

BUREAUCRATIC FUNCTIONS OF POST-SECONDARY EDUCATION:

THE COMMUNITY COLLEGE

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ABSTRACT

With the widespread formation of the Community Colleges of Applied Arts and Technology, we have yet another social institution that is State controlled, and which is directly in the business of the socialization of bureaucratic personalities for the occupational structures of an industrialized continent.

Attention is drawn to the unique structural features of one Community College in Ontario to reveal how this socialization comes about; which social classes become its members; and in terms of a construct for "bureaucratic orientation", how much bureaucratic ideology is transmitted for internalization.

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CHAPTER 1

POST SECONDARY EDUCATIONAL INSTITUTIONS AND BUREAUCRATIC ROLE PRODUCTS

Introduction - The Function of Education and a Larger Perspective

It has been alleged by a number of social scientists¹ that a new personality type has been emerging in highly industrialized societies. The ultimate independent variable is to be found in the nature of these societies. From North America to the Soviet Union, the various institutions are highly bureaucratized. And the argument is that these institutions act as selective mechanisms, reinforcing the necessary forms of behavioural responses and thought processes of their members². In other words, the emergent type is one suited to the needs of bureaucratic organizations.

Although there is much literature describing the structure and development of bureaucracies³; as well as the effects of complex organizations on personalities found within them⁴, very little research

¹For example David Riesman et al., The Lonely Crowd, (N.Y.: Doubleday Anchor, 1950); W. H. Whyte Jr., The Organization Man, (N.Y.: Doubleday Anchor 1956).

²Riesman, p.xxii.

³For example Max Weber, Essays in Sociology, translated by H. H. Gerth and C. W. Mills, (N.Y.: Oxford University Press, 1946); Peter M. Blau, Bureaucracy In Modern Society, (Toronto: Random House, 1956).

⁴R. K. Merton, Social Theory and Social Structure, (Glencoe, Ill.: Free Press, 1949), esp. Part II.

is to be found on the institutional sources of social forces generating attitudes favourable to bureaucratic ideology in those about to enter such organizations in an occupational capacity.

Many years ago, David Riesman described the changing form of educational processes to illustrate how the school, as just one institutional source, has changed its role from being knowledge and teacher oriented to one that is socialization and student oriented.

Riesman claimed that the newly evolving social structure within the school system is one that parallels the kind found in bureaucratic organizations in which the students will one day find themselves. He writes,

There is therefore, a curious resemblance between the role of the teacher in the small-class modern school, a role that has spread from the progressive private schools to a number of the public schools, and the role of the industrial relations department in a modern factory. The latter is also increasingly concerned with cooperation between men and men and between men and management, as technical skill becomes less and less of a major concern..... Thus the other-directed child is taught in school to take his place in a society where the concern of the group is less with what it produces than with the internal group relations, its morale.⁵

It is suggested here that contemporary schools have an affective as well as a cognitive influence on students which facilitates the internalization of bureaucratic ideology.

From the time that Riesman published this somewhat startling connection between the educational institution and the industrial base of society, much research has taken place to learn the influence of

⁵Riesman, p.65.

educational experience on the personality structure of those being processed. It must be pointed out, however, that the bulk of the research was social psychologically and not sociologically, oriented.

The main concerns were with the relationships of variables found in (I) the structure and culture of the school; and (II) its participants.

This underlying perspective resulted in a lack of interest in the third and most important variable; the independent variable of the State or society, at the "institutions" level. Let me expand on this post-Riesman era of interest in education in order to clarify two features that relate to this present paper. The first feature is to show how the working hypothesis contained in this text continues to be related to current research and yet moves above, into the sociological. And secondly, to pinpoint conflict (confusion) and arguments within recent studies of education to show how the sociological context can help to resolve some of this conflict by adding the third dimension, already referred to as the "State".

For the past several decades there has been a massive interest in relationships between non-intellective personality characteristics, as measured by inventories, and several aspects of college success⁶. A great segment of this interest deals with the effects of the college experience on the personality characteristics of students as measured by a variety of personality inventories. It is on this very question

⁶For an indication of this interest see the bibliography of over 200 empirical studies in this area in K. A. Feldman and T. M. Newcomb, The Impact of College On Students, (San Francisco: Jossey Bass Inc., Pub.), 1969.

that a split in opinion in current thinking and research results.

For example, after an exhaustive survey of the literature on change in college students, P. E. Jacob reached the now famous conclusion⁷ that the college has little impact on values and personality attributes. He found that no specific patterns of curriculum, no special type of instructor, and no particular instructional method was found to make a difference in terms of the student's standard of behaviour, quality of judgement, sense of social responsibility, keenness of understanding and guiding beliefs.

In a more recent review, Webster (et al.)⁸ concluded that there are systematic and meaningful personality changes occurring during the college years. This is in line with traditional sociological thinking which extends back to 1957 when Merton (et al.)⁹ made a study of medical education and concluded that the educational experience did provide the context in which "values and attitudes" appropriate to the profession were learned.

K. A. Feldman and T. M. Newcomb might have located the explanation for the conflicting conclusions during their own monumental study. Referring directly to Jacob's controversial conclusion they wrote

Perhaps our differences arise from the fact that we were asking different questions; instead of searching for the "impact of the college experience" we found it

⁷P. E. Jacob, Changing Values in College, (New York: Harper), 1957.

⁸H. Webster, M. B. Freedman, and P. Heist, "Personality Changes in College Students", in M. Sanford (ed.), The American College, (New York: John Wiley & Sons, Inc., 1962), pp. 811-846.

⁹R. K. Merton, et al., The Student Physician, (Mass.: Harvard University Press), 1957.

necessary to pose questions that were at once more specific and more complex.¹⁰

This present research paper follows the sociological tradition as well as the practice of a "specific" and limited approach.

The question that will be raised in this paper will be the one originally suggested by Riesman. In other words, there will be an attempt made to seek specific influence on the participants of educational experience based on the empirical fact that some educational institutions are created, financed, controlled and directed by the State to fulfill its specific needs. At the same time, the inquiry will allow a study to be made on the role of the socio-economic backgrounds of the participants within this entire process.

It is argued that the addition of the State (society) concept will add direction to social psychological variables such as those that relate to the structure and culture of the school and its influence on its participant members. Given more directional concepts, such as the "needs" that arise from the nature of the State's occupational structure, the multitude of previous conclusions can suddenly take on new meaning.

One example will suffice to make this point. Since it will be argued that the "needs" of the occupational structure of a society influence the nature of the structure and culture of the educational system, one proposition will be that some educational institutions function to produce "emergent personality types suited to the needs of bureaucratic organizations" (see the opening paragraph on page 1). The

¹⁰ K. A. Feldman & T. M. Newcomb, The Impact of College on Students, (San Francisco: Jossey-Bass Inc.), 1969, p.3.

question concerning "who" are being processed and "why"; and what scholastic ability and level of achievement (from numerous social psychological and psychological studies) characterize the participants, can be answered in terms of socio-economic categories. As anyone can see, the isolated and highly empirical socio-psychological studies just mentioned, can take on new significance within this larger sociological frame of reference.

And indeed, this particular question will be elaborated on, since there is an interest to determine if the parents of the professional classes and their culture predispose their children with a more favourable attitude in order to facilitate the internalization of the bureaucratic ideology to begin with; thus reinforcing the indoctrination of the schools. And, on the other hand, if the parents of the lower classes and their cultures hinder their children (due to the lack of appropriate value transmission) from internalizing the ideology.

The interest is justified for this reason: only after these two questions are answered can one begin to isolate the precise role of educational institutions as determined by the State.

Community Colleges of Applied Arts and Technology: Ontario

The object of study consists of the cultural and structural environments to be found within the Community Colleges of Applied Arts and Technology in North America. There is no doubt, here, that the function of New York City Community College or Brookdale Community College, or indeed, any community college in the United States of America is quickly evolving to equal the same function of the community colleges

in Ontario as discussed in this paper. However, the one selected for this study is a particular college in Southern Ontario which is representative of them all.

Historically, the educational process in the province of Ontario has had three stages: elementary, secondary, and university. In 1965, the forces of technological change, with its resultant impact on occupational and vocational orientation, caused a change of this structure to include a new dimension of post-secondary education: The Colleges of Applied Arts and Technology.¹¹

In essence, the colleges were designed to cope with three fundamental vocationally oriented problems facing post-secondary education: (i) the lack of trained technicians to fill the new jobs created by technological change; (ii) the emergence of, and the need for, para-professionals in the Social and Health Sciences; (iii) the opportunity of higher education for those students who could not, or did not want to move on to university following the completion of their high school studies at the end of grades twelve or thirteen.

At the time of inception then, these socio-economic problems were clearly identified in the legislation; and the colleges were meant to be their solutions. Therefore, they became the foundation for the guiding aims and objectives of educational design; and at the same time for the development of curricula and the staffing of program departments. It must be added that these same problems can be found as the rationale for all of the other Community Colleges of Applied Arts and Technology in North America.

¹¹An Act to Amend the Department of Education Act, 3rd session, 27th Legislature, Ontario 13-14 Elizabeth II, 1965.

However, from the standpoint of legislation the Ontario system stands unique amongst all of the other junior and community colleges. In this province the intention of the planners was specifically to fill the need for "non-university post-secondary type of education". As a result, the Ontario colleges are designed to be TERMINAL, and it is for this reason that there are not to be found any provisions through curricula to insure the transfer of students into university. If there is any clearly evolving, official viewpoint, it is to keep the colleges as semi-professional, vocational institutions, free of university ties.

This means, therefore, that the diploma is basically the end of the line; and it is expected that the graduate student find his way in the occupational world at the semi-professional level.

In other parts of North America, where large community colleges have mushroomed into existence, such as California, New York, Texas and Michigan, the same function is already being performed in a latent manner.¹² The equivalent document there is the "associate degree"; and it, along with the Ontario diploma, are passports to the semi-professions.

The Occupational Structure and the Role of Colleges

This paper does not intend to carry out an extensive examination of the economic conditions that have forced contemporary State, economic and educational planners to unite in order to design the type of educational institution under study here. But, because this paper assumes

¹²E. J. Gleazer, This is the Community College, (Boston: Houghton Mifflin Co.), 1968, p.51.

that the specific needs of a society's occupational structure is the ultimate factor responsible for the elements of study to come, the following summary is required for background perspective.

The startling fact is this; in North America, the rationalizing process within the technological organizations has produced a labour structure in which "the long-term trends indicate that 80% or more of all jobs in the future will require fewer than 4 years of college, despite the rise expected in professional technical manpower requirements".¹³

When one considers the traditional role that the universities have played in providing manpower for the professional categories in the occupational structure of North America, coupled with this fact of limited professional opportunities, it becomes obvious that some mechanism is required to distract and discourage the current high enrolment into these institutions.

When one reconsiders the needs of the occupational structure in terms of the lower, sub-professional categories, the planned role of the community colleges becomes clear. Based on the above forecast one can look forward to the day when at least 80% of the student population will be induced into community colleges to fulfill the designated organizational needs of the State. It will be interesting to speculate which socio-economic categories will be induced into the community colleges and why.

¹³Occupational Educational Bulletin, Vol. 5, No. 13, November 1970, The American Association of Junior Colleges.

Hypothesis and Research Problem Stated

The working hypothesis of this paper is that the social climate¹⁴ of those community colleges in Ontario serves as structural constraints which are important in shaping the bureaucratic¹⁵ personality of students appropriate to the subordinate level of specific hierarchies (as opposed to the bureaucratic personality at the superordinate level).

It is proposed that one characteristic of all the programs (outside of the General Arts program) in the community colleges in Ontario is that they are meant to "fit" the individual to a bureaucratic role model found within select types of organizational structures. The end product is designated by such titles as "semi-professionals"; "aide"; "technician"; and "technologist". One only need add the adjoining adjective to get an impression of the bureaucratic nature of these roles. For example some are,

- a) library technician;
- b) laboratory assistant;
- c) nurses' aide;
- d) electronic technologist.

The common behavioural pattern implied in all of the above is bureaucratic "subordination" and submission to other superordinate bureaucratic roles.

¹⁴The importance of this concept as it relates to socialization is brought out by O. G. Brim and S. Wheeler, Socialization Through the Life Cycle,

¹⁵A reminder concerning Merton's words on this term; he said "bureaucracy" is a technical term designating a formal, hierarchic organization of statuses. In the social science vocabulary of organization, "bureaucracy" is not a pejorative.

Student Input, College Program and Influence

There are three assumptions underlying the hypothesis of this paper; first, meaningful changes in scores on personality inventories do occur; second, these changes are related to certain social class cultural characteristics a student possesses when he enters college; and third, the changes are related to a student's college experience.

Among the more important sociological studies supporting the assumption that changes in scores on personality inventories do occur and are casually related to educational structures is the study of medical education by R. K. Merton (and associates). In it he provides a definition for socialization of the medical student as:

the processes through which the medical student develops his professional self, with its characteristic values, attitudes, knowledge and skills fusing these into a more or less consistent set of dispositions which govern his behaviour in a wide variety of professional and extra professional situations.¹⁶

This is an important definition since it points out that socialization within an educational structure includes not only cognitive aspects like knowledge and sensori-motor skills, but also affective aspects like values and norms pertinent to the occupational role. As will be further emphasized in this paper, this is especially true of socialization into the semi-professional, subordinate type occupations.

Educational institutions, as formal agencies of socialization, have much in common with other complex organizations, especially those which socialize people. Like other agencies, too, the outcome of the

¹⁶ Merton, Student Physician, p.285.

process depends on the input. It is assumed, here, that two or three years are too short of a period for drastic and climactic changes in the value structure of the students to occur. Therefore, the college experience mentioned in the hypothesis is looked upon as a reinforcer of a core value system that the student already contains, and if socialization does take place, it is a process that simply extends that which was already there in embryo.

In other words, if changes in scores on personality inventories do occur, they will most likely be changes that would be consistent with the value system of the student based on this social class culture, and the goals and objectives of the college program. The student, therefore, is not viewed as a passive object, or as "raw" material which is processed and becomes a finished product.

This is borne out in J. Huntington's study of the professional self image.¹⁷ She found that those students who enter the program already thinking of themselves more as "doctors" than as students, are more likely to maintain the image throughout a variety of interactive situations. They are also more likely to obtain higher academic standings.

To anticipate the outcome of the hypothesis-experiment of this paper, therefore, it is necessary to elaborate on descriptive studies concerning student input as suggested in the above three assumptions.

A large scale survey of research studies on junior college students was completed in cooperation with the University of California

¹⁷Merton, Student Physician, p.119.

and the American Association of Junior Colleges.¹⁸ The following conclusions will provide the necessary profile for the logical scheme of this paper. Although the survey concerns U.S.A. data, there is every reason to believe that the profile applies to the community college students being studied in this paper.¹⁹ The results are:

1) The ACE survey of traits²⁰ showed that as a group, junior college freshman were less self-confident than four-year college freshman on such traits as academic ability, drive to achieve, leadership ability, math ability, intellectual self-confidence and writing ability. A larger proportion of junior college students felt themselves above average in athletic ability, artistic ability, defensiveness, and mechanical ability.

