new faculty, and new faculty often have unrealistically high expectations and goals for themselves. In Olsen's research on new faculty (1990, November), she found that the stress level climbed from the first year to the third year, and that third-year faculty felt they were getting less support from colleagues as time progressed. However, new faculty also experience many satisfactions (Sorcinelli, 1988): they enjoyed the nature of academic work, their autonomy, and the intrinsic rewards of the work. In a tight job market, many new faculty feel very fortunate to have finally landed a full-time academic position.

Faculty who have been in their careers for a number of years may have some common characteristics, although it is likely that these will vary according to the length of time in the career. Simpson and Jackson (1990) have found that the needs of mid-career faculty are fairly diverse and complex, partly because they feel the need to focus more on personal needs than professional needs. Many have attained their professional goals, and are now viewing their careers in new ways. For this reason it is common for mid-career faculty to reassess their careers to determine whether or not the career is still fulfilling. If it is

not, they may try to figure out how to add some variety or make some changes to make it more fulfilling (Baldwin, 1984). A study of mid-career humanities faculty in a large urban university (Cafarella, et al., 1989) revealed that many mid-career faculty had found ways to carve out a niche for themselves in the institution in an area of personal interest. For example, one became the director of the Honors Program, and another spent time chronicling a historic sea voyage. Some mid-career faculty may decide to change departments or institutions, and others may decide to get involved in administrative positions. Those who enjoy teaching may revitalize their careers by learning new approaches to teaching their subjects which are more challenging and fulfilling (Simpson & Jackson, 1990).

Mature, experienced faculty are also likely to have some characteristics in common. B. J. Wheeler's research on aging faculty (1990, November) revealed that they are often viewed as good resource people because they know the history of a situation at the institution or in the discipline. In fact, mature faculty often change the focus of their writing to a more historical perspective. Those who have a good reputation in the field can be considered "sages," who earn more respect with age. And mature faculty tend to enjoy spending more time talking with students and with colleagues. Many productive older faculty attend more professional meetings than are funded by the institution in order to have opportunities to meet with colleagues from other institutions. Finally, many senior faculty have the desire to leave a legacy for others, either in the discipline or in the institution (Baldwin, 1984). However, mature faculty are often viewed by others as "disengaged" if they do not keep up with new developments in their field. In addition, their "historical" perspective may be viewed negatively by others when they say "We've always done it that way," or "We tried that 20 years ago and it didn't work." Wheeler (1990, November) also found that mature faculty had some age-related attributes in common, some of which may have an impact on their work: slower speed of processing; decrease in visual imagery; decreased short-term memory; and some decline in physical functioning. However, McKeachie (1983) found considerable variation in the differences of the impact of aging on individuals.

Misunderstandings and the potential for conflict among these broad groups of faculty may be inevitable for two major reasons. First, there are great differences in the attitudes, motivations, and needs of faculty

in each of the three broad phases of their careers. It is also likely that there are differences even among faculty within each broad phase which may depend on their experiences and their rate of development as a faculty member. Faculty in each of the groups may hold differing points of view because of their "status" in the institution. According to Bar_.r's (1987) academic profile based on academic rank, ass\`:\`.- professors are concerned about working toward tenure, associate professors who have achieved tenure work toward more distant professional goals while seeking to balance personal and professional goals, and although there is a great variation in their levels of productivity, full professors have a desire to maintain their positions as experts.

Second, the "cohort effect" is likely to have an impact on the way faculty view the academic world. Regardless of age, faculty who are hired around the same period of time, are likely to hold similar views of their own academic setting, simply because they have been through some of the same experiences together. For instance, senior faculty may feel that their college "changed the rules" by instituting more stringent research and publishing requirements for academic promotions. As a result, some campuses have a group of faculty who are known as "terminal" associate professors: those who will not meet the new stringent requirements for promotion to full professor status (Mooney, 1990, June). At the same time, the newer faculty, who have had to meet very rigorous requirements just to be hired, feel that the "old guard" are disengaged. This conflict in attitudes can result in a faculty "generation gap" which can cause tension in the institution due of differing values: senior faculty may value teaching more if a greater emphasis was placed on teaching when they were hired; and newer faculty may val'ie research more as the result of greater emphasis being placed on research when they were hired.

In summary, it is essential to make no assumptions about the professional development needs of faculty. The needs and motivations of faculty are likely to be very different, and are likely to depend on how long they have been faculty members, and their desire for change in their careers. Despite the assumptions in much of the literature that faculty careers follow a predictable pattern, there is also sufficient uncertainty about the validity of these idealized career patterns to question them.

How do men's and women's faculty careers differ? Although some of the theories of faculty career development allow for individual differences which would include variations between the careers of men and women, most of the literature on faculty career patterns has focused on the careers of men. For this reason it is useful to examine a separate literature to gain a better understanding of women's career development. The majority of literature in which women's careers are analyzed comes from the business fields. However there is also a separate literature on women in higher education. This section will first examine general career patterns for women before focusing specifically on the careers of women faculty.

A good portion of the literature on women's careers focuses on the inequities for women in the workplace: discrimination in hiring and promotion, and discrepancies in pay (Epstein, 1988). Moreover, careers in fields which have traditionally been considered "women's work" tend to pay at a lower rate than traditionally male careers. But women often choose such careers because they offer flexibility: they might decide to leave the career to have children, and then return to the same career several years later with little disruption (Epstein, 1988).

Jesse Bernard (1978) explains this desire for flexibility with the "contingency" career plan for women. She notes that a study of women in college from 1964 to 1968 revealed shifting desires for careers. About half of the women were consistent in their orientation: some were "careerists" throughout college, others were "non-careerists." But the other half kept changing their minds: some were "converts to careerism," others were "defectors from careerism," and others, the "shifters" changed their minds several times during college. The researchers, Angrist and Almquist, explain that women "do not peg their plans on a single hook; instead they expect, realistically, to incorporate a number of roles into their adult lives -- marriage, child rearing, work, community involvement, and the myriad of other activities they expect to have" (Bernard, 1978, p. 29).

Angrist and Almquist developed four different career "contingency plans," or schedules, all of which assume that women will marry and have children (Bernard, 1978). According to one schedule, those who marry at age 22 and have children soon thereafter, may start professional training around age 30, and a career several years later. But those who start professional training immediately after college and then

begin a career by age 25 may take a few years out for childbearing in their early thirties before resuming their careers in their late thirties. In the "real world" of a competitive career, neither option is a desirable one for traditional career advancement, because a woman is either starting her career "late," or she is leaving her career at a critical point when she could be promoted. In the mid-1960's, Angrist and Almquist found that "the very pressures to remain open to life's options and to provide for family needs are the same forces that hinder women from active pursuit of careers" (Bernard, 1978, p. 35). Ginzberg's study of college-educated women revealed similar results: "those who anticipated that their careers would take precedence over marriage and family largely followed through on their plans . . . while those who did not think they could fit family and career together spent the least time in work" (1966, p. 84). In other words, having a "contingency plan" seems to inhibit the active pursuit of a career. By 1978 Bernard concluded that it was still to early to tell if the feminist movement of the 1970's had had any impact on the career contingency plans of young women.

In her 14-year longitudinal study of women who graduated from a large mid-western university in 1967, Tangri (1986) found remarkable long-term consistency in the types of careers held by the women. Of those who initially chose non-traditional careers in which women were in the minority, over 80 percent continued to work in non-traditional careers. Of those who selected "traditional" careers in female-dominated occupation   ly 70 percent still worked in traditional careers. However, between 1967 and 1970 there was a temporary shift in career as many of the women started families. Both studies indicate that the cohort of women who graduated from college in the late 1960's, even those in non-traditional career fields, left their careers temporarily to have children before resuming the career. Jenkins (1987, August) used this same longitudinal dataset to examine the impact of various factors on women's careers. She found results which were similar to Ginzberg's and Angrist and Almquist's studies: early work experience, early educational aspirations and achievements, and plans to work after having children had a positive impact on women's career achievement. In a later study of women's career achievement in school teaching, college teaching, and entrepreneurail business, Jenkins (1989) found results which supported an alternative hypothesis: experiences in their careers influenced women's

family choices, rather than the other way around. The women in Tangri's study and in Jenkins' two studies appeared to have clear career goals which they were not going to easily give up for "contingencies." However, those in Jenkins' later study who had careers which were more flexible and more conducive to family life tended to have more children and spent more time away from their careers.

