ABSTRACT

Using 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 (ENSM) on change at a state university. The ENSM, a blending of the Normative Systems Model and Metanoic Principles, emphasizes participant decision making and cultural change. The processes experienced by a commission appointed to study academic organization (composed of 15 faculty, 2 administrators, and a community leader) were examined using reports and documents, interviews with 8 community leaders and faculty members, a questionnaire completed by many faculty members, and a participant observer. Data were organized according to the ENSM's major theoretical process occurrences (a shared vision, alignment around the vision, participant decision making and involvement, internal and external assessment, and organizational culture change) and the product outcomes of change and increased participant decision making. These outcomes were reflected in the growing involvement of faculty from the initial 15 to over 70 in the evolved council and committees. Analysis of the data suggest that the process occurrences can assist movement toward cultural change. The ENSM is supported as a participatory change approach to higher education. The findings question the leader's role as the originator of the vision, and suggest that a more effective leader may be one who encourages and supports members of the organization to fulfill leadership roles. Three figures, one table, and a 57-item list of references are included. (SLD)
PLANNED CHANGE IN HIGHER EDUCATION

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Abstract

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 on 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 using reports and documents, interviews, a questionnaire, and the researcher as participant observer. The outcomes were examined 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 suggest that the process occurrences can assist movement toward cultural change, and supports the Enhanced Normative Systems Model as a participatory planned change approach to higher education.
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Table 1: Participation Expands........................................17
This paper presents the background, methodology, results, and implications of a field study on planned change in higher education. The study examined and analyzed a participant decision making approach at a state university to determine if the applied model resulted in its predicted outcomes.

Background

In this section, we present a rationale for the study, the development of the change model applied to the organization and a description of the setting which includes the university and the change process.

RATIONALE

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 from the faculty (Firestone & Herriot, 1981; Kozma, 1985; Olsen, 1983).

However, to adapt and develop, colleges and universities must have a clear mission or purpose (Baldridge, 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, 1977) 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 and success 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 below), which interface as an organization moves through the change process, move from the identification of desired culture to the sustainment of 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, 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, such as the success of the American hockey team at the Olympics. The organization is also
recognized as a system 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 restrictions.

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, 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, 1985; 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; Baldridge, 1983; Beckhard & Harris, 1987; Bennis, 1983; Bergquist & Schoemaker, 1976; Keifer & Senge, 1982; Moore, 1986; Selznick, 1958).

2.) Alignment around a shared vision can provide a purpose or motivation to achieve potentialities beyond generally perceived possibilities (Allen, 1980; Bazerman & Lewiki, 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 provide a basis of understanding potential support of and resistance to change (Allen, 1980; Bennis, 1983; Bergquist & Schoemaker, 1976; Greenfield, 1985; Gershenfeld, 1986; Hollowood, 1981; 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 of its emphases on 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 formed in the mid-1970's 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 shared 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 creating a Commission to identify mission and goals and to make recommendations concerning the future direction of the University. The Commission's process is the subject of this paper.

The Commission consisted of sixteen faculty, two administrators, and a local community leader as chair. The process, which occurred over eighteen months, included goal identification and the establishment of recommendations to implement those goals. This then lead into 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 eighteen month process which is examined (see Figure 2 below).

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze the Existing Culture</td>
<td>Experience the Desired Culture</td>
<td>Modify the Existing Culture</td>
<td>Sustain the Desired Culture</td>
</tr>
<tr>
<td>Commission Study</td>
<td>Council and Committees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 1986</td>
<td>October 1987</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2
Overview of Change Process

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 divided into subcommittees. The subcommittees, with staff assistance investigated and made recommendations concerning the roles of teaching, research, service, arts, graduate programs and the administration of an extensive questionnaire.
The abundant information and recommendations from the subcommittees were diverse and contradictory. To integrate the subcommittee reports, 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 fourteen 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.

