

Planned Change in Higher Education

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Utilizing the Dunkin and Biddle Model, this field study examined the effects of the application of the assessment and goal-setting stage of the Enhanced Normative Systems Model and change at a state university. The model, a blending of the Normative Systems Model and Metanoic Principles, emphasizes participant decision-making and cultural change. The processes experienced by an appointed Commission to Study Academic Organization were examined by using reports and documents, interviews, a questionnaire, and the researcher as participant observer. The outcomes were examined by using the Commission's final report and related documents. Data were organized according to the Model's major theoretical process occurrences (a shared vision, alignment around the vision, participant decision-making, and internal and external assessment) and product outcomes (change toward the vision and increased participant decision-making). Analysis of the data supports the Enhanced Normative Systems Model as a participatory planned change approach in higher education.

Background

Despite growing evidence in support of the effectiveness of participatory change processes (Allen, 1980; Argyris, 1977; Elden, 1979; Heilman & Hornstein, 1982; Lewin, 1951), participative planning for change is particularly rare in higher education (Kozma, 1986). Most change efforts in higher education have emanated from the administration, with only token or minimal participation by the faculty. However, to adapt and develop, colleges and universities must have a clear mission or purpose (Baldrige, 1983; Hollowood, 1981; Martin, 1982; Moore, 1986). Faculty and administrators, together, need to envision new directions and create new ways to realize their shared vision. With emphases on the development of a vision and participant decision-making, a new change model, the Enhanced Normative Systems Model, provides a means for creating change while at the same time considering internal and external factors, such as the organizational culture and political and economic pressures.

Development of the Enhanced Normative Systems Model

The Enhanced Normative Systems Model is an adaptation of the Normative Systems Model (Allen, 1980;

Silverzweig & Allen, 1976) by adding Metanoic Principles (Keifer & Senge, 1982). The Normative Systems Model was developed by Robert Allen and Saul Pilnick as a result of their experience with rehabilitating juvenile delinquents (Allen, Dubin, Pilnick, & Youtz, 1981). The four-phased developmental model is founded on:

Lewin's action research approach (1951), by which members influence the process of change;

The anthropological hypothesis that when individuals come together, they form a culture which in turn affects the individuals (Mead, 1928, 1930); and

the National Training Laboratories' (Allen, 1980) view that cultural change is necessary to support identified organizational change.

The four phases of the model (see Figure 1), which interface as an organization moves through the change process, move from the identification of desired culture to the sustainment of the desired culture.

Figure 1
Enhanced Normative Systems Model

Phase I	Cultural analysis Objective setting	ANALYZE the EXISTING CULTURE
Phase II	Systems Introduction and involvement	EXPERIENCE the DESIRED CULTURE
Phase III	Systems implementation	MODIFY the EXISTING CULTURE
Phase IV	Systems feedback and evaluation	SUSTAIN the DESIRED CULTURE

Although leaders in business and corporate settings have successfully applied the Normative Systems Model to change cultures (Allen, 1980), there is no evidence of the model applied to a university or college-wide setting (Allen, personal communication, 1988).

Metanoic Principles (Keifer & Senge, 1982) are grounded in the management theories of Douglas McGregor (1960), which emphasize the importance of the participant. In addition to the common theoretical foundations of the Normative Systems Model, such as a sense of vision and participant decision-making, Metanoic Principles emphasize alignment around the vision, the importance of the organization as a whole system, and a balance of reason and intuition (Keifer & Senge, 1982). Alignment around the vision may provide a capability to bring about results previously unimagined. The organization is also recognized as a network of interacting and interdependent systems. Although one may envision great ideas and dreams, those ideas and dreams need to be grounded in practicalities, such as political and economic constraints.

By combining the Metanoic Principles with the Normative Systems Model, John Terry, a community psychologist, created a new model, the Enhanced Normative Systems Model (Terry, personal communication, 1988). This model was designed to encourage movement from a vertical to a horizontal decision-making process, rather than emphasize administrative support, as is common to organizational change (Kozma, 1978; Steeples, 1988).

