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CURRICULUM EVALUATION IN THE KELLOGG EXTENSION EDUCATION PROJECT

BY

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ABSTRACT

This study contains the analysis of the curriculum in one portion of an adult education project which featured collaborative planning. Twenty-three male and female participants worked, both as a group and through an elected committee, with the project director to devise the curriculum. The study incorporated three hypotheses, (1) the collaborative process would satisfactorily incorporate what the participants wanted to study into what they actually studied, (2) group planning would lead to higher ratings of usefulness of topics after study than in the earlier ratings during planning, and (3) conception of the usefulness of the topics would move toward consensus as a result of the classroom activities. The data covered a fifteen-month period from generation of ideas to evaluation immediately after classroom study to a three-month followup. Research methods consisted of t-Tests on mean ratings and standard deviations on a seven point scale, supplemented by analysis of written evaluations and suggestions. The findings showed that the planning process had produced a curriculum satisfactorily incorporating members' ideas. However, significant gains in usefulness did not occur. Some tendency toward the mean appeared after classroom study, but no further clustering showed in the followup. The conclusion was that what was contained in the planning process worked well, but the process was incomplete. Due to the absence of performance objectives, "usefulness" could not be adequately defined. "Usefulness" as a part of the established evaluation procedure of the program was, therefore, of questionable value.

Chapter 1

INTRODUCTION

Background and Review of the Literature

A continual problem facing adult educators is how to design programs which will meet the needs of society, foster the purposes of the sponsoring institutions, and help participants achieve their desired goals. A problem-centered approach is strongly advocated by leaders in adult education. After the problem or problems have been identified, however, the task remains of transforming ideas into effective learning experiences. Evaluation and feedback from participants provides the crucial test of effective curriculum planning.

This study deals with curriculum design in the third year of a three-year study-travel program known as the Kellogg Extension Education Project (KEEP) at Montana State University. Data covers a period from December, 1973 to March, 1975.

Most of the literature deals with groups which have some factor in common, such as occupation, interest in a specific subject area, or pursuit of a specific degree or certification. However, the only factor which the participants in this study had in common was their potential for leadership in their communities in Montana.[1]

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[1]See Appendix One, p. 54

In addition, the project combined the unique features of bringing men and women from various backgrounds from throughout the state onto the campus for intensive classroom study followed by travel to points chosen by the participants.

The problems of devising curriculum either for or by such a heterogeneous group becomes obvious when current adult education theory is examined. Knowles (1970, p.44) for example, stated that not only do adults enter into a learning situation with both quantity and diversity of experiences, but that adults actually define who they are by their experience. They see themselves by what their occupations are, where they have worked, where they have traveled, what their training and experiences have equipped them to do, and what their achievements have been.

In addition to coming into the learning experiences with diverse backgrounds, adults enter with definite ideas of what they want to learn. As Long (1971, p.37) pointed out, often the motivation to learn depends upon what is perceived as being immediately useful. Therefore, in a heterogeneous group of adults, it can be expected that what one person thinks might be immediately useful could be quite opposite to what another person with different experiences conceives to be useful. Program planning, then, becomes a process of consensus. This study deals with the components of that process in one program planning project.

In order to evaluate that process, it is necessary to have some theoretical concepts which pertain to adult education curriculum planning in general. The acceptance of the value of participant input has been based on experience and study. Perhaps one of the best known theories is Knowles' applied androgogy (the education of adults). Knowles (1970, p.51) defined three factors which influence curriculum planning for adults:

1. Adults have more to contribute to the learning of others; they themselves, are a rich resource for learning.
2. Adults have a richer foundation of experience to which to relate new experiences and new learnings tend to take on meaning as they are related to past experience.
3. Adults have acquired a larger number of fixed habits and patterns of thought, and therefore, tend to be less open-minded.

Moreover a positive correlation between attitude and participation in program planning was found by Loughlin (1971, pp.3-35). He suggested that the next step would be to determine if participation through a representative group such as a steering committee could also produce significant change in attitude. Such a committee was utilized in this study.

Loughlin further identified that an additional advantage in learner participation in curriculum planning was the possibility for removing or reducing potential conflicts between student objectives and teacher objectives. This tension produced by stated project

objectives, academic bias of the director, and the diverse objectives of the learners was, at least covertly, present in the curriculum planning process in this project. The principals assumed that this conflict would be reduced by collaborative planning between the director and the group.

The Research Questions

This study was undertaken to determine the outcome of curriculum planning from three perspectives, each of which contained a separate hypothesis. The first hypothesis was that collaborative planning would satisfactorily incorporate participant input into the curriculum. This was necessary to determine the validity of the independent variable, "participant planning" of the second hypothesis. The second hypothesis, then, stated that participant planning would produce gains in usefulness of the curriculum. "Usefulness," the dependent variable, was defined within the context of its accepted meaning in the project. This meaning was defined only as a concept somehow contrasted to "interesting," the other regularly employed criterion for rating classroom sessions. Therefore, "usefulness" probably meant 'What I think I might know now that I didn't know before" or "I think I will be able to do something with this." The third hypothesis was that mean ratings of usefulness would tend to cluster toward the mean as a result of study of the topics--group

perception of usefulness would tend to become more homogenized.

The Research Procedures

Research procedures primarily utilized available data generated from the established curriculum planning process. The basic data collection instrument was a seven-point rating scale used consistently throughout the program, both to rate topics for study and to evaluate topics after study. In addition to the rating scale, participants submitted written comments about each topic session to the project evaluator. An additional data collection initiated as part of this study was a three-month followup. This included rating of the eighteen topics chosen for the study on the usual seven-point scale, as well as written responses to a questionnaire regarding usefulness of topics and suggestions for curriculum improvement.

This study employed the statistical method of the t-Test to determine analysis of variance between mean ratings. Conclusions were based primarily on the statistical analysis, with written comments used to help determine predictors of the results.

Purpose of the Study

Even though an evaluation of the overall KEEP project was being conducted by the Institute for Applied Research at the University to determine if the goals produced positive effect upon communities in the state, these results would not be available for several years. In the

meantime, it seemed appropriate to engage in a short term evaluation of curriculum to identify program strengths and weaknesses. The third study-travel group is currently planning its final year curriculum, and a limited number of study-travel groups are planned in the near future. Therefore, identification of features that work or do not work should allow for program improvement.

Because principal readers of this study are expected to be faculty and staff directly involved in the KEEP project, possibly more detail was included pertaining to participants' opinions of class sessions than was essential to develop the hypotheses. The assumption was that this detail might be helpful to these readers.

Description of the Project

The portion of the project in this study was the third year of a three-year study-travel program.[2] The sample group was the second group of the three selected for study-travel participation. Other components of the project, group communications workshops and the first and third study-travel groups, although not dealt with in this study are mentioned to indicate the scope for which project goals were prescribed. The entire project was non-credit in keeping with the accepted role of Cooperative Extension within the University, as well

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[2] See Appendix Two, pp. 55-56 for details of the overall project.

as to make the learning experiences less threatening and non-competitive than if prior education or grades were involved.

Project goals were to improve leadership and community problem solving through a better understanding of systems. The mission of the project, according to a published profile (1973) was to improve the livability of Montana communities by making the system work better. Montana communities were defined "in harmony with the rest of the world . . . not in isolation." As a result, the core feature of the study-travel program was classroom experience combined with travel. The assumption was that some things would be learned more effectively through experience than in the classroom. This applied to the similarities and differences in people, their customs and their institutions.

