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This annotated bibliography of University of British Columbia research relating to adult education lists 232 items, including 32 abstracts of theses and dissertations. Seven British Columbia Area Survey reports are noted, followed by 13 special departmental studies and an adult education dissertation, 18 M.A. theses, four M.Ed. (Adult Education) theses, and eight M.S. (Agriculture and Agricultural Extension) theses, and 42 graduate research reports from the Faculties of Agriculture, Commerce, and Education, the School of Community and Regional Planning, the School of Social Work, and the Departments of History, Psychology, and Sociology within the Faculty of Arts. Numerous publications by faculty members (Gary Dickinson, John A. Niemi, and Coolie Verner) of the Department of Adult Education are also included. Represented in this review are such topics and concerns as agricultural extension, literacy education, community development, leadership training, evening classes and their clientele, correspondence study, vocational and technical education, age differences in adult learning, and educational methodology. There is an author index. (ly)

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RESEARCH RELATED TO  
ADULT EDUCATION  
CONDUCTED AT  
THE UNIVERSITY OF  
BRITISH COLUMBIA

AC004058

COMPILED BY GARY DICKINSON  
VANCOUVER, FACULTY OF EDUCATION, UNIVERSITY OF BRITISH COLUMBIA, DECEMBER, 1968

**RESEARCH RELATED TO ADULT EDUCATION**

**CONDUCTED AT**

**THE UNIVERSITY OF BRITISH COLUMBIA**

**Compiled by**

**Gary Dickinson**

**Vancouver**

**Faculty of Education**

**University of British Columbia**

**December, 1968**

## PREFACE

There are many ways in which research in universities contributes to the advancement of the discipline of adult education, but this can occur only when the existence of the research is known to the field so that it can be identified and used. This listing of research studies that have been completed at the University of British Columbia has been assembled to make known the variety of studies available.

Graduate theses are obtainable on Inter-Library loan from the university. Wherever such studies have led to published reports this has been noted in the list. The research projects carried out by the Department of Adult Education usually involve graduate students so that there is frequently an overlap among departmental studies and student theses. In every case the departmental report differs from the student thesis in some respects so that both might profitably be examined where appropriate.

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## I DEPARTMENTAL RESEARCH REPORTS

### A. BRITISH COLUMBIA AREA SURVEY REPORTS

The Canada Land Inventory in British Columbia is an ARDA project concerned with a general survey of rural land. The inventory includes the study of agroclimatology, soil capability for agriculture and forestry, recreation and wildlife, present land use, and the socio-economic characteristics of rural people. The department is conducting a series of socio-economic surveys of selected rural areas of British Columbia as part of the Canada Land Inventory. At present, seven of the proposed series of fifteen reports have been completed although they are not available for general distribution. If they are released in the future, the area survey reports will be obtainable from the Secretary, Provincial ARDA Committee, Department of Agriculture, Victoria, B. C.

1. Verner, Coolie, Frank W. Millerd, and Gary Dickinson. A Socio-Economic Survey of the Prince George Special Sales Area in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1967. (Survey Report No. 1).
2. \_\_\_\_\_, Gary Dickinson, and E. Patrick Alleyne. A Socio-Economic Survey of the East Kootenay Area in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1968. (Survey Report No. 2).
3. \_\_\_\_\_, and Gary Dickinson. A Socio-Economic Survey of the Pemberton Valley in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1968. (Survey Report No. 3).
4. \_\_\_\_\_, Gary Dickinson, and Bruce Kloosterman. A Socio-Economic Survey of the Peace River Area in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1968. (Survey Report No. 4).
5. \_\_\_\_\_, and Gary Dickinson. A Socio-Economic Survey of Fort Nelson in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1968. (Survey Report No. 5).

6. Verner, Coolie, and Gary Dickinson. A Socio-Economic Survey of the West Kootenay Area in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1968. (Survey Report No. 6).
7. \_\_\_\_\_, Gary Dickinson, and Darrell V. Anderson. A Socio-Economic Survey of the Vanderhoof West Area in British Columbia. Vancouver: Faculty of Education, University of British Columbia, 1968. (Survey Report No. 7).

### B. SPECIAL STUDIES

The special research studies listed below resulted from research projects supported by various sources. Included among these are studies of particular aspects of rural life in British Columbia that are a by-product of the Canada Land Inventory project. Requests for these special studies should be made to the Secretary of the Provincial ARDA Committee as noted previously. Other reports listed are available from the sources indicated.

8. Anderson, Darrell V. Analytical Review of Remedial Educational Programs for Socially and Economically Disadvantaged Adults. Research report to the Special Planning Secretariate, Privy Council, 1968.
9. Bell, Gordon. The Adoption of Business Practices by Participants in the Small Business Management Training Programme. Ottawa: Department of Manpower and Immigration, 1968.
10. Dickinson, Gary, and Coolie Verner. Community Structure and Participation in Adult Education. Vancouver: Faculty of Education, University of British Columbia, 1968. (Special Study No. 3).
11. Ganz, L.B. An Analytical Survey of Participants in Non-Credit Liberal Arts Extension Classes. Research report to the British Columbia Educational Research Council, 1968.
12. Goard, Dean S. Rural British Columbia: A Bibliography of Social and Economic Research. Vancouver: Faculty of Education, University of British Columbia, 1967. (Special Study No. 1).

13. Goard, Dean S., and Gary Dickinson. The Influence of Education and Age on Participation in Rural Adult Education. Vancouver: Faculty of Education, University of British Columbia, 1968. (Special Study No. 2). un-  
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14. Kulich, Jindra M. The Role and Training of Adult Educators in Czechoslovakia. Vancouver: Faculty of Education and Department of University Extension, University of British Columbia, 1967.
15. Niemi, John A., and Darrell V. Anderson. Educational Planning for Disadvantaged Adults: A Review of Research. Research report to the Special Planning Secretariate, Privy Council, 1967. H
16. Stott, Margaret M., and Coolie Verner. A Trial Bibliography of Research Pertaining to Adult Education. Vancouver: Department of University Extension, University of British Columbia, 1963.
17. Verner, Coolie. Planning and Conducting a Survey: A Case Study. Ottawa: Rural Development Branch, Department of Forestry and Rural Development, 1967. ARDA Project No. 16018.
18. \_\_\_\_\_, and Peter M. Gubbels. The Adoption or Rejection of Innovations by Dairy Farm Operators in the Lower Fraser Valley. Ottawa: Agricultural Economics Research Council of Canada, 1967. (Publication No. 11). Supported by the Agricultural Economics Research Council of Canada.
19. \_\_\_\_\_, and Frank W. Millerd. Adult Education and the Adoption of Innovations in the Okanagan Valley. Vancouver: Department of Agricultural Economics, University of British Columbia, 1966. Supported by the Department of Agriculture, Victoria, B.C.
20. \_\_\_\_\_, editor. Adult Education in British Columbia. Journal of Education of the Faculty of Education of the University of British Columbia, Number 10, April, 1964.

## II. ADULT EDUCATION GRADUATE RESEARCH REPORTS

The graduate research reports listed in this section are those which have been completed within the Department of Adult Education. The first masters degree was granted in 1960 (Item 36) and the first doctorate in 1968 (Item 21). The abstracts printed here are as they appear in the graduate research reports.

### A. DISSERTATIONS

21. Dickinson, James Gary. "An Analytical Survey of the Pemberton Valley in British Columbia with Special Reference to Adult Education." Ed.D. (Adult Education), 1968.

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The study problem was to analyze adult education participation in a rural community in conjunction with a detailed survey of the community and its residents. Three hypotheses were tested to ascertain whether or not there were any significant differences between adult education participants and non-participants with respect to socio-economic characteristics, social interaction patterns, and locality of residence. The analytical survey method was used and the principal means of data collection was the personal interview. One hundred fifty-eight non-Indian household heads and a sample consisting of thirty-two native Indian respondents were interviewed.

The community studied was the Pemberton Valley in British Columbia which is an isolated mountain valley one hundred miles northeast of Vancouver. Approximately one-fifth of the non-Indian respondents were classified as farm while the remainder were not engaged in agriculture. In general, the non-Indian population had similar characteristics to the residents of other rural areas in the province. They had a median of nine to eleven years of school completed, an average annual income of slightly less than \$6,000, and worked mainly in unskilled and semi-skilled occupations. The Indians by comparison had less education, lower incomes, and were marginal in the labour force.

Systematic adult education in Pemberton was limited almost exclusively to night school courses. Twenty-three courses offered between 1964 and 1966 had a total enrollment of 352 adults. Some 22.2 per cent of the non-Indian respondents had taken at least one course within the three year period. There were statistically significant differences between the adult education participants and the non-participants with respect to nine socio-economic characteristics studied including age, number of children at home, birthplace, number

of years resident in the area, number of related families living in Pemberton, farm or non-farm resident, father's education, perceived adequacy of skills, and desire for further education or training. Of the social interaction characteristics studied, social participation and road opinion differentiated between the participants and non-participants. Locality of residence was related to adult education participation and the number of respondents who participated decreased as distance from the night school center increased.

Published: See Item 10.

## B. THESES

### 1. MASTER OF ARTS IN ADULT EDUCATION

22. Anderson, Darrell Vail. "Analytical Review of Remedial Educational Programs for Socially and Economically Disadvantaged Adults." M.A., 1968.

The principal concern of this thesis was to examine the role of education in altering the personal and social characteristics of the disadvantaged adult, and to select information of functional value to program design for those educators or agencies contemplating remedial educational programs with disadvantaged adults.

The sources of data for this descriptive study were limited to research reports on special retraining and remedial educational programs for the disadvantaged. Descriptive data on poverty and characteristics of the disadvantaged were also used selectively.

