A ROLE THEORY INTERPRETATION OF THE PREPARATION OF NEW YORK STATE JUNIOR COLLEGE ECONOMICS TEACHERS

by James Peter Moran

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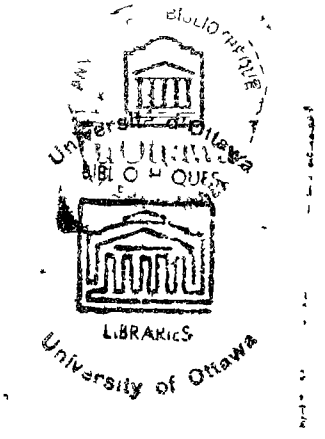

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CURRICULUM STUDIORUM

James P. Moran was born February 26, 1932 in Springfield, Massachusetts. He received the Bachelor of Arts degree in Economics from Stonehill College, North Easton, Massachusetts, in 1954. He received the Master of Arts degree in Economics from Boston College, Boston, Massachusetts, in 1959. The title of his thesis was Flexible Fiscal Policy Through Administrative Stabilizers.

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

This study investigates the interrelationships between economics teacher preparation and the expectations concerning levels of preparation by teachers, administrators, and recognized professional academicians. The study is limited to New York State community-junior colleges and utilizes an elementary role theory model.

In broad terms, the principal concern of educators should be proper understanding of and balance between the aims, agents, matter, and methods of education. This entails curriculum which is directed towards both ultimate and proximate aims. The process should utilize all relevant and appropriate methods to actualize the primary agent of education, the student, as fully as possible in the psycho-socio-politico-economic system in which he lives. This obviously focuses attention on the student as the prime agent and purpose of the educational process.

Beyond the student, there are many agents of education, not the least of which is the school. In turn, the school is comprised of sub-agents including the administrators, the teachers, and recognized professional academicians. The professional academician may be the teacher, the administrator, and/or other persons in the broader sub-cultural institution called the school.

This study does not deal with the whole integration of aims, agents, matter, and method of education. It does consider the preparation of the teacher as an agent in a limited part of the curriculum of the community-junior college; namely, that which is devoted to economics.

The urgency of greater quality and quantity of economic education is critical. The Constitution of the United States and the thinking of her founding fathers intended that the American people should be free in every respect compatible with honesty and the general welfare. These principles of freedom and democracy are embodied in our economic system, and it is this politico-economic system that has produced for Americans the highest level of living of any nation of the world.

The fact that the citizens of the United States are the beneficiaries of an economic system that is capable of providing such abundance should be sufficient reason for understanding it. On the other hand, their failure to understand the politico-economic system could result in its gradual erosion and eventual downfall.

It is evident, however, that understanding of the economic system is weak. For many years economists have felt that Americans were economic illiterates. This feeling was substantiated by a study conducted by McKee and

Moulton[1] (1951) under the sponsorship of The Brookings Institution. According to their investigation:

> It is clear that the organized educational institutions have not adequately met the educational requirements in this field. Only about 25 per cent of college students enroll in economics courses. In the high schools less than 5 per cent of those who graduate have had a course in economics; and the social science texts, which contain a smattering of economics--commonly written by individuals without training in this field--provide very poor substitutes (. . .) This situation in the schools is due to a combination of factors: traditionalism, crowded curricula, the dearth of trained teachers, and the difficult character of the subject matter. There remains a great challenge for professional educators in this area[2].

Bach and Saunders[3], writing in the June 1965 issue of the American Economic Review, indicate only slight improvement since the original study by McKee and Moulton. They estimate 10 to 20 per cent of high school students currently take a separate course in economics.

The Brookings Institution study sufficiently aroused the economics profession and other interested groups to action. In July 1960, the National Task Force on Economic Education was established. The T sk Force members were appointed by

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1 C. W. McKee and H. G. Moulton, A Survey of Economic Education, Washington, D. C., Brookings Institution, 1951, p. viii-63.

2 Ibid., p. 57.

3 G. L. Bach and Phillip Saunders, "Economic Education; Aspirations and Achievements," American Economic Review, Vol. 55, June 1965, p. 329-356.

the American Economic Association and its work was financed by the Committee for Economic Development.

The task force report:

> (. . .) paints a disturbing picture of the absence of teaching of economics in high schools, the only place where we can be sure of reaching most of the citizens of tomorrow. For less than half of all high school graduates go on to college, and only a quarter of these ever take a college course in economics[4].

The potential role of the high school in promoting economic education is clear. The role of the rapidly expanding community-junior college in the United States is equally clear. It is an excellent second line of defense for promoting education in general and economic education in particular.

Forcasting enrollment increases for higher education, Tickton states that they "will double between 1960 and 1970, or thereabouts, triple by 1980 or thereabouts, and continue upward thereafter for years to come"[5]. Vairo[6] anticipates that junior colleges will accomodate fifty per cent of this future college population.

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4 G. L. Bach, Chairman, Economic Education in the Schools: Report of the National Task Force on Economic Education, New York, C.E.D., 1961, p. 5.

5 S. G. Tickton, "The Outlook for Higher Education," 1964 Conference Report of the Seventeenth Annual Conference of the N.Y.S.A.J.C., New York, 1964, p. 4.

6 Philip D. Vairo, "Faculty Quality: A Challenge to the Community College," Journal of Higher Education, Vol. 36, April 1965, p. 217-220.

Many questions are raised by such considerations. The question 'Is your faculty competent?' is one of the most fundamental questions which can be asked of any educational institution.

One of the many facets of the problem of faculty competence is the need for evaluating teacher effectiveness. In discussing contemporary research on this topic, Biddle and Ellena[7] (1964) indicate that a vast amount of research has been done, yet, Travers[8] (1950) concluded that there are "no methods available for appraising the effectiveness of teaching at the higher levels of education"[9]. Similarly, Brain[10] (1965) observes that:

> (. . .) little progress, if any, has been made in the research studies on teacher effectiveness. The more studies one examines, the more negative one's attitude is likely to become about the success achieved. Some approaches held promise, but many appear to have little merit and may be considered primarily as exercises in procedural research[11].

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7 Bruce J. Biddle and William J. Ellena, Contemporary Research on Teacher Effectiveness, New York, Holt, 1964, xiii-352 p.

8 Robert M. W. Travers, "Appraisal of the Teaching of the College Faculty," Journal of Higher Education, Vol. 21, Jan. 1950, p. 41-42 and 56.

9 Ibid., p. 56.

10 G. Brain, "Evaluating Teacher Effectiveness," NEA Journal, Vol. 54, Feb. 1965, p. 35-36.

11 Ibid., p. 36.

The nature of this study makes the problems of evaluation more difficult because the data gathering approach is similar to that of accrediting agencies. Pattillo[12] (1955) has critically observed that this approach is concerned almost exclusively with the means of education rather than with the results. The reason for this neglect of the product of education is not "that accrediting agencies are uninterested in the product, but rather that it is very difficult to get evidence on the outcomes of an educational program"[13].

The difficulties of evaluation of faculty competence are made worse because "adequate" preparation is an evasive concept. On the one hand, the meaning of "adequate" changes over time and, on the other hand, it differs in situation, e.g. differs with the various purposes of the particular institution. In addition, while the "properly" prepared teacher will probably promote education (economic) there is no guarantee that this result will follow; nor is the opposite true.

These difficulties in evaluating adequacy of preparation seem to be partially solved by examining the question in the light of an elementary role theory model. To accomplish this two principal matters must be dealt with.

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12 Manning M. Pattillo, "Accrediting in the Public Interest," Educational Record, Vol. 33, April 1955, p. 120-128.

13 Ibid., p. 125.

The first is to determine the perceptions and expectations of the teachers, administrators, and professional academicians concerning levels of preparation for junior college economics teachers. The approach of determining the expectations of the teachers and administrators by means of questionnaires and the expectations of the professional academicians from a review of the literature has been selected. Thus, the review of the literature must be partially devoted to determining these expectations.

Secondly, it is necessary to select or devise a role theory model. Consequently, this becomes one of the aims of the review of the literature as well.

Summary

The principal agent of education is the student. The major aim of organized education should be to facilitate the development of the whole person in creative interaction with the whole environment. Yet, in studies involving the field of education it is necessary to focus attention on the smaller parts of that whole.

Americans are considered to be economic illiterates. If the erosion of the American politico-economic system is to be prevented, economic literacy must be promoted. Indirectly this study has that aim. Consequently, it focuses attention

on the preparation of New York State community-junior college economics teachers.

Because of the difficulties in evaluating adequacy of teacher preparation which has full meaning only if it is related to the product of education, this analysis is within the framework of an elementary role theory model.

The general hypothesis flowing from the problem is that comparisons of actual economics teacher preparation and expectations concerning preparation by teachers, administrators, and professional academicians will indicate patterns of convergence and divergence as well as latent conflict situations.

CHAPTER I

REVIEW OF THE LITERATURE

The review of the literature is divided into two major parts. The first deals with the development of a role theory model to serve as a framework for analysis. The second section seeks to determine the role expectations concerning preparation of junior college economics teachers as seen by the professional academicians. The latter are, for the most part, specialists in pedagogy and subject matter areas. Since the principal purpose of the study is to investigate the preparation of the economics teachers, the review of the literature concerning role theory is not designed to be exhaustive, but, rather, sufficient to develop the foundations of the theory so that it can serve as the vehicle of analysis.

1. Role Theory.

Although role theory had its origins around the turn of the century in the work of James M. Baldwin, G. Stanley Hall, William James, and John Dewey and continued with contributions by Charles H. Cooley, George H. Mead, and many others, it did not exert much pressure on the currents of American Social-Psychological thought until the 1940's and 1950's[1]. Today most role theory applications have their

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1 Theodore R. Sarbin, "Role Theory," in Handbook of Social Psychology, Cambridge, Mass., Addison-Wesley, 1954, p. 223-224.

heuristic origins in Toward a General Theory of Action edited by Parsons and Shils[2] (1951). Role theory is a part of the broader framework proposed in this work as a "unified conceptual scheme for theory and research in the social sciences"[3].

The concept social role has a great variety of meanings in the literature of sociological, social psychological, anthropological, and educational research. In reviewing over eighty sources Neiman and Hughes concluded that:

> The concept role is at present still rather vague, nebulous, and nondefinitive. Frequently in the literature, the concept is used without any attempt on the part of the writer to define or delimit the concept, the assumption being that both writer and reader will achieve an immediate compatible consensus[4].

A conceptual scheme which serves to effectively clarify the major concepts of role theory and to provide a springboard to a modified model for the particular purposes of this study is found in the work of Brookover[5]. The following is a summary of his major concepts.

Investigation of the total behavior situation which involves roles and role-taking rests on the assumption that

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2 Talcott Parsons and Edward A. Shils, Editors, Toward a General Theory of Action, Cambridge, Mass., Harvard University Press, 1951, .xi-506p.

3 Ibid., p. 4.

4 L. J. Neiman and J. W. Hughes, "The Problem of the Concept of Role--A Re-Survey of the Literature," Social Forces, Vol. 30, 1951, p. 149.

5 W. B. Brookover, "Research on Teacher and Administrator Roles," Journal of Educational Sociology, Vol. 29, 1955, p. 2-13.

this behavior is meaningful only when viewed in a social interaction situation. The concept of role involves an actor in relation to others in particular social groups. To facilitate understanding, it is helpful to visualize the group on one side with its expectations, the actor (person) on the other side with his expectations, and interaction between the two in the center.

Beginning from the point of view of the group, members of any group have general status expectations which apply to any person who occupies a status or position in the group. For example, there are general status expectations concerning teachers from school administrators, from school boards, from students, from the general public, and from other groups.

These general status expectations take on more specific form. Similar to and flowing from the general status expectations, is status in situation. Involved here is the modification of the general expectations as applied to, for example, expectations concerning the economics teacher in school X. Most of the general expectations must be retained, but modified according to situation.

Further modifications are necessary in order to relate these concepts of status to the role expectations of the group as they apply to a particular person in a particular situation. This, for example, would be the groups role expectations of John Doe, an economics teacher in school X.

Turning from the point of view of the group to that of the individual person or actor as he comes into a particular social situation, the actor brings with him a set of prior experiences, drives, perceptions, and expectations related to this status. These experiences, drives, perceptions and expectations are constantly changing.

The change is identified as self-improvement. This is the actor's self-image as he projects himself into the particular status or role. It includes his anticipation of need satisfaction, rewards, punishment, etc., as he occupies the status in this situation. The amount of self-improvement will vary with the group or groups in which the actor is participating.

The actors definition of what others expect of him is another aspect of role and it will vary with his own needs, perceptions, and self-involvement in the status.

In the center of the construct of role theory is the actor's (ego) behavior in interaction with members of the particular group (alter). This is the behavior of the actor as he takes the role in situation with the idiosyncratic variations that result from the way in which he is involved and defines his role. To the extent that the actor's perception of his role does not agree with others expectations of him, conflict of either a latent or manifest type may occur.

This behavior in interaction is always in process. Role perceptions and expectations of both the actor and the group are constantly being redefined. Thus, the role expectations organize the need-dispositions of a number of individuals into a systematic whole so that social ends are maximized.

2. Expectations Concerning Levels of Preparation by the Professional Academicians.

This section of the review of the literature is primarily concerned with determining the typical role expectations of professionals in pedagogy and/or subject matter areas concerning levels of preparation for junior college economics teachers. Proper perspective of these expectations can be gained only if the junior college situation is known in certain specific respects. Toward these aims the review considers: a) The purposes or aims of the junior college, b) Certification and accreditation, c) The differences between junior and senior college teaching, d) The general attributes and competencies desirable in the junior college teacher, and e) Academic and professional training desirable. These topics are considered from the viewpoint of authoritative opinion and the reports of research studies.

a. The purposes of the junior college.--Agreement exists on four principal functions or roles of the community-junior college. Representative statements of these aims

have been made by Garrison[6] (1941), Dolan[7] (1952), and Blocker[8] (1966). The terminology used by these writers varies, but the concepts are essentially the same. In Blocker's[9] terminology, the purposes of the community-junior college are college parallel, technical and vocational, guidance, and community service. The students related to the college parallel function are transfer students, while those related to the other three functions are both transfer and terminal students but they fall primarily into the terminal category.

b. Teacher certification and accreditation.--Teacher certification requirements at all levels of education in each of the fifty states are listed by Woellner and Wood[10] (1965). They report that in New York State there are no state regulations governing the preparation required of junior college teachers. Many other states have certification requirements at this level, but, since New York

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6 Lloyd A. Garrison, "Preparation of Junior College Instructors," Junior College Journal, Vol. 11, Dec. 1941, p. 204-209.

7 F. J. Dolan, "The Preparation of Junior College Teachers," Junior College Journal, Vol. 22, Feb. 1952, p. 329-336.

8 Clyde G. Blocker, "Are Our Faculties Competent?," Junior College Journal, Vol. 36, Dec. 1965-Jan. 1966, p. 12-17.

9 Ibid., p. 15.

10 Elizabeth H. Woellner and M. Aurilla Wood, Requirements for Certification: Thirtieth Edition 1965-1966, Chicago, University of Chicago Press, 1965, p. 111.

State is the field of study in this project, this has little bearing on the topic. It is probable that an absence of certification requirements will continue in New York State because "all members of the Division of Higher Education are against certification requirements at the higher educational levels"[11]. While certification requirements are established by the legislature, they are established after consultation with and usually in cooperation with the New York State Education Department.

This same department is also entrusted with the function of accrediting all of the institutions of higher education in the state. The sixty-five community-junior colleges in New York State have been accredited by the department. In addition, thirty-two of the institutions have been accredited by the Middle States Association of Colleges and Secondary Schools, while two have had curricula accredited by the Engineers' Council for Professional Development[12].

c. Differences between junior and senior college teaching.-- The differences that are described in the literature do not seem to be as numerous as the similarities between

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11 Robert W. Frederick, Consultant, Two Year College Programs, University of the State of New York, State Education Department, Division of Higher Education, Personal Correspondence with the Author, letter dated April 7, 1966.

12 William A. Harper, Editor, Junior College Directory, Washington, D. C., American Association of Junior Colleges, 1966, p. 35-37.

these two levels of teaching. Generally, the qualities that are considered important for good teaching in a senior college are also desired in the community-junior college. Differences which have been identified often seem to be due to the different purposes of the institution.

A comparison of junior and senior college instructors designed to identify major differences between the two was reported by Reeves[13] in 1929. Major differences were[14]: 1. Seventy-two per cent of the junior colleges required teachers to have had some education course work while none of the senior colleges had such requirements. 2. Two-thirds of the junior colleges exercised extensive supervision over teachers, but this was almost non-existent in the senior college. 3. The years of graduate training were less for junior college teachers than for senior college teachers.

One frequently mentioned difference reported by Donovan[15] (1952) is that the senior college teacher is expected to be not only a good teacher, but also a producer of research. On the other hand, the community-junior college teacher is considered to be more a consumer of research.

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13 F. W. Reeves, "How to Improve Instruction in Junior Colleges," Nation's Schools, Vol. 3, April 1929, p. 69-75.

14 Ibid., p. 74.

15 T. P. Donovan, "Problems of the Instructor in the Junior College," Junior College Journal, Vol. 22, May 1952, p. 494-497.

This different emphasis on research usually gives rise to heavier teaching loads for junior college teachers as compared to those teaching in the senior college or university.

Comparing junior college teachers and those instructing in the freshman and sophomore years of four year institutions in North Carolina, Vairo[16] (1965) reports that the junior college teachers compare unfavorably. The main discrepencies of the junior college teacher are in highest degree held, candidacy for higher degrees, experience, subject matter preparation, number of books and articles published, and participation in professional organizations.

Blocker[17] (1966) reported different results in a comparison of a national sample of junior college teachers and a sample of teachers in the North Central Association (accrediting) region colleges. He concluded that "the similarities (. . .) outweigh real or imagined differences"[18]. Blocker's comparison is probably the more representative of the two studies due to the broader nature of the samples.

While it is evident that many writers have pointed to differences, there are others who feel that no distinction

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16 Philip D. Vairo, "Faculty Quality: A Challenge to the Community College," Journal of Higher Education, Vol. 36, April 1965, p. 219.

17 Blocker, op. cit., p. 13-16.

18 Ibid., p. 14.

should be made in the preparation of teachers for different types of higher educational institutions. Belgen[19], in an address before the Fifth Annual Conference on Higher Education in 1950, made the preceding observation and went on to observe that the Conference on the Preparation of College Teachers in 1949 believed it would be a mistake to plan for such differentiation.

d. General attributes and competencies desirable--In 1943, Odom[20] reported thirty-six qualities of a good college teacher which he had identified. The first six qualities in rank order were: 1) knowledge of subject, 2) knowledge of teaching methods, 3) pleasing personality, 4) fairness and impartiality, 5) interest in student's viewpoint, and 6) high moral character.