2) The SCOPE questionnaire²¹ showed that junior college students are more conventional, less independent, less attracted to reflective thought, and less tolerant than their peers in four year colleges.

3) The Omnibus Personality Inventory Scales²² measured higher values of authoritarianism and dogmatism in the junior college sample.

¹⁸K. P. Cross, The Junior College Student: A Research Description, in cooperation with the Center for Research and Development in Higher Education, University of California, Berkeley and The American Association of Junior Colleges.

¹⁹The results of the referred three studies was recently verified in a Canadian study by G. F. Franklin, "A Profile of the Applied Arts Student at St. Clair College" in Social Science Forum, Vol. 1, No. 1, March 1973, St. Clair College, Windsor.

²⁰K. P. Cross, The Junior College Student, p. 26.

²¹Ibid., p. 32.

²²Ibid., p. 33.

These profile characteristics can be related to bureaucratic orientation on a purely hypothetical basis. Leonard V. Gordon²³ constructed a bureaucratic orientation scale to be used in scaling this variable in industrial employees in order to predict staying potential and turn-over rates.

His scale was validated on ideal-type groups such as the peace corps and those found in the military. He learned that there existed a high correlation between those elements of the various scales above (ACE, SCOPE and OIP) and bureaucratic orientation found in his scale. As to be expected, peace corps members were least bureaucratic while military personnel were scaled most bureaucratic. The hypothetical implication concerning the direct relationship between the characteristics of junior college students and bureaucratic orientation is a deduction based on L. V. Gordon's research.

One additional point must now be made, and that has to do with the relationship between student class cultural input characteristics and selection of college and college program, (and bureaucratic role model identification). It is proposed that those students pre-disposed to such an orientation will select those programs and college that will fulfill certain expectations. Marksberry's study of women students and graduates of the University of Illinois²⁴ indicates that the decision to enroll in liberal arts courses rather than in home economics is stimulated by the student image of the liberal arts "coed" as a smartly

²³L. V. Gordon, "Measurement of Bureaucratic Orientation", Personnel Psychology, Vol. 23, No. 1, Spring, 1970.

²⁴In R. W. Tyler, "The Impact of Students on Schools and Colleges", K. Yamamoto, The College Student and His Culture, (Boston: Houghton Mifflin Co.), 1968, p. 405.

dressed, sophisticated woman who is very active in campus social life, whereas the image of the student in home economics is that of a "home-spun" naive girl, spending long hours in the laboratory rather than in dating or in extracurricular activities. This reaffirms the fact that attitudes, values and role models exist prior to, or at, the time of enrolment.

Let's examine the image that the Community College can create through a study of its promotion literature which is universally found in any high school in Ontario. The program descriptions openly publicize the paraprofessional nature of the related end-occupational product. There is no attempt made to conceal the fact that the graduate will inevitably work as a subordinate for a professional; that the ideal characteristics needed for success in the future is an ability to "work with" and "get along with" other members of a bureaucratic team. The descriptions, especially in the technologies, almost seem to have been borrowed from Whyte's "Organization Man".

The earlier question of differential influence of social classes and its cultures must now be reintroduced. It is a fact that the greater majority of students in the universities come from the upper socio-economic classes;²⁵ while in the case of the community colleges, the greater majority will be from the lower socio-economic classes.²⁶ This has profound implications for this study in terms of predisposition to

²⁵J. Porter, "Social Class and Education", in B. R. Blishen (ed.), Canadian Society, (Toronto: The MacMillan Co. of Canada), 1971, esp. p. 169.

²⁶T. J. Callaghan, "Learning: Study Skills and the Community College", in Social Science Forum, Vol. 1, No. 1, March 1973, St. Clair College, Windsor.

the internalization of bureaucratic ideology and formation of occupational self-concepts of the kind just discussed in Marksberry's study.

It is proposed that those going to university will have internalized bureaucratic values to a greater degree than those going to the community colleges. The rationale for this proposition stems from several studies dealing with family dynamics; and two, particularly relate to this issue.

Gross and Gursslin made a study of middle and lower class values²⁷ that point to variables in both classes to support the contention that children are differentially influenced by educational and occupational values. The children from the professional classes learn values that facilitate entry and success in the Universities. In other words, these members learn a need to become professionals. The authors also point to values in the lower classes that hinder the children of these classes from learning similar needs to advance educationally beyond secondary school.

Aberle and Naegele made a study of the "influence of middle-class fathers' occupational role and attitudes toward their children"²⁸ and they tell us that employment and occupation affect a father's relationships with his children. In the educational realm, specifically,

..... in evaluating their sons' present behaviour
they can only focus on general character traits, and

²⁷L. Gross and O. Gursslin, "Middle Class and Lower Class Beliefs and Values: A Heauristic Model" in A. W. Gouldner (ed.), Modern Society, (New York: Harcourt, Brace and World, Inc.), 1969, pp. 168-176.

²⁸D. F. Aberle and K. D. Naegele, "Middle-Class Fathers' Occupational Role and Attitudes Toward Children", in N. W. Bell and E. F. Vogel (eds.) A Modern Introduction To The Family, (New York: Collier-MacMillan Ltd.), 1968.

on a modicum of success in school as an almost essential step toward middle-class occupational status.²⁹

In other words, the father knows the value of education as a means of social mobility from his own experience and sees to it that, of all the important institutional processes, his children will be "well-educated", and that they in turn, will value educational achievement. It must be added that the Naegele study consisted of professional types and that in the eyes of these fathers, "well-educated" meant a university education. Furthermore, the other values that are transmitted are those that are responsible for high occupational aspirations.

They found, too, that the fathers had inculcated their children with the other values that they knew were necessary for their own success. The following describes these core values:

The ideal-typical successful adult male in the middle class occupational role should be responsible, show initiative, be competent, be aggressive, be capable of meeting competition. He should be emotionally stable and capable of self-restraint.³⁰

The question of predisposition, then, must be answered in a way that differentially relates values to educational and occupational success within a given social stratification system. We know that the children of the upper classes learn values that make them aware of "who" they are to become occupationally, "how" to get there; and "how" to act when they get there. This is not the case for the majority of the children from the other lower classes. In fact, a study was carried out by the author on 40 students enrolled in technology courses at a

²⁹Ibid., p. 193.

³⁰Ibid., p. 194.

Community College in order to determine why they selected the school and program. It showed that the major influence was their teachers and not their parents!

Although Naegele and Aberle did not mention the discussed upper-class values as early sources of bureaucratic ideology, it can be assumed that they are indeed related; and the research portion of this present study should verify this as either true or false.

In the case of the lower class members in the community colleges, we can deduce from Gross and Gursslin that since different values are internalized; in fact they are just the reverse of upper and upper middle class values, there is little opportunity to learn about occupational categories at these levels. Furthermore, there is just as little opportunity to learn bureaucratic ideology through family dynamic situations. Therefore, if children from these socio-economic classes select occupational role models as a basis for further education, they will not be fully cognizant of the organizational implications. Whatever bureaucratic values are assimilated later, they would tend to stem from the educational experience in post-secondary educational organizations. And this will be a prime consideration at the research stage.

The reason for this theoretical concern with the detailed relationships amongst student personality input, college program, socialization and end product change in terms of personality scores is to locate, rationalize and emphasize the effect of the structural aspects of the Ontario community colleges in this process. To admit that, while college experience acts as an independent variable, it must

be admitted that social class inputs exist and are just as important.

The College Structure and Culture

There are many aspects of educational organizations which are potentially important for socialization once the student enters a community college, however, eight particular aspects have been chosen for inclusion. These are:

- 1) official goals of the community college system;
- 2) administrative knowledge of educational end-product;
- 3) teaching faculty knowledge of end-product;
- 4) student commitment to educational end-product through application and enrolment;
- 5) course content;
- 6) guest speakers;
- 7) field trips;
- 8) employment anticipation.

In her study of professional image, J. M. Huntington vividly illustrated the influence of situational sources on the self image of the student.³¹ It was found that students who interacted with nurses, patients and those others who believed that they were interacting with a "doctor", rather than a medical student, stated that at these times they actually thought of themselves as "doctor". The situational context reported on by Huntington is but one example of the elements to be found in the concept³² of the "social climate" of an organization. The concept is important because this empirical referent includes all those aspects of an organizations' ecology which facilitates a particular type of socialization and role image.

³¹Merton, Student Physician, p. 120.

³²Brim and Wheeler, Socialization, p. 168.

The linkage between social climates and socialization outcomes is basically an interpersonal one as Campbell and Alexander have emphasized.³³ As the student passes through school, he interacts with others who are "carriers" of the social climate. While his own social and personal background characteristic are important factors in this interaction (including the "latent identity" according to Gouldner³⁴) it is hypothesized by Becker³⁵ that the student adapts himself to the various expectations expressed in the dominant social climate.

It is proposed that the social climate in the community colleges of Ontario consist of the eight aspects outlined above, and that they are central to the preparation and entrance into bureaucratic organizations after the educational experience.

The situational definitions will probably vary among such individual programs as the mechanical drafting technician's; the nurses' aide; and secretarial science and even amongst the various student cultures. Nevertheless, the assumption is made here that there will be a dominant or model climate that gives all of the programs a particular bureaucratic character. Further, it is assumed that, other things being equal, the expectations embodied in the social climate become the organizing frames of reference during the college years which shape the student's socialization experience, and influence the development of his occupational (bureaucratic) self.

³³E. Q. Campbell and N. Alexander, "Structural Effects and Interpersonal Relations", American Journal of Sociology, 71, November, 1965.

³⁴A. W. Gouldner, "Cosmopolitans and Locals: Latent Social Roles", Administrative Science Quarterly, 2, 1958, pp. 444-480.

³⁵H. S. Becker, et al., Boys in White, (Chicago: University of Chicago Press), 1961, p. 259-260.

Elaboration of the eight aspects of the social climate suggests the potential effect on the participants.

1. The first is the organizational goals of the community colleges. Etzioni defines this type of a goal as "a desired state of affairs which the organization attempts to realize".³⁶ These goals become operative in formal agencies of socialization in a variety of ways, for example in the rewards and sanctions, methods, techniques and facilities which are used by the socialization agency to accomplish its purposes. The goals in question specify the broad and foremost objectives to be the educating of semi-professionals and its equivalent.³⁷ These goals orient the faculty, teaching methods, course content, value structures, and social structure to suit. The influence of the resulting "definitions of situations" is assumed to be self evident.

2. Administrative knowledge of the educational product determines the make-up of the courses and their content of the programmes as a whole. It is known that while there is a tendency on the part of some instructors to consider the system in traditional terms (liberalization) the program co-ordinators must orient the whole program to "suit the needs of the community"; in other words the needs of bureaucratic-type organizations.

3. Faculty knowledge of educational end product controls the interactive process and the set of expectations between teacher and student. (ex. "if he's going to be an electronic's technician at

³⁶ A. Etzioni, Modern Organizations, (Englewood Cliffs: Prentice Hall), 1964, p. 6.

³⁷ Ontario Department of Education, Documents, "Applied Arts and Technology Colleges", 1969.

Northern Electric, he's got to know how to act in industry, and the best place to start is right here in the classroom.")

4. The course content consists of theoretically weak materials. The implication due to this deficiency in the ultimate theoretical knowledge underlying any set of complex tasks is that a superordinate will take care of that end of it. In the words of the American Society for Engineering Education, the course must produce a technician "who will perform the less creative and more routine duties of the Engineer".³⁸

5. Student commitment to a bureaucratic role model occurs through application and enrolment into a program identified by the role (i.e., Dental Technician's Program).

6. Guest speakers to these programs in the majority of cases are professionals from the superordinate level in the bureaucratic hierarchy in which the student will one day find himself. This enables the student to identify the superordinate types in his area. For example, the guest speaker to a welfare workers assistant's group would be a graduate social worker; while in the case of the engineering technician the graduate engineer; and in the case of the nurses' aide, the inevitable R.N., the graduate psychologist or physician.

7. Field trips to bureaucratic organizations in which students will be employed provides first-hand knowledge with the future social stratification system. Both the superordinate and subordinate roles are observed in interaction.

³⁸American Society for Engineering Education, "Peaceful Co-existence of Engineering and Technology in the University", June, 1971.

8. Employment anticipation promotes the strengthening of the identification with the role model. Commitment to the role occurs through (a) desiring the role; and (b) applying for the position.

It is proposed that these aspects of the social climate generate the formation of the occupational self in terms of bureaucratic terms. This in turn either produces new values and attitudes, or reinforces old ones; values and attitudes that will be the object of our research.

CHAPTER 2

METHODOLOGY

Sample and Methodology

The preceding discussion has advanced the proposition that the measured degree of bureaucratic orientation is positively related to the experience of students in the unique colleges of Ontario. In the final analysis, the validity can only be determined by empirical research. The following discussion centers upon the initial attempt to operationalize this analysis.

The research populations used in this study consist of two sample groups for two types of educational institutions; the community college and the high school.

Since the assumption is that a specific type of attitudinal change occurs in the minds of the student, a "pre" and post" test would be required to measure the degree of change. Due to a lack of time, a projected or longitudinal study design could not be attempted; instead a cross-sectional study was decided on. This consists of two groups; for a total of 180 students. Schematically, the design appears as follows:

High School Sample
N=120

Pre-test

Community College Sample
N=60

Post-test

It was decided that since the affective system of the student was the key to the research, a personality construct, "bureaucratic orientation" was defined as a commitment to the set of attitudes, values and behaviour that are characteristically fostered and rewarded in bureaucratically subordinate and bureaucratically superordinate type roles.

The Working Concept and its Operationalization

Since one can definitely isolate the two forms of bureaucratic levels mentioned above, it is unfortunate that time does not permit the development of a scale to determine the form of bureaucratic internalizations in the participants of an organizational hierarchy. This ideal tool would allow one to measure and identify the difference between superordinate levels (the supervisory professionals) and subordinate levels (the semi-professionals). As a result, one must be content to simply measure the degree of bureaucratic internalizations of values and attitudes.

In order to achieve this, a construct developed by Leonard V. Gordon³⁹ was selected and purchased. He formulated the construct of "bureaucratic orientation" by resorting to a scheme which related to common denominator characteristics found in the original descriptive schema of Max Weber. A set of four categories parallel to those of Weber, but describing individual rather than organizational characteristics was prepared. These categories are described as follows:

³⁹L. V. Gordon's questionnaire and his notes on its development are found in Appendix B.

- 1) Self-subordination, a willingness to comply fully with the stated wishes of a superior and to have decisions made for one by higher authority.
- 2) Impersonalization, a preference for impersonal or formal relationships with others on the job, particularly with individuals at different organizational levels.
- 3) Rule conformity, a desire for the security that the following of rules, regulations, and standard operating procedures affords.
- 4) Traditionalism, a need for the security provided by organizational identification and conformity to the in-group norm.