Accordingly, the format of a Study-Travel group was to spend approximately four weeks per year in a combination of on-campus study and traveling seminar. The sequence was to study problems related to Montana and travel within the state the first year, to delve into problems of Montana as related to the United States and travel within the U. S. the second year, and to cover problems of Montana and the U. S. as related to the rest of the world in the third year. The portion in this study covers the two weeks on campus in October of 1974. This on-campus time preceded slightly over two weeks of travel overseas to Japan and Taiwan.

The Director of the entire project was Dr. M. E. (Gene) Quenemoen, Professor of Agricultural Economics at Montana State University. In addition to being Project Director, Dr. Quenemoen acted as coordinator for Study Travel Group II. Herein he will be referred to as the "director" and Study Travel Group II will be known as "Group II" or "the group."

The Participants

The size of the group for purposes of this study was twenty-three. Orginally, thirty members had been selected, but through attrition, the group had shrunken to twenty-six by the third year. Of this number, it was possible to achieve a stable number of only twenty-three due to absences from sessions used in the study. Of the twenty-three, nine were female and fourteen were male. The age range was 32 to 57; the median was 41. Eleven people lived on farms or ranches, and twelve lived in towns or cities. Only three lived in a city of over 10,000, however.

Occupational breakdown was as follows: three cattle ranchers, three wheat farmers, four farmer-ranchers, two newspapermen, two homemaker-substitute teachers, one school-teacher-farmer, one automobile dealer, one tax assessor, one public relations person, one adult educator, one librarian, one pastor, one banker and one lawyer.

Level of formal education was almost evenly divided into four categories. Seven people had graduated from high school, seven had high school plus some college but less than a four-year degree, six had a four-year college degree, and five had more than four years of college. The median educational level was high school plus college. In addition, several participants had engaged in informal adult educational or non-credit activities. The group, therefore, represented a higher educational level than the average for the adult population.

Members of the group came from seven generally recognized areas of the state of Montana. Two were from the Northeast, five from the Southeast, two from Central, five from South Central, four from the Northwestern Hiline, three from the Southwest and two from the Northwest.

The Program

As previously noted, this study covers only the on-campus segment of the third and final year of a three-year project. Nine days were spent in classroom activity between October 13-18 and October 28-31, 1974. Sixteen days of travel took place between November 7 and 24, 1974. This traveling seminar has to be considered as a moderator variable on the three-month followup evaluations, but will not be dealt with as a statistical measurement. The upcoming trip no doubt had an influence upon the participants' attitude toward the curriculum because of the immediacy of travel and at-home preparations. Here

again, this variable has been recognized but not measured.

The Curriculum Committee

To develop the curriculum, a three member committee was nominated by the previous curriculum committee and elected by the group at the end of the second year of the project. Two committee alternates were also elected at that time, but were not subsequently needed. The curriculum committee, to be referred to as "the committee" was composed of two males and one female, representing the distribution by sex in the group. According to the nominating committee, these three people were selected because of their differing political viewpoints--one male was a conservative Republican, the other male was a liberal Democrat, and the woman was somewhere in the middle and "could get the other two to talk to each other." As a point of speculation about what other biases might have been characteristic of the committee members, their occupations were newspaper publisher, lawyer, and adult educator. They all came from larger towns, one of which could be classified as a city by Montana standards (80,000 population). The median education and urban background of the committee members did not accurately reflect the rural-small town predominance of the group. Apparently then, recognizable political philosophy was a stronger determinant than demographic factors in selection of the committee.

The committee functioned as the collector of ideas from the

group in formulating the curriculum, as decision-makers in collaboration with the director about which items to include in the curriculum, and finally as planners in formulating methods and choosing resource people to facilitate the curriculum in the classroom. The committee met together with the director three times prior to the campus sessions. The director acted as the communication link for the entire group between campus sessions and the summer institute.[3] His responsibilities included tabulating ratings, keeping members up to date on curriculum planning, making arrangements for speakers and materials and sending out reading materials to the group.

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[3]An annual summer institute was an integral part of the project, held at a recreational spot somewhere in the state. This two-day period served as a "catch-up" time for group members, as well as a time for families to get acquainted.

Chapter 2

THE CURRICULUM CONSTRUCTION METHODS

The hypothesis was that participant input would be satisfactorily translated into curriculum through a collaborative planning process. The process consisted of four parts which in this study are called "phases":

Phase One--	December, 1973 Group members made suggestions to committee. Topics were rated on a seven-point scale.
Phase Two--	Seven-month interval More ideas were generated and added to the list of topics.
Phase Three--	July, 1974 Members made additional input and performed the final rating of the topics.
Phase Four--	August, 1974 Committee and director made final choices and planned on-campus sessions.

Phase One

During the final week on campus of the second year, the curriculum committee asked all participants to make specific suggestions for study the following year. This input occurred during coffee breaks, at meal times, and in informal rap sessions in the residence hall where members lived. A concerted effort was made to get suggestions from each member of the group. These suggestions were recorded, and at the end of the week, members individually rated the topics on a seven-point scale.

The rating device was the "Multi Scan" card with one being the lowest rating and seven the highest.[4]

A major factor, of course, in choice of curriculum topics was the proposed two-week foreign travel seminar which would follow the on-campus work. A tentative decision had been made to travel to Japan and either the People's Republic of China or the Republic of China (Taiwan). The final decision was to be made in July when Phase Three would go into effect. The preliminary travel decision had engendered strong feelings, with almost half the group wanting to travel to Europe instead of the Orient. Residue of unresolved conflict was in evidence at the time the ratings were made, which could have affected topics dealing with foreign travel. However, the negative reactions likely were counter-balanced by positive reactions of those favoring the travel choice, so this variable was considered neutralized.

The curriculum committee tabulated the ratings before leaving campus in December. The director then organized the mean ratings into two divisions, "Curriculum Preferences for U. S. Studies" and "Curriculum Preferences for Foreign Travel," and mailed these to members. Individuals were urged to think of additional topics during Phase Two, as events occurred in their lives and the world.

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[4]See Appendix Three, p. 57 for a sample of the "Multi Scan" card.

Phases Two and Three

Tables One and Two, "Comparison of Curriculum Preferences for U. S. Studies" and "Comparison of Curriculum Topics for Foreign Travel" show the initial items chosen by the group. The first mean rating (R_1) was made in December during Phase One, and the second mean rating (R_2) in the following July during Phase Three. The two categories contained approximately equal numbers of topics, coinciding with the group's expressed desire to spend about half their on-campus time on each area of study. The highest items under each category reflected the interest in immediate and real life problems. The top item under "U. S. Studies" was "Montana Wheat--What Happens To It?" First in "Foreign Travel" was "Social Customs and Taboos." Wheat trade was a natural economic concern to a group of predominately rural Montanans, and desire to learn about acceptable behavior was predictable in a group anticipating travel to foreign countries. The tendency was to rate higher the items which were comparatively "new" and to rate lower those items which had been covered previously, thereby broadening rather than deepening the curriculum. For instance, the "more" in "More on Land use Planning" was indicative of the rather large dose of that topic in the previous years, and the group gave it the lowest rating under "U. S." Likewise, even though the lowest rated item, "Women and Minorities" under "Foreign Travel" scored a respectable

4.0 on the seven-point scale, the topic had been incorporated into previous curricula and had generated adverse reactions on the part of some members of the group. Along the same trend of favoring something new, the ratings were generally higher in the entire "Foreign Travel" list than in the "U. S. Studies" list. Apparently, the immediate need of preparing for foreign travel prevailed over ongoing interest in previous study.