Geyer[21] (1946), Ostlie[22] (1951), and Colvert[23] (1955) studied and reported various aspects of the same question.

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19 Theodore Blegen, "Ferment in Graduate Education," NEA Journal, Vol. 39, Dec. 1950, p. 685-686.

20 S. L. Odom, "An Objective Determination of the Qualities of a Good College Teacher," Peabody Journal of Education, Vol. 21, Sep. 1943, p. 109-116.

21 D. L. Geyer, "Qualities Desired in College," School and Society, Vol. 63, Apr. 1946, p. 270-271.

22 Selmer Ostlie, The Selection and Retention of Junior College Teachers, Unpublished Doctoral Dissertation, University of Southern California, 1951, xxxiii-602 p.

23 Clyde C. Colvert, "Report of the Research Office, American Association of Junior Colleges," Junior College Journal, Vol. 26, Oct. 1955, p. 95-107.

All of these studies were in substantial agreement with one another.

Turning from research studies to authoritative opinion, Hawkins[24] (1955) stated nine characteristics that the junior college teacher should possess. No indication of the order of importance of the following characteristics was given.

1. The junior college teacher should have an understanding of the history, philosophy, and functions of the junior college.
2. The teacher should have some knowledge of junior college administration.
3. The junior college teacher is a full-time public relations officer for the school.
4. The junior college teacher should know his community.
5. The junior college teacher should be able to communicate effectively with both adults and youth.
6. The teacher must participate in extra curricular activities of the school.
7. The junior college teacher must know his field but not be a narrow specialist.
8. The junior college teacher must understand the developmental stage of junior college youth.
9. The junior college teacher should see to it that each student (youth or adult) gets what he needs and desires, from the various courses he takes[25].

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24 T. G. Hawkins, "The Junior College Teacher: Some Unique Characteristics," Junior College Journal, Vol. 25, Jan. 1955, p. 298-302.

25 Ibid., p. 298-302.

These nine characteristics present a representative and comprehensive summary of the attributes and competencies desirable for the junior college teacher which appear in the literature.

e. Academic and Professional Training.-- Reporting in 1944, Pugh and Morgan[26] stated that their analysis indicated the need for detailed studies of desirable junior college teacher preparation in each of the subject matter areas.

The academic and professional training must be at the core of any such investigation. Much appears in a generalized way about this preparation in the literature. For clarity, this phase of the review may be divided into the following subdivisions: 1) The academic versus the professional training quarrel, 2) The coincidence of teaching assignment with the field of graduate training, 3) Professional training, 4) Academic training, and 5) The training of economics teachers.

1) The academic versus the professional training quarrel.-- That there is a quarrel between the academic and professional phase of the teachers preparation is illogical. Both elements are necessary and they can and should complement rather than interfere with one another. Many authorities have advanced this point including Eells[27],

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26 David B. Pugh and Roy E. Morgan, "Shortcomings in Preparation of Instructors," Junior College Journal, Vol. 14, May 1944, p. 413.

27 Walter Crosby Eells, The Junior College, New York, Houghton Mifflin Co., 1931, p. 412.

Koos[28], and Sexson and Harbeson[29]. In spite of this common sense observation, friction continues. It is not the purpose of this study to resolve the conflict. The concern is with the major implications of the conflict for the training of junior college teachers. As Ingalls[30] (1953) states, this is that:

> Candidates for teaching positions frequently offer unbalanced programs. They have majored in Education with a subsequent lack of thorough subject matter knowledge, or in a subject matter field with no training in Educational psychology, guidance, and human relations[31].

The conflict must be resolved so that, as Lord[32] (1953) stated:

> (. . .) the educator would have admitted that he had to know what entropy was before he could teach it, the Academician would have admitted that simply knowing what entropy is will not suffice to communicate it to students, and the two men would stand on common ground--perhaps even lunch together publicly[33].

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28 Leonard V. Koos, "Junior College Teachers: Preparation in Education," Junior College Journal, Vol. 18, Feb. 1948, p. 344.

29 J. A. Sexson and J. W. Harbeson, The New American College, New York, Harper, 1946, p. 181.

30 R. C. Ingalls, "Problems of Staffing the Community College," National Association of School Principals Bulletin, Vol. 37, April 1953, p. 393-401.

31 Ibid., p. 397.

32 John B. Lord, "The Tumult and the Shouting," American Association of University Professors Bulletin, Vol. 39, Autumn 1953, p. 252-256.

33 Ibid., p. 256.

2) The coincidence of teaching assignment with the field of graduate training.-- The exigencies of life sometimes make it impossible for a college to be staffed entirely with people teaching within their subject matter field. State and regional accrediting agencies typically look at this facet of the educational institutions they are evaluating. Unfortunately, since such data is priviledged information, it is not made available.

Two major studies have been completed that provide information on this point. Siehr[34] (1963) has reported on community colleges and McCall[35] (1961) has reported on colleges and universities. A comparison of their findings as they relate to this question are presented by Blocker[36] (1966). For college and university faculty in the survey, sixty-nine per cent of the teachers were teaching in their major field only, while an additional seventeen per cent were teaching in their major field and one other. Most of the remainder were teaching outside their major and a few did not respond. Responses from the community college teachers were similar.

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34 H. E. Siehr, J. X. Jamrich, and K. T. Hereford, Problems of New Faculty Members in Community Colleges, East Lansing, Michigan State University, 1963, p. v-72.

35 H. R. McCall, J. X. Jamrich, K. T. Hereford and B. D. Freidman, Problems of New Faculty Members in Colleges and Universities, E. Lansing, Michigan State University, 1961.

36 Blocker, op. cit., p. 15-16.

Subject taught agreed with the graduate major in 66.3 per cent of the cases. The subject taught did not agree with the graduate or undergraduate major in 9.2 per cent of the cases.

It cannot be said that the subject taught should or should not agree with the graduate and/or undergraduate major according to these percentages. However, this data provides a basis for comparison of these teachers who represent all subject matter areas with the coincidence of graduate majors and teaching assignments of New York State community-junior college economics teachers.

3) Professional training.-- The extensive literature on professional training is divided between authoritative opinion and the results of research studies. There is general but not unanimous agreement among those who are representative of authoritative opinion concerning the proper type and amount of professional training needed.

One of the foremost and most frequently quoted experts in the junior college literature has been Walter C. Eells. Writing in 1931, Eells stated that the junior college instructor "should have had a substantial training in professional courses in Education, to prevent him from being a narrow specialist in his own field"[37].

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37 Eells, op. cit., p. 421.

Sexson and Harbeson (1946) wrote that "sixteen semester hours of professional training are none too many (. . .)"[38]. Smith[39] (1949) recommended from nine to twelve hours, while Anderson[40] (1951), Colvert[41] (1952), and Stone[42] (1958) all recommended fifteen semester hours in professional courses in Education.

As for the actual courses, Colvert's recommendations appear to be the most representative of authoritative opinion. In his portrait of the ideal junior college teacher, he recommended the following courses and areas involving continuing professional development:

Professional training
a. Psychology of the junior college student
b. History, philosophy, growth, and development of the junior college
c. Knowledge and philosophy of curriculum construction
d. Techniques of teaching

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38 Sexson and Harbeson, op. cit., p. 181.

39 H. L. Smith, "Better Education of College Teachers: Junior College," North Central Association Quarterly, Vol. 23, April, 1949, p. 391-396.

40 Harold Anderson, "The Preparation of College Teachers," NEA Journal, Vol. 40, May 1951, p. 343.

41 Clyde C. Colvert, "The Ideal Junior College Teacher," Junior College Journal, Vol. 22, May 1952, p. 502-507.

42 James C. Stone, "The Preparation of Academic Instructors for the Junior College," Junior College Journal, Vol. 28, March 1958, p. 368-371.

e. Scientific method of evaluation of teaching in terms of the student's learning
f. Internship
g. Membership and participation in professional organizations
h. Continuous professional growth
i. Understanding of the duties and responsibilities of the junior college teacher
j. Some knowledge of junior college administration[43].

There is also close but not unanimous agreement among the research studies that have been reported. Garrison[44] (1940) recommended eighteen hours in professional education courses, Pugh and Morgan[45] (1944) recommended twelve hours, and Kinnerson[46] recommended fifteen credit hours with additional work up to twenty-four hours in certain specified areas if the individual teacher desired.

Practice teaching or an internship in the junior college is generally recommended. Most representative of research studies and providing a degree of flexibility in total hours of professional course work are the following recommendations for actual courses by Kinnerson:

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43 Colvert, op. cit., p. 507.

44 Lloyd Amos Garrison, Junior College Teachers: Their Academic and Professional Education, Unpublished Doctor's dissertation, Yale University, 1940, v-173 p.

45 Pugh and Morgan, op. cit., p. 411-412.

46 Kendall Scott Kinnerson, A Study of the Academic and Professional Preparation of Junior College Teachers of Physical Science, Unpublished Doctor's dissertation, Michigan State University, 1957, p. 91.

> 1) guidance and counseling, 2) history and philosophy of the junior college, 3) general psychology, 4) techniques of teaching, and 5) testing, measurement, and evaluation. . .additional work up to twenty-four credits, might well be of value in these areas: 1) psychology of the late adolescent, 2) curriculum construction, and 3) history and philosophy of education (. . .)[47]

An exception to the representativeness of Kinnerson's recommendations exists. Other writers include psychology of late adolescence rather than general psychology in the group of most important courses. Kinnerson does include this in the group of courses he distinguishes as additional work up to twenty-four hours.

4) Academic training.-- The literature concerning academic training can also be divided between that which is representative of authoritative opinion and that which is the result of research studies.

Among those whose writings are representative of authoritative opinion, there is general agreement concerning minimum academic preparation. Long recognized as an expert in the field of junior college education, Eells (1931) observed that: "It is not too much to expect every permanent, well-qualified instructor to have had at least two years of graduate work, largely in the field in which he expects to teach (. . .)"[48] Since most master's degrees can be obtained

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47 Ibid., p. 91.

48 Eells, op. cit., p. 421.

with one year of course work, this points to the need for work beyond the simple attainment of that degree.

Writing in 1946, Sexson and Harbeson[49] stated that, in general, the minimum acceptable academic training then in existence was a master's degree with a major in the field of teaching. This thought has been reaffirmed from time to time in the literature. A most recent statement to this effect was made by Edmund J. Gleazer[50] (1964), Executive Director of the American Association of Junior Colleges. He stated that the minimum preparation should be a "(. . .) master's degree in content field for teachers of academic subjects"[51].

Agreement is unanimous that the minimum degree should be the master's degree for teachers of academic subjects, but some disagreement exists over whether the academic training should be in a single subject area or in a broad fields area. The disagreement seems to stem from the shortcoming of overly narrow specialization which was identified by Pugh and Morgan's[52] (1944) research study. This has led to articles which stress breadth of preparation instead of depth of preparation.

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49 Sexson and Harbeson, op. cit., p. 180.

50 Edmund J. Gleazer, "Preparation of Junior College Instructors," Junior College Journal, Vol. 35, Sept. 1964, p. 3-4.

51 Ibid., p. 3.

52 Pugh and Morgan, op. cit., p. 406.

Prior to the identification of this problem through a research study, Eells[53] (1931) stated that professional courses in Education were necessary to prevent the teacher from being a narrow specialist.

On the other hand, Eckert[54] (1947) suggests the need for a divisional major so that the teacher is prepared to teach more than one subject and to avoid the shortcoming of overly narrow specialization. Similarly, Stone[55] (1958) suggests that breadth of preparation necessitates " (. . .) a broad base involving several related disciplines"[56].

In an address given at the California Statewide Conference on the Preparation, Credentialing, Recruitment and Placement of Junior College Teachers on the topic of breadth and depth, Langsdorf[57] (1958) said:

> (. . .) What do we mean by depth? I submit that we mean subject matter competence of a high order in at least one teaching field. As measured by a degree, (. . .) competence would require a master's degree in the subject, preferably work beyond, and possibly the Ph.D. degree.
> . . . . . .

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53 Eells, op. cit., p. 421.

54 Ruth E. Eckert, "A New Design for the Training of College Teachers," Junior College Journal, Vol. 18, Sept.1947, p. 25-33.

55 Stone, op. cit., p. 369.

56 Ibid., p. 369.

57 William B. Langsdorf, "The Preparation of the Academic Teacher--Problems of Depth and Breadth," Junior College Journal, Vol. 29, Sept. 1958, p. 24-28.

> What do we mean by breadth? To some this means a teacher qualified to teach in several subjects (. . .) While this (may be) a practical necessity (it) does not mean breadth in its fullest sense (. . .)
>
> . . . . . .
>
> In such a society as ours, the teacher must more than ever be broadly educated. There should be few if any fields of knowledge in which he is ignorant (. . .)
>
> . . . . . .
>
> All should know enough to avoid gross error in statement as they touch on other fields, or at the very least, know where they are ignorant, and refrain from comment (. . .)[58].

Again, it would seem that Colvert's[59] (1952) picture of the ideal junior college teacher is most representative of authoritative opinion. According to Colvert[60], the minimum degree level should be the master's degree. Concerning formal training in the academic field in which the instructor teaches, the instructor should have:

> (. . .) a minimum total of eighteen hours of undergraduate credit and eighteen semester hours of graduate work as a minimum total of thirty-six semester hours (. . .)
>
> . . . . . .
>
> It will have to be admitted that this minimum amount of training is not too much for a well-informed instructor (. . .) If an instructor is to be prepared to teach in two academic fields, the problem is more acute (. . .)[61].

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58 Ibid., p. 25 and p. 27.

59 Colvert, op. cit., p. 502-507.

60 Ibid., p. 503.

61 Ibid., p. 503-504.

It should be emphasized that these are minimum requirements. This view tends to agree with the mainstream of opinion which considers that proper academic preparation should be in a single subject but not overly specialized. At the same time it points to the extreme pressures for additional study if proficiency in two or more subject areas is to be required of the teacher.

The research studies that have been reported divide their attention between cataloguing the conditions found to exist and making recommendations concerning what should exist as stated by respondents or inferred from actual preparation.

Garrison[62] (1940) reported that the master's degree was almost the universal requirement with a tendency to move towards the doctor's degree. Most of the teachers were teaching in their subject-matter field. Administrators felt that from thirty-seven to forty-three semester hours were needed in the subject in which the teacher was giving instruction. The specific number of hours needed in the various social sciences was reported to be 43.5[63].

Blake[64] (1942) reported that more than two-thirds in his survey held the master's degree and approximately four-fifths were teaching in their major fields.

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62 Garrison, op. cit., p. 83-84.

63 Ibid., p. 55.

64 Wainwright D. Blake, The Problems and Training of the Junior College Instructor, Unpublished Doctor's dissertation, University of Missouri, 1942, iv-122 p.

The study by Pugh and Morgan[65] (1944) was aimed primarily at the shortcomings of teacher preparation. Pertinent to this study is his finding that preparation is often too narrow and instructors have the content point of view. Generally, there is a lack of suitable balance between subject and professional preparation[66]. They recommended[67] a sound liberal and cultural education and adequate knowledge of the subject, although no attempt was made to specify what constitutes "adequate knowledge".

One of the articles in the four part series reporting a major study by Koos[68] (1947) dealt with subjects taught and the specialized preparation of junior college teachers. Two aspects of his study have relevancy.

One is a detailed presentation of the various social science subjects taught in combination with one another. He reported:

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65 Pugh and Morgan, op. cit., p. 405-414.

66 Ibid., p. 406.

67 Ibid., p. 414.

68 Leonard V. Koos, "Junior College Teachers: Subjects Taught and Specialized Preparation," Junior College Journal, Vol. 18, Dec. 1947, p. 196-209.

> (. . .) the subject most frequently associated in teaching loads with history is political science. Similarly, the subjects most recurrently combined in their loads for teachers of political science are history and economics. For teachers of economics, these subjects are history, political science, and business. For sociology, they are history, political science, economics, and psychology[69].

As far as the academic preparation of the teachers of economics is concerned he reported[70] 10.8 per cent to have double majors in economics; 19.3 per cent to have graduate or undergraduate majors or combinations of majors and minors; 22.9 per cent to have a double or single minor only; 45.8 per cent without major or minor; and 1.2 per cent with no answer.

One of the few studies which follows the recommendation of Pugh and Morgan[71] for detailed studies of preparation needs in particular subject areas was reported by Kinnerson[72] (1957) concerning junior college physical science teachers. He reports that the physical science teacher is usually required to teach more than one of the physical sciences (frequently three). Based upon recommendations of teachers, administrators, and a panel of experts on the junior college movement, he recommended[73] a combined undergraduate and graduate major

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69 Ibid., p. 200-201.

70 Ibid., p. 207.

71 Pugh and Morgan, op. cit., p. 413.

72 Kinnerson, op. cit., p. ix-177.

73 Ibid., p. 128, 130-131.

in one of the physical sciences of from 50-56 credit hours plus two graduate-undergraduate minors of thirty hours each.

The point of applicability of Kinnerson's findings is that it indicates the great amount of additional course work necessary if the broad fields approach as suggested by Eckert, Stone, and others[74] is to be carried out.

Representative of general research studies on the needed preparation of academic instructors is the report by Dolan[75] in 1952. According to Dolan the typical junior college teacher:

1. Has a master's degree, plus one additional year of graduate work
2. Has a minimum of 40-50 semester hours of preparation in his teaching field
3. Has had no course in the field of the junior college
4. Has been recruited from the high school
5. Teaches in both junior college and high school
6. Teaches in more than one field
7. Spends considerable time in non-instructional responsibilities
8. Does no research nor writing for publication
9. Is teaching in a state that has no requirements for the certification of junior college teachers[76].

Concerning proper academic preparation, Dolan recommended[77] two years of graduate work including the master's degree. He further indicated that his prior studies

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74 See p. 20.

75 Dolan, op. cit., p. 329-336.

76 Ibid., p. 330.

77 Ibid., p. 333-334.

indicated the desirability of thirty-seven to fifty semester hours in the subject. He selected forty-five as being the minimum subject matter training that should exist.

5) The training of economics teachers.-- There are two principal studies that relate directly to the preparation of junior college instructors of economics. The first of these is the result of a study inquiring into the teaching of economics which was sponsored by the United Nations Educational, Scientific and Cultural Organization and carried out by a committee selected from among members of the International Economic Association[78].

The report is comprised of detailed presentations by experts on economic education from eight countries together with a general survey by C. W. Guillebaud (United Kingdom) who served as the General Rapporteur[79].

The points of particular applicability to this study are: the autonomy of economics as a discipline, the aims of the teaching of economics, the training of the economist, and the combination of economics with other subjects.