It also emphasized possibilities rather than existing problems (Terry, 1988). The Enhanced Normative Systems Model contains the following theoretical concepts which assist a change process:

1. A shared vision or identified ideal state provides direction for change (Allen, 1980; Baldrige, 1983; Beckhard & Harris, 1987; Bennis, 1983; Keifer & Senge, 1982; Moore, 1986; Selznick, 1957).

2. Alignment around a shared vision can provide a

purpose or motivation to achieve potentialities beyond generally perceived possibilities (Allen, 1980; Bazerman & Lewicki, 1984; Keifer & Senge, 1982).

3. Participant decision-making and involvement of members of an organization ease the change process and enhance durability (Allen, 1980; Elden, 1979; Fullan, 1982; Heilman & Hornstein, 1982; Keifer & Senge, 1982).

4. Assessment of internal and external factors provides a basis of understanding potential support of and resistance to change (Allen, 1980; Bennis, 1983; Bergquist & Schoemaker, 1986; Gershenfeld, 1986; Greenfield, 1985; Katz & Kahn, 1978; Keifer & Senge, 1982).

5. Change of culture is necessary to support an innovation or identified change (Allen, 1980; Argyris, 1967; Heilman & Hornstein, 1982; Keifer & Senge, 1982; Lewin, 1951; Ouchi & Wilkins, 1985).

Description of the Setting

This model was chosen to guide a university through a planned change process because it emphasizes membership participation and future potentials (Terry, 1988). The process included an appointed Commission to Study Academic Organization, which identified goals and developed a blueprint for the future of the institution.

The state university at which this planned change process occurred consisted of a fragmented community with ineffectual faculty governance. The university was formed in the mid-1970s by a state mandated merger of two distinctly diverse institutions. As a result, the 12,000 students (graduate and undergraduate) attend seven colleges located on three campuses, each at least two miles from the others.

The university remained fractured physically, departmentally, and organizationally. Yet, the university shares these common conditions with other universities (Boyer, 1987). Aware of the university's history and the need for planned change, a new president began the change process by employing an outside consulting firm to examine space utilization and by creating a commission to identify mission

Figure 2
 Overview of Change Process

Phase I	ANALYZE the EXISTING CULTURE	Establish need for change Analyze existing culture Identify vision
Phase II	EXPERIENCE the DESIRED CULTURE	Experience new culture Implement small scale model
Phase III	MODIFY the EXISTING CULTURE	Accelerate change Develop strategies Set performance goals
Phase IV	SUSTAIN the DESIRED CULTURE	Create congruence Expand participation Create evaluation system

and goals and to make recommendations concerning the university's future direction.

The commission consisted of 15 faculty, two administrators, and a local community leader as chair. The process included goal identification and the establishment of recommendations to implement those goals. This then led to the second stage of planned change: the formation of a council and seven committees to implement the commission's recommendations. It is the commission's 18-month process which is examined (see Figure 2).

The commission experience included activities, such as regular meetings, and the use of resources, such as books and consultants. The content of the meetings, consistent with Metanoic Principles, included a process of inquiry which moved from general to specific through the development of an abstract ideal university and then toward a realistic vision for the university. Through this developmental process, many areas needing to be examined were identified. To deal with these areas, the commission was divided into subcommittees. The subcommittees, with staff assistance, administered an extensive questionnaire and investigated and made recommendations concerning the roles of teaching, research, service, arts, and graduate programs.

The abundant information and recommendations from the subcommittees were diverse and contradictory. To integrate this information, a task force with representation from each subcommittee integrated and consolidated the reports and recommendations. The task force report, with preliminary recommendations, was then presented to the full commission for study and deliberation. The commission's deliberation resulted in a final report which included identified goals and recommendations to meet those goals. The report was delivered directly to the president who, in turn,

distributed the report to all full-time faculty and administrators.

After the commission completed its work, the president then appointed a Council for Implementation, which consisted of 14 faculty. Seven committees were also formed to address major areas of reform. Each committee was co-chaired by two council members. Six committee members were elected by the faculty, and three other members were appointed by the president. The new council, following the commission's format, met monthly, kept minutes of meetings, and acted on committee reports.