Have the young women changed their outlook on career contingency plans since the late 1960's? In a twelve-year longitudinal study of 23 young women who entered two southern universities (one predominantly black, one predominantly white) in 1979, Holland and Eisenhart found that although most of the young women entered college with firm career plans, two-thirds abandoned their careers or subordinated them to their husbands car: s. In this study, the shift in women's goals was attributed to a "culture" on the campuses in which romance, rather than achievement, is emphasized for women.

Astin (1978) also concluded that the college years are critical to the later career development of women. In her thirteen-year longitudinal study of women who had entered college in 1961, Astin found that many women who were high achievers in high school and who entered college with high educational and career aspirations did not pursue their career goals after college. Instead, they married early, had children and became full-time home-makers.

In examining the impact of the college experience and personality characteristics on later career outcomes, Stewart (1975) studied two groups of women college students from two different colleges: "College A," which had a competitive, achievement-oriented environment; and "College B," which had an environment in which friendliness and sociability were stressed. Stewart also analyzed six personality characteristics of the women: affiliation, fear of success, power, hope of power, achievement, and self-definition. Stewart found that women from College A who had an affiliation orientation were more likely to marry and have children early. She believed that this may have been the result of having been deprived of an affiliative atmosphere during college. But women from College B who chose not to pursue a career immediately after college were likely to have a "fear of success," believing that success is linked to negative consequences. However, women in both institutions who were "power-motivated" were unlikely to marry and have children early, believing that a child would make demands on her time which would

"curtail her freedom to seek control of or impact on her environment" (p.59). Those with a need for "self-definition" found different routes to achieving an adult identity which were dependent on the college type: those from College A chose to attend graduate school for professional training, and those from College B chose to begin working immediately. Stewart, like Astin, found that achievement in college alone was unrelated to beginning a career immediately after college.

Holland and Eisenhart found that the young women's motivations for attending college also had an impact on their later career achievement. Those who were motivated to attend college because they had done well in high school were disappointed when college-level work did not come easily to them. As a result, they felt that they lacked ability, and they scaled down their career goals. Those who were motivated to attend college just to get through in order to have a degree that would lead to better career opportunities actually did not have a strong identity of themselves in the world of work. Many were more interested in the social aspects of college and found the academic work boring, but six of the ten with this motivation managed to get through their classes and earn their degrees. However, because they did not have a strong orientation to a career, all but one ended up with clerical or low-level technical jobs. But of those whose motivation was to attend college in order to learn from experts, all but one kept their career goals, and pursued their careers after college. Although they were also concerned about doing well in college, they viewed poor grades as a lack of mastery rather than a lack of ability. They devoted their time in college to mastering an expertise they planned to use in the future by seeking out good professors and talking with those who were more experienced in the field. The "culture of romance" on the campus did not affect their career goals.

Schuster's (1990) study of the careers of "gifted" women indicated similar patterns. The women in her study entered UCLA in 1957, at a time when the traditional family roles of women were the norm. When the women were surveyed in 1984, Schuster found that most of the women had worked outside the home throughout their adult lives, and all but two worked in fields that were nontraditional for women of that cohort. When in college, these women were similar to the successful women described in the studies of Tangri and Holland and Eisenhart: they had a high level of self-confidence and strong theoretical

interests, and they showed an interest in non-traditional fields. At mid-life these gifted women had a sense of mastery in their careers: they were high-achievers in their careers as they had been in college. Jenkins (1987) found similar results in her longitudinal study of high-achieving women. Those who had been high achievers in college enjoyed careers which were competitive and provided opportunities for status mobility. They derived their job satisfaction from standards of excellence.

The notion of "mastery" is mentioned by Baruch, Barnett, and Rivers in their 1983 study of women's life patterns. They define "mastery" as "feeling important and worthwhile" (p. 13). A combination of "mastery" and "pleasure" contribute to a woman's overall sense of well-being. The authors examined the following six lifestyles which combined sources of mastery (having a paid job) with sources of pleasure (marriage and family): 1) Never-married, employed; 2) Married without children, employed; 3) Married with children, employed; 4) Married with children, at home; 5) Married without children, at home; and 6) Divorced with children, employed. The women with the greatest sense of well-being were the three groups which combined family with careers: Married without children, employed; Married with children, employed; and Divorced with children, employed. The women with lowest sense of well-being in both "Pleasure" and "Mastery" were Married without children, at home.

To sum up, these studies of women and their career decisions raise several important points. First, for those who plan professional careers, experiences during the college years have an important impact in whether those careers are ultimately pursued or not. Second, a desire for "mastery" is very important for success in pursuing a career after college, and a sense of "mastery" through a paid job is important for an overall sense of well-being. Third, although the many of the women in the college graduate cohort of the late 1960's felt the need to develop "contingency" plans which incorporated career possibilities with family possibilities, this trend continued with young women in the 1980's who did not have a desire for "mastery." Both groups of women were generally less successful in developing their careers than other women. Fourth, women need both a sense of "mastery" and the sense of "pleasure" that comes with marriage and/or family for an overall sense of well-being.

According to these studies, most women with careers have an integrated life which includes both career and family. Is there a "typical" career pattern for women? The answer is an emphatic "No." Diamond's examination of career development theories based on men's careers concluded that women's career patterns are far too complex to "fit" into any existing career development theories (1987). DerMarderosian also concluded from her extensive review of the literature of career development that by 1987 "career theory from a developmental perspective does not exist for women" (1987, p. 31). Larwood and Gattiker's comparison of the career paths of "successful" men and women also revealed that women's careers follow very different patterns (1987). Although men tended to follow a traditional path through the ranks to achieve a higher standing within the hierarchy of a company, the progression of women toward achieving higher positions was less regular. Larwood and Gutek (1987) propose several models of women's careers which are somewhat similar to the "contingency plans" proposed by Angrist and Almquist because they indicate various career schedules: one in which women prepare for a career in college, begin a career, and continue working through marriage and family; a second schedule which portrays the traditional situation of many women in which there is no preparation for a career, no career during marriage and child-rearing years, and a delayed entry into the field; and a third schedule in which women prepare for a career in college, but delay entry into the career field.

The variety of career models serve to show the complexity of the patterns of women's careers, but the stories of women illustrate the complexity of career development even more effectively. The interviews of women conducted by Baruch, Barnett, and Rivers (1983) indicated that because many women had no particular career direction when they were younger -- no "Dream" according to Levinson's theory -- they tend to develop their careers in a wide variety of ways. Some started in one career, and later moved into a different career with more prestige, challenge, power, or salary. Others decided late in life to go to college, or to return to college for an advanced degree in order to prepare for a career. A few were willing to take risks and jumped right into a career; then when they needed new challenges they jumped into another career. The stories of these women's careers are highly individualized life histories full of "critical events" which influenced their career decisions and career patterns.

How do these career development issues apply specifically to women faculty in higher education? First, there are several important differences in the characteristics of women and men faculty which should be addressed. According to Astin's (1991) national study of faculty, almost half of all female faculty were appointed to their current positions since 1981, whereas only 33 percent of the men had been appointed to their current positions since 1981. Seventy-two percent of the men are tenured, but only 53 percent of the women are tenured. According to a study of gender differences in the academic career (Thoreson, et al., 1990), women are generally at lower ranks than men faculty, and women are generally less satisfied than men with their professional lives. It is possible that these two factors are related. In general it has been shown that the most stressful years of a faculty career are the early years when faculty are working toward tenure. However, in a study of tenured faculty, men and women differed significantly on about half of the survey items, leading the researchers to the conclusion that the academic profession is seen quite differently by men and women (Armour, et al., 1990). Women in Thoreson's (1990) study reported higher levels of anxiety, stress, loneliness, and recurrent physical illness than men. Several studies indicated that women tend to prefer teaching over research activities (Thoreson, et al. 1990; Armour, et al., 1990; Astin, et al., 1991). This could account for the fact that faculty in community colleges, which emphasize teaching, attract a higher percentage of women than other segments of higher education (National Center for Education Statistics, 1990, p. 13).