During Phase Two, the list had grown to forty-seven items, eight more than were on the original list in Phase One. At the summer institute (Phase Three), these items plus any new suggestions were rated again (R_2). Even though the director had reorganized the two original categories into three--"General," "Japan and Taiwan,"[5] and "Extracurricular," only five items from the original list had been omitted. Four of the omitted items had been at the bottom of the first rating, so apparently had been dropped for lack of interest. However, it is curious that "Resources Available Through Extention" was also dropped, since it had a first rating of 4.0. Since KEEP was sponsored by Cooperative Extension, it appears that this omission was an oversight.

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[5]Since no acceptance had come from the People's Republic of China, the decision to travel to Taiwan was discussed and finalized at the summer institute.

Table 1

Curriculum Preferences - U. S. Studies

Topics	Ratings R_1	R_2
Montana Wheat - What Happens To It?	5.4	5.7
Problems Facing Small Business	5.1	4.9
Conflict Management	5.0	5.5
Corruption In Government	4.9	3.6
What Is Community?	4.9	4.5
Influence And Powers Of News Media	4.8	4.7
Politics - Campaign Financing, Partisanship Involvement Of KEEPers	4.7	4.1
The New Federalism	4.5	4.0
Background of Arabic-Israeli War - U. S. In Mid East	4.4	3.5
Resources Available Through Extension	4.0	omitted
What Is U. N.'s Role Today?	4.0	3.6
How To Accomplish Group Task - When To Use Parliamentary Procedure	4.1	3.8
Basic Philosophy Class	3.9	3.9
Panel On State's Human Resources	3.7	omitted
Follow-up On Topics Discussed This Year	3.7	omitted
St. Labre Mission	3.6	omitted
More On Land Use Planning	2.9	omitted
Topics Added Between R_1 And R_2		
Photography	--	3.3
Report From Montana Commission On Post-Secondary Education	--	4.1
Topics Added At July Meeting - R_2		
Desensitization - How To Speak In A Group	--	4.3
Montana Beef - What Happens To It?.	--	5.9

Table 2

Curriculum Preferences - Foreign Travel and Added Topics

Topics	Ratings R_1	R_2
Social Customs and Taboos	6.0	--
International Monetary Systems	5.7	4.7
Foreign Policy	5.7	5.1
Export-Import Trade	5.7	6.1
Recent Social and Political History (History)	5.5	4.5
Governmental Systems (Government and Political System)	5.5	5.1
Economic Base (Economy-Trade with U. S.)	5.1	6.0
Religion (World Religions)	5.1	3.9
Family Structure (Social Organization - Including Family Structure)	5.0	5.7
Famous Personalities	5.0	2.9
Geography and Climatology	4.9	4.0
The Arts	4.9	3.3
Pollution Control and Environment	4.9	5.0
Communication Systems, Media, How Information is Disseminated	4.8	4.7
Welfare Systems in Countries to be Visited and U. S. Alternatives (Welfare Systems)	4.8	4.5
Language of Countries to be Visited - How to Communicate Through an Interpreter (Language)	4.7	2.8
Transportation Systems	4.6	4.7
Educational Systems	4.5	4.9
American Expatriates Living in Countries to be Visited	4.4	2.7
Status of Women and Minorities	4.0	4.3

Table 2 (continued)

Topics	Ratings R_1	Ratings R_2
Topics Added Between R_1 and R_2		
Interpendency of Nations	--	4.5
Alternative Theories of Economic Development	--	4.3
Comparative Economic Systems	--	5.2
Comparative Political Systems	--	4.7
Comparative Social Systems	--	5.0
Philosophy (of Japan and Taiwan)	--	3.9
Culture (of Japan and Taiwan)	--	4.8
Intercultural Communications	--	4.4
Topics Added At July Meeting - R_2		
Power of Multi National Corporations - Foreign Investment	--	5.6
World Food and Population	--	5.6
Attitude Toward Work (in Japan & Taiwan)	--	5.7
Systems of Management (in Japan & Taiwan)	--	5.1
Agriculture (in Japan & Taiwan)	--	5.4

Table 3

Eighteen Curriculum Topics Used In Evaluation Portion Of Study

Topics	Ratings R_1	Ratings R_2
Export-Import Trade	5.7	6.1
Montana Wheat - What Happens To It?	5.4	5.7
Conflict Management	5.0	5.5
Local Government Alternatives	4.9	5.4
Comparative Economic Systems	5.1	5.2
Foreign Policy	5.7	5.1
Problems of Small Business in Montana	5.1	4.9
Influence and Power of News Media	4.8	4.7
History	5.5	4.5
What is Community?	4.9	4.5
*Intercultural Communication	*6.0	5.0
Religion	5.1	3.9
Items Added in July - R_2		
Montana Beef - What Happens To It?	--	5.9
World Population and Food	--	5.6
Multi National Corporations	--	5.6
Agriculture of Japan and Taiwan	--	5.4
International Interdependency	--	4.5
Alternative Theories of Economic Development	--	4.3

*Intercultural Communication was not a topic as such in the R_1 rating. The term came into use on the rating sheet given out at the July meeting, R_2. For comparison purposes, the R_1 topic, "Social Customs and Taboos" was used in this table.

However, the first rating sheet was not used as a comparison at this time, and nobody noticed or mentioned the omission. The point of the omissions has been made to show that the director was apparently striving to be as non-directive as possible in formulating the curriculum. It appears that much more manipulation could have occurred without probable detection since a seven-month period had elapsed since the first ratings, and the two were not compared at the time of the second rating.

The manner in which items were transposed from the Phase One to the Phase Two list deserves some attention, because there appears to have been some effect from the choice of words used. Many of the items were transposed verbatim, but a few had been reworded, mostly for brevity. For instance, "Language of Country to be Visited: How to Communicate Through an Interpreter" had been condensed to "Language" under the heading, "Japan and Taiwan." Coincidentally, the rating for this item dropped from 4.7 to 2.8. Possibly the title, "Language," was too broad to elicit interest or the connotation was too formidable with the omission of "How to Communicate Through an Interpreter." Another interpretation, however, could be that as the time grew closer for actual study, the Japanese and Chinese languages appeared too difficult to tackle in such a short time.

Some of the items added between Phase One and Phase Three might reflect a bias toward economics on the part of the director, a

professor of Agricultural Economics. The original list contained only one item on this topic, "Economic Base." However, the revised list included three items related to economics--"Comparative Economic Systems," "Alternative Theories of Economic Development," and "Economy-Trade with the U. S." under the heading "Japan and Taiwan." The group, however, did not reject these items, even giving them sufficiently high ratings to be included in the final curriculum. Consequently, if the director had indeed tried to influence the curriculum by the infusion of more economics, the group endorsed this infusion. The question arises, then, of how far the director could have gone in influencing the curriculum by means of manipulating the input of the participants.

In addition to the items added during Phase Two, another seven items were added to the list by group members during Phase Three in July. All of these suggestions received ratings of 4.3 or higher, and were, consequently, made a part of the final curriculum. This factor would indicate the usefulness of including a reassessment and addition component in curriculum planning, especially where a considerable length of time elapses between original planning and follow through.

For the most part, those items rated highly in Phase One remained high in the Phase Three rating. However, a few items dropped sufficiently between the two ratings to be eliminated when the final selection was made by the committee in Phase Four. The possible

reasons for "Language" dropping in esteem have been discussed. The other two items, "Famous Personalities" and "American Expatriates Living in Countries to be Visited," may have seemed somewhat frivolous when the reality of squeezing a number of weighty topics into nine days was considered. The point is that most of those topics considered important at the beginning were still thought to be important seven months later. The major change was in the addition of new topics.