Since the scale that carries these categories (for the construct of bureaucratic orientation) is known as the Work Environmental Preference Schedule, the abbreviated form; that is "WEPS", will be used from here on to refer to the overall concept of bureaucratic orientation.

At the same time, one other dimension was added to the original four categories, and that has to do with degree of ambition or aspiration. A professional's assistant such as a nurse's aide or an electronics technician, is directly blocked from aspiring to those roles that fall into the professional category within the same occupational line and within the same bureaucracy. Therefore, an ideal semi-professional would be characterized by lower aspiration. Perhaps the two foremost reasons for this are the power position of the professional and his legitimate status in relation to the semi-professional within the organization. At any rate, it is an observed fact that semi-

professionals come "to know their place" and try to avoid direct and informal interaction with their superiors. In a study of the nursing profession, Everett C. Hughes provides us with this observation:

Just as the graduate nurse does not expect to be a party to all the doctor's conclaves, so the auxiliaries accept the lines that mark them off from their superiors. The story comes from Missouri of a partition that divided the hospital dining room into a section for the professional nurses and one for the auxiliaries. A new democratically oriented administrator had it taken down, but it was the auxiliaries who objected!⁴⁰

The fifth dimension of "bureaucratic orientation", therefore, attempts to consider this phenomenon in terms of "knowing one's place" and not wanting to aspire above it. Hence it is proposed that those students who select and commit themselves to a role model at the subordinate level will lower their aspirations accordingly. In other words, the student who enters an educational program qualifying him/her as an engineer's assistant, a social worker's aide or a dental technician, will automatically focus on this level and not fix his/herself on the engineer, graduate social worker or dentist.

This concludes the discussion on the construct operationalization of WEPS; subsequent sections will concentrate on the format used in testing. The reason why the issue of testing is brought up now is explained that, in order to exclude ambiguity in just what is being tested, there has been a severe effort to specify propositions in a most precise and economic manner. There are two sets of propositions to be elaborated on; the first deals with those which apply to high school students,

⁴⁰ Everett H. Hughes, (et al.), Twenty Thousand Nurses Tell Their Story, (Montreal: J. B. Lippincott C., 1963), p. 175.

and this must be taken as the "pre-test". The second is one that relates to community college students; and this should be thought of as the "post-test".

Testable Propositions for the High Schools (The Pre-Test)

Within the framework of the preceding discussion, knowledge of research literature leads to the general expectations:

1. (a) High school students who have a high Blishen scale⁴¹ reading will also have a high WEPS mean reading.
- (b) High school students who have a low Blishen scale reading will also have a low WEPS mean reading.
- (c) High school students who have a high Blishen scale reading with "professional" aspirations will have a high WEPS reading. They will be university oriented (with high scholastic ability).
- (d) High school students who have a high Blishen scale reading with "semi-professional" aspirations will have a high WEPS reading. They will be community college oriented (with a low scholastic ability).
- (e) High school students who have a low Blishen scale reading with "professional" aspirations will have a high WEPS reading. They will be university oriented (with high scholastic ability and parents who are upper-class value oriented).
- (f) High school students who have a low Blishen scale reading with "semi-professional" aspirations will have a low WEPS reading. They will be community college oriented (with a low scholastic ability and parents who are middle-class value oriented without knowledge of bureaucratic ideology).
- (g) High school students who have a high or low Blishen scale reading with no "occupation" aspirations will have a low WEPS reading. They will lack educational values and might have high or low scholastic abilities.

⁴¹See page 37 of this text for a discussion regarding the categorization of the traditional Blishen scale of occupations.

Testable Propositions for the Community College (The Post-Test)

This sample will hypothetically consist of previous high school students from categories (d) and (f) from above. However, the assumption is that CAAT's attract a greater proportion of students from category (f). This is the category that will enable one to determine the influence of college experience in terms of a bureaucratic-orientation post-test.

In order to anticipate the results, therefore, the study can expect the following:

- 2.(a) Students who have a high Blishen scale reading will reveal different WEPS reading means according to the college program that they are in; hypothetically they will vary as follows:
 - (i) for those students with a high Blishen mean and in Technology and Business programs, the WEPS will equal the Nelson WEPS average (27.9), in other words the WEPS is structurally being REINFORCED, see Chart 1, p. 31
 - (ii) for those students with a high Blishen mean and in the Social Service and General Arts programs, the WEPS will be less than the Nelson WEPS average (27.9); in other words the WEPS is structurally being SUPPRESSED, see Chart 1, p. 31
 - (iii) for those students with a low Blishen mean and in the Technology and Business programs, the WEPS will be greater than the Nelson WEPS average (27.9); in other words the WEPS is structurally being GENERATED, see Chart 1, p. 31
 - (iv) for those students with a low Blishen mean and in the Social Service and General Arts programs, the WEPS will equal the Nelson WEPS average (27.9); in other words the WEPS is structurally being REINFORCED, see Chart 1, p. 31
- (b) According to the Everett C. Hughes "effect" the length of College experience should show the following influence:
 - (i) Students with a high Blishen mean in their second and third years will show a lower mean for the WEPS and Occupational Aspiration variables than their counterparts in Year 1.

- (ii) In direct opposition to (b) above, students with a low Blischen mean in their 2nd and 3rd years will show a higher mean for the WEPS and Occupational Aspiration variables than their counterparts in Year 1.

Synopsis of Problem Being Researched

As previously mentioned, the main quest in this paper is to discover the institutional sources of social forces that generate or reinforce attitudes favourable to bureaucratic ideology in the life stages of cultural development. Specifically, it is proposed that higher educational institutions and their structures have differential effects on their members, especially when one considers socio-economic categories and their related variables, notably occupational and educational aspirations. For general direction, a scheme has been developed in Chart 1 to indicate generalized patterns.

The main proposal is that while the family of origin is the contingent condition for the differential internalization of bureaucratic values, one of the contributory conditions for the reinforcement, suppression or generation of the values is the educational institution.

Special attention should be paid to the codes (R,S and G). These refer to the particular effect of the institutional types on the existing Bureaucratic Orientation of the incoming member as measured by the scale designed by L. V. Gordon.

Although the same codes are used for the two institutions, one should not be misled into believing that the effects are similar. It should be noted that one can theoretically differentiate between types of generation or reinforcement depending upon whether it is a university or community college.

BUREAUCRATIC VALUES (WEPS) REINFORCEMENT,
SUPPRESSION OR GENERATION

FAMILIAL & HIGH SCHOOL INFLUENCE

BLISHEN STATUS	BUREAUCRATIC ORIENTATION	OCC.ASP.	ED.ASP.	SCHOLASTIC ABILITY
CAT. 1	High	High	High	High
(BLISHEN 1,2,3)	High	High	High	Low
CAT. 2	Low	High	High	High
(BLISHEN 3,4,5)	Low	Low	Low	Low

UNIVERSITY (CONTRIBUTORY CONDITION)				
ENGINEERING	BUSINESS	SOCIAL SCIENCE	ARTS	SCIENCES
High R	High R	Low S	Low S	High R
WEPS AT SUPERORDINATE LEVEL				

COMMUNITY COLLEGE (CONTRIBUTORY COND.)				
TECHNOLOGY	BUSINESS	SOCIAL SERVICE	ARTS	APPLIED ARTS
High R	High R	Low S	Low S	High R
WEPS AT SUBORDINATE LEVEL				

UNIVERSITY				
ENGINEERING	BUSINESS	SOCIAL SCIENCE	ARTS	SCIENCES
High G	High G	Low R	Low R	High G
WEPS AT SUPERORDINATE LEVEL				

COMMUNITY COLLEGE				
TECHNOLOGY	BUSINESS	SOCIAL SERVICE	ARTS	APPLIED ARTS
High G	High G	Low R	Low R	High G
WEPS AT SUBORDINATE LEVEL				

LEGEND

R = Reinforcement
S = Suppression
G = Generation

CHART 1: CONTINGENT & CONTRIBUTORY CONDITIONS FOR BUREAUCRATIC ORIENTATION

It will be argued that the university is instrumental in generating or reinforcing bureaucratic values necessary for positions of SUPERORDINATION, as opposed to the community college which generates or reinforces values for the SUBORDINATE levels of occupation. It must be added that it is unfortunate at this time in Sociological theory and research there is no known instrument that can measure "bureaucratic orientation" and, at the same time, differentiate between those who are "subordinately" oriented and those who are "superordinately" oriented within the general framework of the concept being used; i.e. "bureaucratically oriented". This remains a problem that will have to be solved at another time and its discussion is covered under this title later in the text. Nevertheless, certain assumptions can be made to this affect from the various measurements, mainly from Gordon's scale when combined with student's occupational and educational aspirations.

Sampling Procedure within the Context of Admittance to High Schools

By a process of elimination, Halton county administrators were located at two specific high schools who agreed to allow the researcher into their schools to administer questionnaires. In preliminary conversation, it was assumed from the beginning that they would be in charge of selecting the two groups of students to insure as little interruption of the normal classroom routines as possible. It was agreed that they randomly select the students, the only stipulation being that they be students "most likely" to be striving for higher education at either the Community College or University levels.

Several earlier attempts had "educated" the researcher to the sensitive issue involved in getting into high schools to administer any

kind of a questionnaire in general. Since College X is located in Hamilton (obviously feeding on high school students from the Hamilton area) the first attempt was on the schools in that city. In two cases (the two high schools will remain anonymous) the contacted parties referred the researcher to take the request to the Superintendent of the Wentworth County Board of Education. When this was done, the request was immediately turned down by the Superintendent with the argument that "if you let one in, everyone will want in", and "letting everyone in to do research would hinder the normal teaching and classroom routines". It was pointed out, however, that past graduates of Hamilton schools could gain entry if their past principal was still around and would be willing to put up with the interruptions. Wentworth County High Schools were, as a result, out of question for sampling purposes.

The second attempt to get into high schools was made in Peel County. Administrators at two high schools in Oakville stated that a written request must be made to the Superintendent of the Peel County Board of Education and that a council meeting would decide if the study warranted permission. At the same time I was told by a "friendly" administrator (vice-principal) that following permission from the board, which might take as many as 4 to 6 weeks, permission must then be had from the individual principals; and if his principal was typical of the "conservatism" of other principals in the county, getting in with "thesis" type questionnaires was out. Therefore, after considering the time period involved and the obvious uncertainty later it was decided to communicate with high school officials in another county.

Although eventual success was had in the third county it was not without similar frustrating experiences at three high schools here. It remains unexplainable how it came about that one vice-principal and one counsellor disobeyed the general policy in this county and allowed the researcher in to disrupt the classrooms. Needless to say, that after these experiences, no attempt was made to interfere or question the manner taken to obtain groups of 60 or more students.

Sampling Procedure and Questionnaire Administration

In the case of these two high schools, then, the guidance head at high school N and the vice-principal at high school E made the arrangements for a "randomly" selected group of senior students to answer the questionnaires. Another minor request was that they select an equal number of students from grades 12 and 13; specifically, at least 30 or more from each.

On the days of the visitation it was only at high school E that 7 from the select list of 30 grade 13 students were recorded as being absent. The students at E were otherwise assembled in one large group in one assembly room; and, after explaining the mechanics of the questionnaire, all were tested at this one time.

At high school N, the samples of students were to be found in six different classrooms. It was decided that a research assistant (Elizabeth Hathway from Sheridan College) enter the processing to save time. The testing of grade 12 students therefore, was conducted by the researcher and the research assistant simultaneously within a 30 minute period; following which, a similar procedure took care of the grade 13 students. In the meantime, a previous discussion about the introductory

remarks to the students was held with the assistant to insure as much uniformity as possible.

The last institution to be processed was college X. Full advantage was taken of the "warm" reception that followed the request to sample the college students there. Although it is a laborious procedure, the co-operative spirit enabled "quota sampling" to be carried out. This method was selected not only to speed testing but to insure immediate and full coverage.

Quota sampling required that a detailed analysis be made of the enrolment figures for each program, year and duration of program, and that appropriate proportions be select from each group. A total of 60 students determined the proportions. In collection, storage and sorting only one questionnaire was lost.

The rather lengthy, but simple mathematical procedure for quota sampling of college X is found in Appendix A.

After permission was had from the four heads of Student Services, Business, Technology and Applied Arts the research assistant already referred to spent two days moving from class to class to test the previously selected numbers. Approximately twenty classes were visited, and the required numbers of students completed the questionnaires during classtime.

CHAPTER 3

TEST RESULTS

The Nature of the Samples in terms of Variables used

The sample under investigation consists of 131 high school students from the senior classes (twelfth and thirteenth grades) from 2 high schools in the town of Burlington, Ontario; and 59 students from all levels and programs at College X in Hamilton.

A preliminary attempt to define the 3 samples can be made in terms of the 5 key variables used in the research study itself. These variables are as follows:

1. educational aspirations
2. occupational aspirations
3. parents occupations
4. parents educations
5. degree of bureaucratic internalizations

The first variable is especially applicable to the two high school samples because the students here are at the stage where they are preoccupied with plans for post-secondary education both at home with their parents and in the school through the various guidance agencies. Two important routes to careers are studied here; those college routes that will take the student into semi-professional occupations, and the university which leads to the professions. However,

several of my propositions have raised the question of "who, from what positions in the stratification system aspires to what educational levels?" For this reason variable 1 is deemed important not only for the high school sample but the college sample as well.

The second variable is related to the first and probably even precedes it. In other words, those students who want to "become" a chemical technician or technologist must also aspire to the Community college level, as opposed to those who want to become a chemical engineer, who would have to select the university. It will be assumed that the first two variables are positively correlated. The third variable is the source of the ascribed status for the students in the three samples. Not only does it tell one which students are socially mobile in terms of the first two variables but it will reveal the source of differential influence for the last variable; i.e. degree of internalization of bureaucratic values. The Blishen scale of socio-economic positions will be used to measure status, and in order to economize the procedure, 6 categories have been selected and they are as follows:

1. category 1 EQ Blishen scales 70.14-76.69
2. category 2 EQ Blishen scales 60.07-68.80
3. category 3 EQ Blishen scales 50.93-59.91
4. category 4 EQ Blishen scales 40.05-49.91
5. category 5 EQ Blishen scales 30.00-39.86
6. category 6 EQ Blishen scales 27.01-29.99

It ought to be pointed out that categories 3 and 4 would be equivalent to the kinds of positions that are initially available through community college programs.

The fourth variable is to be assumed to be related to the third variable as explained by Blishen in the construction and ranking of socio-economic positions (1961).

The fifth variable indicates "bureaucratic internalization" or WEPS, and as already discussed in the main text, the instrument used for scaling is a well known scale designed and fully validated by L. V. Gordon. It was purchased directly from him following a brief discussion as to its intended use. If necessary, refer to Appendix B for a detailed analysis of this scale, including its history, methodology and validation. The norm for high school students in the United States of America is listed as 27.7. The two high schools in this study give a mean of 29.17, and this is to be taken as being significantly high especially when one considers that the mean for Oil Company Salesman is 29.7 (in the U.S.A.). We can return now to the preliminary attempt to define the sociological nature of the 3 samples by studying the frequencies for the above 5 variables in Table 1.