The historical development of the independence of economics as a discipline[80] differs between the Continental

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78 C. W. Guillebaud, Ed., The University Teaching of Social Sciences: Economics, UNESCO, Paris, 1954, viii-300 p.

79 Ibid., p. 1-35.

80 Ibid., p. 8-11.

and the English-speaking countries. In the continental countries, economics was originally a subordinate part of law. Today it has attained a full degree of autonomy, although in most cases it has retained a significant admixture of law. In the English-speaking countries, economics was originally a branch of mental and moral philosophy. Gradually it emerged from this dependence to a state of autonomy. This was accomplished in the United States by 1880, in part, because of the influence of Humboldt on the development of Universities in the U. S. Autonomy arrived in Great Britain in 1903 when the great English economist Alfred Marshall succeeded in establishing a separate tripos in economics at Cambridge. While autonomy exists in England today, there is close association with political science.

All of those who participated in the Conference on the teaching of economics "were unanimously and emphatically of the opinion" that economics as a subject in all of its aspects "can only take place on the basis of the effective independence of economics as a separate and autonomous discipline"[81].

Guillebaud identified three aims of the teaching of economics which are commonly accepted among those versed in economic education[82].

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81 Ibid., p. 10.

82 Ibid., p. 12-14.

The first aim of the teaching of economics is as a part of general education. This is frequently referred to as "education for citizenship". The United States is where the greatest development along these lines has occured[83].

A second aim is to meet the needs for some training in economics of those who are adopting a professional career, most notably business, and those whose main interest lies in one of the other social sciences.

The third aim is the training of those who consider economics as their main subject of study. It is from this category that the academic and professional economists are recruited.

Overlap between the three categories exists mainly between the second and the third. On the other hand, the vast majority of the students in the various economics courses at the college level (including the junior college) fit within the first two aims of the teaching of economics.

The training of this third group is critical in its own right because those who adopt the career of the economist become the teachers; research workers; economic experts in industry, banking, government, etc.

The participants at the Talloires Conference unanimously agreed on several critical subject areas for the

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83 Ibid., p. 12.

preparation of all economists regardless of which of these occupations he chooses[84].

Foremost was a thorough grounding in economic theory and in the handling of the tools of economic analysis. This emphasis on theory includes advanced theory[85].

Secondly, they unanimously agreed that theory divorced from practical application and the phenomena of the real world is of little value. Consequently, knowledge of the real world must be obtained and interwoven with the study of theory.

It was also agreed that the evolution of economic ideas has a strong claim to a place in the economics curriculum. A number of the fundamental ideas enunciated by Keynes, for example, and frequently referred to as having originated with him, had been anticipated in the writings of earlier economists such as Spiethoff, Wicksell, Aftalion, and others[86]. This is not meant to depose Keynes from his rightful position as an eminent economist and an innovator.

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84 Ibid., p. 15-18.

85 In the typical curriculum of schools teaching economics in the United States, economic theory is divided into courses on micro and macro economic theory. They are commonly designated as intermediate and advanced theory. For the reader not familiar with usual course content, these titles may be misleading. Advanced theory is not a more penetrating study of the same theory, but rather, a different and complementary branch of economic theory. Either, taken alone, would present an incomplete framework of analysis.

86 Guillebaud, op. cit., p. 17.

It is possible, however, that Keynes' work could have been even more fruitful if he had been a more diligent student of the history of economic doctrines.

Finally, there was universal agreement that knowledge of statistical sources and methods is an indispensable part of the equipment of every economist.

These are to be considered as the core or most critical areas necessary for the training of the economist and are not to be viewed as the total preparation needed.

It was also clear to the participants at the Talloires Conference that economics, although it should be an independent discipline, cannot be learned in isolation. They stated:

> Economics is one of the social sciences, which have for their subject man in society; and although it deals primarily with certain aspects (man's economic activities), economists must not fail to recognize the underlying unity of the social sciences as a whole (. . .) In general, university departments of economics should give careful and thorough consideration to their teaching curricula, with a view to seeing whether a proper balance is being maintained between economics and the other social sciences with which it is associated[87].

The only research study relating directly to the preparation of the junior college economics teacher was reported in 1962 by Davies[88]. This article presents the results of

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87 Ibid., p. 35.

88 J. Kenneth Davies, "The Challenge of the Junior College to the Economics Profession," Junior College Journal, Vol. 33, Nov. 1962, p. 146-155.

his studies in the states of California and Florida, however most of the data relates to Florida junior colleges.

In the Florida study[89], sixteen of the nineteen schools then in existence supplied the names of its economics teachers. Nineteen of the twenty-five teachers responded. One of the teachers had taken no economics courses--not even the Principles course which he was teaching. Five of the teachers had completed 7-12 hours. One of these had taken only the Principles and none had taken any theory. Eight more had taken 13-24 hours, but only two of these had any theory. Out of the total of nineteen teachers, only five had had any training in economic theory. Thus, Davies stated: "the level of training in economics is very low"[90].

All of the teachers were full-time teachers but none of them were full-time teachers of economics[91]. The other fields in which the teachers gave instruction in rank order were: Business, Accounting, Sociology, History, Secretarial Training, and Political Science. Other combinations were noted, but without significant pattern.

Davies believes that several problems face the economics profession arising out of the picture presented[92].

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89 Ibid., p. 146-147.

90 Ibid., p. 146.

91 Ibid., p. 150.

92 Ibid., p. 152.

One is that because of the poor preparation of the teachers, the junior colleges are presenting senior colleges with students inadequately prepared to handle the more advanced courses. Second, these teachers of economics will come to be looked upon as economists, but without a far more adequate training in the field than is indicated, it is like calling a man a surgeon without training in anatomy. Third, the education specialists have been drafted to fill the gap of insufficient supply with the result that there is a watering down of the subject matter.

Concerning recommended standards, Davies believes[93] that the master's degree with a thesis should be a minimum and that the lowest acceptable combination of economics majors and minors should be a strong undergraduate and graduate minor. None of his acceptable combinations find undergraduate training only in economics as acceptable.

In addition he recommends the completion of the following courses as a minimum: two semesters of elementary economics, one semester of intermediate theory, one semester of advanced theory, one semester of the history of economic doctrines, and one semester of statistics.

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93 Ibid., p. 153.

Summary

This chapter has investigated the fundamental concepts of role theory, situational aspects of junior colleges, and the expectations of professionals in pedagogy and/or subject matter concerning levels of preparation for junior college economics teachers.

Role theory is a part of the larger framework of the general theory of action as proposed by Parsons, Shils, and others.

The theory holds that behavior is meaningful only when viewed in a social interaction situation. The group has general status expectations concerning a particular position which are modified so as to apply to a particular person in a particular situation. At the same time, the actor, bringing all of his past with him, becomes involved in his role and in the process formulates his perception of what others expect of him. When the role expectations of the actor (ego) in situation are divergent from the role expectations of the group (alter), either latent or manifest conflict may result. The reciprocal role expectations of the actor and the group are constantly being redefined in the interaction process resulting in what might be called dynamically stable social organization in situation.

This study is limited to New York State and in New York, there are no certification requirements for teachers at

the junior college level. All institutions of higher education must be accredited by the New York State Education Department, Division of Higher Education. In addition, about fifty per cent of the schools have been accredited by the Middle States Association of Colleges and Secondary Schools.

Community-junior colleges have four basic purposes: the college parallel; the technical and vocational; the guidance; and the community service functions. The varied functions of the community-junior college suggests the possibility of differences in the teachers and teaching between junior colleges and senior colleges. Studies indicate that the similarities outweigh the differences when junior college teachers are compared with their counterparts teaching in the first two years of a senior college. Differences seem to be that, while senior college teachers are expected to be producers of research, the junior college teacher is a consumer of research. This frequently gives rise to heavier teaching loads for the junior college teacher. Also, junior college teachers are frequently expected to have completed some education course work, while this is rarely expected of the senior college teacher.

Professional and academic preparation expected by professional academicians generally avoids the shortcomings of unbalanced preparation. The following key minimum requirements are usually expected of junior college economics teachers.

Many of these apply to all junior college teachers of academic subjects.

The minimum academic training should be a master's degree with a thesis mainly taken in the subject taught. Stated in terms of credit hours, this constitutes about forty-five hours with courses taken at both the graduate and undergraduate level. If the teacher is expected to teach in more than one subject area, the problems of preparation become acute. When the master's was taken in one of the subjects taught, the approximate equivalent of a master's degree in course work in the additional subject(s) should prevail. In either case, the economics curriculum in the teacher's academic background must contain study in several core areas. They include: intermediate and advanced theory, statistics, history of economic thought, and sufficient knowledge of the "real economy" to render the theory meaningful.

Professional training should include a minimum of twelve, but preferably fifteen or more credit hours in certain commonly accepted course areas. In addition, some form of supervised practice teaching should be completed, preferably an internship in the junior college.

In order to proceed with the analysis, a role theory model must be adapted for this study and the methods of determination and analysis of role expectations must be specified. These matters are dealt with in the next chapter.

CHAPTER II

DESIGN OF THE STUDY

In order to investigate the interrelationships between teacher preparation and the expectations concerning graduate preparation by teachers, administrators, and professional academicians, certain preliminary steps must be accomplished. They include: 1. the delineation of the role theory model to be used as the framework of analysis, 2. the enumeration of the hypotheses, and 3. the establishing of the methods by which the remaining role expectations concerning teacher preparation will be determined and analyzed. This latter section considers questionnaire development and validity, administering the questionnaires, reliability of the instruments, and the method of organization and analysis of the data.

1. Role Theory Model.

Role theory holds that behavior is meaningful only when viewed in a social interaction situation. The concept of role involves an actor in relation to others in particular social groups.

As was seen in the section of the review of the literature which examined the general framework of role theory[1],

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1 See pages 1-5.

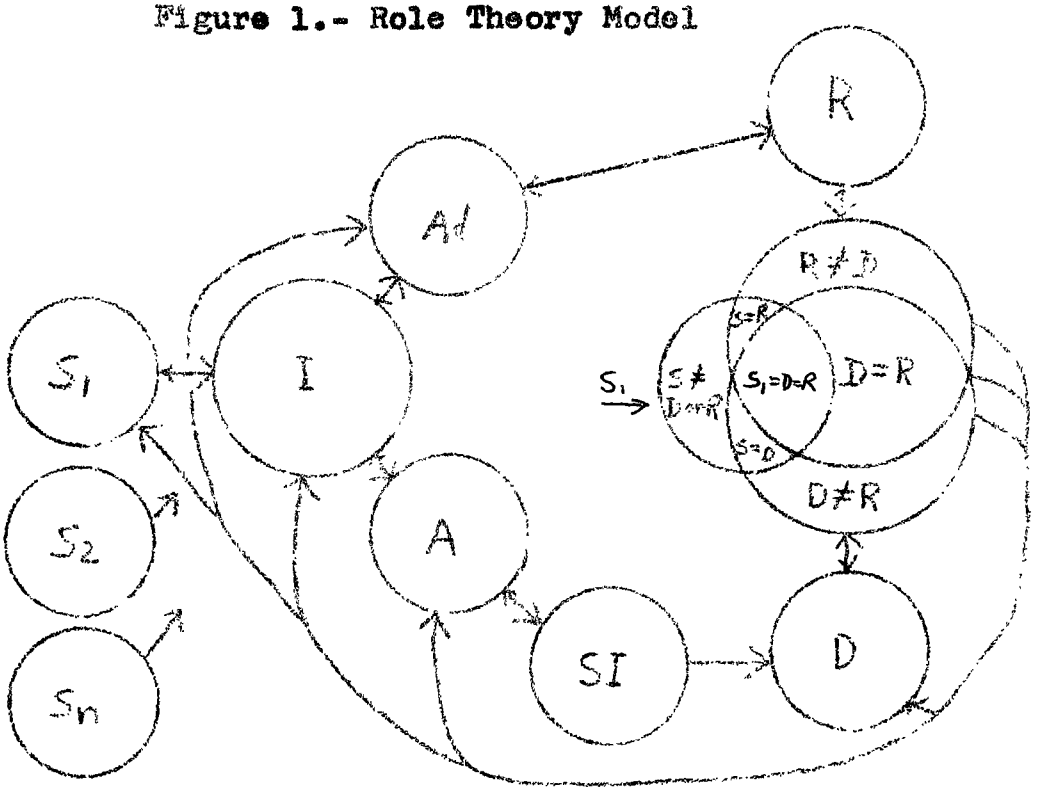
the concepts of role, role behavior, role perceptions, role expectations, and conflict situations are varied and complex. This study does not examine all of the many facets of role. It concentrates on teacher preparation for role as one of the main factors of role expectations and one of the factors that lends itself best to measurement.

The various concepts of role are schematically presented in Figure 1. The description of this paradigm is refined to emphasize teacher preparation for role.

Beginning on the left hand side of the paradigm from the point of view of the group, S_1 represents the general status expectations concerning economics teacher preparation as understood by the professional academicians. In this study, these role expectations are the criteria of adequacy of preparation as derived from a review of the literature.

The concepts identified as S_{2-n} represent the fact that there are many other sub-groups with general status expectations concerning economics teachers. They would include general status expectations by the school boards or trustees, the general public, students, parents, etc. These other groups are not being considered in this study. It must be recognized, however, that these sub-groups may exert significant pressures on all of the participants in the social interaction process.

Figure 1.- Role Theory Model



S_1 = General status expectations concerning economics teacher preparation by professional academicians.

S_{2-n} = General status expectations by other groups.

I = The particular institution: i.e. the community-junior college with its aims.

Ad = The administrator of the institution as interpreter and spokesman of its aims.

R = The administrator's expectation of actor "A" in a particular situation. i.e. his expectations concerning proper economics teacher preparation.

A = Actor, as he enters situation, with his prior experiences, personality needs, and the meaning of the situation for him.

SI = Self-involvement--the actor's self-image as he projects himself into the particular status or role.

D = Actor's definition of what he thinks others expect of him in the role.

DR = Actor's behavior in interaction with others which continually redefines R and D.

These general status expectations (S_{1-n}) impinge upon the institution, I, contributing to the development of the specific aims and the "situation" of that institution. The administrator, Ad, is the interpretor of these aims and the person who carries them out. Based upon many forces which come to bear on the administrator (e.g. his personality, his own role expectations, community forces, etc.) he develops role expectations, R, of actor "A" in the particular situation. As applied to this study, R represents the administrator's role expectations concerning economics teacher preparation in the particular situation.

Returning to S_1, these same general status expectations by the professional academicians and other subgroups which are, in a sense, flowing through the particular institution, have some influence on the actor, A, as he enters the situation. In role theory, the actor is considered to enter upon a particular situation, bringing with him a set of previous experiences, certain drives, and perceptions related to this status he is assuming. From the point of view of this study, the pertinent thing brought to the situation is the actual preparation which the teacher possesses.

Once in the situation, the actor becomes involved. This is designated as SI in the paradigm. The amount and nature of this self-involvement varies in accordance with

the group or groups with which the actor identifies, the ways in which he identifies with the group(s), and the extent of convergence between what the actor thinks others expect of him and what they actually expect of him. Self-involvement, for example, may involve self-improvement or it may involve professional apathy, but this flows from the social interaction situation.

Emerging from what the actor brings to the situation and his self-involvement is his definition of what others expect of him in the role or status which he occupies. This concept is designated as D. In this study, D is limited to what the actor thinks others expect of him in terms of preparation for role. It is reflected by his concept of what economics teacher preparation should be. This can be referred to as the teacher ideal self regarding academic and professional educational preparation.

The larger circles to the right and center of the paradigm represent the behavior in interaction of the actor with members of the particular group(s). To the extent that $D = R$, there is convergence of role expectations and a stable social situation. To the extent that $D \neq R$, there is a latent or manifest conflict situation. In the section designated as $R \neq D$, the administrator's expectations are more than the teachers expectations and would probably provide the administrator with additional sanction power over the teacher.

In the section designated as D ≠ R, the teachers actual preparation and expectations concerning preparation are more than the administrator's expectations, probably providing the teacher with extra bargaining power. The design of this study does not permit the identification of manifest (actual) conflict situations. Consequently, it is only possible to consider the latent (potential) conflict situations as inferred from divergences in role expectations as seen by administrators and teachers.

The smaller circle (S_1) representing professional academicians is superimposed over the circles involving the interaction process in order to suggest comparison of the expectations concerning preparation of the professional academicians, the administrators, and the teachers. It also suggests that there will be many different combinations of convergence and divergence among the three. Actually, S_1 is not directly involved in the interaction process, although the expectations of the professional academicians are felt in various degrees by both the actor (ego) and the administrator (alter).

The return arrows are designed to indicate that there is feedback between all of these variables which contributes to a constant process of redefining of S_1, R, and D.

2. The Hypotheses.

The general hypothesis flowing from the problem in the light of this role theory model is that comparisons of actual economics teacher preparation and expectations concerning preparation by teachers, administrators, and professional academicians will indicate patterns of convergence and divergence as well as latent conflict situations.

Several sub-hypotheses are generated by this. They are divided according to the type of comparison to be made. All of them involve variables of the particular institutions that, due to their hypothetical effect on status in situation, might be expected to affect the amount of convergence and divergence among the major groups.

Type I.-- Hypotheses involving convergence and divergence between professional academicians and teachers and between professional academicians and administrators.

Convergences of role expectations concerning proper teacher preparation will be greater between a.) professional academicians (S_1) and teachers (A and D) and b.) professional academicians (S_1) and administrators (R):

1. When most or substantial numbers of the students in the economics courses are transfer students,

2. When advanced economics courses are taught in the junior college,

3. When the institution is older,

4. When administrators expect teacher preparation in only one discipline,

5. When schools have been accredited by the Middle States accrediting association,

6. When the school is a private institution, and

7. When non-educational specialists as opposed to educational specialists are filling economics teacher positions.

Type II.-- Hypotheses involving convergence and divergence between professional academicians and teachers.

Convergence of role expectations concerning proper teacher preparation will be greater between professional academicians (S_1) and teachers (A and D):

1. When the teachers are full-time teachers of economics and

2. When the teachers receive higher salaries.

Type III.-- Hypotheses involving convergences and divergences among all three groups (S_1, R, A and D):

1. When there is divergence between actual teacher preparation and administrator expectations concerning preparation, latent conflict situations exist:

a. If the actual preparation is greater than the administrator's expectations, there is evidence of professional apathy and

b. If the actual preparation is less than the administrator's expectations, the teacher's ideal self will be more than his real self. (i.e. Expectations concerning proper graduate preparation will be greater than the teacher's actual preparation.)

2. Convergences between actual teacher preparation and administrator expectations concerning preparation will result in higher teacher self evaluation.

It must be recognized that each of these sub-hypotheses could be stated from the opposite point of view. Thus, with each sub-hypothesis, divergences are hypothesized if conditions are reversed.