When the final planning occurred in Phase Four, three additional items were eliminated from the curriculum by the committee and director. This could have been due to committee bias, because all three items rated above 4.3, the informal cutoff point. On the other hand, "International Monetary Systems" and "Communications System and Media, How Information is Disseminated" might have been eliminated on the implicit assumption that the actual travel experiences would expose the group to these topics. As to the other excluded item, "Welfare," the possibility exists that here again the use of condensation of a term affected its consideration. The original wording, "Welfare Systems in Countries to be Visited and U. S. Alternatives" might have presented a more specific topic to grasp. This, in addition to the previous condensations cited, leads to the conclusion that in order to keep the process as pure as possible, the exact wording of proposed topics should be carried throughout the curriculum planning process.

A look at those items added to the list during Phases Two and Three indicates that some tension existed between the aspirations of the director and the group members regarding what should be studied. Those items added by the director were mainly academic or theoretical--"Interdependency of Nations," "Alternative Theories of Economic Development," "Comparative Economic Systems," "Comparative Social Systems," and "Intercultural Communications," whereas the suggestions of members were more related to their personal lives and immediate problems. For instance, "Agriculture in Japan and Taiwan" appeared to be a natural choice of a group in which at least half of the members were engaged in agriculture. Likewise, "Montana Beef--What Happens To It?" related directly to the livelihood of several members. Moreover, an expressed need of several members led to the formulation of "Desensitization--How To Speak In A Group." The topics, "Attitudes Toward Work" and "Systems of Management" arose from an expressed desire to learn why "they" were outproducing "us." One member wanted to explore her personal obligation within her country's apparent commitment to "feed the world," thus the topic, "World Food and Population" was born. Even "Power of Multi-national Corporations" came closer to home than might be readily apparent. Due to the ongoing controversy over development of the state's coal resources by multi-national corporations, the members' lives had been touched by these companies.

As might be expected, the topics added by the director received slightly lower ratings overall than those suggested by the group. However, once a suggestion had been made, it became group property with no apparently strong dichotomy between "his ideas" vs. "our ideas." In the final planning, all the suggestions made in Phase Two and Three were incorporated into the curriculum by the committee and director. Comparison between ratings at R_1 and R_2 are contained in Table Three, "Eighteen Curriculum Topics Used in Evaluation Portion of Study."

Phase Four

One test of good curriculum planning resides in the translation of ideas into learning activities. The task of the committee and director in Phase Four was to bring this about within the limitations of time and resources. A major problem confronting them was finding resource people with sufficient background to cover topics dealing specifically with Japan and Taiwan. The decision was made to utilize graduate students from the two countries plus the few Montana State University faculty members possessing expertise in these areas. In addition, the director suggested using cassette tapes on problems of global dimensions. He had purchased a set of tapes previously which contained speeches delivered to the Pacem in Terris meeting at the Center for the Study of Democratic Institutions at Santa Barbara. The committee members had been sent selected tapes to preview.

The committee expressed reservations about this method of presentation being satisfactory to the group. A compromise decision was made to use some tapes, but only in conjunction with a discussion led by a resource person either from within or outside of the group. The major selling point of using the tapes was the financial saving over bringing resource people to the campus.

During this planning phase, some topics were combined into one all-encompassing session. For example, "Social Customs and Taboos," and "Culture and Family Organization" were incorporated into an all-day workshop, "Intercultural Communication." In planning time allocation, the committee considered strength of rating, with most of the highest rated topics given blocks of one and one-half hours. However, two topics, by their nature, required all day sessions even though numerical mean ratings were not as high as some other topics. These topics, "Conflict Management" and "Intercultural Communication," elicited vastly opposite responses from the group, for reasons which will be discussed in the next chapter. Some of the lower rated topics were considered to be of special interest to some members but not to all of the group, so these were scheduled in the evenings.

Although the planning committee made an effort to vary the learning activities, much depended upon the resource person for a topic and what he or she chose to do. As a result, the bulk of the learning activities became lecture-discussions, a method commonly

regarded as the least desirable in adult education. Comparison of learner reactions to the various methods will be made in the next chapter.

After the final curriculum planning session in Phase Four, the burden fell on the director to carry out the plans. Several contacts proved less than fruitful, and it is at this point that the director must be given credit for perseverance in attempting to carry out the expressed wishes of the group and the committee. Only one topic had to be finally dropped because of lack of a resource person.[6]

After resources were firmed up, the director mailed a tantative schedule to group members three weeks prior to their arrival on campus. Thus those who chose to do so could acquire additional background through independent reading.

In summary, this method of curriculum planning satisfactorily featured an ongoing process of collaboration and negotiation between the director and the group both directly and via its curriculum committee. At no point did this process break down, and as a result,

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[6]The Japanese faculty member at Montana State University who seemed the only possibility to handle "Management Systems" and "Work Attitudes in Japan" finally declined to do so because he was in engineering, and management and work attitudes were "out of his field." This, in itself proved to be a learning experience for the group, indicating something about strict differentiation in the Japanese social and occupational system.

the final curriculum reflected most of the expressed desires of both the director and the group. A minor weakness appeared in the lack of committee involvement during Phase Two. The fact that the director alone translated the original topics into a revised list created some leeway for director bias to be interjected into the curriculum. Also, committee bias may have been a slight factor, but evidence of either director or committee manipulation was slight overall.

In conclusion, the planning process, as far as it went, worked smoothly and to the satisfaction of participants. What had not become apparent to the planners at the end of Phase Four was that a vital component of curriculum planning was missing--there were no specific objectives of what the learning experiences were to accomplish. According to Ringo (1975, p.1):

> If you have the job of teaching something to somebody, you must do something. You can do that 'something' in a reasonably purposeful manner or you can try to 'play it by ear and hope you make pretty music.' Furthermore, you must decide upon the specific objectives you intend for learners to reach at the end of a day, course, or program.

Obviously, the curriculum collaborators were "playing it by ear," which created problems in evaluating the usefulness of the curriculum to be dealt with in the next chapter.

Chapter 3

EVALUATION OF THE CURRICULUM

Part One--Analysis Of Ratings Comparing Usefulness To Planning

The second hypothesis was that significant gains in usefulness would occur as a result of participant involvement in curriculum planning. This chapter deals with the statistical analysis of difference between mean ratings on the eighteen curriculum items chosen for this portion of the study. The same seven-point rating scale was used as before with "one" being lowest and "seven" the highest. Mean ratings at three specific periods were selected for use as shown in Table Four, "t-Tests of Differences Between Means." M_1 is the mean rating from Phase III of the planning process which occurred three months prior to the on-campus study phase. This is the rating scheme used by the committee and director for final choices. This could be called "pre-test," but since this study deals with a curriculum planning process rather than a measurement of performance, M_1 will be called "Conceptualization." M_2 is the mean rating at the end of the on-campus study, known herein as "Post-test." Exactly the same process in obtaining these mean ratings was used as in the curriculum choosing phases--participants rated specific topics on a scale of one to seven on Multi-scan cards. M_3 is the mean rating at the end of a three-month period following the on-campus sessions. This rating will be called "Followup." Since these ratings had to be obtained by mail,

participants were asked to write in their choice of number from one to seven on the usual scale. Since the participants had three years experience with this seven-point scale, it can be assumed that practically no variable exists between the use of the Multi-scan card or a write-in scale.

The statistical method employed was the t-Test, a simple test comparing two means to determine the probability that the difference between the means was a real difference rather than a chance difference. The difference was determined between the mean ratings at Conceptualization (M_1) and Post-test (M_2), between Conceptualization and Followup (M_3), and Post-test and Followup. The Fiduciary Limit at the 5% Confidence Level was 2.02. A "t" larger than this was either a significant gain or loss as a result of the curriculum, the independent variable.