Method

The methodology section includes the research question, the researcher's role and data sources, validity and reliability issues, examination of the process occurrences, examination of the product outcomes, and an analysis of the process product relationship.

Research Question

The question addressed by the study was: When applied in a higher educational setting, will the Enhanced Normative Systems Model produce the predicted outcomes? To answer this question, this field study was divided into three parts: examination of Phase I for the predicted process occurrences, examination of Phase II for the predicted product outcomes, and analysis of the relationship among process and product variables.

Researcher's Role and Data Sources

The first author of this paper was a research assistant working with the commission itself. This person's responsibilities included: taking notes at meetings; researching pertinent issues, working with a subcommittee to develop,

distribute, code, and analyze a faculty questionnaire; recordkeeping for both a task force and the full commission; and writing reports.

As a participant observer, she had access to all commission documents, minutes of meetings, and transcripts of special meetings. Data sources included: an extensive faculty questionnaire utilized by the commission, interviews with eight key faculty or key administrators, pertinent demographic studies, documents (both in-house and state), reports, and literature. The faculty questionnaire was developed by the Carnegie Foundation for the Advancement of Teaching (Trendlines, 1985). The eight-page document included topics such as demographic information, perceptions of the teaching/research relationship, governance, curriculum, and faculty development/community.

Validity and Reliability Issues

The researcher kept careful notes, and maintained a log. The activities of the researcher also included the recommended elements of "participatory action researcher" (Whyte, 1984) in which the consultant is "responsible not simply to the organizational heads, but also to . . . the rank and file" (p. 168). The researcher had numerous responsibilities. She maintained records and investigated issues for the commission members as well as served the administrator as a professional staff member. Organization members at various levels participated in the project design and process.

To assist with accuracy, staff members read and responded to each other's reports before they were presented to the commission and subcommittees. The commission and subcommittees also accepted or revised minutes or reports as a regular agenda item in their meetings. During meetings and retreats commission membership dynamics and interactions were observed through the eyes of an "outsider" with no stake in the solution other than to assist the participant decision-making process.

The interview procedure included taking careful notes during the interview and asking a set of standard questions (Bogan & Taylor, 1975) to obtain participants' perceptions of the process at the completion of the commission's work. Six individuals from the faculty were selected to be interviewed to represent various members involved in the process: those who spoke on both sides of major issues, those who doubted the process as well as those who supported it, and those who served on the commission only, as well as those who continued to be active during the counsel/committee phase of the change process. In addition to the faculty interviews recorded, the president of the university, the chair of the commission, and the executive director were also interviewed for their perceptions of the change process, the change mode, and the history and development of the model.

Examination for Process occurrences and Product Outcomes

The activities of the commission during Phase I of the change process were examined for evidence of the existence of predicted process occurrences: a shared vision, alignment around the vision, participant decision-making, and assessment. Criteria for the occurrences were created from the

theoretical conditions established by Allen (1980) and Kiefer and Senge (1982). Data sources for these criteria included the role of the researcher as participant observer and resources such as meeting minutes, transcripts, a faculty questionnaire, and memos.

The second phase of the process, which involved a newly appointed and elected council and committees, was examined for product outcomes: cultural change toward the vision and increased participant decision-making. Criteria for the determination of product occurrences were created to form the theoretical conditions established by Allen (1980) and Keifer and Senge (1982). Although evidence of cultural change may be weak during the first two phases of the Model, movement toward the vision and participant decision-making is evident through potential and perceived cultural change toward the vision and potential and perceived increases in participant decision-making (Allen, 1980). Data sources for the outcomes included a final report and documents from the second phase of the change process.