3. Method of Analysis.

Different methods could be used to determine actual teacher preparation and the perception of proper graduate preparation by the teacher, administrator, and professional academician. In this study it was decided to establish perceptions concerning preparation by the professional academicians by means of a review of the literature. It was further decided that actual teacher preparation and the teachers' and administrators' expectations concerning preparation would be determined by means of questionnaires.

Questionnaire development and validity.-- Davies, whose study of economics teacher preparation was cited earlier[2], made his questionnaires available for this study. Modifications, additions and deletions were necessary. The procedure for developing the final questionnaires used for the study was designed to insure their validity.

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2 See pages 30-32.

Starting with the Davies' questionnaires which had been used extensively in the field[3], both the administrator and the teacher questionnaires were revised five times over a period of seven months. After each revision, the questionnaires were reviewed by a social science methodology specialist[4].

Davies' administrator questionnaire consisted of eighteen questions. Twelve of these were retained, two were modified, two were combined to form one question, and two were omitted. Six questions were added.

His teacher questionnaire consisted of thirty-seven questions. Of these, nineteen were retained, five were modified, two were combined into one, and eleven were omitted. Fifteen questions were added.

The additions were primarily aimed at adding breadth and depth in terms of information commonly used in evaluating teacher preparation. The deletions were primarily aimed at eliminating data superfluous to this study or readily obtainable elsewhere.

After the final revision, the administrator questionnaire was submitted to seven administrative persons active in the field of higher education. They consisted of a college

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3 Davies informed the author that he is currently conducting a national sample with these same questionnaires.

4 Gamal Zaki, Ph.D., Assistant Professor, Department of Sociology, Russell Sage College, Troy, New York.

president, deans, department chairman, and a member of the New York State Department of Education, Division of Higher Education, Accrediting Section. All of these persons perform teaching duties along with their administrative duties. Similarly, the teacher questionnaire was submitted to seven persons who teach in several subject areas. The minor recommendations for change made by these persons were incorporated in the final questionnaires, but they were not significant enough to justify regarding this as a sixth revision[5].

The fact of extensive prior use of the original questionnaires and the numerous reviews of their revisions by persons with diverse backgrounds indicates validity of the questionnaires. In addition, both the questions and the resulting answers seem to correspond with common sense. Since systematic questionnaire surveys are often undertaken because common sense estimates cannot always be trusted, complete reliance cannot be placed on this. Nonetheless, some face validity is indicated.

Administering the questionnaires.-- This study was limited to New York State community-junior colleges. A list of these schools was determined by cross checking the lists of the American Association of Junior Colleges[6] and the

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5 Copies of the Administrator and Teacher Questionnaires used for this study are presented in their final form in Appendix 1 and 2 respectively.

6 Junior College Directory, op. cit., p. 35-37.

New York State Education Department, Division of Higher Education[7]. This resulted in a list of sixty-seven schools which were classified as community-junior colleges. Two of these schools were later removed from the list. Mater Dei College of Ogdensburg, New York was removed because its president, Reverend Mother M. Immaculata, stated that it was no longer a junior college. The Junior College of St. John's University was dropped because its director, Dr. C. Carl Robusto, stated that the junior college operations in his judgment were not distinguishable from the rest of the University in relation to the information sought in the questionnaires.

No list of New York State community-junior college economics teachers was available.

A package consisting of one administrator questionnaire, one or more teacher questionnaires, and stamped return addressed envelopes was mailed to the president of each of these community-junior colleges on March 18, 1966. In the individually typed cover letter[8] to the administrator, it was requested that each complete the administrator questionnaire and distribute the teacher questionnaires to all who taught economics in his institution.

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7 The University of the State of New York, The State Education Department, Division of Higher Education, Higher Institutions Operating in New York, Jan. 11, 1966, p. 0-6.

8 For cover letter to Administrators, See Appendix 3.

The administrator and teacher questionnaires were designed to permit a feeling of anonymity for the respondents if they desired it. However, all questionnaires were coded in order to permit statistical control.

A follow-up letter[9] was mailed to administrators who had not responded on April 2, 1966 when the administrator response had reached fifty percent. Similarly, a follow-up letter was mailed to teachers[10] who had not responded on April 22, 1966 when fifty percent of those identified through the administrators' questionnaires had been received.

Personal contacts were made with administrators and teachers who had not responded. This enabled the author to complete a list of all economics teachers in service at the time of the survey in the New York State community-junior colleges. A separate appeal was made to the teachers who had not already responded and were identified by this process.

Cooperation by administrators and economics teachers in the community-junior colleges was of a very high order. A total of sixty administrator returns were received out of the sixty-five possible returns. This comprised 92.3 percent of the total population. Forty-seven of the sixty-five

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9 For follow-up letter to administrators, see Appendix 4.

10 For follow-up letter to teachers, see Appendix 5.

schools included economics courses in their curriculum, while eighteen did not. Forty-three, or 91.5 percent of the administrators in schools with economics responded and seventeen, or 94.4 percent of those without economics responded.

A total of ninety-one teachers of economics courses were identified by the administrators in these schools. Returns were received from eighty-four, or 92.3 percent of these teachers. In the four schools with economics where the administrator did not respond, teacher response was 100 percent. Responses were received from administrators and/or teachers in 100 percent of the schools with economics. Only one of the schools had no teacher representation among the total respondents. The school in question had only one teacher of economics.

Reliability.-- The reliability of the questionnaires was estimated by means of a retest. Questionnaires were distributed to several of the original administrator and teacher respondents. A product-moment coefficient of correlation was computed for each question in the two questionnaires.

The overall measure of correlation for the fifteen sets of teacher questionnaires compared was .94. This very high correlation was in part accounted for by the fact that both tests yielded identical answers on sixteen out of the forty questions. In addition, many of the questions asked

for factual information or opinion where the respondents were likely to have strong prior convictions. The remaining individual question correlations ranged from .85 to .93[11].

The overall measure of correlation for the twelve sets of administrator questionnaires compared was .93. Seven out of the twenty-one questions yielded identical answers on both tests. The remaining individual question correlations ranged from .85 to .93[12].

Organization and analysis of the data.-- Data were tabulated by means of the Royall McBee Keysort system. The 8½" by 11" card with 165 punches was used[13].

The various sub-groups for tabulation specified in the sub-hypotheses were coded and punched on one section of the Keysort card. Answers to the major questions were coded or indexed as appropriate for the type of data and punched

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11 Identical answers were recorded on questions 1-3, 5-6, 11, 13-16, 20, 22, 28, 39, and 40. Question 25 had a correlation of .85 and questions 24, 34, and 38 had correlations of .89. Questions 4, 8-10, 17, 18, 21, 23, 26, 27, 29-33, and 35-37 ranged from .90-.93.

12 Identical answers were recorded on questions 1-6 and 11. Question 8 had a correlation of .85, question 20 had a correlation of .87, and questions 9, 12, 14, and 15 had correlations of .89. Questions 7, 10, 13, 16-19, and 21 ranged from .90 to .93.

13 Facilities for computer or I.B.M. punch card data processing were not available within the budget limitations of this study.

on the remainder of the Keysort card[14]. Answers that were explanatory in nature and data of lesser importance were transferred from the questionnaires to the cards to facilitate hand tabulation. Whenever possible, comparable data were punched in the same location on both the administrator and teacher Keysort cards.

The method of analysis of this study can be broadly classified into two subdivisions. The first deals with an over-all view of the role expectations concerning preparation by teachers and administrators and the second deals with the analysis of the specific sub-hypotheses generated by the role theory model.

In the first phase of the analysis, the tabulation was designed to provide an overall view of the role expectations of teachers and administrators in the limited aspect of role involving economics teacher preparation. This tabulation lends itself to general comparison with the expectations of professional academicians, allowing a determination of the extent of convergence or divergence with their recommended minimum standards.

Referring back to the role theory model in use[15], the overview was tabulated to reflect three major things.

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14 The nature of the indexes used is explained as the data is reported.

15 See p. 38.

The first was a general picture of the teachers actual preparation, which is a part of what he, the actor, brings with him to the situation. Second, were the teacher's expectations of what graduate preparation should be. This was designated as D in the paradigm, and evidences what the actor thinks others expect of him. It could be referred to as the teacher ideal self concerning preparation reflecting his particular situation. The third was an overview of the administrators' minimum expectations regarding economics teacher preparation and was designated as R in the paradigm.

For the tabular presentation of the overview, confidence limits were established in the following manner. For teacher returns, it was assumed that the total population was all teachers in service at the time of the survey. For administrator returns, it was assumed that the total population was the number of schools where economics was taught. The limits were then computed at the .05 level according to the following formula:

$$P \pm 1.96 \sqrt{\left(\frac{N-n}{N-1}\right)\left(\frac{pq}{n}\right)}$$

The general hypothesis and most of the sub-hypotheses refer to patterns of convergence and divergence concerning preparation among teachers, administrators and professional academicians. Direct chi squares could not be computed for significant differences between the recommendations of the

professional academicians and the teachers or administrators because their recommendations are such that the teacher or administrator either had or did not have the particular requisite. This results in zero expected frequencies for the professional academicians in some of the cells of each table rendering chi square not usable.

Since direct chi square comparisons could not be made, analysis of the extent of convergence and divergence between the professional academicians' recommendations and a. teachers, b. administrators, was treated in terms of the proportion of the teachers and administrators who met the minimum standards of the professional academicians. The remaining hypothesized patterns were treated in the second phase of the analysis, including certain facets of convergence with professional academicians recommendations.

In the second phase of the analysis, responses were tabulated according to the variables contained in the sub-hypotheses for each of the major variables of preparation measured[16]. This was done for teacher actual preparation, teacher professional activity, teacher recommended preparation, and administrator standards.

The process resulted in nearly three-hundred tables with from four to twenty-four cells each depending upon the

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16 For sub-hypotheses see pages 42-44.

particular tabulation. This tabulation was preparatory for the computation of chi squares to test for significant differences on the major variables of preparation measured between the sub-groups of the sample as derived from the hypotheses.

In many cases where chi square was otherwise usable, expected frequencies were too small (less than five) in one or more cells necessitating the combining of cells. An attempt was made to combine these cells to reflect preparation that would fall in the categories of inadequate, poor, and adequate using the guidelines of preparation recommended by the professional academicians. Still, many of the expected frequencies were too small. In some instances, large enough expected frequencies could have been obtained only at the expense of distorting the data. As a result, most of the chi squares were computed from two by two, two by three, and two by four contingency tables.

For the two by two contingency tables the following formula was used:

$$\chi^2 = \frac{N\,(AD - BC)^2}{(A+B)(C+D)(A+C)(B+D)}$$

When the contingency tables were two by k, the following formula was used:

$$\chi^2 = \left(\Sigma \frac{b^2}{n} - \frac{B^2}{N}\right) \frac{N^2}{AB}$$

Finally, the interrelationships between actual teacher preparation and recommended teacher preparation were

analyzed by means of the phi coefficient, an estimate of r_ϕ and chi square to determine the extent of relationship between the two.

Throughout this study, whenever the phi coefficient was computed, the following formula was used:

$$\phi = \frac{BC-AD}{\sqrt{(A+B)(C+D)(A+C)(B+D)}}$$

The r_ϕ estimates were computed by:

$$r_\phi = \frac{\phi}{k}$$

where k equals the conversion table value found in Dayhaw[17].

Whenever a phi coefficient was computed, chi square was determined by the following adjustment:

$$\text{Chi square} = N\phi^2$$

Summary

The first section of this chapter refined the many faceted role theory concepts to emphasize teacher preparation for role which is one of the main factors of role expectations and the one examined in this study.

The hypotheses were presented in the second section. The general hypothesis seeks to examine the amount of convergence of perceived role concerning preparation by teachers, administrators, and professional academicians. The

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17 L-T Dayhaw, Manuel de Statistique, Ottawa, Canada, Université d'Ottawa, 1963, p. 204.

sub-hypotheses involve variables of the particular institutions that, due to their hypothetical effect on status in situation, might be expected to affect the amount of convergence and divergence among major sub-groups of the samples.

The third section established the questionnaire survey as the method to be used to determine actual teacher preparation and recommended levels of preparation by teachers and administrators. Also examined were questionnaire design, administration, validity, and reliability.

Finally, organization and method of analysis were examined. The planned analysis was divided into two phases. The first phase takes an overall view of the actual preparation of the teachers and the preparation recommended by teachers and administrators. It examines the extent of their convergence with the recommended minimum levels of preparation advanced by the professional academicians as determined from the review of the literature.

The second phase investigates the convergences and divergences according to the sub-hypotheses which are based on institutional variables that hypothetically might be expected to affect convergences.

The reporting of the results of the study is according to these phases, with the overview presented in Chapter III and the examination of the sub-hypotheses in Chapter IV.

CHAPTER III

PRESENTATION AND INTERPRETATION OF THE RESULTS-- AN OVERALL VIEW

This chapter deals with an overall view of the extent of convergence and divergence between the minimum standards of preparation recommended by professional academicians and the actual and recommended levels of preparation of the teachers and administrators surveyed.

It is divided into the following three sections: 1. Teacher actual preparation and professional involvement, 2. Teacher expectations concerning levels of economics teacher preparation, and 3. Administrator expectations concerning levels of economics teacher preparation. It will be recalled that the minimum standards of preparation recommended by the professional academicians were determined by means of a review of the literature. In the three sections of this chapter, pertinent questionnaire responses were indexed and tabulated to provide an overview of actual conditions and to permit an examination of the extent of convergence between the measured variables of preparation and the minimum levels of preparation recommended by the professional academicians.

1. Teacher Actual Preparation and Involvement.

The amount of actual preparation with emphasis on economics subject matter preparation is under investigation.

This preparation is what the actor brought with him to the situation or acquired through self-involvement in the status up to the time of the survey. It is only a part of what the actor brought with him. In this limited way, it reflects the actor's real self.

This section investigates the following facets of teacher preparation: a. general characteristics, b. degree levels, c. graduate hours completed, d. major fields, e. economics credit hours and courses completed, f. professional training in education, g. economics hours versus education hours, h. professional involvement, i. self-education and professional activity, and j. a summary comparison of the recommended standards of preparation with actual preparation.

General characteristics.-- In the academic year 1965-1966 when the survey was made, there were ninety-one teachers of economics in the community-junior colleges of New York State. Eighty-four (92.3%) of these teachers cooperated in this study. Sixty-eight of the respondents taught in public schools. Sixty-six of the respondents were full-time teachers and eighteen were part-time, but only thirty-one were full-time teachers of economics.

The predominant sex of the economics teachers was male. Five of the eighty-four respondents and six of the total population of ninety-one were female. The teachers

ages ranged from twenty-two to seventy-five with a median age of thirty-six years.

Teaching loads ranged from five to twenty-four contact hours per week each semester with a median and mode of fifteen hours. These figures include any extra compensation courses taught. Sixteen of the teachers had contact hours in excess of the maximum of fifteen hours recommended by the Division of Higher Education of the New York State Education Department.

A marked difference between total years teaching and total years teaching economics existed. Total experience ranged from one to forty years. The distribution showed equal occurances of teachers with one and three years experience with a median of six and a mean of 9.6 years. The range of years teaching economics was from one to twenty-five years, with a mode of one year. The median number of years teaching economics was three years and the mean was 4.8 years.

Degree levels.-- The most typical highest degree earned was the master's degree. This degree accounted for 76.2 percent of the total economics teachers with confidence limits of plus or minus 2.5 percent. Doctor's degrees accounted for 9.5 percent (± 1.8%) and Bachelor's degrees were 14.3 percent (± 2.0%). Clearly, the vast majority of the teachers possessed the minimum of the master's degree as recommended by the professional academicians.

Graduate hours completed.-- Teachers were requested to indicate the total of graduate credit hours they had completed. The number of teachers in each category of credit hours with estimated years of graduate residence are presented in Table I. The years of graduate residence were computed on the basis of an assumed thirty credit hour school year which is reasonably typical. The range of graduate credit hours completed was from zero to one-hundred and fifty hours. The mean hours completed were 61.8 hours. Stated in terms of years of residence, the average was slightly more than two years, which is double the amount needed for the typical master's degree which usually requires thirty hours of credit. Graduate hours so much in excess of the typical degree held strongly suggests that the teachers feel that the usual master's degree is insufficient training for the community-junior college teacher. It is also consistent with the recommendations made by Eells[1] and others as far back as 1931, which called for a minimum of two years of graduate work.

Major fields.-- This surface view of preparation appears reassuring, but it is necessary to go beyond this and examine the coincidence of graduate training with teaching duties. Blocker's report which was cited earlier[2], showed

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1 See page 18.

2 See page 14.

Table I.- Semester Hours and Years of Graduate Residence of New York Junior College Economics Teachers.

Credit Hours	Years of Residence	Number of Teachers
0 - 14	0.0 - 0.4	1
15 - 29	0.5 - 0.9	6
30 - 44	1.0 - 1.4	17
45 - 59	1.5 - 1.9	16
60 - 74	2.0 - 2.4	23
75 - 89	2.5 - 2.9	6
90 - 104	3.0 - 3.4	6
105 - 119	3.5 - 3.9	3
120 - 134	4.0 - 4.4	4
135 - 149	4.5 - 4.9	1
150 - 169	5.0 - 5.4	1
		N = 84

that in that more general study, the teacher's major did not agree with the subject taught in 9.2 percent of the cases.

A total of thirty-one different majors or minors were reported by the New York State economics teachers. They ranged over a very broad spectrum from ones typically expected--mainly in the other social sciences--to concentrations such as Music, Theology, Philosophy, Spanish, Logic, and Animal Husbandry. The many combinations that existed were too numerous to present in their entirety. There were twelve different graduate majors, nineteen undergraduate majors, fourteen graduate minors, and twenty undergraduate minors.

For the purposes of this study, it is more meaningful to examine the most frequently occuring graduate and undergraduate majors and the frequency of occurance of various combinations of economics majors and minors. The rank order of the most commonly reported graduate and undergraduate majors of the economics teachers is presented in Table II. Clearly, if the economics teacher has not majored in Economics, he has most likely majored in Business Administration or in one of the other social sciences.

More meaningful for investigating subject matter competence in economics are the various combinations of economics majors and minors of the teachers. These combinations are presented in Table III.

Table II.- Rank Order of Graduate and Undergraduate Majors of New York Junior College Economics Teachers.

Major	Graduate		Undergraduate	
	Number of Teachers[a]	Rank Order	Number of Teachers[a]	Rank Order
Economics	33	1	30	1
Business	20	2	16	2
Education	11	3	0	-
History	10	4	13	3
Political Science	4	5	10	4
Sociology	2	6	3	5.5
Engineering	-	-	3	5.5
Miscellaneous	8	7	14	7

a Columns do not add to total teachers because of multiple majors.