Although strict randomizing procedures were followed in the case of College X notice that in table 1 the "occupational aspiration mean" is 2.71. This is not only inconsistent with the occupational end result of educational processing at a college but with the realities of the newly evolving Canadian stratification system. Several reasons can be used to explain this but foremost is the weakness of the 1961 Blishen scale which, at the time of development, did not take into account the fact of the rise of a whole new occupational category of semi-professionals and its impact on the stratification system. Consider for example the flaw in ranking "draughtsmen" over science and engineering technicians

TABLE 1

Frequencies for Key Variables from Three Samples

	Sample Number						Educational Aspiration					Occupational Aspiration				
	Grade 12	Grade 13	College Year 1	College Year 2	College Year 3	Total	No More (than required)	College or a few years of University	University Degree	Mean	Std. Deviation	<u>Blishen Categories</u>				
College X			24	27	8	59	31	16	12	1.68	.80	18	32	9	2.71	.95
High School N	40	30				70	4	19	49	2.63	.59	47	12	13	1.92	1.29
High School E	30	23				53	4	6	41	2.62	.79	40	8	4	1.47	1.14

TABLE 1 -- Continued

	Patent Occupation					Parent Education							WEPS	
	<u>Blishen Categories</u>													
	1 and 2	3	4, 5 and 6	Mean	Std. Deviation	Grade School	High School	Business or Trade School	College	University	Mean	Std. Deviation		
College X	9	9	41	4.35	1.70	23	21	7	1	7	2.12	1.29	28.22	6.36
High School N	36	24	12	2.49	1.30	6	23	10	4	29	3.38	1.49	29.08	7.11
High School E	23	9	21	2.76	1.56	8	16	6	6	17	3.15	1.52	29.25	7.44

(n.e.s.). This very unreal ranking indicates the general inability to distinguish, differentiate and empirically rank the thousands of 2 and 3 year technicians and technologists in all areas now and in the future to be certified by the Ontario Association of Engineering Technicians and Technologists, the Canadian Librarian Association, the Ontario Association of Professional Social Workers, the various accounting associations, etc. And this problem is as true in the U.S.A. as it is in Canada. A more appropriate scale would have increased the College X mean to at least 3. Future research could provide several suggestions to overhaul, update and refine the Blishen scale to suit the current conditions.

The second analytical remark refers to the fourth variable that defines the ascribed status of high school students. In the case of College X the mean socio-economic index is 4.36 and it matches the expected results based on its unique location and another C.A.A.T. study made in Toronto, Ontario. It tells one that there is an over-representation from the lower Blishen categories of 4, 5 and 6; and an under-representation from the white-collar and professional classes.

Attention, however, must be drawn to the two high school means and their distributions. Although both schools are within walking distance of one another, it was known that they service different socio-economic neighbourhoods. High School N has been defined as a middle and upper-middle class school (after Blishen); while high school E, as an upper middle and upper class institution. In spite of this difference; and in spite of the similarity of the means for the variable in question ("N" = 2.49 vs "E" = 2.76) the distributions of the categories

that make-up these means do not reflect the fact of different socio-economic tracts. For reasons that become very important later, Blishen category 3 for these two schools must be examined to realize that the "N" sample has a greater N than does "E"; and that the reverse is true for Blishen categories of 4, 5, 6. In other words, a bias in the random selection of the samples has apparently entered the study for the reasons already stated under the title of "Sampling Within the Context of Admittance to High Schools".

Pre-Test Results (Propositions 1 (a)(b))

Several hypothetical propositions were advanced and research based on them provided the necessary tests of validity. The first of these propositions stated that the contingent condition for the internalization of bureaucratic values is the socio-economic background of the student as measured by the Blishen scale.

The reasoning, as already discussed in the main text, is that the fathers of students in the high Blishen categories (1, 2, 3) bring home the values and attitudes that they hold during their professional activities at work and influence their children accordingly. Hence, the sons and daughters internalize cultural traits that are parts of the bureaucratic tradition or are associated with it.

This is not the case for the students with a low Blishen rating (4, 5, 6). These students will show low readings across both variables because the fathers, here, will hold not only an antibureaucratic viewpoint, but due to a lack of organizational skills and values at work, will be unwilling or at least unable to pass on attitudes favourable to bureaucratic ideology.

TABLE 2

Relationship between Socio-Economic Status and WEPS

SCHOOL	LOW BLISHEN (categories 4, 5, 6)		HIGH BLISHEN (categories 1, 2, 3)	
	WEPS		WEPS	
	Mean	Std. Deviation	Mean	St. Deviation
High School N	27.9	4.72	29.78	6.47
High School E	31.09	6.64	28.03	7.78
College X	28.02	7.12	28.66	4.10

By focusing on the means under the two Blishen status categories in Table 2 for the two high schools, one can see that the predicted relationships are evident in only one of the two high schools. High School N, the one which has been labelled as servicing a lower socio-economic neighbourhood, is the one which justifies the proposition. If one moves from low to high Blishen categories, notice that the WEPS moves higher accordingly. In comparing Nelson's mean with the U.S.A. high school norm ($M=27.7$; $S.D.=6.4$) we see that it comes remarkably close.

The second high school in Table 2 poses somewhat of a problem since the students in the low Blishen categories have an even higher WEPS mean than those in the high Blishen categories.

However, two possible reasons can be advanced to explain away the apparent discrepancy; and the problem touched on at the beginning of the discussion on the socio-economic reflection of students in the sample selections. A review of the number of students in the frequencies

in the "Parents Occupation" table would help at this time.

TABLE 3

The Distribution of Socio-Economic Statuses in the two High Schools

	Blishen Categories						Statistics	
	1 and 2		3		4,5 and 6			
	Total	%	Total	%	Total	%	Mean	Std. Deviation
School N	36	50	24	33.3	12	16.6	2.49	1.3
School E	23	43.4	9	16.9	21	39.7	2.76	1.56

After examining Table 3, it is proposed that if the high school E total would have had a 6.7% increase in Blishen categories 1 and 2 in order to bring it more in line with high school "N"'s; and if the other categories could have been similarly adjusted to suit, there might have been an increase in the "E", high Blishen WEPS mean. However, this certainly cannot account for the present, unusually high WEPS reading in the case of high school "E"'s, low Blishen categories. Other sociological explanations must be sought to explain this. These reasons must wait until the tests are examined for the next set of propositions.

The College X mean (28.02) enables us to deduce that the "feeder" high schools are close to the high school N WEPS mean; especially since, in the case of the college, the mean includes students not only in the 1st year but also those in years 2 and 3, thus exaggerating the strength of the mean. A later attempt to control for "years of college experience"

will in fact show that those in 1st year produce a much lower figure (27.45).

One further test on the coefficient of correlation will provide additional insights into the degree of relationship between these two variables for the first two propositions.

TABLE 4

Relationships between Blishen Categories and WEPS

	HIGH BLISHEN (categories 1,2,3)			LOW BLISHEN (categories 4,5,6)		
	Multiple R	Std.Error	Total	Multiple R	Std.Error	Total
WEPS for School N	.34	6.19	59	-	-	-
WEPS for School E	.41	7.20	31	.23	6.86	18
WEPS for College X	.33	4.14	18	.25	7.01	41

Although the various correlations (Multiple R.) appear weak in Table 3, it is important to consider them in purely comparative terms, both horizontally and vertically in order to realize that the differences among the three schools are significant in the predicted direction. The high school E and College X M.R.s strengthen as one moves horizontally from low Blishen status to high Blishen categories. This is an especially important characteristic simply because it has been argued that, ideally, there is a positive correlation at the highest Blishen category of status.

A vertical examination of the M.R.s shows that high school E,

which services the upper socio-economic neighbourhoods, has the highest correlation figure between the Blishen and WEPS; followed next by the high school N rating. At the same time, the M.R.s for both high schools are higher than the college X figure in the low status case. From this it can be inferred that the college population actually consists of students who have an even lower mean upon entrance from the various high schools than either of the two high schools in the research samples. If it would be as high or higher we could expect a stronger relationship than the one obtained (.330).

Pre-Test Results (Propositions 1 (c) (d) (e) (f))

The second set of propositions deals with the following relationships:

- i) Blishen status, occupational aspiration and WEPS reading;
- ii) Blishen status, educational aspiration and WEPS reading.

Reference must be made to the discussion on the key variables of occupational and educational aspirations. It was stated at that time (pp.37) that one can assume a positive correlation between these two variables. In other words, it can be taken for granted that the student is aware of the fact that, to "become" an engineer means aspiring to university; and "becoming" an architectural draftsman means aspiring to college. Considering the function of the various high school guidance agencies there is every reason to believe this to be the case.

Specifically, all of the propositions in this set argues that those high school students with Blishen backgrounds in the higher

categories will not only have high aspirations across the two variables, but will also have a high WEPS reading. The opposite will be true for those with a low Blishen status background.

It ought to be pointed out that underlying this scheme of thought is another variable which, unfortunately, could not be included at the thesis level of research; this is the scholastic ability variable which appears in Chart 1, and which is assumed to be "high" in the first model and "low" in the second model. Refer back to Chart 1, p. 31 to see how it enters the flow of patterned movements. This is mentioned due to the anomaly already presented by the high school E statistics, and which will continue to produce problems throughout. This certainly explains how movements from low Blishen categories have historically been made into the "professions", breaking the perpetuation of social class, and giving rise to intergenerational social mobility.

TABLE 5

Variable Means Within Blishen Categories

	LOW BLISHEN (categories 4,5,6)		HIGH BLISHEN (categories 1,2,3)	
	occupational aspiration	WEPS	occupational aspiration	WEPS
	Mean	Mean	Mean	Mean
High School N	3.16	27.9	1.69	29.78
High School E	1.8	31.09	1.45	28.03

The figures for high school N in Table 5 verifies propositions 1(c) and (f) only. The mean for occupational aspiration (3.16) falls into the categories of occupation that can only be attained educationally through non-university success such as the colleges; and the WEPS score ($M=27.9$) is close to the college entrance mean of 26.29. At the same time, the high Blishen category for high school N is 1.69 which can only be attained by non-college success such as the university; and the WEPS score ($M=29.78$) is substantially higher as predicted.

As in the case of the first set of propositions, it is the second school that produces problems, which can now be explained. Notice that the high school E, low Blishen status, occupational aspiration mean (1.8) can only be attained by entering the professions; that is, through university; and notice too, that the WEPS mean is high. According to the major contingency proposition, the WEPS should be low due to the influence of the parents' low occupational ranking.

The phenomenon here is consistent with what we know about "other-class" orientation, social mobility and anticipatory socialization. We are obviously looking at a group of students at high school E who are therefore culturally different from the same category in the high school N sample.

It ought, also, to be remembered that high school E is the school that services a higher socio-economic tract in Burlington, and therefore, it is not inconceivable that most students here, even from lower socio-economic backgrounds, should take on higher aspirations with related values through sheer "osmosis". It must be because of this, that they have aspirations higher than that of their own parents;

as a result, they have already learned the appropriate bureaucratic values that go with their high aspirations, in one way or another. This, in fact, is the second rationale for that mentioned to be forthcoming back on p. 38 when the first discrepancy was met with.

Before leaving this issue, and referring back to the high school E statistics across Blishen statuses, notice that the part of the proposition that maintains that a relationship between "high" occupational aspirations and "high" WEPS reading exists, still holds regardless of Blishen status. In this case of low Blishen status, the occupational aspirations mean of 1.8 can only be attained through university; but, the WEPS reading from such areas will also be HIGH (31.09). This is the case that helps substantiate proposition 1(3). Therefore Chart 1 must be revised to include all other cases such as high school E, and this is to be found in Chart 2.

As for the high school E, high Blishen category, the proposition 1(c) holds to be true as expected (occupational aspiration $M=1.45$; $WEPS=28.03$). Due to a lack of research material, propositions 1(d) and (g) remain to be studied at another time.

The Post-Test (Propositions 2(a) (i) to (iv); 2(b) (i) (ii))

Propositions 1(a) to (f) which were just examined are especially important to this study because it is these types of students who would normally go on to post-secondary levels of education; and this is the next topic of discussion. The only route to the occupations indicated by aspirations in the high school N sample, low Blishen category ($M=3.16$) is the community college. The 3-4 Blishen range of occupations consist

BUREAUCRATIC VALUES (WEPS) REINFORCEMENT,
SUPPRESSION OR GENERATION

FAMILIAL & HIGH SCHOOL INFLUENCE				
BLISHEN STATUS	BUREAUCRATIC ORIENTATION	OCC.ASP.	ED.ASP.	SCHOLASTIC ABILITY
CAT. 1	High	High	High	High
(BLISHEN 1,2,3)	High	High	High	Low
CAT. 2	Low	High	High	High
(BLISHEN 3,4,5)	Low	Low	Low	Low

UNIVERSITY (CONTRIBUTORY CONDITION)				
ENGINEERING	BUSINESS	SOCIAL SCIENCE	ARTS	SCIENCES
High R	High R	Low S	Low S	High R
WEPS AT SUPERORDINATE LEVEL				

COMMUNITY COLLEGE (CONTRIBUTORY COND.)				
TECHNOLOGY	BUSINESS	SOCIAL SERVICE	ARTS	APPLIED ARTS
High R	High R	Low S	Low S	High R
WEPS AT SUBORDINATE LEVEL				

HIGH SCHOOL E, LOW BLISHEN ADDITION

CAT. 2 (BLISHEN 3,4,5)	High	High	High	High
N = 18				

UNIVERSITY				
ENGINEERING	BUSINESS	SOCIAL SCIENCE	ARTS	SCIENCES
High G	High G	Low R	Low R	High G
WEPS AT SUPERORDINATE LEVEL				

COMMUNITY COLLEGE				
TECHNOLOGY	BUSINESS	SOCIAL SERVICE	ARTS	APPLIED ARTS
High G	High G	Low R	Low R	High G
WEPS AT SUBORDINATE LEVEL				

LEGEND

R = Reinforcement
S = Suppression
G = Generation

CHART 2: CONTINGENT & CONTRIBUTORY CONDITIONS FOR BUREAUCRATIC ORIENTATION

of technology-technician levels, and they fall into the subordinate category of any bureaucratically organized enterprise.

The interesting fact concerning this group is that these members (low Blisshen statuses) are the very ones who lack a high bureaucratic orientation (as measured by the WEPS), yet will, in fact, be "fitted" into the most bureaucratically structured roles of all.

