This paper describes the findings of a study on group development using experiential education. Jones and Bearley describe group development as occurring in four phases. Each phase has a task and process dimension to it, where task refers to how the group gets the job done, and process refers to how the group members deal with one another along the way. The task behaviors corresponding to the four stages are orientation, organization, open data flow, and problem solving. The process behaviors associated with the four stages are dependency, conflict, cohesion, and interdependence. The study population consisted of participants in Pacific Crest Outward Bound courses during the summer of 1988. The study instrument was a 40-item Likert-type questionnaire based on the task and process behaviors. Increases over time were noted in the task behaviors of problem-solving and open data flow and in the process behaviors of cohesion and interdependence. Female participants reported significantly higher levels of dependency on the group leader than their male counterparts. Groups that named themselves were significantly more interdependent. Whitewater courses were more effective than land-based courses in generating higher levels of cohesion, problem-solving ability, and interdependence. Long courses were not more effective in group development than short courses. Results suggest that experiential programs such as Outward Bound can be effective in promoting group development. (KS)
GROUP DEVELOPMENT THROUGH EXPERIENTIAL EDUCATION: PROMISES AND DELIVERY

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Abstract
The development of groups has been a salient goal for many experiential education programs, particularly those concerned with personal growth or executive development. Based on a recently completed study, one program, Outward Bound, was determined to be effective in the development of groups along a specified continuum of change. Recommendations for enhancing the development of groups were linked to the research findings of the study.

"There are many objects of great value to people which cannot be attained by unconnected individuals, but must be attained if at all, by association."
Daniel Webster

One of the major tenets underlying many experiential programs is that well-functioning and effective groups will develop from collections of strangers. In many cases, this is considered a desirable outcome since, as the quote above indicates, many "things" in our society can now only be attained through the efforts of groups rather than just individuals. Thus, a number of experiential programs now promote group development as one of the outcomes of participation in their programs. This is particularly true for management and development programs for a business, professional, and executive clientele where effective group dynamics is critical to overall success.

But do these programs actually develop groups and how does this group development process work? Furthermore, are there some particularly effective techniques that experiential educators can employ that will facilitate group development? The purpose of this paper is to describe the findings of a study recently completed on group development through experiential education (Ewert and Heywood, 1991). Additional attention is paid to what behaviors experiential educators should look for in identifying whether and to what extent groups are actually forming.

The Importance of Group Development
Why all the concern about developing groups? To a large degree, the importance of groups in modern society cannot be overstated. Much of the infrastructure of our culture and lifestyle requires various collections of individuals to fulfill their designated tasks (e.g., education, medicine, entertainment). This is especially true in areas such as environmental protection, scientific endeavor, and technology development. Larson and LaFasto (1989:14) support this view in their statement:
"Our ability to collaborate effectively in developing and implementing concrete responses to these problems [environmental] lags far behind our ability to detect the environmental damage and document the increasing severity of the problems."

While institutions such as science and education have been relatively slow to pick up on the idea of using the experiential setting to enhance group development, business and industry have responded much more rapidly. Perhaps sensing that well-functioning groups and project teams are critical to a successful operation, these types of organizations have begun to use the experiential setting in growing numbers.

Beyond making our society function, past research has indicated the effectiveness of group structures on decision-making (Kahneman et al., 1982), intra-communication (Hirokawa, 1990), the transmission of social norms (Whittaker and Shelby, 1988), and task accomplishment (Marby and Attridge, 1990). In addition, Schaffer (1980) reports that group experiences can create a number of socially desirable outcomes such as prosocial altruism, social modeling, and in defining of normative behaviors. Thus, in the realm of experiential education, group development has become both a means to an end (accomplishing tasks such as reaching the top of a mountain) and an end unto itself (learning to function as a member of a group rather than just an individual).

GROUP DEVELOPMENT

Characteristics of the Groups

What constitutes a "group" and in what ways can the development of that group be identified? For this research, the groups under study had five major characteristics: (1) they were composed primarily of strangers, (2) they exist for a relatively short period of time (7-21 days), (3) members must interact and cooperate, (4) the group has no past social history, and (5) the group will disband when the program ends.