As a group, the disadvantaged have the lowest income, the poorest education, the largest families, the most inadequate housing, the highest incidence of ill health, and the least hope or promise of a better future. In addition to such socio-economic handicaps, the disadvantaged are hampered by certain psychological disabilities including a lack of self-confidence, low self-esteem and a high degree of dependency. Because of a limited perception of the value of education, the disadvantaged display neither the aspiration nor the motivation to achieve educational goals. They are further handicapped by a lack of verbal facility which limits their communication with society.

The research provides a depressing picture of the relationship between the disadvantaged and society. Largely because of discrimination, the poverty sub-culture has been compelled to evolve its own operational way of life. The customary associational contacts of the middle-class society are not functional to the disadvantaged and they participate instead through casual, close, and often intimate primary group relationships.

Remedial programs are characterized by: programs of lengthy duration with a distinct preference for the classroom method; instructional agents with little or no specialized training for the clientele; use of a limited number of instructional techniques; heavy reliance on instructional devices and materials; extensive use of pre-adult tests for both placement and evaluation; and a preponderant number of descriptive and subjective evaluations.

**Because of the scarcity of substantial research, specific details of educational planning for the disadvantaged cannot be stated with assurance. The rejection of the institutionalized patterns of education by the disadvantaged is indicative of the need to discover new patterns which will be acceptable to them. The present pattern of remedial educational programs offers little hope of answering the needs of the disadvantaged.**

**Published: See Item 8.**

23. Bell, Gordon. "The Adoption of Business Practices by Participants in the Small Business Management Training Programme." M.A., 1968.

This study is an evaluation of the educational effectiveness of three courses in the Small Business Management Training Programme conducted in several districts of the Lower Mainland of British Columbia. The evaluation utilizes the concept of adoption to determine the degree to which respondents have made use of the specified business skills and techniques taught within the courses.

The study also attempts to measure the reaction of respondents to the courses in general, and to the instructors and course contents specifically.

Data for the analysis were collected by interviewing a random sample of participants in each course from the population of participants in the Lower Mainland of B.C.

There was a significant increase in the degree of adoption among respondents in all courses following participation in the programme. Gains in the degree of adoption were significant at the 1 per cent level of confidence. An analysis of adoption for each specific technique within each course indicates that the degree of adoption was not uniform among these techniques.

An analysis of variance among means of adoption scores in relation to several characteristics of respondents indicated that three characteristics namely education, the relationship of the respondent to the business, and the number of employees in the respondent's business, had a significant relationship to the degree to which respondents adopted the techniques. Differences among means were significant for the three characteristics at the 5 per cent level of confidence.

The recorded scores on the three scales used to measure reactions to course, instructor, and course content respectively indicated a favourable reaction in each case and for each course.

Published: See Item 9.

24. **Berry, Mabel Vivian. "The Functionally Illiterate Adult: Some Elements of an Instructional Program to Meet His Needs." M.A., 1968.**

Automation and machines are replacing unskilled manpower at a rapid rate: these unskilled, untrained people are today's unemployed. They must be given the opportunity to secure the educational tools necessary to take advantage of vocational retraining programs. Both economic and social upgrading are necessary for realization of the potential of these undereducated adults. Provision of Adult Basic Education (A.B.E.) programs is the first step in preparing the functionally illiterate to become a participant in today's society and to become strengthened and extended as an individual.

This descriptive study has focused on the functionally illiterate adult and certain elements of an instructional program designed to meet his needs. The learning abilities of the undereducated adult are influenced by certain social-psychological characteristics which develop out of his restricted environment. These characteristics influence student recruitment and necessitate a flexible, informal learning climate. Careful selection of teachers who understand the students' background and needs is emphasized.

The objective of an A.B.E. program, based upon the communication needs of the functionally illiterate, are met through utilization of a variety of teaching techniques. Examples of techniques which may be used with any published reading system, are suggested.

This study reviewed eleven selected reading systems, concentrating in each case on approach, content, format and evaluation and appraisal where available. The following systems were reviewed: Mott Basic Language Skills Program; American Incentive to Read materials; Reading in High Gear; System for Success; Behavioral Research Laboratories; The Streamlined English Series; ABC-EDL Basic Adult Education System; Holt Adult Basic Education Series; The Steck Publishing Co.; Words in Color; Operation Alphabet TV Home Study Book.

A similarity of content appeared to exist in most reading systems reviewed. A need exists for more content related to the student's environment and his social and vocational problems. More stimulating, enriching and meaningful content would contribute to student interest and motivation. The elements of drama and humor which are appealing to students are lacking in most materials. Where published materials are unavailable or inadequate, the creative, innovative teacher can produce valuable materials based on topics of local needs and interests.

An urgent need exists for more empirical research on the evaluation of materials for effectiveness and student retention.

25. **Buttedahl, Knute B. "A Comparative Study of Participants in Lecture Classes and Participants in Study Discussion Groups." M.A., 1963.**

The purpose of this study is to analyze two distinct methods of adult education to determine if there are any significant differences between them with respect to certain selected socio-economic characteristics of the participants. The hypothesis assumes that there are no significant differences at the .01 level of confidence between adults enrolled in lecture classes and those enrolled in study-discussion groups.

In the study design an effort was made to reduce the dependent variables in so far as possible so that the primary variable would be the method employed in the adult education programs. Certain programs conducted by the Extension Department of the University of British Columbia during the fall of 1961 were used in the study. These included Living Room Learning groups which used the discussion group method and certain Evening Classes which represented the class method.

Three research groups were constructed consisting of those participants in evening classes, those in discussion groups, and a control group. Data was collected from participants by a questionnaire. This was analyzed and tested by the chi square test for statistically significant differences.

The results indicate that there are statistically significant differences in certain specific characteristics of people served by different adult education methods. Differences were found in age, educational background, marital status, occupation, and previous experience in adult education programs. No significant differences were found with respect to sex, social status, social participation score, memberships in community organizations, and length of residence. In addition this study revealed that participants in university adult education are above average in socio-economic status, are actively involved in community organizations, and have lived for a relatively long period in their present community.

Published: See Items 208 and 214.

26. Cameron, Dorothy Mary. "A Study of Enrollments Made in Correspondence Credit Courses at the University of British Columbia During the Academic Year 1961-1962." M.A., 1965.

Correspondence courses for credit were first offered at the University of British Columbia in 1949. Since that time there does not appear to have been any type of survey or evaluation made of the service. The present study was undertaken to provide information about the service as it now operates and to form the basis for further studies where these might be found necessary.

There were serious limitations upon the study, chiefly through lack or inaccessibility of needed data. From that available, a twenty per cent sample was randomly drawn from the 895 registrations made during the academic year of September 1, 1961 to August 31, 1962. A count was made of the total correspondence population of the year to ascertain the numbers of completions, withdrawals, and drop-outs for each of the ten courses then being offered. Otherwise the study was based on data drawn from the sample.

The completion rate was found to be 32.2 per cent, low when compared to a gross completion rate of nearly sixty per cent found for the member institutions of the National University Extension Association in a survey in 1956. Five of the ten courses had a completion rate of twenty-five per cent or less, while the highest was forty-six per cent.

Over seventy per cent of the registrants were in the Faculty of Education with about twenty per cent in the Faculty of Arts. These students were in their First to Fifth year of university study with the majority being in the Third. The completion was lowest for the Second year students and increased somewhat with each subsequent year. Of those who were new at the University, barely a quarter finished. Over half the registrants stated their previous session had been a summer session, and just under a quarter stated a winter session. The completion rate for both was approximately thirty-two per cent.

Those who registered within six months of a previous session were found to achieve a better completion rate than those who had been away longer. This reversed entirely for those who had been away more than six years, all who returned after a longer time finishing successfully.

The majority of registrations took place between August and November with the best completion rate for those in September. These fall registrants also showed a tendency to finish in a shorter time than those who registered in the winter months. In a distribution for the length of time taken, two peaks were found, a greater one for those finishing under a year, a lesser one for those finishing before the two-year limit. Time taken appeared to make little difference to grades, except for a small drop for those who took longest. Men and women made approximately the same grades, but in general the women took considerably longer. The women achieved the higher completion rate, 34.6 per cent, to 26.2 per cent for the men.

The correspondence courses went out to students in each one of the Census divisions of the province. Forty-two per cent resided in the heavily populated Vancouver and lower mainland area, and it was noted these had a low completion rate. Numbers in other areas were too small to give reliable estimates, but the tendency was a rough approximation of the proportion of the population in each area.

The main conclusion was that the correspondence service is not up to the high standards being established for the rest of the university, though the quality of instructor is there and also the need.

27. Campbell, Donald L. "A Study of Enrolments and Financing of Provincial Technical and Vocational Training in Alberta 1956-1965." M.A., 1968.

In Alberta, government-directed institutions of training have developed over the years in order to train apprentices, technicians and to provide other vocational training programmes. An outline of the development of each of these levels of training is presented including a tabulation of the number of people who participated in the different levels of training. The summary that is made herein of the number of people trained is in response to the question: What number of people are being trained and what is the per capita cost? The question is not unique to Alberta. It is suspected, however, that answers are not readily available and a review of the literature bears this out.

Technical and vocational training has a history of nearly fifty years in Alberta. The gradual development of facilities through periods of economic crisis, pressures from enrolment, and Federal financial assistance is outlined before the detailed examination of enrolments and costs is presented for the decade commencing in 1956. The number of apprentices in training in 1956 was 2,195. By the year 1965 the number has increased to 4,572. In relative terms the increase was from 1.9 per one thousand population to 3.1. A similar increase was evident in the training of technicians. In 1956 the Southern Alberta Institute of Technology trained 303 technicians. By 1965 the number of technicians in training had increased to 1,701. Of this number, 950 were trained at the new Northern Alberta Institute of Technology. The relative change as measured per one thousand population was from 0.26 to 1.1. The number of persons in other vocational training and non-technical training programmes also increased. The enrolment of 2,379 in 1956 increased to 4,976 in 1965. The relative numbers in training increased from 2.1 per one thousand population to 3.4.