It is on account of this phenomenon that one can advance and test the proposition that one of the functions of the community colleges of Ontario is to indoctrinate their incoming students with a bureaucratic ideology suitable to the bureaucratic needs of the occupational roles to which they become committed. However, at least six functions are at issue here, and due to the nature of this particular college, at least four of the more important ones can be tested through the construction of those propositions listed earlier. To learn why two of the six cannot, requires an analysis of the programs and numbers available in this college.

TABLE 6

Divisional Populations and Sample Sizes for College X

Divisions in College X	Full time total	Sample total
Technology	1217	27
Business	1171	25
General (Liberal) Arts	0	0
Social Service	29	1
Applied Arts	177	7
Totals	2748	60

A look at Table 6 tells that, unfortunately, at this college there is no General Arts Diploma program, nor is the Social Service program large enough to warrant a larger sample selection under the terms of "quota sampling". As a result of this, the two propositions referred to as 2(a)(ii) and 2(a)(iv) cannot be tested at the thesis level. However, due to the bulking of students in the Technology, Business and Applied Arts' programs, propositions 2(a)(i) and 2(a)(iii) can be tested. In these cases we are directly concerned with the "Generation" or "Reinforcing" influences of the college. These are the two most important ones that directly related to the governing hypothesis.

The reasoning here, as already elaborated on in the main text is that there are structural and cultural influences in the community colleges (at least eight have been isolated) that "generate" the learning of bureaucratic ideology in the entering low Blishen status students within the context of the program and occupational roles; at the same time, "reinforcing" the traits in the high Blishen status students.

For the low Blishen status students in Table 7, the indication is that the college is indeed performing its function of "generating" bureaucratic ideology as indicated by the great increase of the WEPS mean from 25.7 to 30.3.

For the high Blishen status students in Table 7, some explanation is required since what seems like "suppression" is at play which is contrary to proposition 2(a)(iv). It must be remembered that this is a cross-sectional study, and in the final analysis, only a multi-year, longitudinal study can precisely indicate if indeed reinforcement is the

TABLE 7

Tests for Reinforcement/Generation of WEPS in First and Second Year
College Students By Blishen Categories

	WEPS MEANS	
	Low Blishen (categories 4,5,6)	High Blishen (categories 1,2,3)
1st Year Technology, Business and Applied Arts	27.7	29.2
2nd Year Technology, Business and Applied Arts	30.3	27.1
Difference	+3.6	-2.1
Form of Influence	"Generation"	"Reinforcement"

case for high Blishen status students. Observe, however, that the mean (27.1) in the 2nd year of the table is greater than the low Blishen status mean for 1st year in the same table. This is an indication that the high Blishen status group mean in 2nd year could logically have been around 27.0 a year earlier, in which case the proposition regarding "reinforcement" would hold as predicted.

The last two propositions, 2(b)(i) and 2(b)(ii), are related to the phenomenon already referred to as the Everett C. Hughes effect. You will recall that, in his study of role relationships in the hospital, he revealed how roles promoted the separation of individuals based on "coming to know oneself in terms of one's superiors". Role identification

and the lowering of occupational aspirations is an important testable proposition in this study. This phenomenon, in our case, falls within the context of variance within Blishen categories. It is proposed that, as time passes, students from high Blishen backgrounds who normally might hold initially higher occupational aspirations in spite of reality (being in college) will eventually lower their aspirations. In other words, when compared to low Blishen categories of students, high Blishen students are INVERSELY influenced by the length of college experience.

TABLE 8

College Experience as an Influence on Aspiration Within Blishen Categories

	Occupational Aspirations Means	
	Low Blishen (categories 4,5,6)	High Blishen (categories 1,2,3)
1st Year Students	2.5	2.4
2nd Year Students	2.8	3.0
Difference	+0.3	+0.6

For the high Blishen status group in Table 8 the test shows a general decrease in aspirations from a mean of 2.4 to one that comes closer to the mean for the kind of occupations related to the college programs (that is, a mean of 3); hence the predicted movement does occur. Notice, that although a similar effect occurs in the low Blishen status group the movement is only half of that in the latter group.

The implications are that students who come from a high Blisshen standing with close to university-professional type aspirations lower their aspirations due to the influence of college experience.

CHAPTER 4

SUMMARY AND CONCLUSION

Summary

The hypothesis asserts a causal linkage between educational experience in programs at the post-secondary levels and internalization of bureaucratic ideology. Cross-sectional analysis at three different levels of educational experience (high school senior level, first and second years of college) has provided enough evidence to suggest that the working hypothesis has merit for extension into a more elaborate and extensive study. A new institutional source, outside of the family and its dynamic inter-relationships, has been found and isolated which is instrumental in promoting the internalization of, and commitment to, bureaucratic ideology for a select segment within the stratification system.

While the family is seen as the contingent condition underlying the entire process, it must be understood as being a double-sided problem determined by social class and nature of learned bureaucratic values. For example, we have learned that students from the upper three Blighen categories of the stratification system are exposed to bureaucratic orientation along with values that facilitate educational achievement within the context of the family. These students learn a "need" to go into the professions through the university. They will probably end up in the superordinate structure of occupations, with a strong commitment to those bureaucratic principles and values that they learned earlier in

their lives through their parents. It's true, many of these students will not be able to realize the "need" due to scholastic inabilities, but their bureaucratic commitment has nevertheless been learned, and will probably lead to future skills within the context of their eventual entry into bureaucratic structures, and will give them a definite advantage over those who do not possess it.

But there are those that have not internalized a great degree of bureaucratic ideology and commitment. Our study of high school students at high school N and students at College X, show that those coming from the lower three Blishen categories rate lower in bureaucratic orientation. And this is why it is a double-sided problem from the perspective of family contingency.

Not only is there a lack in learning superordinate bureaucratic ideology for students in this class, but we have found that their occupational and educational aspirations are such that they are prime candidates for community colleges. And it is here that we have also tested and found that college students reveal higher bureaucratic orientations with years of college experience. In other words, the college becomes the source institution for learning bureaucratic ideology due to its unique structure and cultural climate. But, one should not be misled into believing that this ideology is similar to that learned by students from the upper three Blishen socio-economic categories, just because the same instrument (WEPS) is being used to measure different socio-economic groups. Due to the nature of occupational role commitment at college, the learned bureaucratic ideology is that suitable for SUBORDINATE levels of work.

It should become obvious that we are dealing here with two types of bureaucratic ideologies, one that fits professional, super-ordinate positions; and one that fits subordinate, semi-professional, technician type positions. And our study shows that the college is over-represented by the lower three Blighen classes.

The force of college experience on occupational and educational aspirations and bureaucratic orientation has been shown to be strong enough to lower the latter two variables, while continuing to reinforce the former even in those students who have upper socio-economic backgrounds. This was referred to as the Everett Hughes effect. But here too, although it seems that the initial bureaucratic orientation of these students is being reinforced, it is argued that a cultural transformation is taking place within the minds of these students. It is a transformation because our study shows that these students have higher occupational aspirations in spite of the reality of being in a college which is training them for occupations lower than their own statuses and aspirations. And it has been argued that bureaucratic ideologies are related to occupational statuses. Therefore, in college, a subordinate ideology is necessarily promoted which relates to the technician type occupations found here. Hence, while we have seen students from an upper class background lower their aspirations educationally and occupationally, we can deduce that their initial value structures are transformed to suit the built-in bureaucratic subordination for the roles with which they become identified.

Major Finds in terms of Larger Issues: Occupational Movements
through Contemporary Post-Secondary Education

In the introduction it was being suggested that industrialized states are relying more on the educational system to provide personnel for their highly bureaucratized occupational structures, and the present study sheds some light on the role of community colleges within this process. Refer to Chart 3 for the following discussion.

The primary concern here is "which" social classes move "where" in the occupational structure; "what" educational avenues are being used; "how" does type of learned, bureaucratic ideology fit into this movement.

Five important phases can be defined, based on the preliminary material already gathered in this paper.

(a) Phase one: bureaucratic ideology is either promoted in the family or it is not. We have learned that social class is the main determinant. This is also true for educational and occupational aspirations as well.

(b) Phase two: based on previous familial socialization, students prove themselves scholastically; and their educational and occupational value structures are either reinforced or suppressed in this phase. This is to say that although social class is instrumental in promoting these values; the high school, neighborhood and peer groups are also active agents. For the upper social categories high school experience is definitely reinforcing; in the case of high school E, we discovered that the lower social groups had high occupational and

educational values. The high school, therefore, is seen as that institution which may or may not affect value structures depending upon its "climate". The high school in question services a high socioeconomic neighborhood and in the case of this high school, probably had a great influence on lower social categories. As for the WEPS reading, we know that tests will show different results depending upon class-background; however, this is not yet a main factor in this phase.

(c) Phase three: it is to be argued that in North America, two main educational institutions are responsible for processing their members for positions in the upper portions of the occupational structure; they are the universities and community colleges. Since the university is well established it has been well studied and we know the class bias involved. We know that students from the upper classes already have the skills that facilitate success; and upon entry, one can deduce from our studies on the high schools, that they are also bureaucratically oriented. From the same study, we know that students from the lower classes are scholastically capable but lack similar degrees of bureaucratic orientation. Since the present study did not extend itself into the university; and because there have been no known studies to measure these traits, we really do not know the effect that universities have on them. However, there is every reason to believe that, due to the liberalizing "climate", the reinforcement or generation of this orientation will not be as strong as in the community colleges. One proposition is that, depending upon the occupational role image that ultimately relates to the university program, the orientation

will "subtley" be affected in the mind dimension of the students. At the same time, it is argued that due to the very fact that the occupational roles through university are professional (found at the top of the stratification system) a superordinate, elitist ideology is being learned, preparing the student to interact with subordinates.

In the community college, on the other hand, our study tells us that the reverse is happening and that part of the education is bureaucratic indoctrination, enabling the graduates to enter the work force as "subordinates" to "professionals". Our study shows the class-bias, through the over representation of lower-categories of Blishen's groups.

It is proposed therefore, that these institutions are not only acting as selective mechanisms to insure that relatively stable propositions exist in the upper half of the occupational structure but that the appropriate attitudes in terms of the bureaucratic work relationships are also learned.

(d) Phase four: the climax of educational experience, whatever its form, leads to entrance into the occupational work structure. Members from the upper and lower socio-economic groups who leave university take on their roles in the real work force equipped with professional type bureaucratic values. Their work situations provide them with the legitimate sanction to give orders lower down the line; but also to obey orders that come from above. Within the role context however, there is always the possibility of one day, moving into higher positions within the upper ends of management and supervision.

This is the next phase in our chart and the question concerning the degree of bureaucratic qualities and commitment becomes an interesting problem, especially in terms of what we know about the bureaucratic nature of these positions.

As for the members leaving the community colleges, at least in Ontario where our study has taken place, the graduates find employment as "aides", "technicians" and "assistants". Those lower class originating students, with previously low degrees of bureaucratic orientation, now take on positions that are most rigidly structured in terms of relationships to other occupational categories. Their only real exposure to bureaucratic orientation occurs in this phase, at college. The reality is "terminal subordination" because they can never "break" the professional "barrier" unless they reeducate themselves at university and unlearn the subordinate-type, bureaucratic ideology that went into their training. I say this is difficult and traumatic because if one goes by the statistics provided by the Professional Engineers Association of Ontario, on the numbers who move from the "technologists" classification to "Engineer" status, one can safely preclude this possibility as a reality. It takes 10 years of study to perform this transformation of "self" through correspondence and extension courses. And this is an educational transformation only, not a bureaucratic transformation, which may or may not come after playing the role of a subordinate during 10 years of work and study.

(e) Phase five: the top of any bureaucracy is top management and supervision. The present research can only point out that graduates

of community colleges, in the future, will find it exceeding difficult to get to the top. Industries in Ontario have been occupationally stratified in terms of unions and professional associations for a long time. The latest association on the scene is O.A.C.E.T.T. (The Ontario Association of Certified Engineering Technicians and Technologists) and the fact that it was created by the leadership from the Professional Engineers Association of Ontario should be taken as a significant happening. The Engineers have set the stage for similar divisions in other associations in order to distinguish themselves in terms of those who have a university education and those who have only college or less. This type of professionalization makes for an even more rigid occupational structure and precludes easy movement from category to category. In the U.S.A. it is still possible for a technologist to call himself an engineer, and to play that role, but the latest indications are that they will eventually follow the Canadian set-up and clearly define who is to use the prestigious label of "engineer".

I need only point to the pre-occupation of the Ontario Social Workers Association to prove that the reaction of the Engineers is not a limited affair. The O.S.W.A. is now attempting to define the rights and obligations of the many social worker-technicians being processed and "let loose" on the market to threaten the traditional work of the professionals.

The newly evolving work structure, therefore, is latently insuring that only university graduates, with legitimate status through professional organizations, will be able to move on to the top levels of bureaucratic hierarchies.

There is one other interesting fact that relates to bureaucratic orientation in Phase five and it comes to us from the Research Division of a major American Oil Company.⁴² It was found that "the less bureaucratic employee was judged to be the more effective worker and the better prospect for advancement to a managerial position"! This is another fact that suggests that technicians and technologists in competition with university graduated professionals will lose in the end. Considering the social class background, the superordinate type of ideology internalized at home and university, then reinforced in work, and the opportunities to shed the ideology structurally, the university type graduate has all of the characteristics to alter his value structure and move ahead.

Contributions of the Study and Suggestions for Further Research

The implications for further study are many and varied. They can be found on two levels: macro and micro levels. To suggest the macro, I need only raise the question "why are community colleges spreading internationally to all industrialized nations in the world?". To provide the basis for research, it is necessary to examine the slogan in North America that is used to promote its spread. Our educationalist argue that "it provides for the diverse needs of the community, hence it helps make possible equal education for all, at all levels". If equal education (implying "all social categories") is the objective, it would be more appropriate to design educational

⁴²See Appendix B, p. 10

institutions that could diagnose the class-based disabilities of students and, after remedying them, place them back into one main education system. More important therefore, let us clearly understand what is meant by the "needs of the community". After studying the majority of programs available, their course contents and end products, it should become obvious that the colleges exist to fulfill the "needs" of either capitalistic or State bureaucracies.

This is not only true for the community colleges; and it is this fact that enables us to classify the specific role of the colleges in terms of the occupational structure. Although the university has traditionally been elitist, yet paradoxically liberal, its end product has always been oriented to the upper end of the occupational structure. With opportunities disappearing in a time of oversupply, a new educational institution had to come onto the scene. It had to be vocational and non-theoretical to service the general mass of post-secondary aspirants without endangering the top of the occupational structure. In fact, it is one that has proven to be able to attract students who were not "meant" to be in university. And, of course, we know the social classes that are, and will continue to be, drawn away from the universities in the future. This problem and solution is as true in Japan, Sweden, and Russia as it is in North America.

Relating this back to further research at the Macro-level, it is proposed that cross-cultural studies be made on college programs; extent of theoretical content; student background; social class bias; and movement of graduating students within the occupational structures.

Related to this must be a study of the role of the newly emerging semi-professional associations, their influence in the industries, their effect on the social mobility of their members, and their relationships with the state. And most important, is a study of the role of the state in financing, structuring and directing of the colleges.