The self-efficacy of women faculty has also been considered as a factor which may affect their achievement in an academic career. According to Schoen and Winocur (1988), "In order to be successful, not only do academics need expertise in their particular field, but also they may need to be confident in their ability to interact with their environment and perform required tasks" (p. 308). Findings of a study in which they used the "Academic Self-Efficacy Scale," revealed that females were more confident of their teaching ability than their ability to perform research tasks, but scored lower overall on the self-efficacy scales. However, these lower self-efficacy scores were more attributable to academic rank than to gender. In another study of faculty self-efficacy, Landing and Owen (1988) used "The Measure of Self-Efficacy in Academic Tasks" to determine the factors which influenced feelings of self-efficacy. Like

Schoen and Winocur, they found that females scored lower than males in research self-efficacy and service self-efficacy, but they scored slightly higher than males in teaching self-efficacy. The sample indicates, however, that the women had, on average, six year less experience than the men. It is difficult to conclude from these studies whether women are clustered at the bottom ranks because they lack self-efficacy, or whether they score lower on self-efficacy scales because they are less experienced.

In examining the careers of women faculty it is important to consider the issue of job satisfaction. In a matched pair comparison of the sample of male and female faculty, Thoreson found only a few differences between men and women, and these were in the area of job satisfaction. Women placed a greater importance than men on having a supportive environment, being a professional, and self-improvement. In another study (Ethington, et al. 1988), women reported that they were satisfied with their career choice, but were not satisfied with their career conditions: low rank, and low pay. Those who were the most dissatisfied were women who taught in applied fields in liberal arts colleges, research universities, and doctoral-granting institutions. However, the women who were most satisfied overall with their careers were those who taught in pure fields in liberal arts colleges.

Much of the literature on women faculty examines the "chilly climate" for women in higher education. In a study of job applicants for junior faculty positions, Bronstein and her colleagues (1987) reported that women applicants for positions obtained faculty positions in lower-status jobs in institutions with less prestige than the male job applicants. Lomperis (1990) also points out that although recently more women have been entering the professoriate, many are in marginal positions: part-time and non-tenure track temporary positions. But some factors should be discussed before drawing conclusions of discrimination. First, in Bronstein's study there were fewer female applicants for the positions in research universities. However, according to recent statistics on Ph. D. students (Lomperis, 1990), it is likely that there will be increasing numbers of women entering the academic profession, because in many fields there are considerably more women Ph. D. students now than in previous years. Second, in Bronstein's study, although the rate of publishing was the same for male and female applicants, the male job applicants typically had had several years of temporary faculty assignments, whereas most of the

women came directly out of graduate programs. When salaries of the men and women were compared two years later, men's salaries were clearly higher. But when earnings were controlled for years since receiving the doctorate, the discrepancy disappeared. This would seem to indicate that men who had had several years of experience in temporary positions had an edge on women applicants. As women gain experience by starting in "marginal" temporary positions, they, too, may be able to attain more desirable positions in more prestigious institutions.

The previous studies pointed out the difficulties of women who were trying to start an academic career. But what about the women who have been hired into academic positions? Chamberlain (1988) points out that although there are more women on the faculty, they have "not been welcomed by male faculty." She concludes,

> "Women faculty members, and single women in particular, are clearly outside the male network. They do not have the same access to information about institutional research resources and opportunities. They bear a disproportionate share of departmental teaching loads, for which there is little credit under the existing academic reward structure" (p. 272).

It is important to note that these conclusions are based on two interesting factors which may not be so easily explained. First, this study found that single women are less productive in research than married women. This is difficult to explain, although married women noted that support and encouragement from spouse and family were important factors in research productivity. Second, women's research productivity tended to be lower than men's, and women are less likely to cite organizational factors as important in enhancing their research productivity. Chamberlain assumes that this means that the women are not aware of resources available to them for research. This may be true, but is it necessarily caused by a conspiracy against women faculty, or are the women simply less experienced in these matters? In addition, the issue of a preference for teaching over research is not discussed. Chamberlain states that women do a "disproportionate" amount of teaching, but according to other studies, women tend to prefer teaching activities. It is true, however, that research tends to be rewarded more than teaching. In their book, Women of Academe: Outsiders in the Sacred Grove, Aisenberg and Harrington (1988) make some similar points. They interviewed eighty women to find out why so many were "falling off the tenure

track." In general, they found that all of the women, both those who had left academia and those who had achieved tenure, felt that they were on the margins of the academic profession.

The findings of both studies raise an interesting question: Is the climate in higher education for women actually chilly, or is this a perception of the women who feel conspicuous because they are in the minority, and who feel less sure of their abilities, possibly because they have had fewer years of experience than their male colleagues? It might be possible to get an answer to this question when there is a higher percentage of women in academe, and when a greater number of women are in the higher ranks.

Although various studies have concluded that "women faculty at four-year institutions are treated as second class citizens where salary, rank, and job security are concerned" (Carnegie Foundation, 1990), they are also among the most conscientious members of the academic community. According to the data from the 1989 Carnegie study of faculty, women showed a higher rate of participation than men in campus committees and the faculty senate. This study also noted that faculty who had heavier teaching loads were more likely to participate as "campus citizens," and, as a result, they were more likely to feel that they had input on the outcomes of campus decisions, and they were more likely to plan to stay with their university. This type of involvement may be on affective way for women to feel less as "outsiders" and more connected with the institution.

In summary, so far the career experiences of women faculty in higher education have been different from the experiences of men. In part, this may be due to the fact that feel self-conscious because they are in the minority. Some differences in the careers of men and women academics may be due to the fact that, on average, they are at different points in their careers. Most men faculty have had more years of experience than the women. For this reason, the women may be at a different developmental point in their careers than the men, and may feel less "self-efficacy" than the men. The roles of women as wives and mothers may have an impact on the amount of time they choose to devote to their careers as faculty. But single women, who may feel as if they "ought" to have a family, may experience a different kind of stress and apartness from other faculty, which might affect their career achievement. In short, there are many variables which might possibly affect the careers of women faculty: their career patterns and

achievement in their careers. On the surface women appear to be far more complex in their career lives than men. But men's careers have not been scrutinized in the same ways that women's careers have. It is possible that the careers of men are also more complex than commonly acknowledged.

What are the tasks of a faculty career? It is necessary to consider the tasks of a faculty career before addressing the issues of faculty vitality, because faculty vitality is usually measured in terms of how well faculty perform their expected tasks. In general, the traditional model of a faculty career has included three types of tasks: teaching, research, and service. Depending on the type of institution, some tasks are emphasized, and rewarded, more than others.

Research is rewarded by research universities and four-year colleges which try to emulate research universities. However, it is interesting that even in research universities, faculty spend less time doing research than other activities. Faculty in private research universities report that they spend 30 percent of their time in research activities, while faculty in public two year colleges spend only 3 percent of their time doing research (National Center for Education Statistics, 1990, p. 48). Ladd's 1977 study of faculty notes that although many articles and books are being published, nearly 60 percent of all faculty have never published a book (alone or in collaboration with others), and only 25 percent of all faculty have published extensively: at least twenty articles or three monographs (Ladd, 1979, p. 3).

Teaching is emphasized by the institutions whose primary mission is teaching, including community colleges, liberal arts colleges, and some comprehensive colleges. Those who teach in two-year colleges spend about 71 percent of their time in teaching-related activities, while those in private doctoral institutions spend only 39 percent of their time teaching: the least time in teaching of faculty in all types of institutions (National Center for Education Statistics, 1990, p. 48).

Professional service activities are generally encouraged, and campus service in the form of committee work is generally expected, but service is usually not a critical basis for rewards in terms of promotion and tenure. "Administrative" activities, including serving on campus committees and faculty senate, account for an average of 13 percent of faculty's time. And "other activities," including outside professional consulting and community service activities, account for an average of 15 percent of the time

(National Center for Education Statistics, 1990, p. 48). There is very little variation in the percentage of

time spent on administrative and "other" activities from one type of institution to another. Elman and

Smock (1985) have asserted that because professional service is one of the basic missions of academe,

faculty should be rewarded for using their professional expertise outside the institution to serve the needs

of the broader community through consulting and providing technical assistance.

It is interesting that, despite many assumptions about the appeal of research activities, the vast

majority of faculty are actually more interested in teaching. Only six percent of all faculty stated that

their interests lie primarily in research, and 23 percent stated that their interests lean toward research.