Table III.- Economics Major and Minor Combinations of New York State Junior College Economics Teachers.

Majors and Minors in Combination	Number of Teachers	Percent of Total	Confidence Limits
Double Major in Economics	19	22.6	±2.6
Graduate Major Alone or with Undergrad. Minor	14	16.7	±2.3
Undergrad. Major Alone or with Graduate Minor	11	13.1	±2.0
Double Minor in Economics	5	5.9	±1.4
Single Minor in Economics	12	14.3	±2.0
No major or Minor in Economics	23	27.4	±2.5
	N = 84	100.0	

No major or minor in economics was reported by 27.4 percent of the economics teachers. The teachers' undergraduate or graduate major did not correspond to subject taught in 47.6 percent of the cases which is significantly more than the 9.2 percent cited by Blocker. The professional academicians suggest that the minimum preparation be a graduate or double major in the subject taught. Applying this criterion, 60.7 percent of the respondents have preparation less than the recommended amount, indicating considerable divergence[3].

Many of the economics teachers who had majored in another field at the graduate level stated that they were teaching primarily in their field. If this were true for most teachers and for most subjects taught an overall appraisal of faculty quality in regard to subject preparation would appear more favorable.

Since this study focuses on economics teachers, such an evaluation of the whole faculty was neither possible nor desirable. It was determined, however, that 43.1 percent of the teachers who had majored at the graduate level in fields other than economics were teaching in their own major field as well as in economics and sometimes in other subjects.

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3 Blake (1942) reported 80 percent of all teachers in their major. See page 22.

Stated in reverse, this means that 56.9 percent of the non-economics majors were teaching only in fields other than their field of graduate major.

Of those who had majored in economics at the graduate level, 54.5 percent were giving instruction in their major field only, while 45.5 percent were teaching in one other area--primarily Business Administration--in addition to their major. None of the economics majors surveyed were teaching in other fields only.

Economics Credit Hours and Courses Taken.-- A simple tabulation of graduate and undergraduate majors and minors results in an incomplete picture. Great variations in quality and quantity of major course requirements exist among different graduate schools. In addition, some teachers acquire the equivalent of a degree by completion of course work or through self-education. To bridge some of these possibilities it is necessary to investigate total credit hours in the subject and whether certain core course areas have been completed.

This study does not purport to evaluate the quality of the graduate schools attended by the teachers nor the quality of the courses they have completed. It also does not measure the amount of teacher self-education in economics, although the positive effect of self-education on faculty competence can be great. The neglect in measuring self

education is due to its evasiveness. Probably the only way of measuring it would be to administer a 'test of economic understanding' to the teachers. Such a task is beyond the scope of this study. Later discussion[4] of professional activity in the field of economics may shed some light on self-education , but only by implication.

As was established earlier, professional academicians recommend a minimum of about forty-five credit hours in the subject taught[5]. In addition, certain key course areas are considered to be critical for all in the field of economics[6].

An index of the number of these core courses completed ranging from 0-5 was developed. One index point was given for each of four specific courses and one point was given for any two practical economics courses with the exception of Principles of Economics. This course was excluded because it is typically offered to undergraduate freshmen or sophomores and is usually an elementary survey course.

The total credit hours in economics accumulated by the economics teachers are presented in summary form in Table IV. Hours ranged from zero to ninety in the subject

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4 See pages 73-83, especially pages 81 and 83.

5 See pages 26 and 35.

6 See pages 29-30.

Table IV.- Economics Credit Hours Accumulated by New York State Junior College Economics Teachers.

Credit Hours	Number of Teachers	Percent of Total	Confidence Limits
0 - 18	24	28.6	±2.8
19 - 30	20	23.8	±2.6
31 - 42	13	15.5	±2.5
43 - 54	10	11.9	±1.9
55 - 90	17	20.2	±2.4

matter of economics. The mean was 33.4 credit hours. Data were originally tabulated in six credit hour intervals. According to this original tabulation, the distribution was bimodal in the 7-12 and 25-30 credit hour classes. The median class was 25-30 credit hours. As viewed by the professional academicians, fifty-seven teachers, or 67.9 percent had accumulated credit hours in economics that were less than the minimum of forty-five hours recommended. This indicates considerable divergence. Conversely, 32.1 percent of the teachers met the minimum credit hour criterion.

Twenty-four, or 28.6 percent of the teachers had credit hours in the 0-18 bracket. A recently reported study by Bach and Saunders[7] which was based on a large national sample, showed that high school social studies teachers did not score significantly higher on a widely used 'Test of Economic Understanding' than did those who had no college courses in economics until the teachers had taken five or more college economics courses. While these results do not have direct bearing on this study, it suggests that most of the twenty-four teachers in the 0-18 credit hour group are no better off than someone who has had no college economics at all.

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7 G. L. Bach and Phillip Saunders, "Lasting Effects of Economics Courses", American Economic Review, Vol. 56, June 1966, p. 505-510.

The number of credit hours completed gives no indication of whether core course areas have been studied. An index of the number of core courses completed is presented in Table V. It should be recalled that these core courses were: Statistics, Intermediate Economic Theory, Advanced Economic Theory, History of Economic Doctrines, and any two practical courses.

Strict application of the standards of core course completion revealed that 67.9 percent of the teachers had not completed one or more of the recommended minimum course areas. The most frequently omitted course was Advanced Theory[8], with fifty teachers who had not taken such a course. Thirty-eight teachers had not taken Intermediate Theory, thirty-three had not taken History of Economic Thought, and twenty-eight had not taken Statistics. Thirty-eight, or 41.7 percent of the teachers have had no courses in economic theory and of the forty-six, or 54.8 percent who have had some theory, twelve (14.3%) have had only the intermediate theory.

Professional training in education.-- Examination of faculty competence must take into consideration the professional training of the teacher as a teacher. Many studies have been carried out in the past concerning this aspect of the community-junior college teacher's preparation and

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8 See footnote 85, p. 29.

Table V.- Index of Core Course Areas Completed by New York State Junior College Economics Teachers.

Number of Core Courses Completed	Number of Teachers	Percent of Total	Confidence Limits
0	10	11.9	±1.9
1	10	11.9	±1.9
2	15	17.9	±2.3
3	6	7.1	±2.3
4	16	19.1	±2.3
5	27	32.1	±2.3

somewhat of a consensus has been reached on the minimum amount and type of education course work that should prevail[9]. For this reason and because the main focus of this study was on subject matter preparation in economics, the data gathered concerning actual education preparation was limited to determination of the number of credit hours completed in education. The credit hours reported are found in Table VI.

The range of credit hours completed in education was from zero to ninety-six. The mean was 12.3 credit hours and the modal class was the 0-6 credit hours group. Nearly one half of the teachers for all practical purposes have had no professional training in education courses. Most of the professional academicians recommend fifteen or eighteen credit hours in education as the minimum professional preparation. Fifteen hours is the practical although not the theoretical lower boundary of the 13-24 credit hour class. Using this as the cutting point, 57.1 percent of the teachers had less professional training than the minimum recommended by the professional academicians. Conversely 42.9 percent met this minimum standard.

Economics Hours versus Education Hours.-- The problem of unbalanced preparation of teachers is a problem of long standing. A comparison of teachers who were classified as

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9 See pages 15-18.

Table VI.- Education Credit Hours Accumulated by New York State Junior College Economics Teachers

Credit Hours	Number of Teachers	Percent of Total	Confidence Limits
0 - 6	41	48.8	±3.0
7 - 12	7	8.3	±1.6
13 - 24	24	28.6	±2.8
25 - 96	12	14.3	±2.1

"adequate" and "inadequate" in economics and education course work by the minimum standards of the professional academicians was made and is presented in Table VII.

From the cross tabulation, a phi coefficient of .29 was computed and r_{ϕ} was estimated at .48. A chi square of 7.06 was obtained which is significant at the .01 level, but not at .001. Approximately three-fourths of the teachers who had "adequate" credit hour preparation in economics had "inadequate" credit hours in education. For those "inadequate" in economics hours, the distribution between "adequate" and " inadequate" in education hours was about half and half. This distribution is strongly indicative of unbalanced preparation. The imbalance was greater among those who had strong economics subject matter preparation giving rise to the significant chi square. Clearly, considerable imbalance exists for those with the weaker subject matter preparation as well. It should be observed that when the minimum standards of the professional academicians were applied for both economics and education credit hours, only six of the teachers met both standards. This was 7.1 percent of all respondents.

Professional activity.-- The amount of professional activity of teachers gives some indication of the quality and competence of a faculty. While not directly a part of what the actor brings with him to the situation nor an indication of his ideal self concerning preparation, professional activity

Table VII.- Comparison of Economics and Education Credit Hours of New York Junior College Economics Teachers.

	Inadequate Education Hours (0 - 12)	Adequate Education Hours (13 or more)	
Inadequate Economics Hours (0 - 44)	27	30	= 57
Adequate Economics Hours (45 or more)	21	6	= 27
	48	36	64

is a measure of the actor's self involvement in his status. Several of the many facets of professional activity were investigated. Those included were professional society activity, research and publications, professional readings, and contacts with economists.

The number of professional societies of which the teachers were members ranged from zero to five per person. There were equal occurances of membership in one and two societies. Sixteen of the eighty-four respondents reported no membership in any professional society, twenty-six claimed membership in one society, twenty-six claimed membership in two societies, seven reported three societies, five reported four societies, and two reported membership in five societies.

More meaningful, is the extent to which economics teachers participate in professional societies devoted to economics. An index was designed to reflect society activity with this emphasis. An index value of zero was assigned when the teacher reported no professional society membership. If the teacher belonged to one or more societies other than the American Economic Association, an index of one was assigned. An index value of two was assigned if the teacher reported membership in the American Economic Association and an index of three was assigned when the teacher reported attendance at A.E.A. meetings within the preceding five years as well as membership. The index was stated in terms of A.E.A.

membership because none of the teachers reported membership in any other economic society. The results of this tabulation are presented in Table VIII.

Fifty-one, or 60.7 percent of the economics teachers who responded have no affiliation with a professional society involving the field of economics, while thirty-three, or 39.3 percent report such membership. Of those who are members of the A.E.A., twenty-three claim that they majored in economics at the graduate level, while ten were non-majors. To examine the extent of this relationship, a ϕ coefficient was computed, r_ϕ was estimated and chi square was computed. The ϕ computed was .50, r_ϕ was .79 and chi square was 21.0. A chi square of this magnitude is significant even at the .001 level of confidence. This coupled with the fairly high r_ϕ of .79 is strongly indicative of close relationships between membership in the economics professional society and having majored in economics at the graduate level. At the same time, non-majors tend not to be members of the A.E.A.

The amount of research and publication activity in the field of economics also came under scrutiny. Teachers were asked to indicate the number of their publications of various types in the field of economics. In a separate question, teachers were asked to indicate other research activity if a true picture was not presented by their answer to the preceding question. An index was developed assigning

Table VIII.- Professional Society Activity Index of New York State Junior College Economics Teachers.

Index	Number of Teachers	Percent of Total	Confidence Limits
0 - No membership of any kind.	16	19.0	±2.3
1 - Some Membership Excluding A.E.A.	35	41.7	±3.0
2 - A.E.A. Membership	13	15.5	±2.5
3 - A.E.A. Member Plus Meetings	20	23.8	±2.6

a value of zero for no publications; a one for non-professional publications; a two for publications of articles, monographs, and reviews; and a three for publication of books. The teachers were asked to indicate the number of publications in each category, but many only indicated by a checkmark that they had published. For this reason, the index does not reflect differences in quantity of publications. For obvious reasons, qualitative differences in the publications could not be ascertained. The index is presented in Table IX.

As would be expected from the generalization that community-junior college teachers are consumers of research rather than producers of research[10], the number with no publications was large. A total of fifty-eight, or 68.9 percent of the teachers had no publications to their credit. Of those who report publications of a professional type, fifteen were economics majors, while seven were non-majors. To examine the extent of this relationship, a ϕ coefficient was computed as .32 and r_{ϕ} was estimated at .51. Chi square was computed to be 6.60 which is significant at the .01 level, but not at the .001 level of confidence. The significance of chi square was due to the fact that nearly half of the majors had published, while only 16 percent of the non-majors had like accomplishments.

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10 See pages 8-9.

Table IX.- Research and Publications Index of New York State Junior College Economics Teachers.

Index	Number of Teachers	Percent of Total	Confidence Limits
0 - None	58	68.9	±2.7
1 - Non-Professional	4	4.8	±1.3
2 - Articles etc.	20	23.8	±2.6
3 - Books	2	2.4	± .8

Another facet of professional activity measured was the type of readings done by the teachers. A list of several publications used for keeping up with the practical aspects of economics was combined with publications dealing with more theoretical aspects of the discipline. Respondents were asked to indicate those publications that they had done some reading in since beginning teaching economics. The question was worded so that occasional as well as regular reading of the publications would justify an affirmative checkmark by the respondents. This introduces some bias in that it gave virtually everyone an opportunity to respond in the affirmative.

Responses were divided into two categories. The first group included those who had read only in publications that would give them some practical insight into the real economic world and the second group included those who had read material from publications and journals of a theoretical nature as well.

Those in the first group totaled twenty-five, or 29.8 percent of the total, while 70.2 percent fell in the latter group. Only one of the thirty-three who had majored in economics at the graduate level reported readings of only a practical nature. On the other hand, twenty-four of the non-majors reported readings of a practical nature only. It is clear that nearly all of the economics majors try to keep

up with theoretical developments, while many of the non-majors do not. The reason(s) why they do cannot be deduced from the data. It may be because they more clearly perceive the need for keeping up with theoretical developments in the field. It may be because their academic background equips them better to do so, or it may be due to other forces.

A final facet of professional activity measured was the type of contacts the teachers have had with economists. The number of contacts per individual are reported in Table X. The number of contacts per person ranged from zero to six and the mean number of contacts was 2.27 per person.

Actual contacts in rank order of importance were university level courses--48, personal contacts--45, lectures--37, economics conventions--31, economics workshops--20, and miscelleneous--4. No contact with professional economists of any type was reported by twelve of the teachers.

The median number of contacts was two. Out of the thirty-three teachers who had majored in economics at the graduate level, four had contacts below the median, while twenty-five (49%) of the non-majors out of a total of fifty-one had contacts below the median number. Thus, the economics majors tend to have more contacts with fellow economists than do their non-major counterparts.

Self-education and professional activity.-- To the extent that the amount and type of professional activity of

Table X.- Contacts with Professional Economists Per Teacher by New York State Junior College Economics Teachers.

Number of Contacts	Number of Teachers	Percent of Total	Confidence Limits
0	12	14.3	±2.0
1	17	20.2	±2.4
2	24	28.6	±2.8
3	13	15.5	±2.5
4	8	9.5	±1.8
5	9	10.7	±1.9
6	1	1.2	± .4

the teacher is an indication of self-education, the evidence suggests that those who already meet the minimum requirements of subject matter preparation as evidenced by a graduate major in economics are the same persons who are most active according to the measures just cited. In the case of professional society activity, research and publications, professional readings, and contacts with economists, all of which involve study or learning, the economics majors were more consistently on the side of greater activity than the non-majors. This cannot be taken to mean that the non-majors do not engage in self-education in economics, but only that the majors seem to be relatively stronger in their self-education endeavors.

Summary application of the minimum standards of the professional academicians.-- An application of the minimum standards as recommended by the professional academicians resulted in the disqualification for one reason or another of all but two of the New York State community-junior college teachers of economics who responded to the questionnaire.

Some of the standards are more important than others. Often it is necessary to compromise some of the criteria, viewing them as being relatively unimportant or offset by other positive factors. The amount of compromise a person is willing to make is an individual matter. Some individuals would not be willing to compromise any of the criteria, some

would swing to the other extreme and be willing to compromise all of them. Most would probably fall somewhere between these two extremes. To facilitate individual judgment on the part of the reader, application of the criteria of the professional academicians was applied in a step-by-step fashion.

One of the requirements is a minimum of a master's degree. Deduction of the twelve bachelor's degrees resulted in seventy-two acceptable teachers by this criterion. Three of the teachers with bachelor's degrees as their highest degree earned, met all of the subject matter criteria so it is possible to add them back to the total viewing them as having degree equivalence. This would result in seventy-five "acceptable" teachers out of the eighty-four respondents.

The professional academicians further state that the degree should be primarily in the subject taught. Therefore, all non-economics majors should be subtracted from the total leaving thirty teachers meeting standards if the three with only a bachelor's degree are permitted to remain in the group. At this point, two of the non-majors could be added because they have the equivalent of a master's degree in economics through course work completed. At the same time, five of the majors should be subtracted because of inadequate credit hours in economics which the professional academicians define as about forty-five minimum. These two

changes bring the total down to twenty-seven teachers who meet the standards.

The courses completed must include certain core areas. Five of the teachers included above had completed courses in only four of the five core areas. Their subtraction brings the total to twenty-three. (It might be argued that completion of four out of the five core courses would be sufficient and that these five teachers should be left in the group of those who met the requirements.)

Another recommendation is that the master's degree should be with thesis. Three that have this degree and have not been removed for other reasons have not completed a thesis. In addition, the three with only a bachelor's degree who were left in the total because of degree equivalence do not have a completed thesis. The subtraction of these brings the total down to seventeen teachers out of eighty-four.

A final requirement of the professional academicians is that the teacher should have completed a minimum of fifteen credit hours in professional education course work in certain generally accepted course areas. No attempt was made in this study to determine whether the education course areas had been completed, but total credit hours in education was determined. Fifteen of the seventeen who remained at this point did not have the required minimum credit hours in education and had to be subtracted. This leaves two teachers

out of the eight-four respondents who met all of the requirements of the professional academicians.

Thus, depending upon the strictness of application of the criteria, twenty-three to twenty-seven of the teachers met the subject matter criteria. When the professional education criterion was also considered, only two remained who met all of the standards applied. Divergence from the recommended preparation was great.

2. Teacher Expectations Concerning Preparation.

The teachers were asked their opinion regarding major points of junior college economics teacher preparation at the graduate level. This section investigates the following aspects of the recommended levels of preparation: a. degree levels, b. major requirements, c. economics credit hours and core course requirements, d. the thesis requirement, and e. professional educational requirements.

The preparation recommended by the teacher is an indication of what he thinks others expect of him concerning preparation in his situation (D). This could be referred to as the teacher ideal self in the limited aspect of his total role situation that concerns preparation. It should be recalled that this concept may or may not agree with what others really expect of him in the situation.

In answer to the question concerning minimum degree levels acceptable, the distribution of answers was very similar to actual degree levels attained. Fourteen, or 16.7 percent of the teachers said that the minimum degree should be a bachelor's degree. Seventy teachers, or 83.4 percent, recommended a master's degree or more, thereby agreeing with the recommendations of the professional academicians. All but three of these believed the master's to be acceptable. These three recommended the doctor's degree as the minimum.