An examination of the financing of apprenticeship, technical, and vocational training reveals that an expenditure by the Province in 1956 of \$241.35 was required to train each apprentice. However, the net cost to the Province after reimbursements and adjustments, was \$148.63 for each apprentice. In 1965 these figures had increased to \$328.39 and \$191.88 respectively. The expenditure and cost of training each technician in 1956 was \$903.71 and \$721.43 increasing to \$1,464.25 and \$750.75 by 1965. In 1965 the expenditure on each technician at the Northern Alberta Institute of Technology was \$1,989.13 and the cost \$1,062.70. For other vocational trainees the expenditure made by the Province in 1956 amounted to \$143.18 and the cost amounted to \$98.35. This had changed by 1965 to a Provincial expenditure of \$388.72 and a net cost of \$116.82.

The capital expenditure in the form of site, construction, furnishings and equipment for students at all levels of training, over the ten-year period 1956 to 1965, was \$241.01. The capital cost was \$93.06.

The completion of this study for Alberta creates the need for comparisons. The reference points for enrolments and for costs have been established herein, but these must mark the beginning and not the end.

28. Dickinson, James Gary. "Patterns of Participation in a Public Adult Night School Program." M.A., 1966.

The problem of retention in public adult night school programs appears to be related to the socio-economic characteristics of participants and to the length and nature of the courses in which they enroll. Three hypotheses arising from this problem were tested in this study of participation patterns. The first of these stated that there are no statistically significant differences in certain socio-economic characteristics of participants who are enrolled in courses of different types or lengths. The second hypothesis tested was that there are no statistically significant differences in certain socio-economic characteristics between those participants who persist in attendance and those who drop out in the total program or in courses of different types and lengths. The third hypothesis stated that there are no significant differences in attendance patterns between the three types of courses or between courses of different lengths.

The data used in this study were derived from 2,075 registration cards and ninety-eight completed attendance registers. Distributions for nine socio-economic characteristics of participants and dropouts were tested for statistically significant differences by chi square, and attendance patterns for courses of different types and lengths were compared using the critical ratio procedure.

Four of the socio-economic characteristics of participants showed statistically significant differences at the .01 level in the distributions by course type and length while five did not. The significant characteristics included sex, age, marital status, and occupation. Thus in regard to these four characteristics, the Surrey program enrolled a different clientele for the three types of courses. Academic course participants tended to be young single males in clerical, labourer, and transportation-communication occupational groups. General course registrants were the oldest group and consisted mainly of housewives. Vocational course participants occupied the median position between academic and general in each of the four significant characteristics.

Twenty-eight per cent of the registrants in the Surrey program were classified as dropouts. Three of the socio-economic characteristics tested showed statistically significant differences between persistent attenders and dropouts in the analysis by course type. These significant characteristics included age, marital status, and occupation. None of the characteristics tested were statistically significant at the .01 level in the distributions by course length. The highest number of dropouts occurred for young unmarried enrollees in academic courses while the lowest number occurred for housewives and those in the older age groups in general courses.

An inconsistent downward trend was noted in average daily attendance for all courses. From a peak ADA of eighty-seven per cent at the second session the attendance declined to thirty-eight per cent at the forty-fifth session for a total loss of forty-nine per cent. Short courses in the general interest category tended to maintain attendance at a higher level than did long courses in the academic and vocational categories.

Published: See Item 97.

29. Ganz, Lothar Benno. "An Analytical Survey of Participants in Non-Credit Liberal Arts Extension Classes." M.A., 1968.

This analysis of the clientele for University Extension Liberal Arts non-credit courses at the University of British Columbia had two objectives: to compare some socio-economic characteristics of participants with those of the general population, and to describe the clientele's motivation, previous, present and projected participation in adult education, reactions about the scheduling of classes, and its methods of obtaining information concerning extension courses. Findings for the participants were then utilized in testing the hypothesis that no statistically significant differences at the .01 level of confidence existed between males and females, between veterans and novices, or between committed and non-committed learners with respect to selected socio-economic and psychological characteristics and specified ways of obtaining information about extension courses.

Participants differed from the general population in the following ways: they had a higher ratio of women to men, contained greater percentages of people in each of the age categories from twenty-five to fifty-four years, possessed a considerably higher level of education, came from higher ranking occupations, had a higher median income and were more actively involved in the formally organized life of their community.

Most of the participants indicated that learning-orientation was one of their prime motivators for attending; goal-orientation and activity-orientation were mentioned in decreasing order of frequency. Seventy-four per cent of the participants reported previous involvement in adult education; fifty per cent were university extension veterans. Over seventy per cent indicated strong intentions to enrol in future university extension classes.

Virtually all respondents resided in the greater Vancouver area, and eighty per cent spent less than thirty minutes travelling to class. Travel-time and distance were named by the majority of participants as the two most important factors in the choice of locations for classes. One-quarter of all respondents, almost exclusively women, attended daytime classes. A similar proportion stated preferences for future daytime attendance.

Direct mailing techniques of promotional material reached fifty-nine per cent of all respondents, and newspaper advertising a further twenty-five per cent. Twenty-nine per cent of all participants indicated learning about classes through the two step flow of information process.

Testing of the hypothesis revealed statistically significant differences at the .01 level between male and female participants with respect to educational level, goal-orientation, learning-orientation, interest in subjects, attendance during specified times of the day, preferences for starting times of classes, attendance on specified days of the week, stated preferences for specified days of the week, interest in weekend seminars, and the type of announcement received for the course.

Veterans differed significantly from novices in age, occupational ranking, income, social participation, type of announcement received for the course, and their extent of use of the two step information flow.

Committed and non-committed learners were significantly different from each other in the distributions according to marital status, income, learning-orientation, previous participation in university extension activities, interest in weekend seminars, and in their utilization of the two step information flow.

30. Goard, Dean Sinclair. "Analysis of Participants in Rural Adult Education." M.A., 1968.

Most research on participation in adult education has described participants using static variables, however, it has been suggested that dynamic factors which describe the relationship between the individual and the organization have more potential value. This study included both types of variables when analyzing the factors which influence participation in adult education in a rural Canadian setting.

The data for this study were collected during the summer months of 1967, when interviews were completed with 881 household heads in six rural regions of British Columbia. The 126 respondents who were classified as participants and an equal number of randomly drawn non-participants were compared using both static and dynamic variables. The distributions within the groups were tested for significant differences using the chi square statistic while linear relationships were indicated by correlation coefficients. To remove the effects of the variables of age and education from the relationships existing between the two groups a second sample of non-participants was matched with the participants on these variables. The new groups were then compared using the static and dynamic variables on which the original groups had differed significantly.

The first and second hypotheses which proposed significant differences between the two groups with respect to certain static and dynamic variables, were tentatively accepted when the original samples of participants and non-participants were shown to differ significantly on thirteen static and eight dynamic variables. The third hypothesis which proposed differences between vocational and non-vocational participants was only partially accepted as the two groups differed on the variables of occupational prestige and income.

The findings with respect to the first two hypotheses were modified when the matched groups were shown to differ significantly on only five static and two dynamic variables. On these variables the participants reported better job training and better jobs, fewer but better educated children, and greater formal social participation. They also reported a greater felt need for further education and stated more willingness to give up sparetime for this education.

A general conclusion was proposed which suggested that the participants exhibited a more favourable attitude to education than did the non-participants. But this conclusion is tentative as the findings of the study emphasize both the need for further research with dynamic variables and the control of age and education variables when comparing participants and non-participants.

Published: See Item 13.

31. Jones, Harvey Gordon. "A Test of Validity of Place of Residence as an Indicator of Socio-Economic Characteristics of Participants in University Non-Credit Evening Classes." M.A., 1962.

The central problem of this study is to test the validity of using census tract data for the area of residence to determine the socio-economic characteristics of participants in university evening non-credit classes. This study has also explored certain socio-economic characteristics of university extension participants through an analysis of data of a 392 member sample from the participants in University of British Columbia Extension non-credit evening courses.

The method used in this study was the analytical survey method.

A fifty-seven class universe was stratified according to the type of class to form twelve groups. A random sample of classes in each of the twelve groups was selected with the participants of the classes comprising the sample. Data obtained from the sample by questionnaire was scrutinised on three accounts: the total sample, the segment of the sample residing in Vancouver, and the segment of the sample residing in the area outside Vancouver. An analysis of this data was carried out to determine certain socio-economic characteristics of the sample and to determine whether the socio-economic characteristics of persons attending the evening classes from specific census tracts were representative of all evening class participants.

The second phase of this study was concentrated on the analysis of data for a fifteen tract segment of the Vancouver portion of the sample to determine whether there was a significant difference with respect to certain socio-economic characteristics between the total population in a given Census tract and residents from the tract attending non-credit evening classes. The chi square was used to test data for the fifteen tract area.

Social status of the sample was analyzed using data for the total labour force by application of the Blishen scale.

Perhaps the most significant outcome of the study of certain socio-economic characteristics of the total population in a given census tract and residents from that tract attending university non-credit evening classes is the demonstration of the significant difference in the characteristics of these two categories of persons. Results of the analysis of data for this study indicate that people who participate in university extension classes are above average in socio-economic status.

The methodology for determining the socio-economic characteristics of participants in university non-credit classes through use of census tract data for the area of residence would, therefore, be invalid.