Of four-year faculty, 58 percent stated that their interests lean toward teaching or are primarily in

teaching, while 93 percent of two-year faculty show more interest in teaching than in research (Carnegie

Foundation, 1989, p. 43). In another national survey of faculty, the results were very similar: overall,

72 percent of all faculty stated that their interests lie primarily in teaching. Even among faculty in

public research universities, over half show more interest in teaching than in research (Astin, 1991, p.

11). In addition, 48 percent of the four-year faculty and 92 percent of two-year faculty agreed that

"teaching effectiveness should be the primary criterion for promotion of faculty" (Carnegie Foundation,

1989, p. 43). Astin (1991) found similar results in his national survey of faculty. Ninety-eight

percent rated good teaching skills as an "essential" or "very important" professional goal of higher

education, and interestingly, there was very little variation among the responses of faculty in different

types of institutions (p. 10). "Engaging in research" was rated as "essential" or "very important" among

only 59 percent of all faculty, although there were considerable differences in the responses of faculty

from different types of institutions. Research was considered "essential" or "very important" by 85

percent of faculty in private research universities and 61 percent of faculty in comprehensive four-year

colleges, but only 25 percent of faculty in public two-year colleges (Astin, 1991, p. 10).

It appears that there is some frustration among four-year faculty about the discrepancy between

teaching and research: most faculty prefer teaching activities and believe that they are more important

than research activities, but the rewards and promotions are determined mainly by achie ements in

research and publishing. Clark (1987) sums up the problem: "The greatest paradox of academic work in modern America is that most professors teach most of the time, and large proportions of them teach all of the time, but teaching is not the activity most rewarded by the academic profession nor most valued by the system at large" (pp. 98-99). In their 1980 study, Marsh and Dillon found that there was a strong negative correlation between faculty salary and hours spent teaching (Austin & Gamson, 1983). Forty-five percent of the four-year faculty surveyed agreed that "the pressure to publish reduces the quality of teaching at my university" (Carnegie Foundation, 1989, p. 51), and 74 percent of four year faculty believe that "at my institution we need better ways, besides publications, to evaluate the scholarly performance of the faculty" (p. 52). Ladd sums up the problem:

> An ascendant model in academe, positing what faculty *should be doing*, is seriously
> out of touch with what they *actually do* and *want to do*. The model is also profoundly
> at odds with the primary goal of promoting the best possible teaching -- that is, the
> best educational experience -- in the nation's colleges and universities" (1979, p. 5).

Why do most four-year institutions reward research rather than teaching? Blackburn states, "The factor which dominates all other professional concerns is attention to status" (Ryan & Sackrey, p. 76). This preoccupation with status permeates all aspects of life in higher education. The whole hiring and promotion system is based on status. Those who attended the "right" graduate school, one which is more research-oriented, are more likely to gain a junior faculty position in a more "prestigious" institution. Faculty are concerned with their status within the institution, as they strive to earn tenure and later as they work toward a promotion to "full professor." Moreover, faculty are concerned about their status in the discipline, based on their publications and citations as well as the status of their institutional department as it ranks among others in the discipline. Institutions are concerned with their status, as they are rated with other institutions. Research productivity is the "coin of the realm" in rating the prestige of both individual faculty and institutions. Institutions which have faculty who produce more research are considered to be more prestigious than other institutions. Faculty who produce more research, and not necessarily "better" research, are more likely to be promoted or snatched up by "more prestigious" institutions than those who do not.

The "teaching versus research" argument has been going on for many years. The research-oriented

professor as a model for the profession started relatively recently, following World War II (Ryan & Sackrey, 1984). In a 1990 keynote address, Lee Shulman asked "Why has the scholarship of teaching been downgraded?" His answer was simple, but the problem is complex. Shulman stated that because research scholarship is open to peer review and it is, therefore, seen as having been legitimately judged by peers to be of good quality. But, unlike research, teaching is typically done in isolation. The very idea of having a peer review of teaching quality is seen as an intrusion or, at worst, an infringement on "academic freedom." Even in community colleges, where teaching is emphasized, the review of teaching is superficial, and unlikely to have an effect on the quality of instruction (Cohen & Brawer, 1989). Shulman believes that it is the absence of an open review process for teaching that causes teaching tasks to be downgraded in comparison to research tasks.

Russ Edgerton, President of AAHE, noted that for teaching to be valued more, there must be more professional discourse about teaching among faculty (Rice, et al., 1990). Shulman believes, "If we want a discourse on pedagogy, we have to make the pedagogy worthy of conversation" beyond simply talking about teaching techniques in general terms (Watkins, 1990). One way of accomplishing this is through a program of "Reflective Teaching." Using the theories of Donald Schon (1983, 1988), the West Chester Area School District in Pennsylvania developed a program of faculty development to encourage teachers to think reflectively about what goes on in the classroom. The purpose of the program is to "provide all teachers with the knowledge and skills to consciously make instructional decisions that are most likely to result in successful learning for students" (Dixon, et al., 1989). Faculty in such a program, which incorporates workshops, discussion groups, and peer mentoring, have abundant opportunities to learn more about "what works" in teaching through professional discourse about teaching.

What if institutions with "high quality teaching" were considered to be more prestigious than those in which large quantities of research were produced? In his 1985 book, Achieving Educational Excellence, Astin recommends replacing the current "reputational model" of higher education in which prestige is based on quantitative factors such as the SAT scores of incoming students and the number of publications of the faculty, with what he calls the "Talent Development" model of higher education, in which institutional

prestige is based on how well they develop the talent of their students. Presumably, institutions would be considered "excellent" if they produce greater changes in their students, thus developing more talent. If this hypothetical model were ever implemented, two-year colleges with open-door policies would be considered the "best" institutions, because they produce the greatest growth in talent by taking students with marginal academic skills and raising their skills to the point that they are able to successfully transfer to upper division classes in a four-year institution.

More recently, the Carnegie Foundation for the Advancement of Teaching (Boyer, 1990) has developed a new model for faculty careers in which four types of scholarship are acknowledged and rewarded: 1) the scholarship of discovery of new knowledge (traditionally known as "research"); 2) the scholarship of the integration of knowledge (making cross-disciplinary connections, and interpreting narrow specialties in a broader disciplinary context); 3) the scholarship of the application of knowledge (including application in the real world through consulting and service activities; and 4) the scholarship of teaching (finding ways to communicate knowledge effectively through a variety of teaching methods). When this new model was presented by Boyer in the keynote address of the 1990 meeting of the American Association for Higher Education, the response from conferees was enthusiastic.

However, feelings were expressed that it will be difficult to overcome resistance to this new model, particularly among research institutions and colleges striving to gain prestige through research. As stated earlier, the issue of institutional and individual prestige is at stake in a new model of faculty scholarship. James W. England, provost of Swarthmore College, noted, "Don't you think this is really a debate about the allocation of prestige? Allocation of prestige is what academics live and die for" (Mooney, April 11, 1990). It is also likely that community college faculty would resist this model, but for different reasons. Many community college faculty chose to teach in the community college because, as noted earlier, their interests lie primarily in teaching. For this reason, it is likely that they would resist the idea of becoming involved in the other forms of scholarship in the Carnegie model.

What would a faculty career look like if the tasks of teaching and research were integrated? In 1906, conferees at an AAU conference in San Francisco stated that it would be "ludicrous to separate teaching

'from research" (Shulman, 1990). But today the more commonly held belief is that teaching and research are mutually exclusive. In fact, many community college faculty intentionally shy away from research activities because they feel that doing research would be likely to adversely affect their teaching (Seidman, 1985). However, Feldman's extensive review of the relationship between research and teaching revealed that "productivity in research and scholarship does not seem to detract from being an effective teacher" (Feldman, 1989). And conversely, Tronvig's (1987) study of faculty role conflicts indicated that there is no evidence to show that research productivity and teaching effectiveness are related, but rather that faculty would like to believe that they are mutually supportive. For instance, one award-winning community college teacher of chemistry explained that teaching and research are equally challenging and rewarding. Siegfried Lodwig of Centralia College in Washington says that teaching makes him a better researcher, and doing research makes him a better teacher (Hendley, 1990). Mann (1990) suggests that faculty development programs should encourage an integration of teaching and research roles by showing that they are complementary rather than mutually exclusive. At Stanford, there has been a well-publicized movement to place more emphasis on teaching by offering permanent salary increases to 20 excellent teachers each year. At the same time, research will be de-emphasized by limiting the number of articles which may be submitted for promotion reviews (Gordon, 1991; Mooney, 1991, March 13).