The teachers were also asked whether they believed the teachers of economics should be required to major in economics. Fifty-nine, or 70.2 percent of the teachers answered in the affirmative, while twenty-four, or 28.6 percent felt that it was not necessary to have majored in economics to teach the subject. For purposes of comparison, it should be recalled that 39.3 percent of the teachers had actually majored in economics, while 70.2 percent believe that the teacher should have majored in economics.

The recommended credit hours in economics is more difficult to interpret. Professional academicians recommend a minimum total preparation of about forty-five hours, but the teachers were asked the number of hours in economics they believed should be required in a graduate program to train economics teachers for the junior college. The teachers' recommendations are found in Table XI.

Table XI.- Teacher Recommended Economics Credit Hours for a Junior College Economics Teacher Graduate Program.

Credit Hours	Number of Teachers	Percent of Total	Confidence Limits
0 - 12	9	10.7	±1.9
13 - 24	25	29.8	±2.7
25 - 36	34	40.5	±3.0
37 - 48	5	5.9	±1.4
49 - 60	11	13.1	±2.0

To relate these recommended hours to the minimum of the professional academicians necessitates some assumptions. At the master's level for subject matter majors it is reasonably standard practice that students are admitted for graduate study if they have completed an undergraduate major in the field. This typically entails thirty but sometimes only twenty-four hours of study in the subject. On the other hand, some graduate schools find a strong undergraduate minor in the subject acceptable. Typical minor requirements are fifteen, but sometimes twelve hours in the subject. If the prospective master's candidate does not meet these prerequisites upon application for admission he is expected to make-up the weaknesses in his academic background.

This means that it is reasonably safe to assume that a minimum of fifteen or more hours of course work in economics would have been completed along with the recommended graduate credit hours. To make this tabulation of teacher recommended credit hours more compatible for comparison with the expected total hours of the professional academicians, the upper and lower limits shown in Table XI could be increased by fifteen credit hours. This would then show the hypothetical range of total credit hours in economics recommended by the teachers.

In the absence of such an adjustment, only sixteen, or 19 percent of the teachers recommend economics training equal to or above the minimum standards set by the professional

academicians. With this adjustment, fifty, or 59.5 percent of the teachers recommend credit hours in economics that are compatible with the recommendation of the professional academicians. This latter approach yields results that are more consistent with the recommendations by 70.2 percent, that the teacher should major in economics.

As well as being asked to recommend the number of credit hours to be taken, teachers were asked to specify six core courses that should be required to be taken or have been taken by all. The same index system that was used for actual core courses taken was used here[11]. The number of teachers who fell into these index categories of zero to five are presented in Table XII.

Since courses recommended were expected to focus on four specific courses out of thirteen given options, and an unspecified number of potential fill-in options, it would be unreasonable to expect many of the teachers to obtain an index of five. A more reasonable approach would be to consider an index of either four or five as generally compatable with the recommendations of the professional academicians. In this light, twenty-seven, or 32.2 percent were in general agreement with the professional academicians, while 67.8 percent were not. While this is far short of

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11 See p. 66.

Table XII.- Teacher Recommended Core Course Areas Index for a Junior College Economics Teacher Graduate Program.

Index Number of Core Courses Recommended	Number of Teachers	Percent of Total	Confidence Limits
0	5	5.95	±1.4
1	5	5.95	±1.4
2	18	21.4	±2.4
3	29	34.5	±2.9
4	20	23.8	±2.6
5	7	8.4	±1.6

desirable standards, it is comparable to the 32.1 percent of the teachers who scored five on the actual core courses taken index.

It will be recalled that the core courses recommended were: Intermediate Economic Theory, Advanced Economic Theory, Statistics, History of Economic Thought, and any two courses that would provide practical knowledge of the real economy. Considering the core courses in terms of rank order of their recommendation, all but Advanced Economic Theory appeared in the first five courses. Thus, if the rank order selection was coded to the index, the total sample would receive an index of four which is reasonably consistent with the professional academicians' recommendations.

Teachers were also asked their opinion concerning the thesis requirement in a graduate program to train junior college economics teachers. Forty-eight, or 58.5 percent of the respondents were in favor of the thesis requirement, while the remaining thirty-four, or 41.5 percent did not think it necessary.

Concerning professional training, the teachers were asked the number of credit hours in education course work that they believed should be included in the graduate training of the economics teacher and whether practice teaching of any type should be required. The education course hours recommended are presented in Table VIII.

Table XIII.- Teacher Recommended Education Credit Hours for a Junior College Economics Teacher Graduate Program.

Credit Hours	Number of Teachers	Percent of Total	Confidence Limits
0 - 6	53	63.1	±2.1
7 - 12	25	29.7	±2.7
13 - 24	4	4.8	±1.3
25 - 30	2	2.4	± .8

Twenty-five out of the fifty-three teachers in the 0-6 credit hour category specified that no education course work should be required. This comprised 29.0 percent of the total sample. If the recommended minimum standards of the professional academicians' are strictly applied, (fifteen or more hours), an extremely small 7.2 percent of the total teacher respondents were in agreement. If it is assumed that some education course credits are expected by these teachers as having been completed at the undergraduate level, it would be legitimate to include those in the 7-12 credit hour category as being within the recommended minimum. This adjustment would bring the total who are in agreement with the professional academicians to 36.9 percent. Whether this adjustment should be made is open to debate. Whichever choice is made, there was great divergence between the teachers' recommendations and the professional academicians' recommendations on this criterion of preparation.

As far as the practice teaching criterion was concerned, fifty teachers, or 61.7 percent of the respondents to this question were in agreement with the professional academicians, while the remaining 38.3 percent disagreed.

3. Administrator Expectations Concerning Levels of Economics Teacher Preparation.

This section deals with the minimum acceptable preparation for economics teachers from the viewpoint of the

administrator. It considers the following topics: a. general characteristics; b. economics teacher requirements--degrees, major-minor, economics credit hours, professional education requirements, and the thesis; and c. a summary comparison of standards of preparation recommended by the professional academicians with the administrators' minimum standards.

These minimum requirements of the administrator are an indication of his actual role expectations of economics teachers in the limited aspect of total role expectations involving teacher preparation.

General characteristics of the schools.-- Questionnaires were sent to the administrators of the sixty-five community-junior colleges in New York State. Sixty, or 92.3 percent of the total responded. Forty-three of the sixty responding schools were schools where economics was taught. Four schools where economics was taught did not respond, thus 91.5 percent of the administrators in schools with economics in their curriculum responded. Out of the eighteen schools where no economics was taught, seventeen were Private Religious institutions, while one was Private Secular.

The administrators were requested to state their minimum requirements for a teacher of economics and their opinion concerning several other aspects of teacher preparation. Several characteristics of these schools which are

pertinent to the role theory sub-hypotheses will be developed later. The focus in this report is on those schools where economics was taught.

Economics teacher minimum requirements.-- Most of the administrators were in agreement with the professional academicians concerning minimum degree levels acceptable. Seven of the forty-three responding administrators in schools where economics was taught, stated that a bachelor's degree was the minimum acceptable. Thirty-five, or 81.4 percent of the administrators stated that the minimum acceptable degree in their institution was the master's degree, while one administrator set the minimum acceptable degree as the doctor's degree. Thus, thirty-six, or 83.7 percent of the administrators had minimum degree requirements that equaled or exceeded the minimum of the master's degree as recommended by the professional academicians.

Administrators were also asked to state the minimum acceptable combinations of economics majors and minors and the minimum credit hours in economics acceptable. Their responses are presented in Tables XIV and XV respectively.

The minimum standards of the administrators vary distinctly from those of the professional academicians. None of the administrators believed that a double major should be the minimum required. Sixteen, or 37.2 percent of the administrators were in agreement with the professional

Table XIV.- Economics Major and Minor Combinations Acceptable to New York State Junior College Administrators.

Majors and Minors in Combination	Number of Administrators	Percent of Total	Confidence Limits
Double Major in Economics	0	--	--
Graduate Major Alone or with Undergrad. Minor	16	37.2	±4.3
Undergrad. Major Alone or with Graduate Minor	5	11.6	±3.0
Double Minor in Economics	3	7.0	±2.2
Single Minor in Economics	14	32.6	±4.2
No Major or Minor in Economics	5	11.6	±3.0

Table XV.- Minimum Economics Credit Hours Acceptable to New York State Junior College Administrators.

Credit Hours	Number of Administrators	Percent of Total	Confidence Limits
0 - 18	14	32.6	±4.2
19 - 30	23	53.5	±4.5
31 - 42	0	--	--
43 - 54	6	13.9	±3.1
55 - 90	0	--	--

academicians by insisting on a graduate major, while twenty-seven, or 62.8 percent find less preparation acceptable. Five, or 11.9 percent of the administrators reported that no major or minor at any educational level was necessary.

Administrators' expectations in terms of economics credit hours were even more divergent from the recommended forty-five hour minimum of the professional academicians. Only six, or 13.9 percent of the administrators stated minimum credit hours that were equal to this minimum of the professional academicians. None of the administrators exceeded this recommended minimum. Thus, thirty-seven, or 86.1 percent had minimum standards that were between fifteen and forty-five credit hours less than the recommended minimum of forty-five hours.

Fourteen, or 32.6 percent of the administrators had minimum standards in the 0-18 credit hour category. Applying the same logic from the Bach and Saunders study cited earlier[12], these administrators are willing to hire economics teachers who are probably no better founded in economic understanding than persons who have never taken any college economics.

The expectations concerning proper minimum preparation in professional education course work were also very

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12 See page 60.

low in terms of the minimum standards of the professional academicians. Only four, or 9.3 percent of the administrators had acceptable minimum standards by this criterion. Seventeen, or 39.5 percent stated that the minimum education course work should be in the 0-6 hour range, while the remaining twenty-three, or 53.5 percent selected hours in the 7-12 range. While most of the professional academicians stated fifteen or more hours as the minimum, a small minority felt that twelve hours was sufficient. Some of this latter group could be considered acceptable by this standard.

Administrators were also asked their opinion concerning the thesis requirement and the desirability of a practice teaching requirement for junior college economics teachers. Twenty-six, or 60.5 percent of the administrators were in favor of practice teaching, while seventeen, or 39.5 percent did not think it necessary. It will be recalled that the professional academicians are in favor of practice teaching preferably in the form of an internship in the junior college.

As for the thesis requirement, twenty-one, or 48.8 percent were in favor of the thesis, while the remaining twenty-two, or 51.2 percent did not think it necessary.

Summary application of the standards of the professional academicians.-- Six, or 13.9 percent of the administrators in schools where economics was taught met the subject matter minimum standards of the professional

academicians. When the minimum education course hours criterion and the practice teaching criterion was applied, none of the administrators met the minimum standards. This is indicative of great divergence--nearly complete--between recommendations of administrators and professional academicians.

Summary

Actual economics teacher preparation and expectations concerning levels of preparation by teachers and administrators were determined by means of questionnaires. Teacher response was 92.3 percent of the total, while administrator response from the schools where economics was taught was 91.5 percent.

The patterns that emerged for the whole teacher sample typically indicate more divergence than convergence between actual preparation and the recommended minimum of the professional academicians. In other words, what the actor brought with him to the situation or acquired up to the time of the survey concerning preparation for role was greatly divergent from the recommendations of the professional academicians.

The typical highest degree held was the master's and, while the range of total graduate hours completed was from zero to one-hundred and fifty, the mean hours completed was

indicative of completion of two years of graduate residence. These levels of preparation seem to indicate convergence with the professional academicians. However, application of the subject matter criteria which involved the teachers graduate and undergraduate major, credit hours completed in economics, and core course areas completed, indicated considerable divergence. Approximately one-third of the teachers met or exceeded the minimum. A little less than one-half of these barely possessed the minimum requisites. Two-thirds of the teachers did not meet the applied standards. Fifteen percent of the total came very close. Divergence of the remainder was great. Slightly over one-fourth of the total had completed almost no formal training in economics.

Application of the professional education training criterion resulted in slightly more than one-half of the teachers meeting the minimum. About eight percent of the total barely met the requisite. The slightly less than half that remained had little or no professional education preparation.

Combined application of the subject matter and professional education criteria resulted in only two out of the eighty-four teachers meeting all requirements.

Professional activity, while not directly a part of actual or recommended preparation, is a part of the real self and is indicative of the teachers self-involvement in

his status. Professional society activity, professional readings in economics, research and publications activities, and contacts with economists were measured.

While eighty percent of the teachers participated at least as members in some professional society, only thirty-nine percent participated in one or more societies devoted to the discipline of economics. Most of the latter group were the same teachers who met the subject matter criteria of the professional academicians.

The measure of professional readings used indicated that a little over two-thirds of the teachers have read publications since beginning their teaching of economics which deal with both practical and theoretical aspects of economics. The remainder had read practical publications only. A significantly larger proportion of the teachers who met the subject matter criteria were readers of both practical and theoretical publications in economics.

Completed research and publications as measured showed that nearly three-fourths of the teachers were inactive in this area. A significantly larger proportion of those who had published were graduate majors in economics.

Administrators were requested to indicate the minimum levels of preparation for economics teachers acceptable to them. Patterns of divergence from the recommended minimum of the professional academicians were more pronounced than

patterns of convergence. In other words, the administrators' expectations (R) of the actor concerning preparation for role were greatly divergent from the professional academicians' recommended minimum preparation.

Typically, the administrators insisted upon a minimum of a master's degree which indicates convergence on this point. However, for subject matter preparation, they were very divergent. Acceptable major-minor combinations indicated that slightly over one-third were in agreement with the professional academicians. The remaining divergences were great, with nearly one-half of the total being content with no major or minor or a single minor only. The minimum credit hours in economics were even more divergent, with only about fourteen percent agreeing with the professional academicians. Of the total, nearly one-third require little or no formal training in economics.

For professional training in education, nearly two-thirds were in favor of practice teaching and require some education course work, but only ten percent require education credit hours that would be clearly acceptable according to the professional academicians' minimum recommendations. While divergence existed on professional education preparation, it was not as great as for subject matter preparation. Typically, the administrators who required the higher subject

matter preparation were the ones with the lower professional education preparation requirements.

Application of all of the minimum standards of the professional academicians to the standards of the administrators revealed that none of the administrators were in full agreement.

Divergence from recommended minimum standards of the professional academicians predominated, but, convergence existed for some. The next chapter investigates whether these patterns of divergence and convergence vary significantly according to the role theory sub-hypotheses which are based on institutional (situational) variables that, hypothetically, might be expected to affect the amount of convergence.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF THE RESULTS-- ROLE THEORY SUB-HYPOTHESES

The general hypothesis of this study is that comparisons of actual teacher preparation and expectations concerning preparation by teachers, administrators, and professional academicians will indicate patterns of convergence and divergence.

From the overview in Chapter III of actual teacher preparation and teacher and administrator expectations concerning preparation, it was seen that divergence between these groups and the professional academicians' recommendations was more common than convergence.

In this chapter, the extent of convergence and divergence is examined according to sub-groups. The chapter is divided according to the sub-hypotheses of the study. They involve:

1. Type of Student,
2. Type of Economics Course Offerings,
3. Age of Institution,
4. Disciplines Expected,
5. Type of Accreditation,
6. Private versus Public Control,
7. Education Specialists,
8. Full-time versus Part-time Teachers,
9. Teacher Salary Categories,
10. Teacher-Administrator Convergences, and
11. Self-Evaluation and Convergences.

The major variables of teacher preparation which have been measured were divided according to the amount of the criterion possessed or recommended and analyzed for significant differences between the groups derived from these sub-hypotheses. The variables of preparation include all those examined in Chapter III as well as a few additional ones. The nature of the additional variables is described as significant differences appear from the application of chi square to those variables.

1. Type of Student.

It was hypothesized that convergence on the major variables of teacher preparation between professional academicians and a. teachers, b. administrators would be greater in schools where the students in the economics courses offered were predominantly transfer students or where there were substantial numbers of transfer students in the courses. The hypothesis was made because it seemed reasonable to expect that schools serving the transfer, or college parallel, function for students in the economics courses would have more stringent requirements for teachers involved in this function in order to promote better articulation between the community-junior college and the senior college.

On the basis of responses by administrators in the schools where economics was taught, it was determined that

nine out of forty-three schools had students that were predominantly terminal, fifteen had substantial numbers of both terminal and transfer students, and nineteen had predominantly transfer students. The number of teachers in the schools according to this classification were twenty-three, twenty-five, and thirty-six respectively.

The chi square values obtained for the teachers in these sub-groups on the major variables of preperation and professional activity measured and the chi squares for the administrators' minimum standards are presented in Table XVI. Levels of significance throughout this chapter are stated only at the .05 and higher levels[1].

An examination of the chi squares involving actual teacher preperation which are the first six listed in Table XVI, indicates that none of the differences were significant. This means that the differences that did exist could have been due to chance. Similarly, none of the chi squares on the data for teacher recommended preparation which are found in Table XVI were statistically significant. Again, those differences that did occur could have been due to chance variations.

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1 For a sample of the 2 x k contingency tables used for this section and throughout this chapter, see Appendix G. The degrees of freedom vary in accordance with the number of cells in the contingency table.

Table XVI.- Significant Differences by Type of Student Sub-Groups on Major Variables Of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree levels	2	.08	--
Major vs. Non-Major	2	5.00	--
Economics Hours	2	2.30	--
Core Courses	2	5.20	--
Education Hours	2	.40	--
Thesis	2	1.70	--
Professional Activity			
Additional Study Plans	2	7.60	.05
Contacts with Economists	4	2.50	--
Professional Readings	2	6.20	.05
Prof. Society Activity	2	7.10	.05
Research and Publications	2	4.10	--
Recommended Preparation			
Degree levels	2	2.90	--
Major vs. Non-Major	2	.69	--
Economics Hours	2	2.90	--
Core Courses	2	4.60	--
Education Hours	2	1.70	--
Practice-teaching	2	1.70	--
Thesis	2	4.20	--
Administrator's Standards			
Degree levels	2	2.92	--
Major vs. Non-Major	2	3.34	--
Economics Hours	2	1.50	--
Education Hours	2	4.35	--
Practice Teaching	2	1.17	--
Thesis	2	.08	--
Research Expected	2	4.46	--
Professional Activity	2	1.75	--

Significant differences on three of the items of professional activity of the teachers were found. Visual interpretation of the data indicates that more of the teachers of transfer students plan to work for an advanced degree in economics than do their counterparts who teach predominantly terminal students. Similarly, those who teach substantial numbers of both terminal and transfer students were more inclined to read professionally in theoretical as well as in practical journals for keeping abreast of economic developments. The teachers in this category had also been more active in their attendance at meetings of the American Economic Association.