The hypothesis was not borne out that gains in usefulness would occur as a result of participant involvement in curriculum planning. The results of the t-Test in Table Four show that only three of the eighteen topics proved to have significant variance between Conceptualization and Post-test, and of these only one was a positive variance. This topic, "Intercultural Communications," also made significant gain between Conceptualization and Followup. No significant variance occurred however, between Post-test and Followup. This was typical of the action between Post-test and Followup--the only significant variances were

both negative and the general trend was to insignificant negative variances. The two topics with significant negative variance between Conceptualization and Post-test were "Montana Beef - What Happens To It?" and "What is Community?"; coincidentally both topics were suggested by members and seemingly had at-home importance. Three other significant negative variances occured between Conceptualization and Followup, "Export-Import Trade," "Local Government Alternatives," and "Conflict Management." Here again, all were topics suggested by members. To recap, the difference between mean ratings showed only one significant gain that held up over a period of time, five topics that showed significant losses between Conceptualization and Followup, with the bulk of the topics, thirteen, showing neither significant gains nor losses.

To obtain some insight into the possible reasons for these results, the investigator turned to the comments written by participants in addition to their numerical ratings of the various topics. Why did the "Intercultural Communication" topic stand out so dramatically from the insignificant or negative results of the other topics? In this case, the topic was developed as an all-day workshop by an outside resource person who was a specialist in this type of work.[7]

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[7]The specialist was Rich Rocchio from the Center for Research and Evaluation, Denver, Colorado. His experience included training Peace Corps volunteers and U. S. Navy personnel stationed overseas.

Table 4

t-Tests of Differences Between Means

Curriculum Topics	Means		t	Means		t	Means		t
	M_1	M_2	t_{12}	M_1	M_3	t_{13}	M_2	M_3	t_{23}
1. Interdependency of Nations	4.0	4.739	1.533	4.0	4.608	1.268	4.739	4.608	- .433
2. Alternative Theories of Economic Development	4.086	4.782	1.226	4.086	4.608	.979	4.782	4.608	- .359
3. Comparative Economic System	4.826	5.217	.775	4.826	4.391	- .863	5.217	4.391	*2.150
4. Multinational Corporations	5.391	4.608	-1.805	5.391	4.521	-1.865	4.608	4.521	- .185
5. World Food and Population	5.608	5.391	- .49	5.608	5.391	- .480	5.391	5.391	0
6. Religions of Taiwan and Japan	4.173	5.086	1.795	4.173	4.521	.635	5.086	4.521	-1.246
7. Intercultural Communication	4.391	6.347	*3.681	4.391	6.260	*3.853	6.347	6.260	- .256
8. Foreign Policy	4.913	4.44	- .970	4.913	3.956	-1.840	4.44	3.956	-1.092
9. Export-Import Trade	5.956	5.217	-1.808	5.956	4.956	*2.430	5.217	4.956	- .735
10. History of Taiwan and Japan	4.739	5.478	1.608	4.739	5.521	1.703	5.478	5.521	.120
11. Agriculture of Taiwan and Japan	5.142	5.478	.668	5.142	5.00	- .281	5.478	5.0	-1.297
12. What Happens to Montana Wheat?	5.652	5.652	0	5.652	5.391	- .682	5.652	5.391	- .749
13. What Happens to Montana Beef?	6.043	5.086	*2.614	6.043	5.260	*2.449	5.086	5.260	.438
14. Problems of Small Business in Montana	4.869	5.782	1.910	4.869	5.565	1.593	5.782	5.565	- .517
15. What is Community?	5.043	3.608	*2.507	5.043	3.826	*2.261	3.608	3.826	.442
16. Influence and Power of the Media	4.826	5.0	.376	4.826	4.565	.530	5.0	4.565	-1.482
17. Local Government Alternatives	6.0	6.043	.133	6.0	5.130	*2.309	6.043	5.130	*2.443
18. Conflict Management	4.913	3.782	-1.786	4.913	3.0	*3.438	3.782	3.0	-1.435

N = 23 F.L. = 2.02 at .05 C.L.

df = 44 $* \frac{t}{F.L.} > 1.00$

Comments pointed out that the leader was "dynamic," "humorous," "well-prepared," and had incorporated a variety of techniques into his program. He employed lecture based on personal experiences, consensus exercises, case histories, critical incidents, and interaction with Japanes and Taiwanese students in the classroom.[8]

Additional comments pointed up the aspects of this workshop which corroborated ideal adult education practices--"Most enthusiasm and down to earth involvement all week," "Served to point out more clearly our own resources and how to use them," "Not just theory--his head seemed squarely on his shoulders," and "Use of students really added to the learning--what 'they' think of 'us' is a revealing story."

Conversely, the other all-day workshop, "Conflict Management," received a roasting from the bulk of the group in addition to a significant negative variance between Conceptualization and Followup. This session was also conducted by an outside resource specialist. The workshop centered around a simulation game, "Ultradyne" which involved urban growth problems. By his own admission, the leader had not used this particular game before, but "had been told it was good." The

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[8]One exercise was to arrive at consensus on values held by Americans and the Host National Country and to compare these to one's own values. These ratings were later shared with Japanese and Taiwanese students who had also completed the exercise from their perspective with the United States being the host nation. Another consensus exercise involved handling simulated critical incidents which might occur in a foreign country.

rules turned out to be complex, the playing board was too small for the size of the group and the videotaping malfunctioned, with the result that almost all the participants lost interest before the day was half over. The comments expressed disappointment and frustration; however, a number of members thought the leader's wrap-up session on power and conflict in real life situations was worthwhile. One participant summed it up this way, "The game was sufficiently complicated so that the cost of learning the mechanics more than offset the benefit of learning therein provided." The difficulties of the game was further compounded by a resistance to "game playing" on the part of some of the members. One person expounded, "For the life of me, I can't see what grownups can learn from games!" and another speculated, "I think we are still pretty leary of simulation games." One optimist in the group, nevertheless, saw some learning from the very frustration of the game, finding it an insight to be remembered when working with groups at home.

Here is an example where Knowles' description of adults as being more rigid and less open-minded comes into effect. The simulation game as a learning tool presents risks to program planners in that not only can the game go wrong due to poor planning or faulty equipment, but built-in resistance to games may provide an additional barrier to learning. Moreover, most practioners of simulation games hypothesize that most of the learning takes place at home after the

game has been engaged in; this can be a disadvantage in that adults seem to want their learning experiences to be immediately useful or meaningful.

A look at another topic, "What is Community?" which lost ground throughout the process may provide additional insight into curriculum planning for adults. This was planned as a discussion session in small groups centering around two assigned pieces of reading which had been sent out by the director. One reading dealt with Singapore and Hong Kong and the other with a utopian idea for a settlement pattern in South Dakota. The reaction to this method of topic development was mixed. "Most of the KEEPers are very poor students and are consistently poorly prepared for this sort of thing," claimed one member. Others commented that it was too hard to see the connection between the two foreign city-states and their own community problems, that people had not done their homework and only a few carried the discussion, and one person "did not learn anything but had a lot of laughs."

Two factors seem to be involved in this topic's being less than successful--the apparent reluctance of adults to read in preparation for classroom activity[9] and preference for material which seems to relate directly to the at-home problems of participants.

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[9]The director regarded this lack of at-home reading as his major disappointment in the program.

However, another consideration is that some of the group may have lacked the background to engage successfully in this activity. Niemi (1972, p.10) pointed out that program planners may take for granted that adults have the necessary skills of listening intelligently, analyzing and synthesizing information, making inferences and judgments. These skills had not been assessed so far in this project.