   Do the tasks of a faculty career change over the career? The Carnegie report recommends that institutions encourage faculty to use a combination of the four types of scholarship: discovery, integration, application, and teaching. Through shifting their focus among the different types of scholarship, it is believed that faculty would be less likely to "burn out" (Leatherman, 1990). However, Roger Soder, associate director of the Center for Educational Renewal at the University of Washington, believes that "The [Carnegie] report doesn't create a new scholarship as much as it legitimizes a lot of what has always been going on in American higher education." Studies of faculty have shown that faculty may naturally shift from emphasis in one area to emphasis in another over the course of their careers. In her interviews with mid-career faculty and senior faculty, Tronvig (1987) found that many who had been interested primarily in research when they started their careers had shifted their interests to activities

which were directly related to teaching, including the preparation of new course materials, and finding ways to "get students turned on" to the subject. In her longitudinal study of faculty, Lawrence (1985) found similar preferences for teaching activities among senior faculty. Lawrence also found that mid-career faculty tend to be more interested in collaborative cross-disciplinary activities. Like Lawrence, Baldwin (1979) found that in general faculty tend to expand and diversify their roles as their careers develop. In addition, Baldwin's study showed that interest in research tends to decrease and interest in teaching and collegewide service tends to increase among senior faculty. However, because this was a cross-sectional study of faculty, these finding could be the result of a "cohort effect" among the senior faculty who were studied in 1977.

To summarize, faculty are generally expected to perform three types of tasks: teaching, research, and service. However, the emphasis placed on teaching or research is completely dependent on the type of institution. Although many institutions reward research productivity over teaching effectiveness, the vast majority of faculty prefer teaching activities, and spend most of their time on teaching-related tasks. Despite the fact that teaching and research are commonly seen as mutually exclusive activities, the new Carnegie model for faculty careers encourages the integration of four different types of scholarship: research, integration, application, and teaching. This model is different from the current model which emphasizes research in four-year institutions, but it legitimizes what faculty actually do. In general, faculty in four-year colleges tend to change the emphasis of their tasks over the course of their careers, commonly focusing more on research at the beginning of their careers, moving toward integration and broadening of knowledge later in the career, and becoming progressively more interested in teaching. This examination of the tasks of faculty careers forms an important basis for the following discussion of faculty vitality, because the vitality is defined in terms of the tasks performed by faculty.

Characteristics of Faculty Vitality

The characteristics of faculty vitality will be examined in this section by attempting to answer the following four questions: 1) What are the attributes of vitality which are common to all careers?; 2) What are the indicators of faculty vitality? 3) What individual qualities are related to vitality in a

faculty career?; and 4) What individual characteristics contribute to lack of vitality in a faculty career? Through a better understanding of the individual factors which influence faculty vitality it may be possible for institutions to enhance the vitality of their faculty.

What are the attributes of vitality which are common to all careers? The popular literature on careers includes many books which address career vitality. Some of the books present a "be all that you can be" attitude toward career success and fulfillment in a career. Dr. Wayne Dyer's work exemplifies this attitude. In his book, The Sky's the Limit, Dyer (1980) states, "I'll show you how to be a no-limit person -- a winner 100 percent of the time!" Dyer defines a "no-limit person" as one who looks at the world differently. "They see everything in the world as an opportunity, rather than as something to be feared or avoided. They look at any experience as a potential for excitement and growth" (p. 90). In his book Learned Optimism, Social Science professor Martin Seligman (1991) continues this theme. Seligman believes that "explanatory style," how people explain their disappointments and failures, is what separates a person who is naturally optimistic and one who is not. Those who are more optimistic in their outlook, according to Seligman's research, tend to be more successful because they choose to rise above their failures rather than become bogged down in them. Seligman, like Dyer, believes that it is possible for people to consciously change their outlook to become more optimistic and, therefore, more successful and fulfilled. Covey's (1989) book, The 7 Habits of Highly Effective People examines some additional factors which are related to vitality and success. In examining the literature on success written since 1776, Covey found that the "success" literature written after World War I was more superficial, focusing on public image and a positive mental attitude. However, the literature in roughly the first 150 years focused on a "character ethic," promoting the idea that success is the result of the following character attributes: integrity, humility, fidelity, temperance, courage, justice, patience, industry, simplicity, modesty, and the "Golden Rule" (p. 18). Covey's "seven habits" were derived from both the "character ethic" literature, and the more contemporary success literature, because he believes that both are necessary for a truly successful and fulfilling life. On a slightly different theme, Garfield's book, Peak Performers: The New Heroes of American Business, addresses the qualities of those who are performing

their duties to the peak of their abilities. Garfield believes that "extraordinary achievers are ordinary people who have found ways to make a major impact" (p. 15). According to Garfield, the "peak performer" is "always willing to evolve and grow, to learn from the work as well as to complete it, to be 'better than I ever was'" (p. 16). Like Dyer and Seligman, Garfield believes that "the potential for major increases in achievement and self-development exists in everyone, and that the starting point is an internal decision to excel" (p. 18). All three books promote the idea that a positive mental attitude is essential to success.

Another theme of the career literature is the analysis of careers and career fulfillment. In their book, Take This Job and Love It, Jaffe and Scott (1988) cite VALS (Values and Lifestyles) research from SRI International which indicates a shift in attitudes toward careers. The traditional view of work is "outer-directed," focused on the extrinsic rewards of salary and perks. However, since the early 1970's, the VALS research has shown an increasingly "inner-directed" attitude toward careers which focuses on the intrinsic rewards: "opportunities to learn and grow, to develop skills, to be part of a community, and to do something personally meaningful" (p. 11). With this shift toward intrinsic rewards, people have higher expectations of self-fulfillment on the job, which may lead more quickly to disillusionment and burnout if the work is not interesting, challenging, and rewarding. Jaffe and Scott take the position that people can "rekindle the passion" for the work if they change their attitudes by finding new opportunities for creativity in their present jobs.

Michael Maccoby, Director of Harvard University's Program on Technology, Public Policy, and Human Development, examined the motivation to work in his book, Why Work, which, like Jaffe and Scott's book, addresses the theme of intrinsic rewards for work. Maccoby found that because the traditional incentives of hierarchical promotions, money, and power will be in short supply in the future, young workers will need to be motivated by other factors. The young people entering the workforce who were interviewed by Maccoby indicated that their main goal at work is self-development and getting along well with others by solving problems cooperatively. However, Maccoby points out that these "self-developers" are not motivated in a bureaucratic work atmosphere in which their work does not allow them to continue their development, and in which they are treated as "role performers" rather than as whole persons. A solution

to this problem is presented by Senge in his book, The Fifth Discipline: The Art and Practice of the Learning Organization. Senge is the Director of the Systems Thinking and Organizational Learning Program at MIT's Sloan School of Management. He advocates the idea that organizations should encourage continued growth and learning among all employees through the following five disciplines: utilizing organization-wide systems thinking; encouraging the development of personal mastery; fostering a sense of personal vision through the formation of "mental models;" building shared vision; and encouraging team learning. Senge agrees with Maccoby in stating, "The way they [organizations] are designed and arranged, the way people's jobs are defined, and, most importantly, the way we have all been taught to think and interact create fundamental learning disabilities [within the organizations]" (p. 18).

Finally, Goldschmidt's (1990) book, The Human Career, analyzes careers from an anthropological perspective. He advocates the notion that the sense of self is developed through identification with career activities. This leads to social identification with others in the career, and an ongoing interaction between the self and the "society" of the career group. Goldschmidt states that his approach "perceives change, not equilibrium, as inherent in the social order. Social institutions are seen as derivative, not formative. They derive from the actions of individuals; institutional patterns respond to the recurrent needs and desires of the persons who make up the society" (p. 206). Goldschmidt recognizes prestige as a social goal which can affect changes in career patterns. If one career role has decreasing usefulness, but another role has increased advantages, people will gravitate toward the new role. This is a logical choice, based on prestige and economics: it is less risky to follow a career path in which the rewards are obvious. According to Goldschmidt's theory, vitality is synonymous with the ability and willingness to adapt to new, more advantageous career roles.