Examination of the section of Table XVI which reflects chi squares for the administrators' minimum acceptable standards, indicates that none of the existing differences were significant. The differences that did exist, while not necessarily due to chance, could be accounted for by chance variations.

The amount of convergence and divergence on the major variables of preparation measured between the professional academicians' recommendations and a. teacher actual preparation, b. teacher recommended preparation, and c. administrators' minimum acceptable standards did not vary significantly in accordance with the type of student being taught. Consequently, the hypothesis that convergences would be greater

when most or substantial numbers of the students were transfer students must be rejected. The evidence of actual differences was insufficient.

2. Schools with Advanced versus Elementary Courses Only.

It was hypothesized that convergence on the major variables of teacher preparation between professional academicians and a. teachers, b. administrators would be greater in schools that offered advanced courses in economics than in schools that offered only the elementary course in economics. It seemed reasonable to anticipate that higher levels of preparation might be expected because of the additional complexity of the material in the more advanced courses.

It was found that the elementary Principles of Economics course only was taught at twenty-two of the schools responding, while in twenty-one both this elementary course and advanced courses were taught. Thirty-nine of the responding teachers were in the former group of schools, while forty-five were in the latter.

The chi square values obtained for the teachers and administrators in these sub-groups on the major variables of preparation and professional activity measured are found in Table XVII[2].

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2 For a sample of the 2 x 2 contingency tables used for this section and throughout the chapter, see Appendix 6. The indicated degrees of freedom vary in accordance with the number of cells in the contingency table.

Table XVII.- Significant Differences by Type of Courses Sub-Groups on Major Variables of Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree levels	1	.13	--
Major vs. Non-Major	1	.35	--
Economics Hours	1	.06	--
Core Courses	1	.17	--
Education Hours	1	.00002	--
Thesis	1	.93	--
Professional Activity			
Additional Study Plans	1	2.93	--
Contacts with Economists	2	.72	--
Professional Readings	1	.08	--
Prof. Society Activity	1	.56	--
Research and Publications	1	.01	--
Recommended Preparation			
Degree levels	1	.77	--
Major vs. Non-Major	1	1.91	--
Economics Hours	1	3.53	--
Core Courses	1	2.63	--
Education Hours	1	4.36	.05
Practice Teaching	1	.15	--
Thesis	1	.29	--
Administrator's Standards			
Degree levels	1	.23	--
Major vs. Non-Major	1	.01	--
Economics Hours	1	.89	--
Education Hours	1	1.12	--
Practice Teaching	1	.19	--
Thesis	1	1.89	--
Research Expected	1	.009	--
Professional Activity	1	.18	--

An examination of the chi squares involving actual preparation shows that none of the differences found were statistically significant. Similarly, none of the chi squares for professional activity were significant.

A signigicant difference was found on one of the items of preparation levels as recommended by the teachers. The number of education hours recommended was significantly different at the .05 level but not at the .02 level. The actual difference giving rise to the significance stemmed from the fact that more teachers in the schools offering advanced courses in economics recommended education hours of six or less. Thus, the amount of divergence between professional academicians and teachers on this one point was greater than the divergence for the whole group.

None of the differences that existed among administrator responses when divided according to schools with and without advanced economics courses were significant.

The amount of convergence on the major variables of preparation measured between the professional academicians' recommendations and a. teacher actual preparation, b. teacher recommended preparation, and c. administrators' minimum acceptable standards did not vary significantly in accordance with the type of economics courses offered with the relatively minor exception of some additional divergence concerning education hours recommended on the part of teachers of advanced

economics courses. Therefore, the hypothesis that convergence would be greater when advanced courses in economics were taught in the junior college must be rejected. With the exception noted, the actual differences could be accounted for by chance variations.

3. Age of Institution.

It was hypothesized that convergence on the major variables of teacher preparation between professional academicians and a. teachers, b. administrators would be greater in older institutions. The hypothesis was made because it seemed reasonable to expect that older institutions would have had time to stabilize at higher levels of actual and expected preparation.

The junior college movement is young. To analyze on the basis of institutional age, it is necessary to speak of relative age. The ages of the institutions were determined from the listing in the Junior College Directory[3] of the year in which the school was organized as a Junior College.

The New York State community-junior colleges ranged in age from two to one-hundred twenty-two years. A more meaningful picture is gained by omitting the oldest institution. With this adjustment, the range would be from two

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3 Junior College Directory, op. cit., p. 35-37.

to sixty-four years. To facilitate analysis, the schools were divided into three age groups. Fourteen of the schools were in the zero to eight year group with twenty-eight of the teachers in those institutions. Fourteen of the schools were in the nine to nineteen year group with twenty-one of the teachers in these institutions. Finally, fifteen of the responding schools were in the age group of twenty or more years with thirty-five of the teachers in this group.

The chi square values obtained for the teachers and administrators according to these sub-groups on the major variables of preparation and professional activity measured are presented in Table XVIII.

Examination of the chi squares obtained for teacher actual preparation indicate that on all but one of the variables statistically significant differences were not found. The one with significance was economics course hours completed and was significant at the .05 level. The significance stemmed from a larger proportion of teachers who had inadequate economics hours in schools that were twenty or more years old. Visual inspection of the data prior to combining cells for chi square, further revealed that nearly half of the teachers in this sub-group were actually in the 0-18 credit hour category rather than in the two categories with a combined range of 19-42 hours.

Table XVIII.- Significant Differences by Institution Age Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree levels	2	.33	--
Major vs. Non-Major	2	3.36	--
Economics Hours	2	7.40	.05
Core Courses	2	5.20	--
Education Hours	2	.40	--
Thesis	2	.42	--
Professional Activity			
Additional Study Plans	2	4.60	--
Contacts with Economists	4	2.00	--
Professional Readings	2	.96	--
Professional Soc. Activity	2	4.50	--
Research and Publications	2	5.20	--
Recommended Preparation			
Degree levels	2	3.60	--
Major vs. Non-Major	2	.49	--
Economics Hours	2	8.76	.02
Core Courses	2	3.70	--
Education Hours	2	2.90	--
Practice Teaching	2	9.24	.01
Thesis	2	.08	--
Administrator Standards			
Degree levels	2	4.91	--
Major vs. Non-Major	2	6.72	.05
Economics Hours	2	1.17	--
Education Hours	2	6.56	.05
Practice Teaching	2	7.27	.05
Thesis	2	1.72	--
Research Expected	2	2.73	--
Professional Activity	2	.29	--

None of the chi squares for professional activity were statistically significant. The differences that did exist were on the side of lesser activity for the twenty and over age group schools, but these differences could be accounted for through chance variations.

The chi squares for teacher recommended preparation were significant in the cases of economics hours recommended and practice teaching recommended. For recommended economics hours, the significance stemmed from a larger proportion of the teachers in the schools twenty years old and over recommending hours considered inadequate by the professional academicians. The difference for practice teaching was due to a greater proportion in the oldest category of schools being in favor of practice teaching.

Three of the chi squares on the variables as recommended by the administrator were significant at the .05 level. A significantly larger number of the administrators in the middle age group of 9-19 years expected their teachers to have majored in economics. Similarly, a significantly larger number in this age group expected hours in education course work that would be classified as adequate by the standards of professional academicians. A significantly smaller proportion of the administrators in the oldest age group believe that practice teaching should be required. This last point is strangely the reverse of the teachers in these same institutions.

The amount of convergence and divergence in certain variables did vary significantly on the basis of institutional age sub-groups. Where the significant variations did exist, they were generally on the side of expectations in the older institutions being lower than in the other sub-groups. Visual inspection of the data suggests that the middle age group of 9-19 years had slightly higher actual preparation and expected preparation on the part of teachers and administrators, although the differences were not great enough to justify accepting this as an alternative hypothesis.

The hypothesis under investigation anticipated greater convergence on the major variables of preparation measured between the professional academicians' recommendations and teachers and administrators in older institutions. Where the differences were statistically significant, they usually were so because of greater divergence of these older institutions. The hypothesis must be rejected as far as the significant variables are concerned. The combined statistical and visual evaluation suggests accepting an hypothesis that the middle age category of schools converge more with the professional academicians' recommendations than do the rest.

4. Number of Teaching Disciplines Expected.

It was hypothesized that convergence on the major variables of teacher preparation between professional

academicians and a. teachers, b. administrators would be greater in schools where the administrators expect teacher preparation in only one discipline.

On the basis of responses by the administrators in the schools where economics was taught, it was determined that 81.4 percent of the administrators expected their teachers to be prepared to teach in two or more discipline areas. More specifically, out of the forty-three responding administrators in schools where economics was taught, eight expected teachers to be prepared in one discipline, thirty-one expected teachers to be prepared in two discipline areas, and four expected teachers to be prepared in three subject areas. The number of teachers corresponding to these categories were eleven, sixty-two, and eleven respectively.

The small number of actual frequencies resulted in small expected frequencies making it difficult to apply chi square analysis. The categories of two and three discipline areas expected were combined. Low expected frequencies still existed in the one discipline expected category. This must be kept in mind when interpreting chi square. The obtained values of chi square for the main variables of teacher preparation measured are presented in Table XIX.

Examination of the obtained chi squares indicates significant differences in three of the variables of actual preparation. The significance of major versus non-major at

Table XIX.- Significant Differences by Teaching Disciplines Expected Sub-Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree levels	1	.16	--
Major vs. Non-Major	1	5.94	.02
Economics Hours	1	3.71	--
Core Courses	1	4.74	.05
Education Hours	1	8.95	.01
Thesis	1	.02	--
Professional Activity			
Additional Study Plans	1	.63	--
Professional Readings	1	3.74	--
Prof. Society Activity	1	1.24	--
Research and Publications	1	.01	--
Recommended Preparation			
Degree levels	1	.96	--
Major vs. Non-Major	1	.67	--
Economics Hours	1	5.09	.05
Core Courses	1	1.02	--
Education Hours	1	1.91	--
Practice Teaching	1	3.49	--
Thesis	1	.92	--
Administrator Standards			
Degree Levels	1	1.91	--
Major vs. Non-Major	1	10.66	.01
Economics Hours	1	10.63	.01
Education Hours	1	5.17	.05
Practice Teaching	1	2.17	--
Thesis	1	.73	--
Research Expected	1	2.38	--
Professional Activity	1	1.29	--

the .02 level stemmed from the fact that while slightly more than one-fourth of the teachers in the "two or more disciplines expected" category had an adequate major, nearly four-fifths of the teachers in the "one discipline expected" schools had an adequate major by the standards of the professional academicians.

Similarly, the significant chi square for core courses completed was due to the fact that while slightly less than one-half of the "more than one discipline expected" category would be classed as adequate, nine-tenths of the teachers in one discipline expected schools were in the adequate category.

The difference between the sub-groups for actual preparation in education course work was significant at the .01 level. This was somewhat the reverse of the prior two significant differences. Here the significance stemmed from greater divergence from the professional academicians' recommendations. Only one of the forty-three teachers in the total sample who had adequate hours was in the one discipline expected category of schools.

None of the variables of professional activity that were measured showed a significant difference according to the sub-groups of number of disciplines expected.

For teacher recommended preparation, one of the variables was significant at the .05 level. This was for economics hours recommended. The significance stemmed from

the fact that only one of the thirty-four teachers in the total sample who recommended "inadequate" hours in economics was in the "one discipline expected" category of schools.

Three of the administrator standards variables were significantly different. The major requirement was significant at the .01 level, economics hours at the .01 level and education hours at the .05 level.

The significance of the major requirement and economics hours stemmed from the larger proportion of "one discipline expected" administrators who insist on a major in the discipline and "adequate" hours by the standards of the professional academicians.

As was true with the teachers in the "one discipline expected" schools, the significance of chi square for administrator education hours required in these schools was due to significantly more of the administrators falling in the inadequate category by the standards of the professional academicians.

The amount of convergence and divergence in certain variables did vary significantly on the basis of the number of disciplines expected of the teachers.

The significant variables that did exist involving subject matter preparation were on the side of higher levels of actual and expected preparation in the "one discipline expected" schools. Thus, on these variables, there was

indication of greater convergence with the professional academicians' recommendations for subject matter preparation. The significant variable for professional education preparation was on the side of greater divergence. The hypothesis of greater convergence on the major variables of preparation between professional academicians' recommendations and a. teachers, b. administrators in "one discipline expected" schools must be accepted as far as the subject matter preparation variables were concerned and rejected as far as professional education preparation was concerned.

5. Type of Accreditation.

It was hypothesized that convergence on the major variables of teacher preparation between professional academicians and a. teachers, b. administrators would be greater in institutions that had been accredited by the Middle States Association of Colleges and Secondary Schools.

It should be recalled that all institutions of higher education must be accredited or approved by the New York State Education Department, Division of Higher Education. It is often implied that accreditation by one of the regional associations such as Middle States is an indication of better quality schools. This implied difference as it relates to faculty preparation and standards is what is really being examined.

The chi square values according to these sub-groups for the major variables of teacher preparation and professional activity are presented in Table XX.

Twenty-eight of the community-junior colleges in New York State where economics was taught have been accredited by Middle States, while nienteen have State accreditation only. Of the forty-three responding schools where economics was taught, twenty-seven had Middle States accreditation, while sixteen had State accreditation only. The classification of teachers in these schools was fifty-three and thirty-one respectively.

Examination of the chi squares obtained, indicates that none of the basic variables of preparation and professional activity were statistically significant.

One minor point of significance did appear. The administrators were asked what their policy was towards attendance by their economics teachers at professional meetings and workshops involving economics. Based on the responses, the schools were classified as to whether they encouraged such professional activity or, on the other hand, discouraged or were indifferent towards such activity.

A significant chi square on this point at the .05 level occurred. The significant difference stemmed from the fact that the administrators in the Middle States accredited

Table XX.- Significant Differences by Type of Accreditation Sub-Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preperation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	1	1.03	--
Major vs. Non-Major	1	.71	--
Economics Hours	1	.97	--
Core Courses	1	.92	--
Education Hours	1	.93	--
Thesis	1	2.21	--
Professional Activity			
Additional Study Plans	1	.14	--
Contacts with Economists	2	.04	--
Professional Readings	1	1.21	--
Prof. Society Activity	1	.01	--
Research and Publications	1	.33	--
Recommended Preparation			
Degree Levels	1	.25	--
Major vs. Non-Major	1	.18	--
Economics Hours	1	2.67	--
Core Courses	1	2.06	--
Education Hours	1	2.67	--
Practice Teaching	1	2.21	--
Thesis	1	1.99	--
Administrator Standards			
Degree Levels	1	.11	--
Major vs. Non-Major	1	.0009	--
Economics Hours	1	.45	--
Education Hours	1	.73	--
Practice Teaching	1	2.25	--
Thesis	1	.26	--
Research Expected	1	.14	--
Professional Activity	1	4.55	.05

schools were more prone to encourage such professional activity than were their counterparts in the other schools.

The hypothesis that convergence on the major variables of teacher preparation measured between the professional academicians' and a. teachers, b. administrators would be greater in Middle States accredited schools must be rejected. With the exception cited, the relatively small actual differences that did occur were well within the bounds of possible chance variations.

6. Private versus Public Control.

It was hypothesized that convergence on the major variables of teacher preparation between professional academicians' recommendations and a. teachers, b. administrators would be greater in the privately controlled institutions.

It is often implied that institutions under private control are better quality schools. If this were true, it would be reasonable to expect faculty whose actual preparation and expectations would be more convergent with the standards of the professional academicians.

The chi square values obtained according to these sub-groups for the major variables of teacher preparation measured are presented in Table XXI.

An examination of the chi squares obtained when the sample was divided according to public and private schools

Table XXI.- Significant Differences by Public-Private Control Sub-Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	1	4.65	.05
Major vs. Non-Major	1	.17	--
Economics Hours	1	1.63	--
Core Courses	1	.44	--
Education Hours	1	.01	--
Thesis	1	1.19	--
Professional Activity			
Additional Study Plans	1	.27	--
Contacts with Economists	2	3.05	--
Professional Readings	1	.21	--
Prof. Society Activity	1	.03	--
Research and Publications	1	.57	--
Recommended Preparation			
Degree Levels	1	.06	--
Major vs. Non-Major	1	.07	--
Economics Hours	1	3.97	.05
Core Courses	1	.26	--
Education Hours	1	.003	--
Practice Teaching	1	1.43	--
Thesis	1	.07	--
Administrator Standards			
Degree Levels	1	.01	--
Major vs. Non-Major	1	.01	--
Economics Hours	1	.61	--
Education Hours	1	.60	--
Practice Teaching	1	.01	--
Thesis	1	.05	--
Research Expected	1	.08	--
Professional Activity	1	.26	--

indicates that only two of the combined total of twenty-six variables in the table reflect statistical significance at the .05 level.

The significance of actual degree levels stemmed from the fact of a higher proportion of teachers with the bachelor's degree as the highest degree earned in the private institutions.

The significance of economics credit hours recommended by the teachers stemmed from the fact that while nearly two-thirds of the teachers in public schools recommended adequate hours, just over half of the teachers in private schools recommended adequate hours by the standards of the professional academicians.

The hypothesis that convergence on the major variables of preparation measured between professional academicians' recommendations and a. teachers, b. administrators would be greater in private institutions than in public institutions must be rejected. The two points where significant differences were found, if anything, suggest greater divergence in the private schools. The lack of significance of most of the variables in this direction would seem to outweigh these two. There is insufficient evidence to accept an hypothesis of greater divergence in the private schools.

7. Educational Specialists vs. Non-Educational Specialists.

It was hypothesized that convergence on the major variables of teacher preparation measured between the recommendations of the professional academicians and a. teachers, b. administrators would be greater when non-educational specialists were filling economics teacher positions in the community-junior colleges.

As a segment of the academic versus professional training quarrel at the higher education level, remarks with derogatory implications are sometimes made about educational specialists. Just what an educational specialist is, is hard to determine, but it seems that the reference is to the teacher with an undergraduate and/or a graduate major in education. For this study, it was decided that any teacher with such a major would be classified as an educational specialist. The wording of the hypothesis was designed to reflect the somewhat typical derogatory implication.

By this classification, thirteen teachers were identified as educational specialists, while the remaining seventy-one were considered non-educational specialists. The educational specialists were employed by eleven of the forty-three responding schools in which economics was taught.

The chi square values obtained according to these sub-groups for the major variables of preparation measured are reported in Table XXII.

Examination of the chi squares obtained that involve actual preparation indicates two with statistically significant differences. One of the differences was in education hours completed and was significant at the .001 level. It has no real meaning because the nature of the sub-group of the educational specialist precludes the possibility of any of the respondents falling in the category of inadequate hours. Thus, the design of the study forces this statistical significance. Thesis completion was also significant at the .01 level. The significance stemmed from the larger proportion of educational specialists who had not completed a thesis. Most master's degree programs in education do not require a thesis, so it could be argued that the design of the study forces this statistical significance also.