Rather unexpectedly, "Montana Beef" which rated highest of any topic at Conceptualization decreased significantly in the next two ratings. This could be due to an inordinately high rating in the first place because of its timeliness in July, 1974--the bottom had just dropped out of the cattle market. Perhaps it proved to be too specific and close to home, losing importance in the context of the more global problems of world hunger and international trade. The speaker for the topic was from the Governor's office, usually a comparatively well-liked source by the group. The speaker was neither particularly praised nor criticized in the comments. Therefore, in perspective, an at-home topic may have high initial interest but not prove as useful in the long run as learning experiences with the potential for behavior change. This contrast shows up between the rather mediocre rating received by "Intercultural Communication" at Conceptualization compared to the high rating for "Beef." The learning experiences attached to these two topics showed an inversely proportional movement--the first with significant gains and the second with significant losses. However,

Montana wheat should probably have gone the way of beef in the ratings to support this hypothesis, and since this did not happen, the evidence has to be considered inconclusive.

Comments from the project evaluator shed some additional light on curriculum planning in this type of project. She observed that late afternoon speakers always found it difficult to hold the group's attention, possibly because the participants were accustomed to more physical activity than that provided from sitting long hours on hard chairs. She, therefore, suggested scheduling theoretical topics such as economics or political science in the mornings with more participatory activities in the afternoons. She concurred with participants' comments that taped segments must be kept short; thirty minute sections were too long and complex to keep the group's attention. Short segments should be utilized followed by discussion, or a prepared outline of the text of the tape could be prepared so that participants could follow while listening to the tape.

In summary, the evidence did not support the hypothesis that participation in curriculum planning leads to gains in usefulness. The apparent weakness in the curriculum design was that it incorporated only what members wanted to study without specific objectives of how this learning would be measured after the classroom activities had taken place. Members' comments tended to describe why sessions had interested them, but "usefulness" appeared vague and hard to define.

An additional inference that may be drawn from this portion of the study is that the manner in which a topic was developed affected the participants' perception of the usefulness of that topic to a significant degree only if the handling was either especially well done or poorly done. If the interest was sufficiently high for a topic to be chosen for study, the method of presentation had minimal effect upon usefulness. The lapse of time from Conceptualization to Followup produced significant losses in approximately one-third of the topics. The factor again supports concern about the absence of performance objectives--if the participants had no specific way to measure what they could do as a result of the classroom experiences, it follows that they would not necessarily know how to tell if various topics had been useful to them.

Part Two--Analysis Of Difference Of Standard Deviations

The second method of analyzing the data employed the t-Test on the standard deviations of the mean ratings of Conceptualization ($S.D._1$), Post-test ($S.D._2$), and Followup ($S.D._3$). The investigator hypothesized that the classroom treatment of the topics would cause extreme likes and dislikes about a topic to move toward the middle or mean. In effect, the set patterns of thinking characteristic of adults would tend to become "unset" by the learning experiences. Those who were extremely eager to study a certain topic would possibly have their enthusiasm tempered by an increased awareness of the ramifications of the topic, whereas those who reacted negatively to a topic would find it more useful as they learned more about the topic. In other words, exposure to learning experiences would tend to dilute learner biases.

Table Five, "t-Tests of Differences of Standard Deviations" contains this analysis. The Fiduciary Limit was 1.960 at the 5% Confidence Level. Six of the eighteen topics showed significant clustering toward the mean. These were "Interdependency of Nations," "Comparative Economic Systems," "The Power of Multi-national Corporations," "Intercultural Communication," "Agriculture of Japan and Taiwan," and "Influence and Power of the Media." Only one topic claimed a significantly negative variance, that is, away from the mean. That was the one which had lost ground in the prior analysis of gains, "Montana Beef--What Happens To It?"

Table 5

t-Tests of Differences of Standard Deviations

Curriculum Topics	Standard Deviations		t	Standard Deviations		t	Standard Deviations		t
	$S.D._1$	$S.D._2$	t_{12}	$S.D._1$	$S.D._3$	t_{13}	$S.D._2$	$S.D._3$	t_{23}
1. Interdependency of Nations	2.022	1.009	*3.038	2.022	.988	*3.116	1.009	.988	.104
2. Alternative Theories of Economic Development	2.020	1.738	.738	2.020	1.469	1.497	1.738	1.469	.182
3. Comparative Economic Systems	1.992	1.277	*2.047	1.992	1.269	*2.073	1.277	1.269	.028
4. Multinational Corporations	1.802	.940	*2.873	1.802	1.238	1.749	.940	1.238	-1.296
5. World Food and Population	1.469	1.469	0	1.469	1.529	- .193	1.469	1.529	- .193
6. Religions of Taiwan and Japan	1.969	1.345	1.773	1.969	1.647	.848	1.345	1.647	- .769
7. Intercultural Communication	2.104	1.335	*2.094	2.104	.864	*3.697	1.335	.864	*2.007
8. Foreign Policy	1.755	1.529	.670	1.755	1.706	.138	1.529	1.706	- .778
9. Export-Import Trade	1.521	1.166	1.259	1.521	1.186	1.180	1.166	1.186	- .082
10. History of Taiwan and Japan	1.789	1.201	1.850	1.789	1.201	1.850	1.201	1.201	0
11. Agriculture of Taiwan and Japan	1.930	1.201	*2.105	1.930	1.243	1.966	1.201	1.243	- .164
12. Montana Wheat--What Happens to it?	1.335	1.112	.870	1.335	1.196	.525	1.112	1.196	- .348
13. Montana Beef--What Happens to it?	.928	1.443	*2.035	.928	1.176	-1.122	1.443	1.176	.973
14. Problems of Small Business in Montana	1.632	1.536	.290	1.632	1.236	1.309	1.536	1.236	1.029
15. What is Community?	2.033	1.751	.712	2.033	1.497	1.440	1.751	1.497	.859
16. Influence and Power of the Media	2.014	.797	*3.806	2.014	1.121	*2.628	.797	1.121	-1.594
17. Local Government Alternatives	1.087	1.065	.098	1.087	1.391	-1.169	1.065	1.391	-1.264
18. Conflict Management	2.130	2.066	.146	2.130	1.507	1.168	2.066	1.507	1.481

N = 23 F.L. = 1.960 at .05 C.L.

df = 44 $* \frac{t}{F.L.} > 1.00$

An examination of the raw scores clearly shows what happened to the six topics which clustered toward the mean. For example, when "Interdependency of Nations" was rated at Conceptualization ($S.D._1$), five people gave it a "one" and three others gave it a "two" or "three"--eight ratings at less than the halfway mark on the seven-point scale. However, in the Post-test ($S.D._2$), no extremely low ratings occurred, and the bulk of the ratings were at "four" or "five." The trend toward the mean also carried over for all six topics into the Followup ($S.D._3$).

It is noteworthy that five of the six topics showing a tendency toward the mean dealt with international issues or broad concepts. The only one of the topics not fitting this description was "Agriculture in Japan and Taiwan," which even though not theoretical dealt with subject matter about which the participants admittedly knew very little. Some evidence is available from this data to indicate that broader topics although not as popular at conceptualization, led to greater attitude change than narrower topics dealing with specific information. The research indicates that isolated facts are not retained as well by adults as by children, thereby creating another possible reason for informational topics not to bring about as much change.

Did anything else happen with these six topics which may have caused attitude change to occur? Three of the six were presented by group members instead of outside resource people. This factor created

positive response from members in each case. For example, the two wheat farmers who presented "Agriculture in Japan and Taiwan" were complimented for "their more personal approach, evidence of research and effort with humor thrown in." (They had grown "rice" in flower pots and threatened the female participants with having to demonstrate rice paddy planting.) Other comments on programs by constituents corroborated the theory that adult learners are themselves rich resources for learning--"It's nice to have the Fellows share their expertise with us." One participant stated that all the "KEEPer" programs had seemed the most pertinent of any presented." It should be noted that this high regard for constituent expertise had to do with planned programs, not non-directed discussion which tended to degenerate into "sharing of ignorances," according to some participants.