At the micro-level, and drawing specifically from the present study, the following problems could be investigated:

(a) The Blishen Scale is dated due to the following:

(i) advent of community colleges, (ii) the rise of professional organizations, (iii) the recognition of college graduates by industries, (iv) disassociation of professional groups from semi-professionals, (v) the hindrance of social mobility of technicians and technologists, (vi) lowered salary for technologists doing the work formerly done by professionals, and (vii) community recognition and awareness of the graduates in terms of status and prestige.

(b) The L. V. Gordon, bureaucratic orientation scale needs refinement to enable differentiation of types of internalized ideologies. As it stands now, its performance is very similar to a thermometer. The problem is that, like a thermometer, it has its definite limitations. The scale cannot indicate the difference between super-ordinate and subordinate orientations.

(c) Due to a lack of time, this study had to resort to cross-sectional analysis to generate a basis for the working hypothesis. It is proposed that a longitudinal study be launched on the following levels:

- (i) high school to community college or the university
- (ii) community college to the work force
- (iii) university to the work force

If carried out over a 3-4 year period, definite inferences could be made under the existing theory and key variables in this paper.

Given this amount of time, other weaknesses in this study could also be overcome. For example, the unanticipated negative reaction of school administrators effected the direction and quality of research. Specifically, it produced a reluctance to (1) insist on proper "sampling" procedures; and, (2) to request the scholastic achievements from their files for those participating in the testing. The final weakness, of course, was the fact that there was no time to obtain information on university students.

APPENDIX A: COLLEGE X STATISTICS

The statistics reproduced in detail on the following pages are those obtained from College X. Pages one and two describe the program and list the populations found in each. Pages three and four show the proportions obtained, following the procedure for "quota sampling".

MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY

FULL-TIME STUDENTS October 15, 1972

	<u>FIRST YEAR</u>	<u>SECOND YEAR</u>	<u>THIRD YEAR</u>	<u>TOTALS</u>
<u>TECHNOLOGY DIVISION</u>				
<u>Technology Programs</u>				
Architectural Technology	<u>55</u>	<u>37</u>	<u>19</u>	
Computer Systems Technology	<u>67</u>	<u>23</u>	<u>8</u>	
Chem. Tech. - Chemical	<u>23</u>	<u>24</u>	<u>12</u>	
Civil Tech. - Civil	<u>25</u>	<u>37</u>	<u>24</u>	
Control Systems Tech. - Control Systems	<u>24</u>	<u>10</u>	<u>16</u>	
Electronics Tech. - Electronics	<u>54</u>	<u>34</u>	<u>41</u>	
Industrial Management Technology	<u>24</u>	<u>19</u>	<u>13</u>	
Mechanical Tech. - Mechanical	<u>19</u>	<u>22</u>	<u>22</u>	
Metallurgical Tech. - Metallurgical	<u>14</u>	<u>8</u>	<u>9</u>	
Quality Control Tech. - Quality Control	<u>3</u>	<u>-</u>	<u>-</u>	
Textile Tech. - Textile	<u>18</u>	<u>16</u>	<u>8</u>	
TECHNOLOGY	<u>326</u>	<u>230</u>	<u>172</u>	<u>728</u>
<u>Technician Programs</u>				
Architectural Technician	<u>29</u>	<u>18</u>		
Automotive Technician	<u>23</u>	<u>23</u>		
Construction Technician	<u>11</u>	<u>24</u>		
Food Processing Technician	<u>56</u>	<u>21</u>		
Electronics Technician	<u>65</u>	<u>42</u>		
Control Systems Technician	<u>30</u>	<u>15</u>		
Industrial Technician	<u>18</u>	<u>11</u>		
Mechanical Technician	<u>25</u>	<u>18</u>		
Hydro Power Technician	<u>13</u>	<u>8</u>		
Instrumentation Technician	<u>13</u>	<u>13</u>		
Medical Technician	<u>13</u>			
TECHNICIANS	<u>296</u>	<u>193</u>		<u>489</u>
TECHNOLOGY DIVISION	<u>622</u>	<u>423</u>	<u>172</u>	<u>1217</u>
<u>BUSINESS AND APPLIED ARTS DIVISION</u>				

MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY

FULL-TIME STUDENTS October 15, 1972 (continued)

ee Year Programs				
Business Administration	<u>197</u>	<u>91</u>	<u>81</u>	
Communication Arts	<u>102</u>	<u>26</u>	<u>12</u>	
Physiotherapy	<u>20</u>	<u>22</u>		
Photography	<u>22</u>			
al Three-Year Business/Applied				
s/Health	<u>341</u>	<u>139</u>	<u>93</u>	<u>573</u>
Year Business Programs				
Accounting	<u>68</u>	<u>45</u>		
Finance	<u>28</u>	<u>18</u>		
Insurance Administration	<u>23</u>	<u>14</u>		
Marketing	<u>88</u>	<u>45</u>		
Secretarial-Business	<u>153</u>	<u>21</u>		
-Legal	<u>-</u>	<u>52</u>		
-Medical	<u>-</u>	<u>43</u>		
AL TWO-YEAR BUSINESS PROGRAMS	<u>360</u>	<u>238</u>		<u>598</u>
Year Applied Arts Programs				
Child Care	<u>29</u>	<u>26</u>		
Community Planning	<u>20</u>	<u>15</u>		
Early Childhood Education	<u>39</u>	<u>38</u>		
& Security Administration	<u>32</u>	<u>21</u>		
Education Leadership	<u>41</u>	<u>34</u>		
Health Services	<u>29</u>	<u>20</u>		
Community School Worker	<u>16</u>			
Applied Arts Programs	<u>206</u>	<u>154</u>		<u>360</u>
AL BUSINESS/APPLIED ARTS/HEALTH	<u>907</u>	<u>531</u>	<u>93</u>	<u>1531</u>
AL COLLEGE FULL-TIME ENROLMENT	<u>1529</u>	<u>954</u>	<u>265</u>	<u>2748</u>

SAMPLE SELECTION DESCRIPTION FOR QUOTA SAMPLING

Total Full Time Enrollment	2748	<u>Sample</u>
Technology Division	1217	26.57 (27)
Technology Programs	728	16.15 (16)
Technician Programs	489	<u>10.84 (11)</u>
Architectural Technology		3.64 (4)
Computer Systems Technology		3.21 (3)
Eng. Tech. - Civil		2.82 (3)
Eng. Tech. Electronics		4.23 (4)
Eng. Tech. - Mechanical		<u>2.06 (2)</u>
		(16)
Technician Programs		
Architectural Technician		1.60 (2)
Civil Technician		1.57 (2)
Data Processing		2.63 (3)
Electronics Technician		<u>3.65 (4)</u>
		(11)

Business and Applied Arts

3 Yr. Programs 12.51 (12)

Business Admin.	8.37 (8)
1st year	4.27 (4)
2nd year	1.97 (2)
3rd year	1.75 (2)

Communication Arts 3.17 (4)

Two Yr. Business 13

Accounting	2.45 (2)
Finance (& Ins. Admin)	2.02 (2)
Marketing	2.89 (3)
Secretarial - Business)	5.84 (6)
- Legal)	
- Med.)	

Two Yr. Applied Arts 7.06 (8)

Child Care	1.22 (1)
Community Planning	.77 (1)
E.C.E.	1.71 (2)
Law and Security	1.17 (1)
Rec. Leadership	1.66 (2)
Social Services	1.08 (1)

S. Arvay

APPENDIX B: THE QUESTIONNAIRE AND NOTES ON THE DEVELOPMENT OF THE WEPS

The questionnaires reproduced in detail in this section can be classified into three types; the first, on page 15, is the one used for the high schools; the second, on pages 16 and 17, is the one for the community college. The basic difference between the two is found in the first two question-entries which deal with levels or grades and type of program; otherwise, the remaining test items are identical. The third questionnaire, on pages 18 and 19, is the purchased instrument, designed by L. V. Gordon to measure Bureaucratic Orientation. The pages that precede page 15 are devoted to general notes on the development and methodology for the "WEPS" instrument.

WORK ENVIRONMENT PREFERENCE SCHEDULE - WEPS

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INTRODUCTION

Bureaucratic organizations are highly prevalent in today's society. The identification of individuals who are particularly adaptable to this type of work environment has been a matter of practical concern and a broader understanding of their characteristics has been of considerable theoretical interest. The Work Environment Preference Schedule or WEPS should prove useful for these sorts of objectives. The WEPS is designed to measure a personality construct, "bureaucratic orientation," which reflects a commitment to the set of attitudes, values and behaviors that are characteristically fostered and rewarded by and in bureaucratic organizations.¹

High scores typify individuals who are accepting of and acquiescent to authority, who prefer to have specific rules and guidelines to follow, who prefer impersonalized work relationships and who seek the security of organizational and in-group identification. Low scores are made by individuals who do not so characterize themselves.

The bureaucratic orientation construct was derived directly from the structural schema of Max Weber (1946), which described the common denominator characteristics of bureaucratic organizations. Four behavioral categories, which paralleled those of Weber but describe individual rather than organizational characteristics, are incorporated in the WEPS. These are:

Self-Subordination - or a willingness to fully comply with the stated wishes of a superior and to have decisions made for one by higher authority.

Impersonalization - or a preference for impersonal or formal relationship with others on the job, particularly with individuals at different organizational levels.

Rule Conformity - or a desire for the security that the following of rules, regulations and standard operating procedures affords.

Traditionalism - or a need for the security provided by organizational identification and conformity to the in-group norm.

The WEPS should prove to be a useful instrument for both research and applied purposes. The bureaucratic orientation construct has conceptual relevance for a number of areas such as organizational and industrial psychology, education, personality and social psychology. The content of the WEPS has been

¹"Bureaucratic," as used here, refers to a particular type of organizational structure - one that is widely found in industrial, governmental, educational, and religious institutions. The popular and opprobrious use of this term to represent "red-tape" and inefficiency is not intended.

found to be meaningful for a broad spectrum of populations, including industrial and governmental employees, college students, upper level high school students, older retired people and military officer and enlisted personnel. Translations of the WEPS have yielded significant validities in a number of other cultures.

Scores on the WEPS would be expected to be related to industrial turnover. Individuals with high scores probably would be poorly suited for positions or organizations where initiative and independent judgment is expected, while those with low scores might well be dissatisfied in restrictive or highly structured work environments. The WEPS should prove serviceable for use in guidance, where for given vocational objectives, the counselee's work environment preferences would be considered in conjunction with the work climates in usually available sources of employment (see Gordon, 1967a).

A counterpart form, the School Environment Preference Schedule or SEPS has been designed for use at the high school and lower levels. However, at the 11th and 12th grade levels where the world of work is the frame of reference, as in occupational counselling, the WEPS and not the SEPS would be the instrument of choice. Beyond the 12th grade level the WEPS is the appropriate instrument. It may be used into the retirement years and with the unskilled, the skilled and the professional.

ADMINISTRATION

The Work Environment Preference Schedule is self-administering. The required directions are presented in full on the form itself. There is no time limit and everyone should be permitted to finish. Most respondents will complete the WEPS in 10 minutes or less. Fifteen minutes should be ample for all individuals.

SCORING

Only a single total score is obtained for the WEPS. The level of the relationships among the categories noted during the development of the WEPS rendered inadvisable any attempt to generate separate subscales or subscores (see Development).

The WEPS is scored by giving two points for each response of "Strongly Agree" or "Agree," one point for "Undecided" or "Disagree," and zero points for "Strongly Disagree." This scoring scheme was found to be optimal on the basis of internal and external item analyses of data from diverse populations.² Scoring is easily accomplished by counting the number of "Strongly Agree" and "Agree" responses, multiplying this value by two, and adding the resultant product to the sum of the "Undecided" and "Disagree" responses. A scoring box to facilitate this simple computation is provided at the bottom of the test form.

²Two other scoring methods are used with scales of the present type, the traditional Likert weights ranging from 1 to 5, and weights of 2 for "agree" and "strongly agree" and of 1 for the other responses. (Korn and Giddan, 1964). The present scoring method, which considers "extremeness response set" variance as potentially valid variance on the whole has been found to yield higher validities than either of the others (Gordon, 1967c, Kikuchi and Gordon, 1970a, Gordon, 1971b).

RELIABILITY

The coefficient alpha reliability of the WEPS was found to be .90 separately for Peace Corps and Counselor samples. The long range stability of WEPS scores was assessed by administering the instrument twice to a sample of 105 Army ROTC students, with a 16 month interval between testing. The resultant produce moment correlation of .65 reflects acceptable score stability, particularly since the ROTC program was designed in part to produce changes in bureaucratic values.

NORMS AND INTERPRETATION

Normative data are important for relating an individual's score to those of reference groups of interest. Norms for generalized populations will not necessarily serve this purpose best. In many, if not most, instances the local group will represent the more meaningful frame of reference and the development of local norms would be indicated.

A set of percentile norms are appended to the manual. Some are based on generalized samples, others on specialized samples, the latter being presented for illustrative purposes only.

It should be cautioned that use of the WEPS for personnel decisions must be based on evidence of validity of both practical and statistical significance. In such evaluations the WEPS should be administered under circumstances similar to those in which the instrument will be used operationally, and, as a matter of sound practice periodic re-validation is urged. Further, for assessment purposes, WEPS scores must be considered in the light of all other pertinent information, regarding the individual, his work group, his duties and/or his larger organizational setting. As is the case with other single test scores, information yielded by the WEPS is not sufficient in its own right for decision making purposes.

DEVELOPMENT

The classical bureaucratic model is characterized by a pyramid, consisting of positions which are ordered into a hierarchical system of super and subordination. Each position has well-defined activities and responsibilities, demanding specialized competence, and with authority delimited to that necessary for the discharge of its duties. Employees function as representatives of particular positions, which define the degree of formality and the nature of the relationships to be observed. Ultimate control of the organization rests at the top of the hierarchy. Reliability of behavior is maintained by directives, by rules and regulations and by standard operating procedures which prescribe the exact manner in which duties are to be performed.

A personality construct "bureaucratic orientation" was postulated as reflecting a commitment to the set of attitudes, values, and behaviors that are characteristically fostered and rewarded in the above type of organization.

The first step in the measurement of this construct required the development of a schema that would specify the particular classes of attitudes, values, and behaviors to be included. To this end, the theoretical and research literature was reviewed. The original descriptive schema of Max Weber (1946), which identifies the common denominator characteristics of bureaucratic organizations, appeared to be particularly suitable for this purpose. Accordingly, a set of categories parallel to those of Weber, but describing individual rather than organizational characteristics, was prepared. These included, along with Self-Subordination, Impersonalization, Rule Conformity and Traditionalism, a fifth category called Compartmentalization which reflected complete confidence in expert judgment and a need to restrict one's concern to one's own area of specialization.