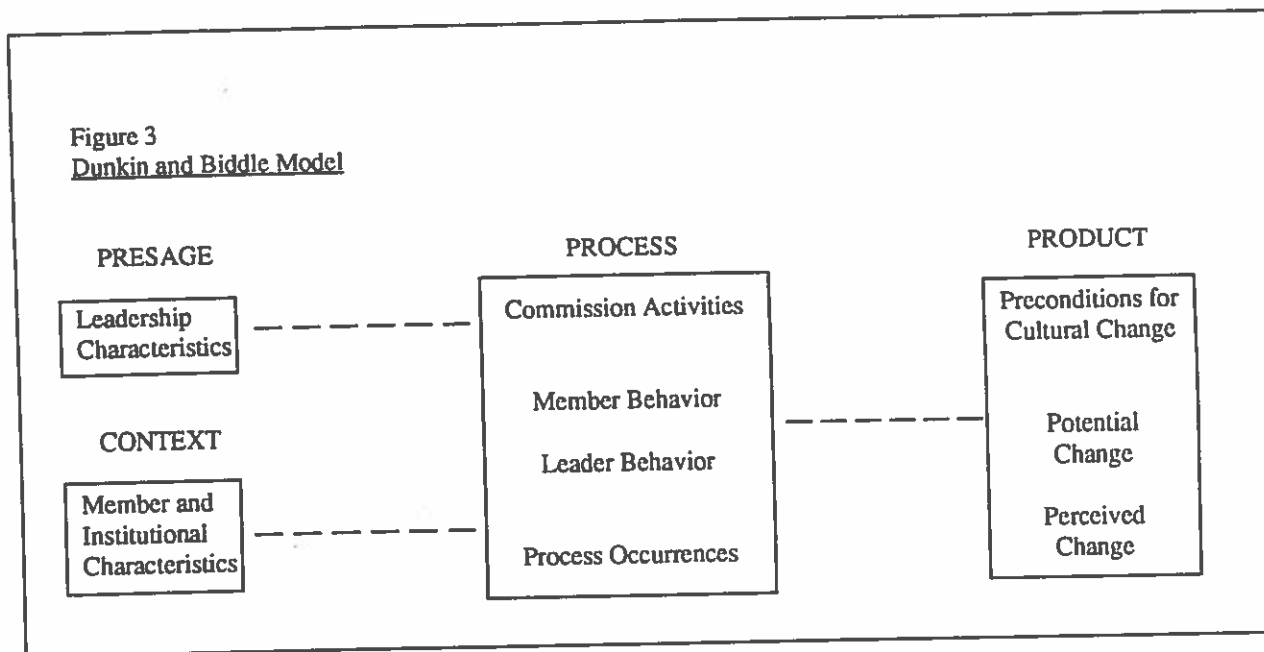
Analysis of Process and Product Relationship

The relationship of the process occurrences and product outcomes were then analyzed by use of a model of analysis developed by Dunkin and Biddle (1974). Although the Dunkin and Biddle Model (see Figure 3) is generally applied to analyze processes within the classroom, the variable categories may also be applied to organizational change. The classification variables, in addition to process and product variables, include presage variables, which are characteristics of the change agents (e.g., training), and context variables, which are those conditions to which the change agents must adapt (e.g., organizational characteristics).

Although the study included examination of the presage process, context process, and product process variables, this paper considers only the product process variables with respect to participant decision-making and cultural change. For the product process relationship, the product outcomes (potential and perceived changes toward the vision and potential and perceived increased participant decision-making) were examined for their relationships with the process occurrences (a shared vision, alignment around the vision, participant decision-making, and assessments). For example, the occurrence of alignment around the vision was examined for its influences on change toward the vision. The occurrence of participant decision-making as a part of the process was examined for its influence on increased participant decision-making as an outcome through established organizational support.

Results

The results of the study suggest that the use of the Enhanced Normative Systems Model produced the predicted process occurrences and product outcomes, and provides encouraging support for the use of this change model in higher education settings. Data confirmed that the use of



the Enhanced Normative Systems Model included the process occurrences: a shared vision, alignment around the vision, participant decision-making, and internal and external assessments. The commission's vision became the guide and reference for decisions and recommendations, supporting the theory that a shared vision provides direction, motivation, and a focal point for organizational change (Beckhard & Harris, 1987; Bergquist & Shoemaker, 1986; Moore, 1986; Selznick, 1957). For example, a vision of a new university core curriculum became a vision in the Metanoic sense providing motivation to accomplish results beyond expectations (Keifer & Senge, 1982b). A new core curriculum provided reason for the university's faculty to cooperate (Beckhard & Harris, 1987) by moving beyond departmentalism to make major reorganizational decisions.