32. Koerner, Anna Rosborough. "Heating Techniques in Domestic Food Processing: A Text for Adult Education." M.A., 1968.

The purpose of this study was to prepare curriculum materials for an avocational program in adult education on the heating and cooking techniques of domestic food processing. The material was developed as a teaching device (text) to be used in an adult education program or as a self study program for adults who had never cooked.

The text departed from the conventional development of food text materials. It is customary to proceed from the food to the method of preparation. This text began with the method and applied it, wherever possible, to each of six natural foods. These foods were meat, poultry, fish, vegetables, fruit and eggs. It was felt that this presentation would provide the adult learner with the means of achieving his immediate practical objectives more readily than the conventional presentation.

In addition to developing curriculum material for an avocational program on the heating and cooking techniques of domestic food processing the study served to examine the cooking repertoire of Canada and the United States. By means of deduction it became apparent that certain valuable areas of cookery have been neglected in Canadian and American cuisine. This was particularly evident in vegetable cookery. A method of preparing chicken by poaching was also found to have been largely overlooked in Canadian and American cook books.

The text was developed from a conceptual classification designed especially for this study. The classification depicts the whole field of food processing starting with food in its natural state and following it through the various processes to the stage at which it is ready for consumption. It begins by showing the six food processing techniques of preparation and preservation. These are: (1) sub-division and fractionization, (2) combining and mixing, (3) heating and cooking, (4) removal of heat and freezing, (5) use of chemical agents, (6) use of microorganisms. The heating and cooking technique is further classified according to media of heat transfer. These are: (1) water, (2) steam, (3) air, (4) fat, (5) combinations of these media. The media classification is subdivided into methods of cooking. When water is the medium of heat transfer the cooking methods are boiling, simmering, poaching, and stewing; when steam is the medium the methods are steaming, waterless cooking and pressure-cooking, when air is the medium the methods are broiling and roasting or baking, when fat is the medium the methods are pan-frying, deep-fat frying, sauteing and pan-broiling; when a combination of media are used the methods are braising and pot-roasting. The methods may also be classified as moist heat methods, dry heat methods and combination methods.

The text was divided into five units as chapters, each chapter dealing with one medium of heat transfer. Each chapter gave definitions of each cooking method as well as description of its use with six natural foods. The foods chosen for this

study were meat, poultry, fish, vegetables, fruits and eggs. If the method could be applied to these foods it was described in detail and a basic formula was developed. These basic formulae are steps of procedure which are used by experienced cooks to achieve predictable results. At the end of each chapter an appraisal of the method was made. Learning experiences were also suggested which would enable the adult learner to assess his own progress and achievement. Solutions to problems were given.

Every effort was made to familiarize the adult learner with the basic principles of food preparation. It was felt that the intelligent performer of a skill is one who understands "why" as well as "how" a procedure is followed.

It was also felt that if the adult learner was given an understanding of basic methods, basic formulae and essential skills he would be equipped to use recipes intelligently.

This study was conceived as one unit in a broader curriculum which would embrace all six techniques of domestic food processing.

33. Kulich, Jindra Milos. "The Role and Training of Professional and Volunteer Adult Educators in Czechoslovakia." M.A., 1966.

The purpose of this study was to examine the available material on the organization and management of the standard system of training of adult educators in Czechoslovakia and to report on the form and content of this system.

Czechoslovakia has a rich heritage in adult education which dates back into the nineteenth century. At the beginning of the study this historical development since the middle of the nineteenth century and up to the Second World War is sketched as a background while developments since 1945 are treated in greater details.

Throughout the historical development of adult education in Czechoslovakia the role of the adult educator has changed with the changing political system. Undoubtedly the most striking change in role was brought about by the Communist take-over in 1948. The role of the adult educator in a communist state, the expectation of the Communist Party, of the society at large and his self-image are examined as a background to the training required as a preparation for this role.

Czechoslovakia is unique in that since 1962 it has a national standard system of training full-time and volunteer adult educators. The full-time adult educators, who in Czechoslovakia are thought of as professionals, are trained both at the university and at the secondary technical level. Three universities have full departments of adult education while the three secondary librarianship schools also have such departments. Full-time as well as extramural programs are offered by these institutions. The program of studies includes both general education and specialized courses in adult education and related fields. Qualifications for full-time adult education positions are prescribed by the Central planning authorities, but several surveys have shown that the actual qualifications of the adult educators employed in the field are well below the required standard and very few adult educators who are under-qualified are studying to complete their qualifications. A general evaluation of the training of full-time adult educators under the Standard System seems to indicate that the university programs are well established, and functioning according to plan. The programs in secondary librarianship schools, on the other hand, were found wanting.

Volunteers are trained under the Standard System in the Basic Adult Education Course which has been established in all districts by 1964. The Course is designed to equip the volunteers with a basic minimum of political as well as specialized knowledge and skills. Advanced courses for volunteers were established on an experimental basis. The preparation of young intellectuals to serve as volunteers also was emphasized by the Standard System. Unlike the professional training, the training of volunteers has not yet developed in depth and will require further development and evaluation to fulfill its task.

Research and theory are necessary foundations of proper training. The development of research in and theory of adult education in Czechoslovakia suffered a serious setback during the period 1950-1956 when research, and especially sociology, were regarded as dangerous. Since approximately 1958 interest in theory returned to the field and in the early 1960's sociological and psychological research were rehabilitated. Recent developments indicate increasing professionalization of the field.

Czechoslovakia is unique in that it has the first national standard system of training of adult educators. It is also unique in that it has long-range planning at all levels for the staffing and the training facilities required to prepare sufficient numbers of adult educators to fill the need. The rigidity of the system and of the plans is the main drawback. Western adult educators should study carefully the Czechoslovak experience to consider these aspects which might be applicable. Their colleagues in Czechoslovakia, on the other hand, would do well to draw on the extensive experience and skill of American adult educators in social research. On the whole, adult educators in all countries should be aware of the work of their colleagues elsewhere and thereby advance adult education on a world-wide scale.

Published: See Item 14.

34. McGown, William Fell. "Instructional Devices in Adult Education". M.A., 1966.

This study discusses the nature of instructional devices in the adult education setting and presents a typology or classification scheme in which all such devices can be organized, classified, integrated or considered.

It was important to carry out a fairly wide and deep review of all research that might possibly be pertinent, or even partially pertain, to the effectiveness of instructional devices, for they were regarded not just as audio-visual aids but rather as a means that could be used purposely to strengthen or enhance the effectiveness of the learning process, --whether a method or technique, and which could supplement either of these in the realization of the educational objective.

This rather broad approach to instructional devices involved the author with some aspects of teaching supplements that are not usually found in a discussion of audio-visual aids, yet it was considered that such an item, for example, as "color" or "group size" should be regarded as a device that a teacher must consider, choose and try to use for the best instructional results.

In summary it can be said that in this review of the research pertaining to the use of instructional devices in adult education it was found that their proper use can improve the effectiveness of most teaching situations.

However, it will be seen that there is a large and important conclusion generally accepted by researchers in the field of instructional devices. This is stated in a number of ways, but the following two will illustrate the point: (1) Adult education can be conducted successfully using any instructional device or combination of devices, and the question of effectiveness must take into consideration the habits and abilities of the learners with regard to the device; (2) the effect of the use of a device, within certain limits, depends more upon the characteristics of the learners than upon the elemental variables within the device itself.

Assuming this is true it would seem then that it would be the conclusion of the researcher, student or teacher that a premium is placed on the judicious use of any or all instructional devices in order to minimize the noted wide differences in adult learners.

35. Neylan, Margaret S. "The Development of an Evaluation Q-Sort: A Study of Nursing Instructors." M.A., 1966.

The purpose of this study was to develop an Evaluation Q-Sort and to test it by measuring the perceptions held by nursing instructors of the relative importance of five functions and effects of evaluation. The functions and effects identified for study were: the measurement of student achievement, the measurement of student progress, psychological effects of evaluation, the influence of evaluation on teaching, and the influence of evaluation on administration. An Evaluation Q-Sort was developed and used to measure the perceptions of evaluation held by the 111 nursing instructors in the six professional nursing schools in the Lower Mainland and Vancouver Island areas of the Province of British Columbia. The population was divided into ten classifications according to various criteria related to role, experience, preparation, and instructional setting. The central hypothesis assumed that the group of instructors as a whole would not assign greater importance to any one of the five functions and effects of evaluation. The nine sub-hypotheses assumed that the perceptions of evaluation held by nursing instructors would not be influenced by the variables selected for study. The .05 level of significance was used in the study.

The results indicated that the nursing instructors did ascribe significantly different degrees of importance to the five functions and effects of evaluation. Measurement of student achievement was ascribed least importance and measurement of student progress was ascribed most importance among the functions and effects studied. In addition, differences were found with respect to the nature of the instructors' responsibilities, the type of school in which she taught, and her stated level of satisfaction with preparation as an evaluator. No differences were found with respect to length of experience in nursing service or education, preparation as an instructor, course in tests and measurements, instructional focus, and instructional setting.

36. Smith, Colin Henderson. "Federal Contributions to Education for Adults and to Certain Agencies of Cultural Diffusion: An Analytical Survey of Developments in Canada from 1920 to 1960." M.A., 1960.

This thesis attempts to marshal sufficient evidence in support of the contention that the Federal Government notwithstanding the constitutional barriers that may exist is actively engaged in providing certain forms of "education for Canadian adults."

Terms have been defined. Among these the employment of the term "education for adults" in place of "adult education" is significant in that it attempts to circumvent unnecessary ambiguities. Such terms as "agencies of cultural diffusion", "formal education for adults", and "informal education for adults" have also been defined. Techniques employed to amass the information required have been explained. Chosen as more detailed examples of Federal aid in support of "formal education for adults" are the Technical and Vocational Training Programs and the University Grants System.