While this type of group structure may not be evident in all experiential education programs (e.g., business groups often remain intact after the course ends) there are a number of commonalities that transcend many programs. Most experiential programs are short term and episodic in nature with a structured set of program objectives that requires a high degree of interaction between the participants. Usually but not always, these participants have no previous history with one another and for the most part are a collection of relative strangers that will disband after the course ends. Given these criteria, the members of the groups studied emulate many of those typically found elsewhere in experiential programs.

Measuring Group Development

From a theoretical as well as programmatic perspective, of great importance is the need to be able to identify when a group is actually developing. How can we "prove" that the program is really effective or useful in developing groups? One way would be to find a suitable model or theory that describes different attributes of group development and seek to observe and measure whether those attributes are actually occurring. For example, if a group development theory suggests that a well-functioning group allows constructive confrontation and disagreement within that group to occur, and that trait is displayed in a particular group, the observer may be more inclined to believe that the group is maturing in terms of intermember trust and integration.

While there are a number of group development theories, the one deemed most applicable to the experiential education setting by the researchers was the Jones and Bearley (1986) model. The model is based on Parson's Theory of Social Action (Parson and Shils, 1951; Turner and Maryanski, 1979) and divides group development into phases. These phases include: Latency, Adaptation, Integration, and Goal Attainment. In turn, each phase has a task and process dimension to it, where
task refers to how the group gets the job done, and process refers to how they deal with one another along the way.

Latency refers to the phase where groups initially identify and sort out the different values, symbols, expectations, and behaviors that each member brings with them into the experience. As shown in Table 1, the task variable for latency is called orientation and the process variable is termed dependency.

Once important "latent" attributes are recognized (e.g., one individual is extremely shy or anxious about the upcoming events), the group moves into an Adaptive phase where the task is characterized by getting the group organized and the process revolves around resolving conflicts. In this case, the task component is termed organization and the process component is called conflict.

The integrative phase of group development is characterized by acquiring information to effective decision-making (task) and developing cohesion among group members (process). In this phase, the task behavior is called open data flow and the process behavior is termed cohesion. Once a group develops to this phase it is ready for the goal attainment phase.

The final phase in this model is goal attainment. Here process is characterized by interaction between group members and meeting challenges as they arise. For this phase, the task behavior is called problem solving and the process behavior is termed interdependence. Fox (1987) reports that the ability to effectively solve problems is a hallmark of successful organizations, and without it, many if not most, endeavors will ultimately fail.

This statement by Fox is just as true in experiential education, for while we spend a great deal of time and energy working on the process by which groups solve problems, we also rely on the fact that many if not most of the problems we challenge groups with will eventually be solved. Without some measure of success in actually solving some of the problems, groups will quickly recognize that, despite the best of processes, the challenge was not met.

Identifying Group Development

Using the Jones and Bearley model, experiential educators should be able to look for specific behaviors that would indicate whether and where a group is along a development continuum. This development continuum moves from Stage 1 to Stage 4. A Stage 1 group can be characterized as having high dependency and orientation needs. From an instructor or facilitator perspective, these groups need relatively high levels of instructor guidance and time to set standards for individual behavior within the group.

In contrast, Stage IV groups display high levels of interdependence and effective problem-solving. Groups in this stage pose interesting "shifts" for the experiential educator who becomes less instructor and more participant, consultant or facilitator.

The Jones and Bearley model and experiential education make a good fit in that students in experiential education programs are often brought together from diverse backgrounds with different cultural and personal values. These values must be sorted out (latency), with individuals needing to adjust to the new social constraints and organization imposed on them by the "group" (adaptation). The resources of the group must be both identified and combined (integration), in order to achieve the objectives of the program (goal-attainment). See Table 1.

In addition, the task and process behaviors should also change in an expected pattern. According to Jones and Bearley's model, the following patterns of change should occur if a group is actually developing into a well-functioning and cohesive unit. For the task behaviors, over time, orientation and organization should decrease while the behaviors of open-data flow and problem-solving should increase. For the process behaviors, as the course or experience progresses, the behaviors of dependency and conflict should decrease while cohesion and interdependence should increase.