Data also confirmed that the use of this model produced the outcomes predicted by the theory at the end of the first phase: potential and perceived change toward the vision and potential and perceived increased participant decision-making. Potential change toward the vision was evident in the goals and recommendations described in the commission's final report. Perceived change toward the vision was particularly evident in increased faculty communication, and in the continued work for a quality core curriculum. In contrast to the description of the university as fragmented and isolated at the beginning of the study, the effects of the commission's work were viewed as producing change on the communication level. Members of the faculty from different disciplines began to talk with each other and share ideas about what was happening at the university. The walls of compartmentalization, although not broken, were at least pierced.

The activities of the second phase of the change process were consistent with and in support of the vision of quality

education and a cohesive integrated core curriculum. A core committee recommended a curriculum which provided a combination of depth and breadth. The curriculum was carefully designed for sequence of courses and the development of students' skills and knowledge.

Potential increased decision-making was evident in the recommendation to form a faculty senate and structural support for ongoing participant decision-making. Perceived increased participant decision-making was evident in the university's move from a hierarchical structure before the commission to an increased participatory form, as faculty involvement expanded from 16 faculty and two administrators on the commission to nearly 80 faculty members on the new council and its committees (see Table 1). Participant decision-making not only expanded beyond the select group, but also increased five-fold through the 18-month process under study.

Analysis of the process product relationship supports a relationship among the changes toward the vision and development of a vision, alignment around the vision, and increased participant decision-making. The encouragement of the members to develop the vision and the focus of the commission discussions on potentialities rather than problems appear to focus on attainment of the vision and desire culture.

Increased participant decision-making within the whole university appears to be related to the process occurrence of participant decision-making with the commission. The leaders' encouragement and support of members' decision-making and participation created a new culture for the members to experience. Member participation was established in the small group. The formation of the faculty senate and the expansion of the change process in Phase II increased membership participation in the large group, the

Table 1
Participation Expands

COMMISSION		COUNCIL AND COMMITTEES		
Appointed		Appointed	60% Elected 40% Apointed	
15	Faculty	14	Faculty	70
2	Administrators	0	Administrators	5
1	Community member	1	Community member	2
				Students

university.

Implications and Conclusions

Although this study involved only one institution, the analysis points to the importance of participant decision-making in planned change and supports the role of grass-roots involvement in the development of a vision. It also raises questions regarding the leadership style generally found in higher education. In contrast to studies which emphasize the active role of the leader in planned change (Mills, 1988; Nelson, 1987; Selznick, 1957; Shirley, 1988; Swain, 1988), it supports the research and theory of Elden (1979, 1988), an American social scientist in Trondheim, Norway, studying participatory organizational change.

This study suggests that a more effective leader may be one who encourages and supports members of the organization to fulfill leadership roles (Elden, 1979). However, the members of the organization must be willing to actively assume their roles and be responsible for university governance for participant decision-making to be successful. Cooperation and collaboration of individuals working together, not only provide potential to discover creative approaches to problems (Selznick, 1957), but also may create common understandings and cooperative solutions.

Cultural change may occur through employment of the principles of cultural change and support for the new desired culture (Allen, 1980; Heilman & Hornstein, 1982; Lewin, 1951). The Enhanced Normative Systems Model, in contrast to the views of Sarason (1983) and Allaire and Firsirotu (1984), appears to provide evidence for the ability to purposefully change an organizational culture (Ouchi & Wilkins, 1985). Although new conditions and activities and/or programs may be introduced in an organization, for enduring change to occur, structural support must be provided, and a

means of assessment and evaluation must be incorporated into the culture and structure.

This study raises questions for future research such as the Model's effectiveness in a setting with a history of traditions rather than a readiness for change as was the situation of this study. This study also did not analyze interpersonal relations nor the role of the particular members of the commission. However, data do suggest that the Enhanced Normative Systems Model was influential in the success of the change process used by the commission and the resulting outcomes. Data point to the Model's appropriateness and effectiveness for use in planned organizational change and goal setting in higher education where a participatory sense of community is valued.

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