Methodology

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 in 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 for the eighteen months of the Commission activities was a research assistant working with the Commission itself. This entailed: taking notes at meetings, researching issues of concern, working with the Subcommittee to develop and distribute a faculty questionnaire (based on a national faculty survey by the Carnegie Foundation for the Advancement of Teaching), coding and analyzing the 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, transcripts of special meetings, memoranda, and reports. Data sources included: an extensive faculty questionnaire utilized by the Commission, interviews with eight key leaders and faculty, pertinent demographic studies, documents (both in-house and state), reports, and literature. The faculty questionnaire was developed by the Commission using as a foundation a survey distributed by the Carnegie Foundation for the Advancement of
Teaching (Trendlines, 1985). The eight page document included topics such as demographic information, perceptions of 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 contained the recommended elements of "participatory action researcher" (White, 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, following the guidelines set forth by Bogan and Taylor (1975), included taking careful notes during the interview, and asking a set of standard questions to obtain participants' perceptions of the process at the completion of the
Commission’s work. Six individuals from the faculty were selected 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 Council/Committee phase of the change process. In addition to the faculty interviews recorded, the President of the university and the Chair of the Commission, and the Executive Director were also interviewed for their perceptions of the change process, information concerning the change model, and the history and development of the model.

EXAMINATION FOR PROCESS OCCURRENCES

The activities of the Commission, during the 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. Data sources for the process occurrences included resources such as meeting minutes, transcripts, a faculty questionnaire, memoes and the role of the researcher as participant observer.

Criteria for a Shared Vision

According to the Enhanced Normative Systems Model, a shared vision will be present. A vision is an identified desired state to work toward (Allen, 1980). The vision may be specific, such as a 20% increase in enrollment, or nebulous, such as becoming a school of choice. A shared vision is supported by a representative group within an organization (Keifer & Senge, 1982).
The opportunity for a shared vision may occur when the need for change is acknowledged (Allen, 1980). Once the need for change is recognized, the Enhanced Normative Systems Model requires satisfying the following operational conditions in Phase I to support the existence of a shared vision:

A. The Commission identified the vision (Allen, 1980; Keifer & Senge, 1982).

B. A majority of the intermediate decisions made by the Commission reflect the vision (Allen, 1980; Keifer & Senge, 1982).

Criteria for Alignment Around the Vision

In addition to shared vision, the Enhanced Normative Systems Model predicts an alignment around that vision. This alignment constitutes a commitment to the vision, established through the group's cohesion and action to bring the vision to reality (Keifer & Senge, 1982). The Enhanced Normative Systems Model requires satisfying the following operational conditions to support the existence of alignment around a vision:

A. The Commission demonstrated cohesive support for the vision. Cohesion may be identified by group consensus or at least a 2/3 majority vote, and behavior reflecting support, such as a public stand by the group.

B. The Commission acted to bring the vision to fruition.

Criteria for Participant Decision Making

According to the Enhanced Normative Systems Model, there will be evidence of participant decision making (Allen, 1980). The Enhanced Normative Systems Model requires satisfying the following conditions to support the existence of participant decision making:
A. The President, Chair, and Executive Director supported and encouraged participant decision making (Allen, 1980).

B. The Commission was representative of the organizational membership (Allen, 1980).

C. The Commission, in addition to the administration, was influential in decision making (Allen, 1980).

Criteria for Internal and External Assessments

According to the Enhanced Normative Systems Model, there will be internal and external assessments to identify supporting and non-supporting conditions (Allen, 1980). All of the following operational conditions must be satisfied to support the existence of internal and external assessments:

A. An internal examination was employed by the Commission to assess the current culture (Allen, 1980). Culture includes the procedures, values, and norms (expected and supported behaviors) of members of the organization (Allen, 1980).

B. An internal examination was employed by the Commission to identify unwanted norms to modify and the desired norms to support (Allen, 1980).

C. An external examination was employed by the Commission which identifies influential factors such as demographic changes and potential clientele (Allen, 1980).