Additionally, the comments on these topics expressed favorable opinion about the practical aspects of the programs. This correlates with characteristics of adult learners identified by Mielke (1975, p.2) that adults have needs which are more realistic and immediate than those of children. Attending classes voluntarily, they are impatient with long discussions on theory, preferring to see the theory applied to practical problems.

The evidence from this portion of the study indicated some degree of homogenization, but the fact that there was not more is not particularly surprising. It must be remembered that the program was

non-credit and lacked performance objectives. In addition, the following variables were present--the median age was forty-one and occupational and educational backgrounds were quite diverse. Moreover, the program had abstract long-range goals of "better leadership and problem solving," which were never translated into specific curriculum objectives either by the participants or the director. One of the members of another study-travel group, Bowler (1974, p.4) made this incisive assessment of the classroom experiences in his program:

> Facts, theories, a few opinions and mountains of statistical data poured forth. What you made out of it is geared to your experiences, prejudices, notions, background, and ability to understand the language. Each takes from it what he wants or will accept.

Even though some improvement in program planning had been initiated as a result of feedback from Mr. Bowler's group, the basic principle had remained the same--have people tell what they want to study and then find someone to present the topic. Specific objectives had been overlooked.

Part Three--Followup Questionnaire

The final component of the curriculum evaluation process was a followup questionnaire containing these questions:

(1) Which of the sessions stand out in your mind as the most valuable in preparing you for your travel? Why?
(2) What session or sessions do you regard as the most valuable to you in your life in your community? Why?
(3) Now that you can look back at the curriculum for your final year, what suggestions do you have for improving the on-campus curriculum? Is there something you wish we had included?

The responses to the first question strongly supported the results of the mean ratings--"Intercultural Communication" was mentioned fourteen times as being the most useful preparation for the travel. In addition, this topic was mentioned once as being helpful for back home understanding of other people. The agricultural topics ranked second. Religion and history were singled out five times each, creating stronger support for these topics than the ratings indicated.

"Local Government Review" comprised something of a mystery in that it was mentioned eight times as being most useful in the community in response to the second question. However, this topic had shown a statistical loss in the ratings. One can only conclude that this topic had proved of strong interest to certain members, while being of little interest to others. It should be noted that five of the group had been elected to Local Government Commissions. Predictably wheat and

agriculture were singled out five times, again highlighting the perceived usefulness of those subjects which affect daily lives. In the same vein, it could be expected that "Problems of Small Business" was also mentioned five times as being useful in the community. The only surprise among the comments was that three people singled out "Conflict Management" as being useful to them at home. In each case, the respondent qualified his statement with something like "in spite of the confusion of the game." It appears that some learning had taken place, as simulation game advocates would predict.

Responses to the third question, "Suggestions for Improvement," can be grouped into two categories--preparation for international travel and process in the classroom. In the international travel category, the following suggestions were made: more history of the countries to be visited, a current events "crash course" on what was happening currently in a country to facilitate conversation with host families,[10] a class on what kind of food to expect, conversational

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[10]Weekly newspapers from each country had been mailed to members for several months prior to the trip. However, these appeared to have been unsatisfactory, possibly because no real use was made of them in the classroom. Hindsight indicate that these newspapers could have been a good jumping off point for study. In addition to their lack of classroom incorporation, another negative factor was the propaganda characteristics of the newspaper from Taiwan.

phrases, conversations with other adults who had lived in the countries to be visited, geography, and more in-depth study of the economics of the countries.

In the "process" category, these suggestions came forth: more practice of human relations skills, more help on how to get one's point across in one's community, more of the tapes, definite assignments so that each group member would be responsible for a program, regret about not having done more reading about countries to be visited, a suggestion that some speakers could have been better informed about the group in order not to repeat material the group already knew, and a final recommendation from one person to "toss out the shrinks!"

Five people could think of no improvements or suggestions. The others appeared to be straining for something to write, indicating no great dissatisfaction or glaring omissions. The conclusion can be reached, then, that based on the questionnaires, the participants were generally satisfied with the contents of the curriculum. Nevertheless, the diversity of comments, some of which were in almost direct opposition to others, reinforces the difficulty of planning curriculum for a heterogeneous group of adults.

Chapter 4

SUMMARY

This study attempted to take apart the curriculum in a segment of an ongoing adult education project dealing with community leadership. The study divided into two parts--the first analyzing the planning process, and the second covering the evaluation of usefulness of the curriculum produced by the process.

The planning process involved a collaborative effort between the director and participants via an elected committee. The findings indicated that the process of brainstorming, determination of preference by rating scale, and choice of learning activities was relatively free of director or committee bias. For the most part, the group members got what they had asked for. Allowing a period of time to elapse between planning sessions produced additional ideas which were all incorporated into the final curriculum; therefore, planning in stages was worthwhile.

The results showed no evidence to support the hypothesis that gains would occur in what participants perceived to be useful to them if they had planned their own curriculum. If anything, the data indicated a tendency for the opposite to occur--a few losses in usefulness showed up when mean ratings were compared longitudinally.

In the evaluation section, the findings supported accepted adult education theory. The most highly rated curriculum item

incorporated experiential components--case method, critical incident, discussion, and consensus testing. Nevertheless, the most predominantly used techniques consisted of lecture, assigned readings, and canned audio-visual presentation, all of which received criticism from group members.

The purpose of the study, however, was to determine usefulness of the curriculum, and the evidence indicated that the method of presentation had little effect on usefulness of a topic. The only exceptions were the extremely good or extremely poor activities, which proved to have statistical significance on a scale measuring usefulness. The results were that very little happened one way or the other when data was analyzed for gains in usefulness. Comparison of mean ratings between Conceptualization and Post-test, Conceptualization and Followup, and Post-test and Followup revealed only one positive variance (gain) in usefulness. Some tendency to losses occurred, particularly between Conceptualization and Followup. Apparently, participants choosing their own curriculum had no positive effect upon usefulness.

When the data was analyzed for tendency toward the mean, some evidence (six out of eighteen topics) appeared to support the hypothesis that classroom activity would produce a clustering of ratings about the mean. This occurred mainly in topics dealing with broad, multidimensional concepts.

The results took on added clarity when measured against an accepted standard of good adult curriculum planning-- Knowles' seven step process (1970, p.54):

1. Establishment of a climate conducive to adult learning
2. Creation of an organizational structure for participative program planning
3. Diagnosis of needs for learning
4. Formulation of directions for learning (objectives)
5. Development of a design of activities
6. Operation of the activities
7. Re-diagnosis of needs for learning (evaluation)

The study indicated that some of these steps had been carried out very well, especially the creation of an organizational structure for participative planning. The collaborative arrangement between director and participants engendered participant satisfaction and transformed participant input into the curriculum. In addition, the development of a design of activities and operation of the activities appeared to be strong points of the program. Previous feedback from participants had verified that the on-campus environment was conducive to learning.

The weakness, then, was not in the way things were carried out, but rather in what was left out of the process entirely--the diagnosis of needs for learning, the formulation of directions for learning (objectives), and the re-diagnosis of needs for learning. Without these components, the evaluation procedures proved unsatisfactory, with the concept of usefulness becoming a vague abstraction.

Lack of performance criteria was no doubt an outgrowth of the effort to make this program a non-threatening learning experience. However, it appeared that some method of helping learners see where they were and where they wanted to go was a necessary, but missing, component of the curriculum process.