Some questions raised by this study include: (1) Are the activities engaged in to be termed "education" ? (2) Does the Federal Government provide organized education for adults? (3) Do the activities presently engaged in by that Government take place because of popular demand? (4) Does the Federal Government give leadership within the broad terms of this enquiry, or conversely, does it indulge in expedients to meet currently stated public demands? (5) Does the B.N.A. Act block constructive thinking about Federal assistance to education?

The conclusions arrived at by the analysis are: first, that a "prima facie" case has been established in support of the contention that the Federal Government is actively engaged in providing certain forms of "education for Canadian adults"; second, that in many cases there is a deliberately-arrived-at plan to do this; third, that those activities enjoy the popular support of most Canadians; fourth, that the Government initiates these schemes after the wisdom of such proposed action has been mooted by commissions of inquiry; fifth, that Federal leadership is far too reluctant in admitting that it so acts, and that if it did acknowledge that it was engaged in providing education for adults, it could do a more efficient job; finally, that the expression "informal education for adults" does not constitute "organized provision" of education.

Two recommendations formulated from these findings are: (1) That Section 93 of the B.N.A. Act should be reworded. (2) That a nominal Federal "per capita" grant be made to support university extension work, and organized informal education for adults should be channelled through the Canadian Association for Adult Education to national voluntary associations.

37. Stinson, Winona Elizabeth. "A Systematic Review of Research Related to Methods of Adult Education." M.A., 1967.

The purpose of this review is to organize the findings of studies on adult education methods according to the Verner conceptual scheme, defining adult education processes according to their inherent characteristics, and to extend or clarify any parts of that scheme.

The material reviewed, mainly empirical research conducted with adult subjects, is used to describe the method, the effects of the learning and the characteristics of the participants. The learning goals are classified as information giving, skill developing and knowledge supplying. As the majority of methods had been studied for their uses, little research was available on their maximum learning potential.

From the description of the methods the key element emerged as the amount of overt participation built into the method, ranging from lowest in methods whose goal is to impart information to greatest in those where learning is conducted on-the-job.

The participant studies revealed that the structure of some methods must be modified for more efficient learning.

The research showed that the learning goal became more concrete as the amount of overt participation increases. Therefore, a two-dimensional classification scheme has been developed with the amount of overt participation occupying one dimension and the degree of abstraction of the learning goal the other. Areas requiring further research have been indicated.

38. Stott, Margaret Muir. "A Review of Selected Research Related to the Use of Techniques in Adult Education." M.A., 1966.

The purpose of this thesis was to review the existing research on techniques for adult education and to develop a scheme by which such techniques could be classified in a logical construct.

The research reviewed was restricted to that literature pertaining only to educational programmes designed and conducted with adults. The findings of the selected studies on each technique were summarized and the technique was placed in the classification scheme. Many of the existing research studies are not comparable with each other, because of poor research designs and the effect that they were not conceived under the same theoretical framework so that similar variables were not controlled.

Research studies dealing with certain techniques were particularly scarce such as those concerned with information techniques like the lecture, form, panel, debate, symposium and dialogue. The bulk of the research tended to be concerned with techniques involving learner participation, such as group discussion and skill practice. In the case of certain techniques no valid research was found.

In addition to research pertaining to techniques, the literature dealing with the classification of techniques for adult education was also examined and the Newberry system was adopted as the most valid for purposes of this study. This system of classification produces a two dimensional scale which placed a technique in terms of the degree of learner involvement on the one hand, and ascending measures of concreteness of subject matter on the other. On the basis of the research reviewed, each technique considered has been placed in a cell on the Newberry Scale.

39. Webster, Daisy. "The Need for Adult Education of Married Women in the Lower Socio-Economic Levels in Vancouver." M.A., 1968.

In North America urban society, people of lower socio-economic status have a poor record of participation in adult programs. Vancouver, Canada's third largest metropolitan area, was selected for study into the needs for adult education by married women in this sub-culture. An unstructured sample of residents in three widely divergent areas of lower socio-economic index was studied to discover (1) why these women do not participate in adult education, and (2) what their needs in adult education are.

An analysis of the data revealed that the majority of the respondents in all three areas were between the ages of 15 and 44, married, and had families of one to four children. While most of the women in the study had gone beyond Grade 8, less than one out of three had completed high school. Most of those who had participated or are presently on continuing education programs are high school graduates. Non-participation in adult education programs by these women of lower socio-economic status was attributed to a variety of interrelated reasons. In order of importance these reasons were: lack of facilities for care of small children; expenses involved in tuition fees; transportation and related costs; and feelings of inadequacy in meeting the standards of course requirements. Some of the women also expressed fear of institutionalized programs. This was mainly among new Canadians of ethnic origin, other than British, who tend to cling to their own language and culture, and were hesitant to leave their immediate neighborhood.

A conflict of priorities appeared to exist between the concepts of needs as perceived by resource personnel and those perceived by the respondents. The resources personnel had a more global approach related directly to the objectives of the institutions that provide services within the community. Most of the women placed highest priority on education for future employment. Although the order of priority differed, both groups expressed need for education in the following categories: (1) cultural orientation, (2) family relationships, (3) nutrition and home management, (4) citizenship, and (5) employment. Nevertheless, success of adult education programs is dependent on two conditions: (1) that these married women should share in the planning process, and (2) that the choice of the areas of study should be consistent with the priorities as set by the women.

In order to assist married women of this sub-culture, efforts must be made to remove barriers to opportunity imposed by tuition costs and lack of child care services. More attention must be given to counselling, to flexibility of program design and to part-time study.

## 2. MASTER OF EDUCATION IN ADULT EDUCATION

40. Glensk, Alfred H. "An Investigation of Academic Post-Secondary School Students in King Edward Senior Matriculation and Continuing Education Centre." M.Ed., 1964.

This study seeks to discover any significant differences among the participants of three types of educational programs at King Edward Senior Matriculation and Continuing Education Centre. Selected measurable characteristics of these post-secondary students are tested in order to investigate any differences among the participants at the centre.

The data chosen include various performance factors of continuing education participants. These characteristic factors of student behavior were coded for use in the key-sort cards, and tabulated for electronic processing and statistical analysis. The chi-square test and the "t" test were applied to the data to test for significant differences among the three types of participants in a post-secondary school. Relationships within groups and between groups were further tested by the Pearson product-moment coefficient of correlation using three selected factors: grade-point average, intelligence quotient, and final achievement.

The null hypothesis was upheld in most instances, and evidence could not be found that any single factors tested other than final achievement contributed to distinguishing young adults on the basis of the educational measurements selected. Further research into other characteristics of adult learners might more clearly account for differences in academic performance. Of the three groups of participants which were analyzed, the senior matriculation students were more distinct and had characteristics which were more singularly predictable when related to the criterion of success on a final examination than the interrupted program students or the grade XII students.

Published: See Item 215.

41. Lund, Mary MacLeod. "Physiological Changes in Age Which Affect Adult Learning Performance." M.Ed.; 1968.

The purpose of this thesis was to review research on the developmental physiological processes of aging which have significance for adult learning. Attention was directed, specifically, to the progressive, age-related changes most immediately associated with the skills of communication: vision, audition, speech, reaction and movement times to visual and auditory stimuli, perception, retention, and performance facility. Affective reaction to physiological aging was also considered.

In recognition of the interdisciplinary nature of the relationship of aging to learning, research from diverse areas was examined. Psychological inferences, in some instances, predominate since the study is concerned not with aging but with learning concomitant with the aging processes. References of recent date were normally consulted.

Investigations have revealed no "typical adult" nor even a typical or an average progression in any aspect of physiological development; therefore, an individualized response to any adult learning situation can be expected. The evidence with the greatest impact for the education of adults lies in the areas of previous learning, recency of learning, and habits of learning. There are educational needs not now met by adult education; not the least of these is the need for understanding the processes involved in physiological aging. It is well categorized that older people can learn and under certain conditions do learn, but adults being different learners require a different social, educational, and physical environment in which to learn. The facilities at present provided for child-youth education and "adapted" for adults present some frustrating physical limitations for adult learners. Adults have distinctive needs for learning. Where these needs have been catered to, the measure of success has been high, the failure rate low. There is an awareness of the fallacy of setting arbitrary limits to successful achievement based solely on chronological divisions.

42. McKinnon, Donald Peter. "A Comparison of Distances Travelled to Urban Night School Centers." M.Ed., 1966.

The purpose of this study is to analyse the distances travelled to three urban night school centers in order to determine whether each serves separate areas or whether each serves larger, overlapping areas. The sample population consisted of 486 adults enrolled in twenty-two courses offered as part of the 1962-1963 program. Some of these selected courses were in subjects offered at all three centers; some courses were offered at two of the centers and the remainder were offered at only one center. It was thus possible to compare the centers while controlling for the number of centers offering the same subject matter.

Distributions of distances travelled to each course and to each group of courses were prepared. The chi-square test of independence was used to compare the various distributions and the significance of the difference between mean distances travelled was used to provide additional comparisons. Maps were prepared illustrating the residences of participants and a correlation was made to determine the relationship between the distances travelled and the percentage of sessions attended by the participants.

The results indicated that half of the 486 participants travelled less than 2.8 miles. More lived between one and two miles from the center they attended than in any other mile interval from the center. Only five per cent of the participants travelled more than nine miles and less than one per cent travelled more than fourteen miles.