D. An external examination was employed by the Commission which identifies possible supporting and non-supporting conditions, such as political and economic forces (Allen, 1980).

E. An external examination was employed by the Commission to compare an organization’s profile and conditions with other universities.
EXAMINATION FOR PRODUCT OUTCOMES

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. Although evidence of cultural change may be weak during the first two phases of the Model, movement toward the vision and participant decision making will be evident through potential and perceived cultural change toward the vision and potential and perceived increased participant decision making (Allen, 1980). Data sources for the product outcomes included a Final Report, and documents from the second phase of the change process.

Criteria for Cultural Change

The Enhanced Normative Systems Model requires satisfying all of the following operational descriptions for potential and perceived cultural change and for potential and perceived increased participant decision making:

A. A majority of the goals and recommendations made by the Commission reflected the vision (Allen, 1980; Keifer & Senge, 1982).

B. The recommendations included action to be taken to bring the vision to fruition.

C. The recommendations reflected the findings of the internal and external examinations (Allen, 1980).

D. During Phase II, there was perceived change toward the vision (Allen, 1980).

E. Goals and recommendation included plans to support ongoing faculty decision making as part of the University’s structure (Allen, 1980).

F. Decision making in Phase II expanded beyond the Commission to include other members of the University (Allen, 1980).
ANALYSIS OF PROCESS AND PRODUCT RELATIONSHIP

The relationship of the process occurrences and product outcomes were then analyzed using a model of analysis developed by Dunkin and Biddle (1974). Although the Dunkin and Biddle Model (see Figure 3 below) 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 agent must adapt (e.g.: organizational characteristics).

Although the study included examination of the presage process, context process, and process 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 within the process was examined for its
influence on increased participant decision making as an outcome.

Results

It appears from the results of the study 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 a higher education setting. 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 &
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, 1982). A new core curriculum provided reason for the University's faculty to cooperate (Beckhard & Harris, 1987) 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 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 to 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 sixteen faculty and two administrators on the Commission to nearly eighty faculty members (of whom 60% were elected) on the new Council and its Committees (see Table 1 below). Participant decision making not only expanded beyond the select group, but increased five-fold through the 18 month process under study.

Table 1

<table>
<thead>
<tr>
<th>Participation Expands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commission</td>
</tr>
<tr>
<td>Appointed</td>
</tr>
<tr>
<td>15 faculty</td>
</tr>
<tr>
<td>2 Administrators</td>
</tr>
<tr>
<td>1 Community Member</td>
</tr>
</tbody>
</table>

Analysis of the process product relationship supports a relationship among the potential and perceived change 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 appears to focus on attainment of the vision and desired culture.

Increased participant decision making within the whole University appears to be related to the process occurrence of participant decision making within the Commission. The leaders' encouragement and support of members' decision making and participation created a new culture for the members to experience. Membership participation was established in the small group. The formation of a faculty senate and the expansion of the change process in the Council and Committees increased membership participation in the large group, the University.

Implications and Conclusions

Although this study involved only one situation, 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, 1984; Norton, 1986). The findings of this study call into question the role of the leader as the originator of the vision (Burns, 1978; Selznick, 1958; Shirley, 1988;
Swain, 1988), and 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, 1977). 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 can 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; Lewin, 1951; Heilman & Hornstein, 1982). The Enhanced Normative Systems Model appears, in contrast to the views of Sarason (1982) and Allaire and Firsirotu (1984), to provide evidence for the ability to purposively change an organizational culture (Ouchi & Wilkins, 1984). 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. This study also did not analyze
interpersonal relations nor the role of the particular members of the Commission. However, data does suggest that the Enhanced Normative Systems Model was influential in the success of the change process used by the Commission, and the resulting outcomes. It would, therefore, point to the use of the Model as appropriate and effective in planned organizational change and goal setting in higher education where a participatory sense of community is valued.
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Resources Not Published