Items were then written for these five categories, each item being worded so that agreement would reflect acceptance of the bureaucratic norm. No attempt was made to control for acquiescence by the usual technique of item reversal since acquiescence itself was assumed to be a characteristic of bureaucratic orientation.

It was intended that the measure of bureaucratic orientation would be broadly applicable. Accordingly, data from samples of both sexes and from highly diverse populations were obtained for item analysis purposes. Included were a nationally-representative sample of civil service workers at all organizational levels,³ students in trade training programs, college students, high school students and military personnel.

It was found that Compartmentalization items were unrelated or negatively related to those of the other four categories, particularly at the higher organizational levels. On the other hand, items from the other four categories were highly interrelated, with a single factor accounting for almost all of their content variance. Since differential category scoring would be inappropriate, Compartmentalization was eliminated from the final form. For each of the four remaining categories, six items that had the most satisfactory internal statistics across samples in terms of variances and relationships to the total category score were selected. These 24 items constituted the final instrument.^{4,5}

³The cooperation of Robert Hastings, Executive Assistant to the President, State, County and Municipal Employees Association - AFL-CIO, who assumed responsibility for this extensive testing, is gratefully acknowledged.

⁴The decision to eliminate the Compartmentalization items was made just after the presentation of an invited paper at the XVIth International Congress of Applied Psychology (Gordon, 1968a). Accordingly, in the republication of this paper (Gordon, 1969) and in its subsequent expansion (Gordon, 1970a) data based on 30 items, which included six Compartmentalization items, were reported.

⁵The component of Compartmentalization which reflects complete confidence in expert judgment was found to be an associated aspect of bureaucratic orientation for the younger student. This category, renamed "Uncriticalness," is included in the school form - the SEPS.

RELATIONSHIPS TO OTHER MEASURES

Merton (1940), Weber (1946) and others have proposed that work environments represented by the bureaucratic organizational model would appeal to individuals with certain specified personality characteristics. If the WEPS does in fact assess the individual's acceptance of the bureaucratic norm, significant relationships with measures of such characteristics would be expected. Correlations between the WEPS and values as measured by the Survey of Interpersonal Values (Gordon, 1960) and Survey of Personal Values (Gordon, 1967b) provide one such set of relationships. Results based on five different samples are presented in Table 1.

Table 1. Correlations between the WEPS and the Gordon Survey of Interpersonal Values (SIV) and Survey of Personal Values (SPV).⁶

SIV	Peace Corps (N=58)	Officer Trainees (N=95)	Trade Trainees (N=91)	College Males (N=60)	College Females (N=108)	Average (N=412)
Support	.13	-.01	.19	-.23	.19*	.07
Conformity	.44**	.45**	.35**	.47**	.24**	.37**
Recognition	.21	.16	.20	.31*	.31**	.24**
Independence	-.42**	-.31**	-.23*	-.45**	-.10	-.27**
Benevolence	-.05	.01	-.24*	-.05	-.19*	-.12*
Leadership	-.29*	-.19*	-.15	.13	-.20*	-.15**
SPV						
Practical Mindedness	.28*	.10	.10	.28*	.12	.16**
Achievement	-.42**	-.23*	-.02	-.06	-.17	-.17**
Variety	-.34**	-.21*	-.27**	-.44**	-.22*	-.28**
Decisiveness	-.39**	-.17	-.19	-.24	-.09	-.19**
Orderliness	.45**	.33**	.31**	.43**	.27**	.34**
Goal Orientation	.38**	.20*	.14	.14	.11	.18**

Highly consistent significant relationships will be noted between the WEPS and four of the value scales, in a positive direction with Conformity and Orderliness and in a negative direction with Independence and Variety. Thus, individuals who score high on bureaucratic orientation are inclined to place a high value on conformist behavior and on being systematic and orderly, and a low value on having personal independence of action and on engaging in new or varied activities. These results are in full accord both with prior findings regarding need satisfaction in bureaucratic environments and with inferences derivable from bureaucratic theory.

Additionally, significant relationships are noted for seven other value dimensions. Positively with Recognition, Practical Mindedness and Goal Orientation and negatively with Benevolence, Leadership, Achievement and Decisiveness. Thus, bureaucratically oriented individuals tend to place a higher value on being treated as important, on taking care of their possessions and on having clearly defined work objectives, and a lower value on treating other people with consideration, on being in a leadership position, on setting high standards of accomplishment for themselves,

⁶In this and following tables one (*) and two (**) asterisks reflect significance at the .05 and .01 levels, respectively.

or on coming to quick decisions. Certain of these characteristics resemble the opprobrious stereotype of the bureaucrat, and are reminiscent of some of the dysfunctional characteristics of bureaucracy described by Merton (1940).

Product moment correlations between the WEPS and scales of the Allport-Vernon-Lindzey Study of Values based on a Peace Corps sample (N=66) are presented in Table 2. The WEPS is significantly associated positively with the Economic value and negatively with the Aesthetic value. Thus, the more bureaucratically oriented individual is inclined to have a higher regard for what is useful and for the practical affairs of the business world and to be less interested in a diversity of experience or the artistic episodes of life.

Table 2. Product moment correlations between the WEPS and A Study of Values.

Values:	r	Values:	r
Theoretical	.00	Social	-.13
Economic	.48**	Political	.14
Aesthetic	-.34**	Religious	-.08

Correlations with certain other personality scales, based on samples of 108 female and 81 male college students are presented in Table 3. The most pronounced relationships are with Authoritarianism, as measured by the California F Scale (Adorno, et al, 1950) and with Rokeach's (1960) measure of Dogmatism. Both are in directions congruent with bureaucratic theory, high WEPS scores being associated with being authoritarian and dogmatic. Acquiescence (Couch and Kenniston, 1960) which was assumed to be related to bureaucratic orientation, is found to correlate significantly with the WEPS both for the female and combined samples, but to a modest degree.

Table 3. Correlations between the WEPS and other personality variables.

Variable	Female (N=108)	Male (N=81)	Total (N=189)
Authoritarianism (Levinson)	.50**	.66**	.59*
Dogmatism (Rokeach)	.43**	.47**	.45**
Acquiescence (Couch-Kenniston)	.27**	.08	.20**
Religious Conservatism (Couch)	.25**	.33**	.28**
Internal-External Control (Couch)	.20*	.39**	.28**
Machiavellianism (Christie)	-.11	-.19	-.20**
Social Desirability (Marlowe-Crowne)	.00	.11	.07

Scores on the WEPS are also positively associated with Religious Conservatism as measured by the brief Couch (1960) scale, a finding consistent with the nature of the bureaucratic orientation construct. A significant positive correlation is also found with Couch's (1960) measure of Internal-External Control, on which high scores reflect a belief that hard work pays off. For the total group, a significant negative relationship is noted with Machiavellianism (Christie, 1964) suggesting that bureaucratically oriented individuals are disinclined to be manipulative of others - they simply follow orders and adhere to rules and regulations. The zero correlation with Social Desirability (Crowne-Marlowe, 1964) suggests that for the group as a whole endorsing bureaucratic sentiments is not associated with a desire to make a favorable impression.

In the first, (Bronzo, 1966), the WEPS was administered to an entire class of 172 Boston College Air Force ROTC cadets during their first year in the two year program. At the start of the second year 77 or 44.7 percent of the class either had resigned or had not elected to continue. The expected difference between the means of the drop-out and continuing groups was found to be significant at .01 level of confidence (Table 5), and the predictive validity of the WEPS against the dichotomous "turnover" criterion is represented by a biserial correlation of .50.

Table 5. Predictive validity of the WEPS for a sample of Air Force ROTC cadets against a retention-drop-out criterion.

Group	N	Mean	SD
Remaining	95	31.1	5.3
Drop-out	77	26.5	4.9
Difference		4.6**	r = .50**

In the second study (Gordon, 1970b), Army ROTC students at all four grade levels at Siena College were given the WEPS early in 1969. At that time the program was mandatory for the first two years and voluntary for the remainder. The following year ROTC was made voluntary at all levels, and the WEPS means of those who re-enrolled and those who did not were compared. It will be noted (Table 6) that at each of the three retestable levels (the original senior group had graduated) those who re-enrolled were on the average the more bureaucratic, having the significantly higher WEPS mean.

Table 6. Mean WEPS differences between students who re-enrolled in an ROTC program and those who did not (with biserial equivalents).

Class (1969-70)	N	Sophomore Mean	SD	N	Junior Mean	SD	N	Senior Mean	SD
Re-enrolled	34	34.5	5.7	35	33.0	5.1	57	33.4	4.9
Non Re-enrolled	145	31.7	6.2	56	30.5	6.8	10	29.3	6.3
Difference		2.8**			2.5*			4.1*	
r (one-tail tests)		.26**			.25*			.42*	

In the third military study, the WEPS was administered to the entire class of 472 seniors at the United States Military Academy one week prior to graduation (Bridges, 1967). Each cadet then indicated, in probability terms, the likelihood of his resigning his commission after his obligated term of service was completed. When the cadets were divided into four groups, representing graduated degrees of stated military career commitment, a monotonic relationship was found between means of stated career motivation and the WEPS, with the F-ratio among means being significant at the .01 level (Table 7).

Table 7. Concurrent validity of the WEPS for a senior U.S. Military Academy sample against a career motivation criterion.

Level of Motivation	N	Mean	SD
Very high	116	31.9	4.1
High	174	29.4	5.8
Moderate	144	27.4	6.6
Low	38	21.0	8.3
Total	472	28.8	6.6
			r = .44**

For the entire sample, the concurrent validity of the WEPS against this army career motivation criterion was reflected by a product moment correlation of .44. (A validity of the same magnitude was obtained in a replicated study with the senior class the following year).

Two studies, conducted in the Orient, were designed to relate WEPS scores to the employees' feelings of satisfaction with aspects of their highly bureaucratic work environments. In the first, (Gordon and Kikuchi, 1970b) the WEPS (in translation) was administered to several male samples in silk and steel companies in Japan, followed by a standardized measure of industrial morale which assessed the worker's feeling of job security and promotion possibility. Correlations between the WEPS and morale measure were positive for all samples (Table 8) with a significant ($p < .01$) average value of .35. Thus, the more bureaucratically oriented employee was inclined to feel more secure and to think of his company as offering the greater prospect of advancement.⁷

Table 8. WEPS means and standard deviations for male Japanese industrial samples and correlations with an industrial morale index.

	<u>N</u>	<u>Mean</u>	<u>SD</u>	<u>r</u>
Factory Workers (Silk)	23	36.1	5.0	.34
Clerical Workers	17	34.3	6.2	.67*
Mechanical Workers	33	35.8	4.3	.10
Mechanical Supervisors	15	36.8	5.5	.41
Steelworkers	35	32.4	5.2	.36*

In the second (Gordon and Khalique, 1971), both the WEPS and a morale scale were administered to every fourth male school teacher on the roster of four large secondary schools in Patna, India. The morale scale was designed to assess the teacher's over-all satisfaction with his assigned duties, his colleagues, his superiors and the general actions of the higher administration. When the teachers were divided about equally into upper, middle and lower groups on the basis of their morale scores, the WEPS means for the three groups were found to differ significantly from one another ($p < .05$), the higher the level of expressed morale, the higher the average WEPS score (Table 9). This relationship is reflected by a product moment correlation of .58 ($p < .01$) for the entire sample.

Table 9. WEPS means and standard deviations for Indian teachers in the upper, middle and lower morale groups.

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Upper	15	42.0	10.4
Middle	16	34.2	5.3
Lower	15	27.7	9.7

$r = .58^{**}$

⁷ The use of test translations in other cultures is discussed in Gordon and Kikuchi (1966), Gordon (1968b), and Kikuchi and Gordon (1970b).

Another other-cultural study (Gordon and Khalique, 1971) bearing on the validity of the WEPS was conducted during a partially effective teachers' strike in the state of Bihar, India. Despite warnings by the government, about half of the secondary school teachers (all male) went on strike for increased economic benefits. All accessible teachers in the upper two pay levels, including those who participated in the strike and those who refused to strike were administered the WEPS. As anticipated, a significant ($p < .05$) difference in bureaucratic orientation was found between the two groups, (Table 10) those who militantly opposed the bureaucratic authorities having the lower WEPS mean. The biserial correlation equivalent of this difference is .40.

Table 10. WEPS means and standard deviations of striking and non-striking Indian teachers.

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Non-strikers	22	35.9	11.4
strikers	27	28.2	11.6
Difference		7.7*	$r = .40^*$

Selznick (1943) observed that bureaucratic attitudes (of the type measured by the WEPS) are differentially held among organization levels, being stronger at the lower levels and weaker at the higher. Data obtained on the developmental form of the WEPS from supervisory and non-supervisory personnel in the same organizations (civil service employees, institutional nurses and high school teachers) consistently revealed significant mean differences ($p < .01$) between levels, those at the higher levels being the less bureaucratic. Parenthetically, differences among levels were not found in Japan, in the steel and silk companies, where fixed role definitions and traditionalistically determined behavior characterize all organizational levels.

The direction of the relationship between scores on the WEPS and performance ratings in bureaucratic organizations will depend on such factors as level, the particular job requirement, organizational climate, and the behavioral expectations of those making the evaluations. Following are some findings of interest in this regard.

A study was conducted by the Research Division of a major American oil company to determine the relationship between bureaucratic orientation and two operational indices of job effectiveness. The WEPS was administered to a national sample of 149 non-managerial warehouse personnel who were responsible for the care, custody and delivery of the company's products to customers and service stations. The concurrent validity of the WEPS with rated job performance was $-.26$, and with promotion potential was $-.36$, both significant at the one percent level. Thus, the less bureaucratic employee was judged to be the more effective worker and the better prospect for advancement to a managerial position.

A study supported by the New York State Department of Mental Hygiene was designed in part to determine the relationship between bureaucratic orientation and effectiveness of mental hospital support personnel. The samples consisted of two types of personnel. The first were experienced employees in hospitals at five locations, three in one eastern state (A, B, and C) and two in the west (D and E). These people were primarily employed as aides and food service and custodial personnel. The second type of personnel were students in a Psychological Aide Training program in a third western hospital (F). The level of experience of members of this group was

minimal, being largely associated with their training. For members of each sample, two sets of ratings were obtained. The first, Personal Relations, represented an ability to interact with patients in a warm, supportive and congenial manner in day by day relationships; the second, Work Effectiveness, assessed the individual's effectiveness on the job. For the experienced personnel, ratings were obtained from work group peers at the eastern installations and from supervisory personnel at the western hospitals. For the Psychological Aide trainees ratings were obtained from both peers and instructional staff. Except for installation E, the proportion of male employees was very small and accordingly results are reported only for the females.

Table 11. Correlations between WEPS and Ratings of Personal Relations and Work Effectiveness for female experienced mental health hospital employees and student trainees.