Although all of these books address careers and career vitality on a broad level, many of these issues are relevant in discussing the careers of faculty. These books raise four main points which may be applied directly to faculty vitality. First, although the issue of a positive attitude is addressed in a somewhat superficial and simplistic manner in the popular literature, it is likely that success in a faculty career, particularly in competitive fields, is more likely for those who are not easily defeated by failures and

and disappointments when the grant is not awarded or the article is not published. Second, the motivation to continue to learn and grow is essential for vitality in the faculty career. Whether a faculty member is involved in ground-breaking research or not, it is essential for faculty to stay current in the discipline. Third, most faculty started their careers because of the intrinsic rewards of teaching or research in their disciplines. If they have become bored, perhaps it might be wise to consider revitalization through finding creative new outlets and new opportunities for learning and development. Fourth, vitality is directly related to adaptability and willingness make changes in the career by adding new roles and dropping others as needed. However, these role changes must be perceived as advantageous, or they are unlikely to occur. For instance, for some faculty, the change in role to spend more time in teaching-related activities must be accompanied by rewards which are perceived to be better than current rewards for doing research, such as grant money, or faculty are unlikely to make the change.

Conceptually, what is "faculty vitality"? Although the preceding four points illustrate some of the broad principles which might characterize "vital" faculty, they do not offer a clear conceptualization of faculty vitality. Many have struggled to define what exactly is meant by "faculty vitality," because it is a somewhat vague and ambiguous concept. Clark and Lewis in their book, Faculty Vitality and Institutional Productivity, note the difficulty of defining "vitality." They explain that the term "vitality" is used to describe "essential, yet intangible, positive qualitites of individuals and institutions that enable purposeful production" (p.3). In other words, "vitality" results in "productivity." Baldwin and Krotseng define "vital" faculty as

> professors who are enthusiastic, curious, and regenerative. . . people who enjoy
> their work, reach out for new challenges, and are not afraid to risk failure.
> Vital professors are productive professionals in a quantitative sense. But their
> essence is perhaps better captured in qualitative terms that go beyond simple
> productivity (p.7).

Thus, the difference between "vitality" and "productivity" may be described in the following way: "vitality," an intangible qualitative attribute, may be measured in terms of "productivity," a quantitative accounting of the tasks performed by a faculty member. Faculty who are considered to be "vital" are also "productive" in the tasks valued by their institution.

What are the indicators of "vital" faculty? The tasks associated with "productivity" vary from one type of institution to another, which means that faculty "vitality" is defined differently in different types of institutions (Baldwin, 1990, March/April). In a research-oriented institution, "vital faculty" are those who are productive in terms of the number of articles published or the number of citations. In an institution which emphasizes teaching, "vital faculty" are those who "produce" successful students (measured by student retention rates and success in advanced classes or in careers) and satisfied students (measured by student evaluations of teaching quality). To sum up, Schuster states that "a vital professor is defined as a 'star performer' in those areas that his or her institution most prizes" (Baldwin, 1990, March/April, p. 163).

In addition, "vitality" may be defined differently according to the discipline (Baldwin, 1988). Some disciplines value research and the idea of training students to do research, while others tend to emphasize the the importance of the teaching and learning processes which result in critical thinking by students, and a greater understanding of the subject. Disciplines which are strongly tied to careers value faculty who maintain involvement in the profession through consulting or other professional practice.

The definition of faculty vitality and the indicators of vitality in terms of productivity are contextual. Definitions of "vitality" and "productivity" are dependent on the tasks that are valued by the institution and the tasks valued by the discipline. Interviews with faculty in different types of institutions and in different disciplines reveal these differences in values (Clark, 1987). When asked to "describe someone you consider to be an outstanding academic," the professor of biology in a research university said,

> An outstanding academic is someone who makes genuine contributions to his or
> her field in an elegant way, while at the same time is teaching others, passing
> on that information or the techniques or the approaches, so that it's not just one
> individu   'n isolation doing some elegant research but they are actually training
> other people as well (Clark, p. 123)

Here is the description of "an outstanding academic" from a professor of political science in a comprehensive college.

> I think an academic should not be someone who lives and dies in the ivory tower.
> Personally, I am a sort of pragmatic fellow. I think an academic should teach,
> write, and do research but he or she should also be involved in some of the
> practical things within your area of competence (Clark, p. 126).

And finally, a community college professor of biology says an "outstanding academic" is

> Somebody who is active in their field, so that lets a lot of us out . . . I mean active
> in the core of one's area -- research! [An outstanding community college teacher is]
> one who can get across the idea to the students and, probably more important, excite
> the student to want to learn and to do the work on his own (Clark, p. 127).

In general terms, high involvement with students and colleagues, and being current in the discipline are characteristic of "vital" faculty in any institution. Baldwin (1988) adds the following indicators of vitality in his description of vital professors: they are intellectually engaged; they enjoy the respect of their colleagues; and they are "enthusiastic, caring, dedicated, vigorous, creative, flexible, risk-taking, and regenerative" (p.38). In a study of faculty excellence, seventeen Miami-Dade Community College faculty who were selected by their peers as outstanding teachers were interviewed regarding their views of three broad categories of faculty excellence: motivation, interpersonal skills, and intellectual abilities (Roueche, et al., 1987). In general, considerable agreement was found on "what makes an excellent teacher." Several qualities were found which were common to the excellent teachers in this study: they have a positive spirit of optimism; they gain great satisfaction from student success which creates new energy for them in their teaching; and they often take risks in the classroom by trying new techniques which may increase their effectiveness as teachers.

Following this initial study of teaching excellence, Miami-Dade Community College developed a list of 28 items to define faculty excellence in four broad categories: motivation, interpersonal skills, knowledge, and application of knowledge (McCabe, 1990). Faculty, students, and administrators at Miami-Dade were asked to respond their level of agreement with each of the items. Although the percentages varied somewhat from one segment to another, all three ranked "being knowledgeable about their work" as the most important attribute of excellent faculty. The following attributes ranked second among the three segments: for faculty, "presenting ideas clearly;" for students, "providing a written statement of course requirements and evaluation procedures at the beginning of the semester;" and for administrators, "treating students with respect."

This study of faculty excellence raises an important issue: measuring the attributes of faculty vitality is very tricky because the perceptions of the faculty may be very different from the perceptions of the

students with regard to excellence and vitality. Faculty may have great respect for a co: 'eague who is well-respected in his or her discipline, but students may have a different viewpoint based on their experiences with the same faculty member as a teacher or advisor. This may explain why the student evaluations which are used in studies of teaching effectiveness are often at odds with the peer evaluations of faculty in studies of faculty vitality and faculty productivity.

In a study of professional competence in mid-career faculty, Willis and Tosti-Vasey (1988) found that faculty activities which contributed to professional competence and currency in the field included reading journals regularly, being involved in professional organizations, and spending time in research and publication. However, these indicators of professional involvement may also vary greatly from one type of institution to another. It is interesting to note that there is considerable variation between faculty in different types of institutions in the number of national meetings attended per year. In research universities, 57 percent of the faculty attended two or more meetings per year, but in comprehensive colleges 37 percent of faculty attended two or more meetings, and in community colleges this number dropped to 25 percent (Clark, 1987, p. 245). The number of meetings attended is likely to be related to the funding available from the institution. However, it may also be related to the perceived relevance of the meeting. For instance, many community college faculty choose not to attend national meetings in their discipline if the focus of the meetings is unlikely to be useful in their teaching activities. But instead, many community college faculty have banded together to form their own discipline-related groups, some of which are regional and local, which focus on the challenges of teaching the subject in a community college rather than advanced-level cutting-edge research which is more applicable in the teaching of advanced-level graduate classes rather than introductory classes at the lower-division level (Clark, 1987). This observation is consistent with the findings of the 1989 faculty study of the Carnegie Foundation for the Advancement of Teaching and Learning. When faculty were asked, "how important to you are national or international societies in your discipline?" findings indicated that national societies were considered "very important" of "fairly important" by 69 percent of faculty in research universities, 60 percent of those in comprehensive colleges, and 45 percent of those in two-year colleges (Carnegie, 1989, p. 119). But,

when asked "how important to you is your academic discipline?," disciplines were ranked as "very important" by 81 percent of the two-year college faculty, 75 percent of faculty in comprehensive colleges, and 76 percent of the research university faculty (Carnegie, 1989, p. 117). Although they attend fewer national meetings, and may consider a national society to less important than faculty in other institutions, two-year faculty do consider their discipline to be very important.