The statistical tests indicated that there was an association between the distance travelled and the center attended. It was found that when courses were offered at one center only, there was no statistical difference between the patterns of distance travelled to the three centers. Participants seemed to travel from throughout the city of Vancouver to attend, no matter which center offered the course. Women who attend courses designed for women only travel shorter distances than men who attend courses designed for men only. For courses offered at all three centers, adults travelled further to John Oliver Night School and to Technical Night School than to Kitsilano Night School. Travel distance does not inhibit the subsequent attendance of those who enroll.

The opening of new night school centers during the past fifteen years was reviewed and it was found that a new center opened within two miles of a large well established center is unlikely to attract sufficient clientele to be economically successful.

43. Melton, James Edward. "The Influence of Alternate Course Locations on Distances Travelled by Participants in Urban Adult Evening Classes." M.Ed., 1966.

The central problem in this study is to determine whether or not the distance travelled to attend an educational activity is influenced by the number of places in which a given course is available within the same community.

The distances travelled by non-credit evening class participants of two adult education institutions, the University of British Columbia Extension Department and the Vancouver School Board Night Schools, were studied by means of the analytic survey method.

The participants in most of the non-credit courses offered on the campus by the Extension Department in one term were included in the study. A much smaller sample population of courses was selected from the three major night school centers operated by the Vancouver School Board.

The participants of both institutions were grouped into two categories, Unique or Common. Unique participants were those who could obtain the course they attended at that one location only. Common participants were those who could have chosen alternative course locations.

The distances travelled from place of residence to course location by Unique and Common Extension participants were compared as were the distances travelled by Unique and Common night school participants.

The chi-square test of independence was used in the comparisons of the distributions of Unique and Common participants while the significance of the differences between the mean distances travelled and between the median distances travelled was determined by the use of critical ratios. The .01 level of confidence was the criterion used to determine the significance of differences.

Distances travelled by Extension participants were found not to be influenced by alternative course locations in the same community when these alternatives were public school night school participants. Courses available at a single location attracted participants from the whole community whereas courses offered at three locations tended to attract participants from the neighbourhood of the center. Although there was some participation from the greater metropolitan area, the night schools tended more to serve the city alone than did the Extension Department.

These findings suggest that the usefulness or necessity of additional extension course locations in the metropolitan area is questionable. However, an increase in the number of public school evening course locations would seem likely to yield increased participation providing care was taken to avoid the competition which may result when new locations are placed too close to existing ones.

### 3. MASTER OF SCIENCE IN AGRICULTURE-AGRICULTURAL EXTENSION

The graduate study program in Agricultural Extension is a co-operative program operated by the Faculty of Education and the Faculty of Agriculture. Graduate students receive the degree of Master of Science in Agriculture (Agricultural Extension) through the Department of Agricultural Economics in the Faculty of Agriculture.

44. Alleyne, E. Patrick. "Interpersonal Communication and the Adoption of Innovations among Strawberry Growers in the Lower Fraser Valley." M.S.A., 1968.

This study is the second in a series of rural sociological studies relevant to the adoption of innovations by farmers in the Lower Fraser Valley of British Columbia. The adoption performance of strawberry growers, as measured by an adoption score computed for each respondent, was used for classifying the individuals into adopter categories. This classification was then used as the basis for further analysis of: (1) the relationship between adoption and socio-economic characteristics, (2) the relationship between ethnicity and adoption, (3) the differential use of information sources, (4) the innovation response state, (5) reasons for delay in the adoption process and for rejection.

The level of adoption, as indicated by four adopter categories, correlated positively and significantly with social participation, size of farm, acreage in strawberry, gross income from agriculture, strawberry, and from other agricultural enterprises; the amount of farm labour employed for harvesting, and estimated farm value. Age was negatively correlated with adoption. There was no significant relationship with a number of other variables studied.

Extension contact was the most important single variable which showed a significant positive association with adoption. The relationship was strongest for personal contact with the District Horticulturist.

A relatively high level of practice adoption is indicated by an average of 4.12 adoptions from the total of 6 innovations studied. Characteristics of the innovation accounted for almost one-half of the reasons for delay, and about one-third for rejection. Situational factors, relevant to the particular circumstances of the respondents, were the reasons given most frequently, especially among the early adopters.

Ethnic groupings included Menonites, Japanese and "Other" respondents. Differences were significant for 16 socio-economic characteristics, besides differential levels of extension contact. Japanese, who were the most experienced growers, were characterized by the lowest levels of adoption performance and extension contact. Menonite growers were the least educated and were intermediate in practice adoption.

Information sources were classified into two categories and personal sources were the most frequently used by all adopter categories in both. When classified by Origin, Government sources were second in importance, followed by commercial and Farm Organization. When classified by the Nature of the Activity, on the other hand, the order of importance was individual instructional, instructional group and mass media.

The study included an analysis of the patterns of interpersonal communication among the growers, both in their search for advice and in informal visiting on a friendship basis. Opinion leaders, identified by sociometric procedures, were mostly early adopters. Sociometric choices extended predominantly to growers in higher adopter categories, or to others at the same level of adoption. There were no dyadic relationships extending from Japanese respondents to other ethnic groups. Selection by other ethnic groups among themselves also did not exceed 30 per cent in any instance. The distribution of socio-metric choices either by adopter category or ethnic origin were statistically significant. Interpersonal communication among growers was also largely confined to growers in the community network.

Opinion leadership was positively associated with high socio-economic status, including high social participation, and the ability to keep informed on aspects of their commercial enterprises from sources close to the origin of new information.

Publication: In process.

45. Dent, William John. "The Sources of Agricultural Information Used by Farmers of Differing Socio-Economic Characteristics." M.S.A., 1968.

This is a report of the use that farm operators make of twenty-seven different sources of agricultural information and the attitudes that they hold toward these sources. In addition, several concepts are described and delineated in order to precisely define the areas of concern of the study.

Personal interviews were conducted with a stratified random sample of 147 farm operators in the County of Two Hills in the province of Alberta.

A primary purpose was to determine any associations that might exist between seventeen selected socio-economic characteristics of the farm operator and his use of and attitude toward each source of agricultural information included in the study. The study also suggests that farmers may be grouped according to their information seeking activity. It presents a model for such groupings and identifies some of the socio-economic characteristics which may describe the persons in each group.

Scaling techniques were used and correlation coefficients were calculated for all possible associations. The data were processed at the Computing Center at the University of British Columbia.

The study reports the associations existing between each socio-economic characteristic and the use of all sources of information as well as attitude toward each source of information. Each source of information was examined with respect to the use of the other sources of information. Attitudes were also examined on a similar basis.

The final examination of data identifies three groups of respondents based on their information seeking activity. It also determines that certain socio-economic characteristics may be useful to identify these groups.

46. Gubbels, Peter Martin. "The Adoption and Rejection of Innovations by Dairymen in the Lower Fraser Valley." M.S.A., 1966.

This study analyses the adoption and rejection of some dairy farm innovations by Lower Fraser Valley dairymen. It also analyses use of information sources, length of time spent in the adoption process, reasons for delay in proceeding through the adoption process, reasons for rejection and discontinuance of innovations, and dairyman-district agriculturist contact.

Data for the analysis were collected by interviewing a representative sample of the Lower Fraser Valley dairymen.

There was a distinct tendency for the earlier adopters to have large farms, a high production per cow, less than 20 years farming experience, a high farm plus off-farm employment income, large numbers of dairy young stock, office visits with the district agriculturist, agriculture courses at vocational schools, and enjoyment from dairying. There were no significant differences between the earlier and later adopters regarding age, years of school completed, social participation, tenure, specialization, use of hired labour and place of birth.

A number of respondents had had no contact of any type with the district agriculturist in the year previous to the interview but on the average each respondent used 2.53 types of contact.

When classified by the nature of the activity, the most used sources of information were personal, followed by individual instructional, mass and instructional group. When classified by origin, the most to least used sources were personal, commercial, government and farm organization. The proportions in which the information sources were used for the two groups of innovations differed.

On the average each respondent was unaware of 2.19 of the 10 innovations and continuing in the adoption process for 1.57. Rejection had occurred for an average of 4.38, adoption for 1.66 and discontinuance of 0.20 of the 10 innovations.

Almost half the decisions to reject innovations were made at the awareness stage in the adoption process.

From the laggard to the early adopter-innovator category, unawareness and rejection decreased while continuation in the adoption process, adoption and discontinuance increased.

Situational factors made up more than two-thirds the reasons for delay in proceeding through the adoption process but characteristics of the innovations made up more than two-thirds the reasons for rejection and discontinuance of innovations.

The rate of rejection and discontinuance was higher and adoption lower when less than one year was spent than when one or more years was spent in the adoption process.

An adoption tendency score was derived and compared with the adoption score but it could not be determined that use of one or the other was a more useful way of identifying differences among the respondents.

Published: See Item 18.

47. Jeerapandh, Somsala. "The Agricultural Extension Methods and Their Applicability to the Underdeveloped Countries: With Special Reference to Southeast Asia." M.S.A., 1963.

The thesis investigates the extent to which agricultural extension methods as used in the developed countries can be applied to the countries in Southeast Asia with particular reference to Thailand. The working hypothesis is that the peculiar conditions of agriculture in the underdeveloped countries restricts the total transfer of extension methods from the developed regions to the underdeveloped regions of the world.

The historical development of agricultural extension work in the developed countries of Europe and North America is traced, and the general theory and methods of agricultural extension are explored. Then the agricultural problems of Southeast Asia are studied, with a view to identifying the factors which will affect the agricultural extension work in that region.

It is concluded that the method of personal contact which is effectively used in the developed countries can be the main method for persuading farmers in Southeast Asia to accept improved techniques and training them to apply these methods efficiently. However, the personal contact method involves costly personnel, transportation and equipment. The meeting and demonstration methods tend to be effective also.