Other Selected Variables

In addition to the pattern of task and process behaviors described above, several other variables and their impact upon group development were looked at. Based on past research and the literature the variables of gender, age, identification with the group, type of experience, and length of experience were examined. It was hypothesized that females would have higher levels of expectation
regarding group development than males going into an experiential education course as would the older student (21 years or above). It was also hypothesized that group identification (i.e., did the group name itself), white-water rafting courses, and longer courses would produce more evidence of group development than non-identifying groups, mountaineering courses, and short courses.

HOW THE STUDY WAS CONDUCTED

The study population consisted of participants in Pacific Crest Outward Bound courses during the summer of 1988 (June through September). Seventeen courses were selected to represent a variety of types and lengths of courses experienced by different groups. To be able to compare across time, a pre-course (one week prior to the course) and post-course (immediately after their course) format was used.

The study instrument was a 40 item questionnaire developed from the Jones and Bearley (1986) Group Development Assessment Questionnaire. Essentially, the instrument used a Likert-type scale ranging from 1 (completely untrue) to 6 (completely true). Analysis was based on the composite scores for each of the Task (Orientation, Organization, Open Data Flow, and Problem-Solving) and Process behaviors (Dependency, Conflict, Cohesion, and Interdependence). Since the composite score for each behavior was based on the scores from five individual questions, each composite score could range from five to 30. The underlying assumption of this approach was that higher composite scores represented higher levels of importance placed on the Task or Process behaviors.

RESULTS OF THE STUDY

Expectancies

Pre and post sets of questionnaires were mailed to 198 course participants with a return rate of 57 pre-course (29%) and 67 post-course (34%). The pre-course scores were actually surrogate measures of the level and types of expectancies individuals had concerning the development of their perspective groups. Using Analysis of Variance routines, the results indicated that there is no significant differences between females and males or younger and older students with respect to the level or type of group development they expected to occur. Of greater interest is the pattern of change reported by the participants. With respect to expectancies (pre-course scores), the order of importance (lower to higher) for Task behaviors went in the following manner: orientation, organization, dataflow, and problem-solving. Likewise, for Process behaviors the order from least important to most important was: conflict, dependency, interdependence, and cohesion. In other words, participants reported that they expected to see group development behaviors that represented open dataflow, effective problem-solving, and high levels of interdependence and cohesion. Thus, from a marketing and information perspective, it would appear that pre-course information should mention opportunities to experience these types of group development scenarios.

Patterns of Change

Because pre-course scores were really measures of expectation (since they were generated before the groups had actually formed), no direct comparison with post course scores was possible. It would be instructive, however, to examine the pattern of change between the pre and post scores. In this case, the pre and post scores were substantially different and in the predicted direction if this type of experience was effective in producing group development. As can be seen in Figure 1, increases were noted in the Task behaviors of problem-solving and open data flow and in the Process behaviors of cohesion and interdependence. In a similar fashion, decreases over time were noted for the Task behaviors of organization and orientation and the Process behaviors of dependency and conflict. In other words, the various groups became less dependent on the instructor, less prone to debilitating conflict, and in less need of time and effort for orientation and getting organized.
Conversely, they became more effective in problem-solving and communicating. In addition, participants reported their groups as becoming more cohesive and interdependent.

**TABLE 1**

**CONCEPTUAL MODEL OF GROUP DEVELOPMENT**

<table>
<thead>
<tr>
<th>DEVELOPMENT STAGE</th>
<th>TASK BEHAVIORS</th>
<th>PROCESS BEHAVIORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATENCY</td>
<td>ORIENTATION</td>
<td>DEPENDENCY</td>
</tr>
<tr>
<td>ADAPTATION</td>
<td>ORGANIZATION</td>
<td>CONFLICT</td>
</tr>
<tr>
<td>INTEGRATION</td>
<td>OPEN DATA FLOW</td>
<td>COHESION</td>
</tr>
<tr>
<td>GOAL ATTAINMENT</td>
<td>PROBLEM SOLVING</td>
<td>INTERDEPENDENCE</td>
</tr>
</tbody>
</table>

1 As groups move through the developmental process, greater emphasis should be placed on the lower sets of behaviors (e.g., problem solving interdependence).