What indicates vitality in the career patterns of faculty? Baldwin and Blackburn (1981) found that "variety, change and a sense of progression are essential to academic careers," and are characteristic of vital faculty with successful and satisfying careers. Baldwin's (1990) later study of faculty indicated that those who were considered to be "vital" faculty had added some variety to their work. Baldwin notes, "Some had worked in administration or outside of higher education. Others had begun teaching full-time or part-time in new subject areas where they had developed an interest and some expertise. Vital professors seemed to find many ways to expand their work lives and make room for professional growth" (p. 169). According to similar findings of another study, faculty are concerned about "monotony" and lack of autonomy. Faculty are the most likely of any occupational group to become bored when they feel less challenged in their tasks (Eble & McKeachie, 1986, p. 166). Although many faculty feel "stuck" at some point in their careers, Baldwin (1990) found that significantly fewer of the vital faculty had felt "stuck" in comparison to a group of representative faculty. This is probably related to the variety in career tasks that many vital faculty have naturally built into their careers. In addition, a high level of morale and job satisfaction among vital faculty has been shown to be significantly related to a "sense of accomplishment" (Eble & McKeachie, 1986, p. 166).

What individual qualities are related to vitality in a faculty career? It might be easier to first identify the characteristics which are not related to vitality. Contrary to popular mythology, the length of time as a faculty member and the age of a faculty member have been found to be unrelated to vitality in terms of productivity and teaching effectiveness (Crawley, 1990). More specifically, in research universities, age has not been found to be significantly related to lower productivity in terms of research (Austin & Gamson, 1983, p. 39). Although much of the research assumes that mid-career faculty have a

negative impact on the institution (Caffarella, et al., 1989), studies have shown that peak performance among faculty often does not occur until mid-career (Willis & Tosti-Vasey, 1990). In addition, older faculty tend to enjoy teaching more and feel that they have a better rapport with students than they did when they were concentrating their energies on research earlier in their careers (Lawrence, 1984). However, older and mid-career faculty have indicated some frustration with the changes that have occurred since they started teaching in college. Because of the number of underprepared students and the diversity of background of today's students, very often the teaching techniques that were effective twenty years ago are no longer effective with this new group of students (Kalikow, et al., 1990). Despite the frustrations, studies have shown that length of time as a faculty member was not related to job satisfaction (Armour, et al., 1990). In fact, job satisfaction tends to increase over the faculty career, and is at its peak just before retirement (Baldwin, 1979).

Which individual characteristics do predict faculty vitality? Although some studies have shown that age is unrelated to productivity, several studies of faculty which were done in the 1970's show that "the relationship between age and research productivity follows a saddle-shaped curve" (Austin & Gamson, 1983, p. 78). In general, researchers believe that this may be caused by shifting interests over the career. Young faculty tend to spend more time doing research as they work toward tenure. In a recent faculty study, those who tended to published the most were faculty with the least years of experience (Carnegie, 1991, March/April). Research activity tends to dip among associate professors but rises again among full professors (Austin & Gamson, 1983, p. 78). Although the publication patterns in the 1970's among younger faculty were consistent with more recent research, it is difficult to tell whether the scholarly activity at mid-career and later years indicates a "typical" career pattern or is indicative of the faculty cohorts who were at those stages of their careers when the research was done.

Vitality in teaching has also been evaluated over periods of the faculty career (Blackburn, 1982). Using student assessments of teaching, one study demonstrated that there is a certain amount of stability in teaching performance over a relatively short period of time (three years). Another study indicated that the level of interest in teaching changes over the faculty career. However, student evaluations were not

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used to find out if faculty interest affected the quality of teaching from the student's perspective. Other studies indicated variations in teaching quality, according to student evaluations, which were not necessarily related to age. Blackburn (1982) concluded that the evidence presented in the research so far does not indicate that there are career phases in teaching effectiveness.

In a recent study of faculty publication rates, the following individual characteristics were found to be related to those who published considerably more than their colleagues: they teach graduate-level courses; they are less likely to prefer teaching over research; they spend considerably fewer hours in teaching undergraduates and somewhat fewer hours in graduate classes; they interact less with students outside of class; they spend fewer hours preparing for teaching and in scheduled office hours and significantly more hours in research activities; and they participate less in campus governance and committees (Carnegie, 1991, March/April). These results are very similar to Finkelstein's conclusions in 1978:

> The "productive" faculty member thus holds a doctorate, places a strong value
> on research, and started publishing early. He or she spends more time in
> research than teaching, has little commitment to administrative work, and
> stays in close contact with colleagues and developments in the discipline
> (Austin & Gamson, 1983, p. 38).

All of these individual attributes have been shown to be related to greater quantities of publication: characteristics which describe a "vital" faculty member in an institutions which value research and publication.

Those who have an intrinsic motivation for their work are usually characterized as "vital." Vital faculty like opportunities for self-actualization, they like autonomy in their work, and they like risky settings in which they can be investigative and challenged in their work (Schneider & Zalesny, 1982). Those who are internally motivated to do research and to publish are likely to continue to publish even after achieving tenure (Austin & Gamson, 1983). According to DeVries, faculty self-expectations are by far the best predictor of their activity patterns, predicting far more variance in time allotment to teaching, research and administrative activities than institutional expectations and colleague expectations (Finkelstein, 1984, p. 93). Vital faculty, when asked, were able to generate a number of specific projects they hoped to accomplish within a short period of time. They had more concrete and immediate

goals than other faculty (Baldwin, 1990, March/April). Reskin's findings support the notion of self-motivation. One of her major conclusions was that early productivity and collegial recognition contribute to later productivity (Drew & Tronvig, 1988).

These findings would seem to indicate that vital faculty are highly self-motivated, and that external influences may not have a great impact on their vitality and productivity. However, unlike DeVries' study, Reskin found that the "external forces" exerted by the type of institution had an impact on research productivity. One of the strongest predictors of productivity among chemists was having a first position with a university. She notes, "The effect of organizational context points to the role of organization-specific reward structures and is consistent with the accumulation of advantages among scientists whose jobs provide access to resources that facilitate productivity" (Drew & Tronvig, 1988, p. 26). Several studies of faculty research productivity done in the 1970's also indicate that "institutional quality and 'colleague climate' are the strongest predictors of productivity" (Austin & Gamson, 1983, p. 78). In a more recent study of faculty (Carnegie, 1989), when faculty were asked, "are you currently engaged in any scholarly work that you expect to lead to a publication, an exhibit, or a musical recital?," positive responses were received from 95 percent of the faculty in research universities, 75 percent of the faculty in comprehensive colleges, and 32 percent of the faculty in two-year colleges (p. 47). In addition, there are differences in publication rates by discipline. Those who have published the greatest number of articles over the career are in Engineering (average of 33 articles), Physical Sciences (29 articles) and Biological sciences (27 articles). Those who have published the least are in the Humanities (11 articles), Business and Communications (13 articles) and Social Sciences (14 articles) (Carnegie, 1991, p.28). Baldwin (1988) found similar results in comparing three groups of faculty from three broad disciplinary groups: 1) Arts and Humanities, 2) Math and Natural sciences, and 3) Social Sciences. Those in Math and Sciences tended to be more research-oriented and published more than faculty in the other fields. However, Baldwin also found that faculty in liberal arts colleges were very similar in their activities, despite disciplinary differences. According to this evidence, it seems that self-motivation works together

with institutional climate and disciplinary "culture" to increase productivity which is measured in terms of scholarly activity.

Baldwin (1990, March/April) found that faculty who are considered to be "vital" tend to work longer hours and invest a larger proportion of time in their responsibilities unrelated to teaching, including research, institutional service, and administration. In addition, "vital" faculty were found to collaborate with colleagues more than representative faculty in both teaching and research activities.

In summary, although the measures of vitality are different from one type of institution to another there are several traits that appear to be associated with faculty vitality in all settings: they are highly self-motivated individuals who put more time into their work; they gain intrinsic satisfaction from their work; they have self-expectations of productivity; and they are likely to have careers which are characterized by variety in their work.