For effective evaluation of curriculum usefulness, therefore, the program must contain specific objectives. The long range goals of leadership and problem solving must somehow be translated into the types of behavior which a participant needs to exhibit in order to be a better leader or problem solver.

Limitations of the Study

The writer was a member of the curriculum committee in this study, thereby creating a hazard to objectivity. Every effort was made, however, to conserve subjective judgment for interpretations and conclusions. The sample was small, causing conclusions to be risky. Also, the data would probably have been more valuable if the mean ratings had been for correlated groups. This was not possible because the evaluator had kept ratings anonymous throughout the project. An ideal situation would have been to compare a control group to the participation group, but no such group existed within the context of the project.

Suggestions for Further Study

A study for curriculum in subsequent study-travel groups in the project would shed more light on the hypothesis that curriculum planning would be improved by use of performance objectives. Additionally a wealth of material exists for further research about other aspects of the project. Evaluation techniques are personality tests, baseline and followup data from communities, plus questionnaires covering community involvement and personal impact.[11]

Preliminary followup data from the Institute indicates that participants see themselves as more self-confident, more discriminating in their choice of activities, more visible in their communities, and having a broader perspective on life. An intriguing early finding which merits further study is the apparent impact on the women in the groups. They note increased self-confidence and independence as a result of being "on their own" away from home, often for the first time. In view of the fact that women were included in the project only at the last minute, the potential irony becomes apparent. Possibly the most significant impact of the Kellogg Extension Project could be the awakening of Montana women to their potential as leaders in their communities. This aspect of the Project begs for further study.

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[11]See p. 58 of Appendix.

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REFERENCES CITED

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APPENDIX

Appendix One

Four other projects of a similar nature in addition to the one cited in this study have been funded by the Kellogg Foundation, sponsored by Cooperative Extension through the land grant universities in Michigan, Pennsylvania, California, and Alaska. No reports on curriculum planning have been made available at this time. The original project in Michigan involved only male farmers. This homogeneity was considered to be a negative factor by the project planners in Montana who theorized that since communities are made up of people of varying occupations, educational and ethnic backgrounds these demographic components should be included in adult education groups dealing with community leadership. A last minute decision was made to include women as well as men in the project. The common denominators were that participants be "well established" in their communities and be interested in developing their leadership ability.

Appendix Two

The Kellogg Extension Education Project (KEEP) is a multi-faceted adult education project operated by Cooperative Extension at Montana State University, partially funded by the W. K. Kellogg Foundation. The original project covered a five year period from 1971-76, but now has been extended through additional state appropriations.

The project has three components: (1) Three groups of thirty persons in three-year study travel programs, (2) Forty one-week group communications workshops interspersed between sessions of the study-travel groups, and (3) Annual public affairs forums.

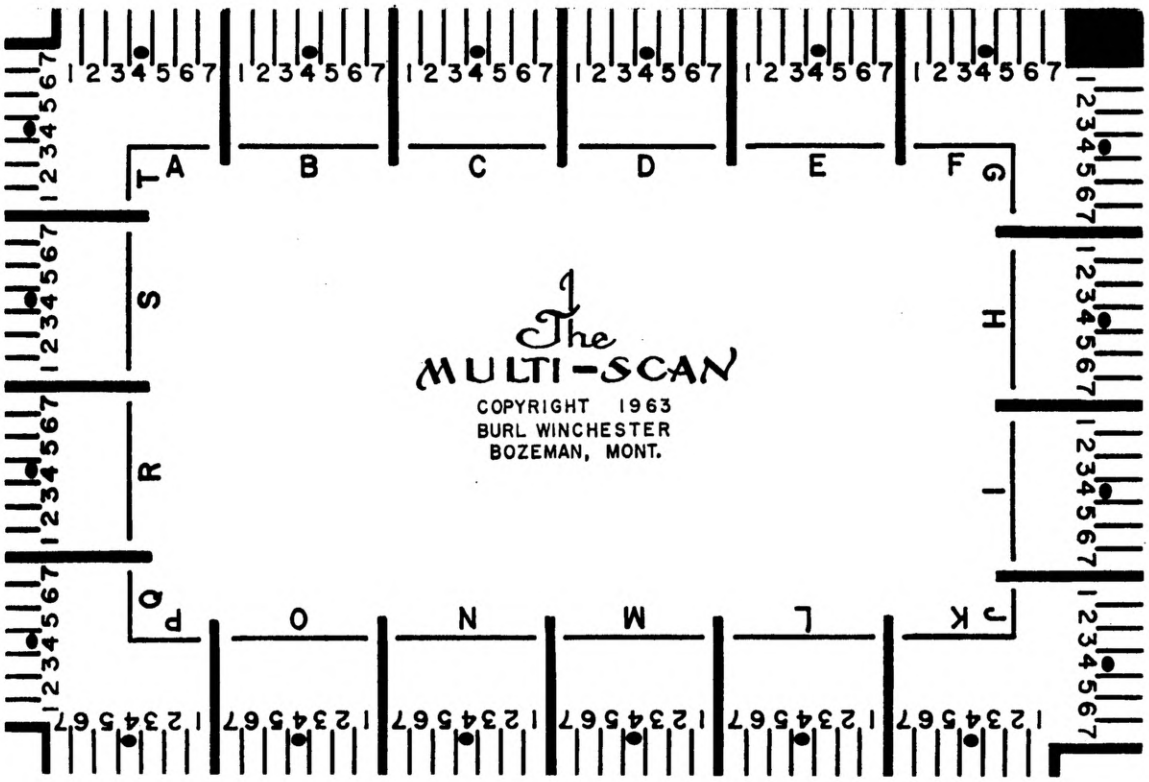
The project purpose is "to increase the social and economic knowledge and to improve the leadership skills of present and future leaders in Montana."

The KEEP director and staff are Cooperative Extension staff. The Rural Areas Development Committee (RAD) of the state acts in an advisory capacity to the KEEP staff. In addition, a faculty committee from Montana State University advises the project director on academic matters. The program is non-credit, the rationale being that this makes the project more attractive to a wider variety of applicants. A selection committee comprised of Cooperative Extension staff evaluates applications and conducts personal interviews with selected applicants and their spouses before final selection for study-travel fellowships.

All fellowships, whether for study-travel or group communications, cover travel expenses to and from Bozeman, and food and lodging on campus. In addition, the study-travel fellowships include almost all of the travel and living costs on the traveling seminars. A matching book allowance of $100 per year is awarded to each Fellow in the study-travel programs. The main cost to the individual is the time (approximately thirty days each year for three years) spent away from his or her regular occupation and family. Between yearly on-campus sessions, a number of communications, readings, and suggested readings are sent from the director to the participants.

Appendix Three

MULTI SCAN CARD



Appendix Four

The Kellogg Extension Education Project is being evaluated by the Institute for Applied Research at Montana State University. One portion of the evaluation is an eleven-county study of community problem-solving. Evaluators visit communities in those counties which have had the most participants in the entire project. Baseline data was collected in 1974 through responses to questions asked of participants and key people in the major communities. Respondents were asked to identify the major problems in their communities and who was doing something about these problems. A followup visitation using the same questions is planned for 1977-78.

The other three components of the evaluation program are used exclusively with the three study-travel groups. One instrument, devised by the staff of the Institute, is the "Community Involvement Questionnaire." It is administered three times--pre-test, beginning of the second year, and post-test in 1977-78.

In addition, a battery of personality tests--"MSGO," "T-P Leadership," and "Firo-B,"--are administered four times: pre-test, end of first year, end of third year, and post-test in 1977-78. The final evaluation component is the "Personal Impact Statement" administered at the end of the third year. The purpose of this device is to determine participants' attitudes toward their community activities after their completion of a three-year study-travel program.