<u>Experienced</u>	Rating	N	Personal Relations	Work Effectiveness	Mean	SD
Eastern A	Peer	45	-.34*	-.31*	35.7	5.2
Eastern B	Peer	73	-.31**	-.12	36.1	5.5
Eastern C	Peer	57	-.22	-.17	37.3	5.6
Western D	Sup.	45	-.33*	-.49**	21.8	7.1
Western E	Sup.	36	.33*	.28	32.7	7.2
<u>Trainees</u>						
Western F	Sup.	37	.16	.09	28.9	6.3
	Peer	37	.29	.16		

For the eastern samples, (Table 11) correlations between the WEPS and the two criteria are negative in sign, indicating that the more bureaucratic individuals are perceived by their peers as interacting less effectively with patients and as performing less well in their work assignments. Separate analyses for Black and Caucasian personnel at the eastern hospitals (Table 12) reveal similar directional relationships for both races. Further WEPS means for the Black and Caucasian samples across installations were not found to differ significantly ($p < .05$).

Table 12. WEPS means and validities for female Black and Caucasian mental health hospital employees.

	Rating	N	Personal Relations	Work Effectiveness	Mean	SD
Black	Peer	96	-.27*	-.16	36.9	5.1
Caucasian	Peer	79	-.30*	-.19	35.9	5.7
				Difference	1.0	

Correlations for the two experienced western samples (Table 11) consisting of Anglo-American females, are not directionally consistent, with significant negative and positive relationships occurring respectively for the two hospitals. It is instructive to note that sample E for whom the WEPS has positive validity is substantially ($p < .01$) more bureaucratic than sample D. While the two groups were equivalent in educational level, the former was significantly older and had longer experience in a mental health setting. For the inexperienced trainees, the WEPS is positively but non-significantly associated with instructor ratings.

Correlations of the WEPS with age, length of service, job satisfaction, educational level and a Mental Health Work Judgment Test are presented in Table 13 for the six installations. Job satisfaction was measured on a simple five point scale. The Work Judgment Test, prepared by the New York Civil Service Commission, described problems that might arise with patients and required the respondent to identify the preferred solution.

Table 13. Relationships of the WEPS with selected variables for female mental health hospital employees at six installations.

	INSTALLATION						Average (N=293)
	A (N=45)	B (N=73)	C (N=57)	D (N=36)	E (N=45)	F (N=37)	
Age	.31*	.01	.18	.27	.18	.44*	.20**
Experience	.29*	-.16	.44**	.32	-.05	.11	.14*
Job Satisfaction	.14	.31**	-.02	.38*	.19	.12	.19**
Educational Level	-.57**	-.43**	-.22	-.42*	-.34*	-.38*	-.39**
Work Judgment	-.36*	-.34**	-.41**	-.27	-.19	-.17	-.30**

On the whole, the WEPS is positively associated with age, length of service and job satisfaction. The more bureaucratic employee tends to be older, to have a longer period of service and to be better satisfied with her job. The WEPS also is related but in a negative direction to educational level and to the work judgment measure. Thus, the more bureaucratic hospital employee is inclined to be the more poorly educated and to be less aware of how to cope with problems that might arise with patients within the hospital.

GROUP DIFFERENCES

Evidence regarding the validity of the WEPS also may be obtained by examining means of groups whose organizational circumstances differentially fit the model on which the instrument is based. Data for several groups are presented in Table 14. It may be noted that very high means are found for individuals who had over-adapted to a highly bureaucratized environment - male and female residents at a Veteran's Administration domiciliary, most of whom had been at the domiciliary for an extended period of time with psychosomatic complaints and with whom attempts at rehabilitation had been unsuccessful. Likewise very high means were also obtained for experienced hospital service personnel of both sexes. On the other hand, substantially lower means occur for Peace Corps volunteers, tested at the end of training, and for university faculty. Members of the latter groups were largely responsible for structuring their own work environments and for making their own decisions.

The WEPS means in Table 14 are simply illustrative and are not intended to characterize broad populations. For example, mean differences may be found among similar occupational groups from different companies or regions or of different age or educational levels. The means presented will serve as a useful frame of reference for assessing the level of means obtained for particular samples of concern.

Table 14. Illustrative means and standard deviations for the WEPS.

<u>Male</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
V.A. Domiciliary Residents	171	39.6	6.7
Oil Company Deliverymen	149	37.8	5.2
Hospital Service Personnel	25	35.0	7.0
Heroin Addicts - hospitalized	66	33.2	6.0
Army ROTC Students	393	32.1	6.2
Community College Students	91	31.5	5.7
Oil Company Salesmen	138	29.7	5.8
Military Academy Seniors	472	28.8	6.6
High School Seniors	123	27.7	8.4
College Students (education)	81	27.5	6.4
Guidance Counselors (H.S.)	48	26.7	7.5
Peace Corps Volunteers	46	25.5	8.5
Professors (education)	21	20.4	8.2
<u>Female</u>			
V.A. Domiciliary Residents	32	39.6	5.8
Hospital Service Personnel	207	36.7	5.5
High School Seniors	129	28.3	7.0
Guidance Counselors (H.S.)	20	27.4	5.0
College Students (education)	108	27.2	6.1
College Health Nurses	50	26.5	5.3
Peace Corps Volunteers	20	23.0	7.7
Professors (education)	12	21.8	8.3

USES OF THE WEPS

The individual differences measure generated from the bureaucratic organizational model is of interest from a number of points of view. First, in recent years serious attention has been paid to the congruence between individual and environmental variables, such as the individual's need system and the environmental press or his role expectation and the organizational norm. Underlying this particular emphasis is the assumption that the greater the congruence between the orientation of the individual and that of the organization, the greater the satisfaction of the individual and the more likely he is to remain in it. Early efforts in this direction are exemplified by the work of Pace and Stern (1958) and Gouldner (1957) in their respective studies of students and professionals in academic settings. The WEPS provides a measure of the individual's orientation toward those attitudes, values, and behaviors that are fostered in a highly prevalent type of organizational climate, and would be expected to be predictive of his adaptability to it. Thus, the WEPS could be potentially useful for selection, assignment or guidance purposes.

Second, the climate of an organization or organizational unit is an important datum for both administrative and research purposes. However, its direct measurement is sometimes cumbersome, threatening or otherwise difficult to achieve. By relating employee evaluations to their WEPS scores, inferences may be made as to the extent to which bureaucratic attitudes and values are rewarded by a particular supervisor, within a particular unit, in particular types of positions within the organization, or in the organization as a whole.

Third, the impact of bureaucracy on the personality of the individual has been a matter of considerable concern to organizational and other theorists. Merton (1940), for example, spoke of personality change as being a probable major outcome of bureaucratic service, Weber (1946) expressed concern that growing bureaucracy was "partialling out the soul" of mankind, and Blau and Scott (1962) remarked that . . . "the possibility that free men become mere cogs in the bureaucratic machineries is one of the greatest threats to our liberty." Each has stressed the importance of research in this area. The "bureaucratic orientation" construct, as measured by the WEPS, would be particularly meaningful in such research since it reflects an intended outcome of the bureaucratization process. Changes in WEPS scores with length of service would constitute directly relevant data; that personality dimensions which are most highly correlated with the WEPS would be most susceptible to the bureaucratic press, would represent a reasonable research hypothesis.

And finally, "bureaucratic orientation," like authoritarianism and dogmatism, would seem to be an important personality construct in its own right. It subsumes behavior that is both prevalent and socially significant, and differs from constructs measured by other available instrumentation. A continuation of the mapping of the constellation of characteristics related to this construct, begun in the present study, would be of theoretical significance.

COMMUNICATIONS

The author will appreciate receiving results of research involving the WEPS and/or SEPS as well as other information or comments related to their use. Communications should be addressed to:

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Name is NOT required on this questionnaire

Which year of high school are you in?

☐
☐

Grade 12

Grade 13

How much more schooling do you expect to get after high school?

☐
☐
☐
☐

no more is required for the occupation that
I am entering

2 or 3 years in community college

a university education

if "other" specify _____

In a few sentences, what are your occupational aspirations for the future?

What is your age? _____

In your family, who has earned most of the money used to live on during your lifetime?

☐
☐
☐
☐

father or step-father

mother or step-mother

both

if "other" specify _____

What has been the occupation of the person you checked in above in (5) ?

Has this person worked for himself or has he (she) been employed by somebody else?

☐
☐

worked for himself or owns own business

employed by somebody else (a firm)

How far did this person go in school?

☐
☐
☐
☐
☐

attended grade school

attended high school

attended business school, trade or technical school

attended college

attended university

1. Which of the following programs are you enrolled in? (check one)

☐
☐
☐
☐
☐
☐

- General or Applied Arts
- Visual Arts
- Technology
- Business (also computers)
- School of Design
- Secretarial Science

2. Which year of the program are you in?

☐
☐
☐

- 1st year
- 2nd year
- 3rd year

3. How much more schooling do you expect to get after college?

☐
☐
☐
☐

- no more is required for the occupation that I am entering
- a few more years of college or university extension
- a university degree
- if "other", specify,

4. In a few sentences, what are your occupational aspirations? (future)

5. What is your age?

6. What kind of residence do you now occupy?

☐
☐
☐

- an apartment close to the college
- with parents
- other

6. In your family, who has earned most of the money used to live on during your lifetime?

- | | |
|--------------------------|------------------------------------|
| ☐ | father or step-father |
| ☐ | mother or step-mother |
| ☐ | both of the parents nearly equally |

7. What has been the occupation of the person you checked in above?

8. Has this person worked for himself or has he (she) been employed by somebody else?

worked for himself or owns own business

employed by somebody else (a firm)

9. How far did this person go in school?

- | | |
|--------------------------|---|
| ☐ | attended grade school |
| ☐ | attended high school |
| ☐ | attended business school, trade or technical school |
| ☐ | attended college |
| ☐ | attended university |

10. If you are married and if it had any bearing on your education please specify.

Key: SA - Strongly Agree
 A - Agree
 U - Undecided
 D - Disagree
 SD - Strongly Disagree

- | | | | | | |
|---|----|----|----|----|----|
| 10. A person should think of himself as a member of the organization first, and an individual second. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 11. People are better off when the organization provides a complete set of rules to be followed. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 12. Within an organization, it is unwise to question well-established ways of doing things. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 13. A superior should expect subordinates to carry out his orders without question or deviation. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 14. Within the organization, it is better to maintain formal relationships with other people. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 15. There is really no place in a small organizational unit for the nonconformist. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 16. Pins, written commendations, ceremonies, etc. are all signs of a good organization. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 17. The most important part of a superior's job is to see to it that regulations are followed. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 18. In general, a person's rank or level should determine his relationships toward other people. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 19. Job security is best obtained by learning and following standard work procedures. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 20. A person should defend the actions of his organization against any criticism by outsiders. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 21. A person should do things in the exact manner that he thinks his superior wishes them to be done. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 22. Within an organization, a person should think of himself as a part in a smooth running machine. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 23. It is better to have a complete set of rules than to have to decide things for oneself. | SA | A | U | D | SD |
| | == | == | == | == | == |
| 24. Length of service in an organization should be given almost as much recognition as level of performance. | SA | A | U | D | SD |
| | == | == | == | == | == |

2X	+		=	
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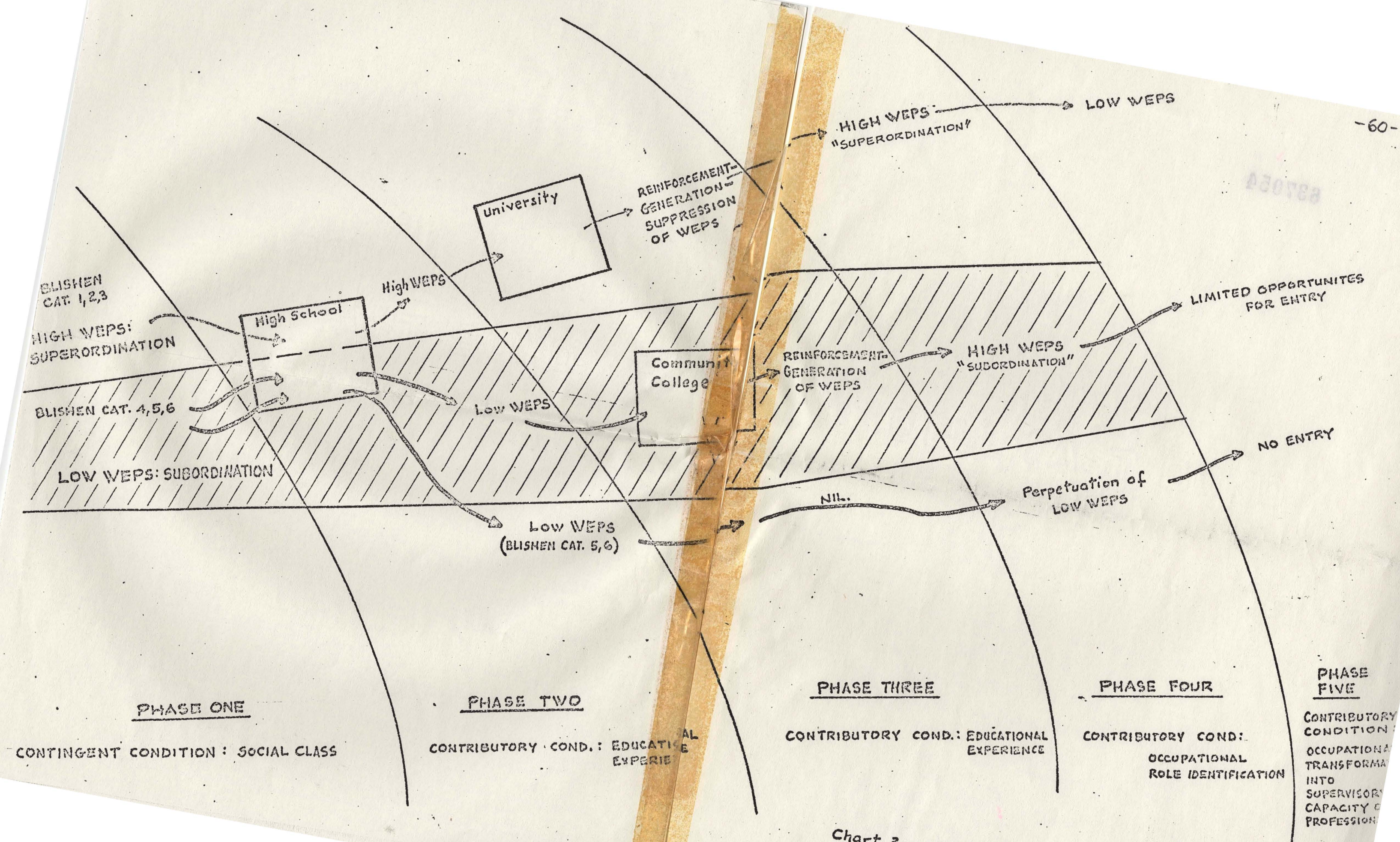


Chart 3. Variable Transformations of WEPs Based On Educational Experiences And Occupational Movements As Contributory Conditions.