Mass methods of agricultural extension including radios, newsprint, magazines and circular letters would not be effective, since few farmers can read and a still smaller number have radios. However, posters and farm exhibits are two types of mass media which would stimulate a great deal of interest on the part of the rural population.

Ideally, methods should be diversified. Meetings, demonstrations, discussions, films and slides can be used to complement each other. Their combination for best results varies with local conditions.

In Thailand, as in any other underdeveloped country, a complete agricultural extension program is required. This would necessitate a greater number of agricultural extension workers than the country now has and therefore a training program for extension personnel is in urgent demand.

The study also deals in some detail with the case of Thailand and conclusions are drawn for that country. To the extent that Thailand is representative of Southeast Asia, then conclusions can be generalized for the region.

48. Job, Claude Hollis. "A Study of the Roles of Selected Agricultural Extension Agents in British Columbia." M.S.A., 1965.

This thesis is a study of the roles of certain agricultural extension agents in British Columbia, as viewed by the agents themselves. An attempt is made to identify the different activities the agents perform and to enquire into how well the agents are adapting themselves to the changing definitions of extension work. The data for the study is based on responses given to a questionnaire by three types of agents, --District Agriculturists, District Horticulturists and Other Agents who have been on the staff of the British Columbia Extension Service for two or more years.

The three types of agents are in general agreement with respect to the functions of the Extension Service on which most time and effort have been devoted in the past but differed as to the relative importance of the different functions. The indication is, however, that the Extension service concentrates on work of a service nature such as providing information on specific farm practices and teaching the underlying principles of farming, rather than on community development processes.

Distinct differences appear in the roles of each type of agent as defined by the activities they perform. Most of them identify "consultant", "source of information and ideas" and "student" the three most important out of a total of nine types of activities. However, District Agriculturists perform a wider range of activities than do the other two types of agents.

The majority of each type of agent indicate that they do not feel very proficient in performing any one role. Though in general, the roles which they consider important form a pattern which is similar to the ones they actually perform, it appears that they are least qualified to perform the roles which they consider to be important. This is particularly so among District Agriculturists. Of the three agent groups, District Horticulturists achieve the highest level of role fulfillment and least amount of role stress, with Other Agents next and District Agriculturists last. This may be due to the wider area of responsibility of the District Agriculturists compared to the other two groups. The evidence suggests that the agents do not conform to the "changing definition of extension work" since the roles which rank high both in importance and performance, are those with major emphasis on work of a service nature and on agricultural production.

"The opportunity to help other people", "personal contact" with people and "freedom in planning and doing my work" appear to be the strong motivating forces in extension work. For these agents "the lack of a well defined program" is chief among the less desirable aspects of the job. In general, the agents have favourable opinions of the prestige of their positions and both status consciousness and satisfaction in the job are also high.

The agents perceive of their alter groups as having differential expectations with respect to the roles the agents should perform; each type of agent views these

expectations in line with their own self image of the job, and the vested interests of each group. District Agriculturists are most responsive to their local clientele rather than to those people above them. Other Agents show a greater orientation to their directors than to the farmers' (local interests). District Horticulturists seem to be influenced by their local clientele and their directors to an equal extent. The agents have significant relationships with farm organizations, while non-farm organizations and university extension play very minor roles in their work. "Inadequate communications" prevents the agents from fulfilling the expectations of their alter groups, and this suggests that the Extension Service is not a well integrated social system.

Groups other than the agents themselves participate very little in the determination of the extension program. Though, the agents feel that the extension program in the main should be their responsibility, they indicate a desire for more participation by other groups. District Agriculturists want to make greater use of program planning committees, District Horticulturists stress individual farmers, while Other Agents want to see their directors be more involved.

It appears that the agents try to use their time and resources more efficiently by concentrating their attention on farmers with higher incomes as they are in a better position to follow the extension recommendations. Thus, there is a positive relationship between the amount of time the agents devote to farmers and the income level of the farmers.

49. Keesing, Paul Brunton. "A Study of Provincial Agricultural Extension Services in Canada: 1952 - 1961." M.S.A., 1965.

This thesis is the study of the activities of the Agricultural Agents of Canada. As a background to this study the history of the Agricultural Extension Services was investigated and a brief historical record presented. Following the history is a study of the methods used to contact farmers by Agricultural Agents during the ten year period 1952 to 1961.

The historical record begins with the "Agricultural Instruction Act" of 1913 which led to agricultural instruction being carried out by each province. When the assistance given under this Act terminated, agricultural instruction was left the responsibility of the provincial governments, and typically, each evolved a separate section to house the Agricultural Extension Service within its Department of Agriculture. Within this section the Agricultural Agents find a great degree of individual freedom but also the responsibility of carrying out many duties, some of which relate little to extension work, and consequently, detract from their effectiveness as Agents.

The activities of the Agricultural Agents during the ten years 1952 to 1961 were studied, chiefly from information given in the annual reports of the provincial departments of agriculture, and, in particular, numerical data were sought and accumulated. The numerical data were copied onto key sort punch cards and from thence built into tables for each activity, most of which fell into three classifications, Individual Methods, Group Methods, and Mass Media Methods. With the aim of detecting any changes in the methods used over the ten year period, the first five years were compared with the second five years for each method and the change expressed by the difference as a percentage of the first five years. From these changes general trends and exceptions are perceptible.

The interest of farmers in extension was studied and as judged by their requests to Agents per farmer, interest increased by 19.5 per cent. However, at the same time, attendance at group events decreased. The numbers of services for farmers performed by Agents were presented in consideration of the opportunities they provide to contact farmers.

The data for the number of times each method of contact was used by agents in each province were not always complete and this imposed some limitation on the usefulness of the data. However, the number of Agents, and hence the number of times an activity was used per Agent, was available in most cases, and the calculated changes of activities per Agent are apparently indicative of the actual situation.

The results of the study show that there was a slight increase of less than one per cent of individual contacts, a decrease of 15.5 per cent of meetings,

and 36.7 of other group events, but a great increase in the use of mass media. On a per Agent basis, the average Agent made 5 per cent less individual contacts, organized 13.7 fewer group events, but used mass media more extensively. When the number of contacts per farmer is considered, the increases were greater because of a decrease in number of farms. Individual contacts per farm increased by 10 per cent, meetings decreased by only 7.3 per cent, and the use of mass media per farm showed a greater percentage increase than the percentage increase of mass media events.

50. Millerd, Frank Webb. "An Analysis of the Adoption of Innovations by Okanagan Orchardists." M.S.A., 1965.

This study analyses the adoption of some innovations by Okanagan Valley orchardists. Comparisons were made with findings on the adoption of innovations by American farmers.

Also included in the study is an evaluation of the 1964 televised chautauqua produced by the Horticultural Branch of the British Columbia Department of Agriculture. This style of chautauqua (which may be defined as an assembly for educational purposes, lectures, entertainment, etc.) replaced an earlier version held in district halls throughout the Okanagan Valley.

Generally, adoption theory, as developed from studies in other countries, can be applied to a specific Canadian setting. Earlier adopters of innovations were more active educationally, had been in orcharding longer, had larger and more valuable orchards, and sold more orchard products than later adopters.

These results coincide with past studies. However, the vast majority of the early adopters were full-time orchardists, while other studies have found part-time farmers to be the most innovative. Also, this study found complete ownership of the farm to be a characteristic of the later adopters while other studies have found this characteristic of early adopters.

Two differences with previous studies were found in the use of sources of information. Agricultural agencies increased in importance between the awareness and interest stages in the adoption process. Also unique to this study was less use of mass media and agricultural agencies by the earlier adopters than the later ones.

Evidence of a two-step concept of the diffusion of technological innovations was found with innovations flowing from their place of origin to the earlier adopters and from them to the later adopters.

Innovativeness was found to be a general characteristic of certain respondents in that they adopted most innovations.

The T.V. Chautauqua was more valuable than its predecessor in one respect; more of the laggards (who use fewer agricultural agencies than most orchardists) watched the televised program than attended the district hall chautauqua.

This study is limited by the use of a sample to gather data, the use of an incomplete population list for sampling and inconsistencies in the interpretation of questions and answers by the interviewers.

Published: See Item 19.

51. Morehouse, Ralph Ernest. "A Study of Role Perception and Performance Among Agricultural Extension Personnel in Nova Scotia." M.S.A., 1968.

This thesis is a study of the roles of agricultural extension workers in Nova Scotia based on the workers' views of their particular jobs. An attempt is made to identify the various activities of the workers, find out who determines their program and if they are doing the things they think they should be doing. The data for the study was obtained from responses to a questionnaire by three types of workers--Agricultural Representatives, Home Economics Representatives and Subject Matter Specialists who are permanently employed by the Nova Scotia Department of Agriculture and Marketing.

The three types of workers agree that they are conforming to their expected roles but there are certain areas within the general scope of their work where they would like to change emphasis. The guidelines set up when the agricultural extension service was established in 1926 still apply today although there have been changes in methods and additions to staff.

All workers agreed that they had not received adequate training in their formal education to do the specific tasks required by their job but they felt competent on the basis of the training they have and the experience gained. They feel programs in in-service training can best help them overcome deficiencies in past training.

Agricultural Representatives and Subject Matter Specialists base their programs on needs identified by themselves and organized groups of farmers while Home Economics Representatives tend to determine their own program with some indication that farm women should have more effect on their program plans. While the Agricultural Representative wants to plan programs based on needs in his area, the Subject Matter Specialists would tolerate province-wide programs designed to increase the overall agricultural production.