What individual characteristics contribute to lack of vitality in a faculty career? "Deadwood," "stagnant," "disengaged," "worn out," "over the hill," and even "the Petrified Forest" are terms which have been used to describe faculty who lack vitality (Mooney, 1990, June 27). But these faculty must have been vital at some earlier points in their careers or they would not have been hired and then granted tenure. McKeachie (1983) says, "Nobody intends to become dead wood, and nobody enjoys being perceived as dead wood" (p.61). What causes once-productive faculty to become deadwood? McKeachie believes that lack of momentum in a career is one of the causes. As faculty are working toward promotions and tenure, there are goals in the career toward which to strive. But some of those who gain tenure do not continue to move forward in their careers when all of their goals have been achieved. It is possible that they were so focused on the external goals of promotion and tenure that they did not develop their own internal "sense of meaning" for their work that would continue to propel them forward through self-motivation and intrinsic rewards (Votruba, 1990).

Stress is another factor which may cause a lack of vitality (McKeachie, 1983). Many aspects of higher education have changed dramatically since the time when many mid-career faculty and senior faculty entered their careers: there is more diversity among students, many students are less well-

prepared than in the past, and in many colleges there is a greater emphasis on research productivity (Kalikow et al., 1990). Faculty are frustrated as a result of these changes, and, with less intellectual stimulation and limited mobility, they often feel "stuck" in the institution. According to a 1989 national faculty survey, 24 percent of all faculty have seriously considered leaving higher education in the past two years, and 20 percent report that they "feel trapped in a profession with limited opportunities for advancement (Carnegie, 1989, pp. 78-79). At the extreme, "burn out" may result from a feelings of frustration and "stuckness" over an extended period of time (Blackburn, et al., 1986). To summarize the problem, Pines and Aronson provide this description of "burnout:"

> Burnout tends to afflict people who enter their professions highly motivated
> and idealistic, expecting their work to give their lives a sense of meaning.
> It is a particular hazard in occupations in which professionals tend to experience
> their work as a kind of "calling." Burnout involves the painful realization that
> we have failed -- that all our efforts were for nothing, that we no longer have
> the energy it takes to do what we promised ourselves to do, that we have nothing
> left to give.

Those who feel particularly disillusioned and unappreciated may experience "Professorial Melancholia," a crisis of low self esteem (Mooney, 1989). After interviewing and counseling faculty members for several years, counseling psychologist David Machell concluded that there are elements inherent to academic work which may cause this "melancholia." First, being a professor is not "just a job:" faculty feel ownership of their work because they are deeply and emotionally immersed in it. Second, according to Machell, faculty members "suffer from self-generated problems, particularly their own expectations of perfection" (p. A14). Machell notes that "the criticism, the nothing-is-ever-good-enough aspect is really at the center of this disease." "Professorial melancholia" has a negative effect on motivation and self-esteem, and may manifest itself in vicious and unprofessional ways which reflect paranoid thinking. However, this disease can be treated through counseling and through the development of diversions outside academe which may prevent a faculty member's sense of self-worth from being entirely wrapped up in the academic career.

A lack of congruence between their own professional goals and the goals of the institution may be one factor which causes faculty to feel "stuck" (Wylie, 1990). Moreover, by the standards of their institution

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they are likely to be considered less "vital." John Roueche (1990) recommends that faculty choose their

institutions carefully. For those more interested in teaching than publishing, a research university is

probably not a good "fit." Faculty who find that their interests do not match the predominant culture of the

institution may be good candidates for a career move into an institution whose goals are similar to their

own. However, some faculty may have initially chosen an institution which was congruent with their own

personal career goals, only to experience a shift in goals and interests at mid-career. Rather than leaving

the institution, faculty can work to make adjustments in their work roles. As noted earlier, vital faculty

tend to add variety to their careers in order to continue to have new intellectual challenges.

Those who lack intrinsic motivation for their work are likely to find external material rewards more

important (Schneider & Zalesny, 1982). While intrinsic rewards are likely to maintain faculty

satisfaction and morale, particularly among vital faculty, Austin and Gamson (1983) found that the

erosion of extrinsic rewards, such as salary and workload, may have a negative impact on faculty morale.

However, despite teaching more hours and receiving lower salaries, a national survey of faculty indicated

that community college faculty are more satisfied than other faculty on the following issues: quality of

their colleagues, their job overall, their workload, and their institution's philosophy and goals

(Wisniewski, 1990). This would seem to indicate that community college faculty feel sufficient intrinsic

rewards that the extrinsic rewards are less important. Although it would be jumping to conclusions to say

that this indicates that faculty vitality is higher in community colleges than in other types of institutions,

it may indicate that those in the community college have a better "fit" with the institution. In other words,

there may be a greater proportion of faculty in community colleges who are considered "vital" in that

setting than faculty who are considered vital by their own institutions in other types of institutions.

To summarize, it is important to remember that faculty who are no longer vital were once energetic

and involved, or they would not have been initially hired and then promoted. The events which lead to a

lack of vitality are highly individualized, but some patterns emerge from the studies of faculty. Vitality

begins to wane with a lack of career momentum, a lack of new challenges and intellectual stimulation, and a

lack of intrinsic motivation for the work. In addition, some of the changes in higher education since the

beginning of the career can cause frustration which results from feelings of a lack of competence in performing under the new, and sometimes undesirable, conditions. Feeling "stuck," and feelings of stress and burnout can ultimately lead to low self-esteem and low motivation for the work.

Conclusion: Recommendations for an Individualized Approach to Enhance Faculty Vitality

What can be done to enhance faculty vitality? First, the connection between faculty development and adult development must be considered. Then we may consider what steps may be taken to enhance faculty vitality.

The literature of adult development and faculty career development presents four major points. First, it is important for adult development stages, phases, and critical life events to be considered when looking at faculty careers. Second, it is important to remember that because of the diversity of career patterns, age is not inextricably linked to career development stages. Third, the measures of vitality are different from one type of institution to another. Finally, each individual has different motivations which shift over the career span.

For all of these reasons, faculty development programs for revitalization should recognize individual differences and individual needs which are based on the issues of adult development and career development (Claxton & Murrell, 1984; Lawrence, 1985). Both personal and professional needs for growth and development should be considered (Hill, 1990). Issues of midlife changes and issues of aging should be considered in programs of faculty renewal. And flexibility in faculty development should be incorporated to allow faculty to have meaningful growth at all career stages.

What can institutions do to help burned-out faculty who lack vitality? It is first important to remember that these were once bright, productive people when they were hired, and that they are valuable human resources (B. J. Wheeler, 1990). Lawrence (1985) believes that if institutions paid closer attention to the individual needs and motivations of the faculty as they shift over the career, the energies of the faculty might be re-directed in ways that are mutually beneficial to both the individuals and the institution. It is likely, for instance, that senior faculty have a desire to "leave a legacy." By working

with them and finding out what they would like to "leave behind for others," it may be possible to provide opportunities for revitalization which also benefit the institution (B.J. Wheeler, 1990). Lucas (1990) recommends that institutions provide retraining opportunities for faculty and opportunities for movement within the institution. Through effective organizational development processes, institutions can reallocate human resources in order to revitalize faculty while, at the same time, providing services needed by the institution (Lunde & Hartung, 1990).

What can be done to prevent burnout in faculty? Wunsch (1990) recommends that institutions encourage faculty to develop their own individual "professional development plan," starting from the time they are junior faculty, and revising and updating regularly, every two to three years throughout their careers. Writing and revising a professional development plan provides a regular opportunity for faculty to reflect on their goals and "dreams" in order to begin to plan small, short-term projects which will meet the goals. As noted earlier, vital faculty are characterized by having many short-term projects which contribute to the overall vitality of their careers.

Finally, it is important for faculty to ultimately take responsibility for their own career vitality. This process may begin with career consulting in order to encourage faculty to reexamine their interests and professional goals so that they might to redirect their energies in a way which will enhance their careers (Wheeler, 1990). Faculty must provide their own motivation for continued learning and development, because the desire for learning comes from within. In addition, faculty should consider writing reflective "life histories," so that they might look back to see what they have accomplished so far (Mann, 1990, November).

An on-going program of faculty development must be considered as an integral part of an effective institution. By linking faculty development and adult development, and by considering the individual differences which are inherent in the development of a faculty career, institutions can provide opportunities for individualized renewal which will result in a more vital faculty.

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