**Effects of Gender, Identification, Course Type, and Course Length**

Using a series of ANOVA's and post hoc paired T Tests the effects of gender, group identification, course type, and course length were determined. Based on post-course scores, there were no significant differences using the variables of gender and age. In the case of gender, however, one significant difference was found on the Process variable of dependency on the group leader. In this case, female participants reported significantly higher levels of dependency than their male counterparts.

Whether a group chose to name itself or not seemed to make a difference in the Process behavior of interdependency. Groups that named themselves were significantly more interdependent and relying of one another than those who did not. It should be noted however, that the naming of a group appears to be a manifest variable in that it represents a high level of group identity. Making a group name themselves will not necessarily result in feelings of more interdependence among group members.

Whitewater courses were more effective than land-based courses in generating higher levels of cohesion, problem-solving ability, and interdependence. Given the nature of the whitewater experience in an Outward Bound program, the data may simply be reflecting the fact that these groups were forced to work more closely together, were in constant close proximity with one another, and faced a more dynamic set of environmental conditions (changing water conditions, rapidity of change, serious consequences in the event of a mishap).

The results indicated that long courses (9 days or more) were not more effective in group development than short courses. One significant difference was noted in the Process behavior of
conflict with long course participants reporting more conflict than their short-course counterparts. In this case, the date may reflect the more numerous opportunities for participants to experience conflicts of some sort or another in a longer course format.

In each of the above cases (type of course and length of course), another explanation for the results may be selection bias. In other words, participants who chose to attend a whitewater or longer course would be "different" than those who chose other types of courses. Overall, that has not been the personal observation of the researcher, but the possibility exists, nevertheless.

**IMPLICATIONS FOR EXPERIENTIAL EDUCATION**

The data suggest that the various groups of participants in this type of experiential education program moved from a Stage I group (Immature group high in the need for structure and guidance) to a Stage III or IV group (Effective team with high levels of interdependence and problem-solving skills). Spontaneous group naming appears to be a "good" indicator that group development is taking place. This finding is in line with the works by Tanford and Penrod (1984) and Asch (1951) that have suggested that when individual members gain a sense of group membership they are more likely to conform for "the good of the group" and work toward collective goals.

The fact that whitewater courses were more effective in group development than land-based courses would suggest two things. First, as previously mentioned, the physical and structural setting inherent in whitewater rafting may be more conducive to group development (e.g., constant close physical proximity with each other). On the other hand, participants that sign up for whitewater rafting courses may also be more interested in socialization and affiliation. Some past research (Roggenbuck and Schreyer, 1977; Knopf, Peterson and Leatherberry, 1983; Heywood, 1987) would suggest that, at least in the area of outdoor recreation, that is the case.

There are several problems that plagued this particular study and the results. First, the results are generalizable to other experiential programs only to the extent that these Outward Bound programs emulated other experiential education courses. Doubtless, there are differences between the wide variety of experiential programs that are now available, with differing impacts upon group development.

Second, the low sample size would suggest, at the very least, that experiential educators be cautious in the extent they "trust" the findings. At the very least, additional research needs to be conducted both using this design and comparisons of groups once they have actually formed. In addition, some qualitative designs such as participant observations, journal-keeping, and open-ended interviewing would add to the "richness" of the data and make for more meaningful explanations.

Despite these concerns, there is now some additional empirical evidence that experiential programs such as Outward Bound, can be effective in promoting group development. It should be kept in mind, that the groups studied were not part of courses specifically designed to promote group development such as would be observed in Professional Development Courses (Ewert, 1991) or special contract courses. This fact alone, would suggest that when experiential programs are geared to group development, the results would be even more dramatic.

References