Agricultural Representatives and Subject Matter Specialists work mainly with those farmers having relatively high gross incomes since these are generally the ones who are most able to follow recommended practices. Home Economics Representatives work mainly with farm families where there is a low gross income and with non-farm groups.

All workers generally agree that "job security", "freedom" in program planning, the "satisfying experience" of doing extension work, the "recognition" they get for their work, their "office facilities" and the "prestige" of their position are important reasons why they like their job. They do not like administering policies, the many night meetings and the fact that they have little chance to "specialize".

The workers believe they have a very good relationship with farm people and organizations but they feel they can do their best job by being better acquainted with individuals and getting their support for programs.

There is a fair degree of role concensus among the three types of workers but because of differences in their jobs they differ in some areas of role perception. There is general agreement of the importance of their roles as applied to functions of the extension service. Their present performance is based on tradition as well as direction from above and, except for a few instances, they want to change their role performance. This is indicated most strongly as they perform the roles of "student", "administrator", "organizer of events", "organizer of groups", "consultant", "program planner", "program evaluator", "public relations officer", "trainer of leaders" and "service agent". They would especially increase the time they spend on "public relations", "program evaluation" and "program planning". The Agricultural Representative would spend less time in his role as a "source of information" while the other workers would spend more time on this role.

"Farm visits" by extension workers and "demonstrations" are the best methods of communicating new ideas to farmers according to Agricultural Representatives and Subject Matter Specialists. Least effective are "commercial sources", "newspapers", "telephone calls" and "circular letters".

### III GRADUATE RESEARCH REPORTS RELATED TO ADULT EDUCATION IN OTHER UNIVERSITY DEPARTMENTS

Contributions to the advancement of knowledge about educating adults are not exclusive to the Department of Adult Education. A number of theses that are relevant to adult education have been completed in other faculties and departments of the University of British Columbia. Such studies are listed in this section in chronological order by department.

#### A. FACULTY OF AGRICULTURE

52. Etter, Harold Clinton. "Report of a Survey of Rural Co-operation in Denmark, with Consideration of the Contribution of the Folk High Schools." M.S.A., 1929.
53. Matchett, Robert Gordon. "A Manual on Farm Accounting and Methods of Financing for B.C. Farms." M.S.A., 1955.

#### B. FACULTY OF ARTS

##### 1. Department of History

54. Selman, Gordon Rex. "A History of the Extension and Adult Education Services of the University of British Columbia, 1915 to 1955." M.A. (History), 1963.

##### 2. Department of Psychology

55. Hayes, Herbert O. "A Comparative Study of Three Hundred Non-Veteran Students and Three Hundred Student Veterans in the Faculty of Arts at the University of British Columbia." M.A. (Psychology), 1949.
56. Blewett, Duncan B. "A Comparison of Certain Measures of Interest in Armed Service Trade Selection." M.A. (Psychology), 1950.
57. Hill, William F. "A Study of Intelligence Testing, Classification Testing, and Clerical Aptitude and Mechanical Aptitude Testing in a Military Setting." M.A. (Psychology), 1950.
58. Shirran, Alexander F. "The Construction and Development of an Objective Carpenter's Trade Test." M.A. (Psychology), 1950.

59. Devries, Alcon G. "A Study of Training Needs in the Selling of Real Estate through the Use of the Critical Incident Technique." M.A. (Psychology), 1957.
60. Barrett, John. "The Critical Requirements of First Line Supervisors in the Consolidated Mining and Smelting Company of Canada, Limited, Trail Operation." M.A. (Psychology), 1958.
61. Connaghan, Charles Joseph. "An Exploration Study of Information Needs of Workers in an Industrial Organization." M.A. (Psychology), 1960.
62. Elstone, Ovidius Alfred. "The Predictive Value of Psychological Tests for the Training of Real Estate Salesmen." M.A. (Psychology), 1962.
63. Friedt, Marguerite. "Aging and Performance on Some Cognitive and Psychomotor Tasks." M.A. (Psychology), 1964.
64. Hannah, Farrell John. "Short-Term Memory and Cerebral Excitability in Elderly Psychiatric Patients." M.A. (Psychology), 1964.

### 3. Department of Sociology

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66. Bull, Christopher Neil. "Work: Effect on Number and Duration of Activities Per Day." M.A. (Sociology), 1967.

### C. FACULTY OF COMMERCE

67. Foo, Chee Chin. "An Examination of Management Development Programs." M.B.A., 1965.
68. Lee, Martin Blaine. "An Experimental Investigation of the Effects on Group and Leader Efficiency and Leader Anxiety When Varied Leadership Styles are Imposed." M.B.A., 1967.

#### D. FACULTY OF EDUCATION

69. Tracy, Wilmott E. "Vocational Training for Rehabilitation in British Columbia for World War II Veterans to March 31, 1945." M.A., (Education), 1945.
70. Livesey, Adelia Frances. "A Study in Developing a Technique of Method Evaluation in the Teaching of English as a Second Language to Adults in Multilingual Classes." M.A., (Education), 1961.
71. Morrison, Terrence Robert. "The Development of National Radio Education in Canada, 1929-1949." M.A. (Education), 1967.

#### E. SCHOOL OF COMMUNITY AND REGIONAL PLANNING

72. Bofah, Robert Kwaku Buor. "Integration of Community Development with Community and Regional Planning." M.A. (Community and Regional Planning), 1963.
73. Barcham, Donald William Priestly. "Community Development: An Integral Technique in the Process of Community Planning." M.A. (Community and Regional Planning), 1965.
74. Adderley, Erwin Percy. "Urban Renewal and Manpower Training: The Relationship between a Social Program and Urban Development." M.A. (Community and Regional Planning), 1967.
75. Hiyobo, Lucia. "Manpower Planning: Technical Education for Planning for Regional Development, The Case Examined for Tanzania." M.A. (Community and Regional Planning), 1968.

#### F. SCHOOL OF SOCIAL WORK

76. McKenzie, Kathleen Elizabeth. "Community Centres and Their Leadership: A Study of B. C." M.S.W., 1947.
77. Fagan, Mary Stewart. "North Vancouver Memorial Community Centre: A Study of a Local Community Effort in Organizing Leisure-Time Activities." M.S.W., 1949.

78. Farina, Alfred John Oswald. "The Edmonton Community Leagues: A Study in Community Organization for Recreation." M.S.W., 1950.
79. Jones, George Vaughan. "Leadership in Recreation: A Study of the Impact of Leadership on the Recreational Programme in the City of Bellingham, Washington." M.S.W., 1950.
80. Pollock, John Orr. "The Programme Volunteer in Leisure-Time Agencies: A Study of the Experiences and Attitudes of a Sample of Volunteers in 14 Building-Centered Agencies in Portland, Oregon, and Vancouver, B.C." M.S.W., 1950.
81. McCosham, Beverley Jane Jerome. "Cultural Arts in Group Work Agencies." M.S.W., 1951.
82. Smith, Marjorie Vivien. "The Social Worker in Parent Group Education." M.S.W., 1952.
83. Alexander, Harold Alfred. "A Comparative Review of the Programme of a Neighbourhood House and a Community Centre with Reference to the Implication for Public-Private Co-operation." M.S.W., 1954.
84. Clarke, Duncan Leslie. "Vocational Training and Its Role in the Rehabilitation Process: A Review of Three Penal Institutions in B.C." M.S.W., 1954.
85. Vecic, Claire St. John. "The Staff Development Program of the Social Welfare Branch," M.S.W., 1954.
86. MacCullie, Andrew, "Parent-Teacher Associations: A Study of the Objectives and Accomplishments of the P.T.A.'s with Respect to Citizenship Education." M.S.W., 1955.
87. Merson, Stanley Rae. "Recruitment and Training of Program Volunteers: The Recruitment and Training of Program Volunteers in Recreational and Leisure-Time Agencies in Vancouver." M.S.W., 1957.
88. Bauman, Adlin Martin. "Education for Family Living through Co-operative Pre-School Groups: A Study of Teacher, Parent, and Child Experiences, Greater Vancouver, 1963-64." M.S.W., 1963.

89. Cushing, Honor Emily. "Leadership in a Voluntary Association: An Exploratory Study of Leadership in the British Columbia Parent-Teacher Federation." M.S.W., 1963.
90. Kerr, Ann Margaret. "Caseworkers Working with Groups: A Survey and Assessment of Casework Agencies Using Groups of Clients and Relatives of Clients for Educational and Treatment Work." M.S.W., 1963.
91. Kargbo, Marian Judith Tanner. "Musqueam Indian Reserve: A Case Study for Community Development Purposes." M.S.W., 1965.
92. Lloyd, Antony John. "Community Development in Canada." M.S.W., 1965.
93. Catt, Frederick Ozmer. "Vocational Training of Disabled Persons in British Columbia: A Study of Factors Influencing the Success of Federal Provincial Vocational Rehabilitation Programmes." M.S.W., 1966.

IV PUBLICATIONS BY THE FACULTY OF THE DEPARTMENT  
OF ADULT EDUCATION

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95. with Coolie Verner. "The Lecture: An Analysis and Review of  
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97. with Coolie Verner. "Attendance Patterns and Dropouts in Adult Night  
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See also: Items 1, 2, 3, 4, 5, 6, 7, 10, 13, 21, 28.

## B. NIEMI, JOHN A.

98. "A Proposal in Fundamental Literacy Education for Undereducated Adults in the Outlying Areas of Alaska." Unpublished M.Ed. thesis, University of Alaska, 1963.
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100. with Mary Ann Coughlan. "The Visually Handicapped in Centennial Exploration." Continuous Learning, 7:79-81, (March-April, 1968).
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See also: Items 1, 2, 3, 4, 5, 6, 7, 10, 16, 17, 18, 19, 20, 95, 97.

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