In the area of professional activity, significantly fewer educational specialists pursued reading programs that included theoretical as well as practical journals in economics. This accounted for the significant difference in professional readings at the .05 level. None of the educational specialists indicated the completion of any research or publications. This gave rise to a significant difference on this variable at the .02 level.

Table XXII.- Significant Differences by Educational Specialist Sub-Group on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	1	.02	--
Major vs. Non-Major	1	3.68	--
Economics Hours	1	1.91	--
Core Courses	1	.99	--
Education Hours	1	14.66	.001
Thesis	1	9.83	.01
Professional Activity			
Additional Study Plans	1	.43	--
Contacts with Economists	2	1.33	--
Professional Readings	1	4.27	.05
Professional Soc. Activity	1	1.69	--
Research and Publications	1	5.46	.02
Administrator Standards			
Degree Levels	1	.13	--
Major vs. Non-Major	1	1.58	--
Economics Hours	1	2.11	--
Education Hours	1	4.75	.05
Practice Teaching	1	.49	--
Thesis	1	.41	--
Research Expected	1	.40	--
Professional Activity	1	.89	--

Examination of the chi squares obtained for the administrators' standards indicates a significant difference in education hours expected of the teachers. This significance stemmed from the fact that almost all of the administrators in schools where the educational specialists were employed required some education course work.

Non-educational specialists engaged more in some phases of professional activity. Beyond this, except for the greater convergence forced by the nature of the sub-groups, the preparation of the educational specialist was not significantly more divergent from the recommended standards than was the preparation of the non-educational specialist. The hypothesis of greater convergence for the non-educational specialist must be rejected.

8. Full-time versus Part-time Economics Teachers.

It was hypothesized that convergence on the major variables of preparation between professional academicians' recommendations and the teachers would be greater when the teachers were full-time teachers of economics.

It was found that thirty-one of the teachers in the sample were full-time economics teachers while the remaining fifty-three were part-time teachers of economics. Table XXIII contains the chi square values obtained according to

Table XXIII.- Significant Differences by Full versus Part-Time Sub-Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	1	.08	--
Major vs. Non-Major	1	4.97	.05
Economics Hours	1	5.94	.02
Core Courses	1	5.39	.05
Education Hours	1	.15	--
Thesis	1	.14	--
Professional Activity			
Additional Study Plans	1	.01	--
Contacts with Economists	2	1.76	--
Professional Readings	1	.37	--
Prof. Society Activity	1	3.13	--
Research and Publications	1	2.19	--
Recommended Preparation			
Degree Levels	1	.26	--
Major vs. Non-Major	1	.18	--
Economics Hours	1	4.39	.05
Core Courses	1	.25	--
Education Hours	1	1.44	--
Practice Teaching	1	2.30	--
Thesis	1	.03	--

the full-time versus part-time sub-groups for the major variables of teacher preparation and professional activity measured.

For actual preparation, examination of the obtained chi squares reveals that three of the variables were significant. A significantly larger proportion of the full-time economics teachers had majored in economics, although nearly half of them were non-majors. Similarly, a significantly larger proportion of the full-time economics teachers had adequate economics hours, although nearly half of them did not. In line with the above differences, the significance of core courses completed stemmed from a significantly larger proportion of the full-time teachers being in the "adequate" category.

None of the chi squares for the variables measuring professional activity were significant. The differences that existed were on the side of lesser activity for the part-time teachers, but were all within the bounds of possible chance variations.

The chi square for teacher recommended economics credit hours was significant at the .05 level. The significance was due to a larger proportion of full-time teachers recommending adequate hours in economics.

The principal variables of subject matter preparation varied significantly on the basis of full-time versus part-time teachers of economics. This was not true for the

professional education requirements. The hypothesis of greater convergence for full-time teachers between recommended standards and actual preparation must be accepted for subject matter preparation but rejected for professional education preparation.

9. Teacher Salary Categories.

It was hypothesized that greater convergence on the variables of preparation would exist between professional academicians and teachers when teachers received higher salaries.

Sixty-one of the total of eighty-four teachers reported their salary. Eighteen of the non-respondents were part-time teachers, so salary data was not applicable. Five did not choose to divulge salary information. The range of salaries reported was from $5,000 to $20,000. Rounded to the nearest $500 increment, the average salary was $8,000.

For the chi square analysis, teachers were divided into four approximately equal categories. Twenty teachers were in the $5,000 - $7,499 group, twenty-one were in the $7,500 - $8,999 group, and twenty were in the $9,000 - $20,000 range. The remaining twenty-three teachers were the non-respondents for reasons cited above.

Table XXIV contains the obtained chi square values for these salary sub-groups on the major variables of teacher preparation and professional activity measured.

Inspection of the obtained chi square values reveals no overall pattern of significant differences. The degree level variable was significant at the .01 level because of a larger proportion of bachelor's degree holders in the lowest salary category. This follows normal patterns of pay scales.

Under professional activity, contacts with economists showed a significant difference at the .02 level. The significance stemmed from a larger proportion of teachers with a very low number of contacts (zero or one) in the lowest salary group and among the part-time teachers. The significance is largely accounted for because of the nature of the part-time teachers. Many of them could not logically be expected to have much contact with economists. The principal employment status of the part-time teachers was: Economic Consultant--1, Data Analyst--1, Full-time economics teachers in liberal arts college--2, Graduate students--2, High School history teachers--2, Retired--2, and School Administrators--8. Because of the principal duties of about two-thirds of these teachers, such contact is unlikely.

The significant differences that did exist were accountable due to other forces. None of the major preparation variables were significant. The hypothesis of greater

Table XXIV.- Significant Differences by Salary Sub-Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	3	13.84	.01
Major vs. Non-Major	3	1.29	--
Economics Hours	3	4.17	--
Core Courses	3	4.80	--
Education Hours	3	2.72	--
Thesis	3	5.77	--
Professional Activity			
Additional Study Plans	3	5.36	--
Contacts with Economists	6	16.19	.02
Professional Readings	3	1.44	--
Prof. Society Activity	3	6.62	--
Research and Publications	3	1.53	--
Recommended Preparation			
Degree Levels	3	5.76	--
Major vs. Non-Major	3	.39	--
Economics Hours	3	5.75	--
Core Courses	3	2.15	--
Education Hours	3	.42	--
Practice Teaching	3	4.59	--
Thesis	3	2.15	--

convergence on the variables of preparation measured between professional academicians' recommended standards and teachers at higher salary levels must be rejected.

10. Teacher--Administrator Convergence and Divergence.

It was hypothesized that when there is divergence between actual teacher preparation and administrator expectations of proper graduate preparation, latent conflict situations exist:

a. If the actual preparation is greater than the administrator's expectations, there is evidence of professional apathy.

b. If the actual preparation is less than the administrator's expectations, the teacher's ideal self will be more than his real self. (i.e. Expectations concerning proper graduate preparation will be greater than the teacher's actual preparation.)

In order to analyze these sub-hypotheses, it was necessary to divide the teachers into sub-groups to reflect preparation which exceeded the minimum expectations of preparation by the teacher's own administrator, and preparation which was less than the administrator's expectations. A category to reflect actual preparation that was equal to the administrator's minimum standards was included in the classification.

Understanding of the specific sub-hypotheses cited is enhanced by an overall view of the results of this classification. The chi squares obtained are presented in Table XXV.

The results were startling. It will be recalled that strict application of the standards of the professional academicians' resulted in only two (2.4 percent) of the eighty-four teachers meeting all of the standards. Relaxation of the standards for professional education training and the thesis requirement increased the number of "acceptable" teachers to twenty-three (27.4 percent) out of eighty-four.

According to the sub-grouping for this hypothesis, six of the teachers could not be classified because of non-response from their administrators. Of the remaining seventy-eight teachers, forty-one (52.6 percent) had preparation which exceeded their administrator's minimum standards, twenty-one (26.9 percent) had preparation equal to their administrator's minimum, and sixteen (20.5 percent) had preparation less than their administrator's standards. Of the sixteen, six had preparation only slightly lower than the minimum expected.

While only about two percent of the teachers met all of the minimum standards of the professional academicians, eighty-one percent of the teachers met the minimum standards of the administrators for whom they work.

Examination of the chi squares obtained indicate that the differences for degree levels was not significant, but the

Table XXV.- Significant Differences by Preparation More Than, Equal To, or Less Than Administrator Standards on Major Variables of Preparation and Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	2	4.98	--
Major vs. Non-Major	2	18.04	.001
Economics Hours	2	22.44	.001
Core Courses	2	27.99	.001
Education Hours	2	.80	--
Thesis	2	5.60	--
Professional Activity			
Additional Study Plans	2	.44	--
Contacts with Economists	4	9.75	.05
Professional Readings	2	11.28	.01
Prof. Society Activity	2	13.44	.01
Research and Publications	2	9.18	.02
Recommended Preparation			
Degree Levels	2	2.92	--
Major vs. Non-Major	2	.96	--
Economics Hours	2	2.29	--
Core Courses	2	3.67	--
Education Hours	2	2.25	--
Practice Teaching	2	.86	--
Thesis	2	4.51	--
Miscellaneous			
Teacher claimed Weakness in Economics Training	2	3.17	--
Teachers of Advanced or Elementary Courses Only	2	.81	--
Teaching Experience	2	4.35	--

three variables involving subject matter preparation were all significant at the .001 level. The significance of the major-non-major category stemmed from the fact that fifteen out of the sixteen in the category of preparation less than the administrator's minimum have no major or minor in economics, while about two-thirds of the teachers in the "more than" category had graduate preparation in economics. Similarly, all of the teachers in the "less than" category were classified as having inadequate economics hours while about two-thirds of the "more than" category were classified as having adequate economics credit hours, giving rise to the significance for this variable.

The variables of professional activity have particular applicability to sub-hypothesis a. Four of the variables had significant chi square values. Contacts with economists was significant at the .05 level, professional readings and professional society activity were significant at the .01 level, and research and publication was significant at the .01 level. All of the significant differences stemmed from the fact that larger proportions of the teachers in the "more than" category were in the most active subdivisions, while a much larger proportion of the "less than" teachers were in the least active subdivisions.

None of the items of recommended preparation showed any statistical significance. This lack of significant differences is probably significant in itself.

The fact of much higher preparation levels in subject matter for the "more than" teachers might be expected to result in the similar higher levels of recommended subject matter preparation which did occur. At the same time, the "less than" teachers might be expected to recommend preparation levels consistent with their much lower actual preparation. The chi squares for recommended preparation were not significant because all three groups tended to recommend subject matter preparation at higher and adequate levels in roughly the same proportions. Thus, the non-significance reflects the fact that many of the teachers who have low levels of subject matter preparation still recommend higher and "adequate" levels.

While investigating the convergence between teacher actual preparation and administrator standards, it was decided to examine whether there was a significant difference according to these sub-groups between those teachers who claimed that their graduate training was adequate in preparing them to teach economics in a junior college and those who claimed their training was inadequate. A larger proportion of the teachers in the "less than" group claimed their

training was inadequate, but as is indicated in Table XXV, the difference was not statistically significant.

Also investigated was whether there was a significant difference according to these sub-groups in the number of teachers that were teaching advanced courses. The difference was not significant.

Finally among the miscellaneous comparisons, the number of years of economics teaching experience was compared to these sub-groups. The resulting chi square was not significant.

Included in this overview of teacher actual preparation as it relates to administrators' minimum standards was the information needed for the specific hypothesis. The hypothesis was that there would be latent conflict evidenced by professional apathy for teachers with preparation more than their administrator's expected minimum. The significant differences were consistently due to teachers with less rather than more preparation predominating in the lowest categories of professional activity measured, while the "more than" teachers were consistently more active. The hypothesis of professional apathy for the teachers with preparation in excess of their administrator's minimum must be rejected. Latent or overt conflict may exist, but not in this form.

Sub-hypothesis b. anticipated that when actual teacher preparation was less than administrator's expectations,

teacher recommended preparation would be greater than teacher actual preparation reflecting an ideal self that was greater than the real self.

An overall view of actual versus recommended preparation facilitates understanding. To examine the extent of the possible interrelationships, phi coefficients, estimates of r_{ϕ} and chi squares were computed for the major variables of preparation measured. These comparisons are summarized in Table XXVI.

The comparison of actual degree levels with degree recommended had an r_{ϕ} of .47 and a chi square of 6.31 which is significant at the .05 level. The small correlation that existed and the significant chi square stemmed mainly from the greater proportion of master's degree holders that recommended the master's as a minimum than from the bachelor's holders who recommended the bachelor's as a minimum. Turning this around, the bachelor's holders were more likely to recommend the master's degree than the master's holders were likely to recommend the lower degree as a minimum. For degree levels, the ideal self tends to be equal to or greater than the real self.

Actual major compared with recommended major resulted in an r_{ϕ} of .66 and a chi square of 13.93 which is significant at the .001 level. The significant chi square and the moderate correlation stemmed from the influence of

Table XXVI.- Phi, r_ϕ and Chi Square Comparisons of Actual and Recommended Levels of Preparation of New York State Junior College Economics Teachers.

Actual versus Recommended Preparation	ϕ	r_ϕ	Chi Square[a]	Levels of Significance
Degree Levels	.27	.47	6.31	.05
Major vs. Non-Major	.41	.66	13.93	.001
Economics Credit Hours	.26	.42	5.68	.02
Core Course Index	.26	.43	5.79	.02
Education Credit Hours	.45	.71	17.01	.001
Thesis	.46	.74	17.90	.001
Research	.15	.24	1.79	--

a All chi squares have 1 degree of freedom.

nearly all of the economics majors insisting upon the need for majoring in economics, while more than half of the non-majors said that a major was essential. The fact of half of the non-majors recommending an economics major as minimum is evidence of the ideal self being more than the real self.

The comparisons of actual economics credit hours and the core course index with their counterparts on the recommended side give similar results. The r_{ϕ} estimates were .42 and .43 respectively and the chi squares were 5.68 and 5.79 which were both significant at the .02 level. The significant difference for the economics credit hours stemmed from the fact that while most of those classified as adequate in economics hours recommended adequate hours, half of those with inadequate hours recommended hours that were adequate. The significant difference for core courses appears to have stemmed mainly from the fact that those with a low actual index for the most part have a low recommended index, while those with a high actual index are about evenly divided between a high and low recommended index. The higher recommended hours by those classified as inadequate in economics hours was further evidence of the teacher ideal self being greater than the teacher real self.

Comparison of actual with recommended education credit hours yielded a more positive correlation. The r_{ϕ} estimate was .71 and chi square was 17.01 which is significant at

the .001 level. Here, most of those with inadequate hours recommended inadequate hours, whereas nearly two-thirds of those with adequate hours recommended adequate hours. In this instance, there is no strong evidence of the ideal self being greater than the real self.

A comparison of those who have completed a thesis with recommendations for the thesis also yields a more positive correlation. The r_{ϕ} estimate was .74 and chi square was 17.90 which is significant at the .001 level. In this instance, the proportions of those who recommend the opposite of their own status concerning the thesis were very close. Nearly all of those with a thesis recommend its completion. Several without a thesis recommend a thesis. This variable is not a significant one for evaluating the teacher ideal self being greater than the real self. It does indicate a marked positive belief on the part of those who have completed a thesis of the value of it to them.

The one item of professional activity that could be compared in this section with available data concerned research and publications. As well as indicating research and publications completed, the teachers were asked to indicate whether they thought research was essential for a junior college teacher to remain a good teacher. The r_{ϕ} estimate for research completed relative to research being considered essential was a very low .24. Chi square was 1.79, and was

not significant. More of those who had completed research indicated that it was essential, but the existing difference was within the bounds of chance variations.

Viewing the whole sample, the teacher ideal self tended to be greater than the teacher real self insofar as subject matter preparation was concerned. For professional education preparation this was not the case.

The specific hypothesis under investigation indicated an expected ideal self greater than the real self for the teachers whose preparation was less than their administrator's minimum standards. This overview deals with the same phenomena for the total sample.

Of the sixteen teachers whose actual preparation was known to be less than their administrators expected as minimum, five had an ideal self concerning economics preparation that was equal to their real self. Eleven of these teachers had an ideal self concerning economics preparation that was more than the real self but considerably less than the minimum of the professional academicians. Concerning the economics preparation, ten of the teachers had an ideal self that was equal to or more than their administrator's minimum standards, while six had an ideal self less than their administrator's minimum.

For professional education preparation, only one of the teachers had an ideal more than his real preparation. Of the

remainder, seven were equal while five had an ideal that was less than the real preparation in education. Ten of the teachers had an ideal in education work that was less than their administrator's minimum, while six were equal to or more than their administrator's minimum.

Relating this to actual preparation, sixty-two out of seventy-eight teachers that could be classified had actual preparation equal to or more than the administrator's minimum. Of the sixteen with less preparation, ten had an ideal self regarding subject matter preparation that equaled or exceeded their administrator's minimum. Thus the real and/or ideal corresponded with or exceeded the administrator's minimum expectations in all but six cases concerning subject preparation. For professional education preparation, the real and/or ideal self corresponded with or exceeded the administrator's minimum in all but ten of the seventy-eight cases.

It is difficult to unequivocably accept or reject the hypothesis that when the teacher's actual preparation is below his administrator's minimum, his ideal self concerning preparation will be greater than his real self. The evidence points to acceptance, but it must be remembered that the pattern for all teachers was one where the ideal tended to be greater than the real self. Whether this is significantly more true for the "less than" teachers than for the whole could not be determined because of the small numbers in the "less than" category.

A qualified acceptance to reflect the fact that this is also true for the whole would appear justified.

11. Self-Evaluation and Convergence.

It was hypothesized that convergence on the major variables of preparation measured between actual teacher preparation and administrator's minimum standards would result in higher teacher self-evaluation. This is most meaningful when convergence is thought of as preparation being equal to or above the administrator's expectations concerning minimum acceptable preparation.

An overview of the teachers self-evaluation is helpful for understanding the specific hypothesis. Teachers were requested to evaluate themselves in their economics teaching on ten qualities on a five point scale[4]. The overall pattern of self-rating was high. To facilitate analysis, the five possible ratings for each quality were indexed from zero to four going from lowest to highest evaluation and averaged for each teacher in preparation for classification according to high, medium, and low self-evaluation. In order to retain a workable number in the high and low categories, fifty percent of the teachers were placed in the middle group.

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4 See question 25 of Teacher Questionnaire in Appendix 2.

This resulted in twenty-one classified as high in self-evaluation, thirty-nine as medium, and twenty-one classified as low. The chi squares obtained when these categories were compared to the variables of teacher preparation and professional activity measured are presented in Table XXVII.

Examination of the chi squares reveals two points of significant difference for subject matter preparation. The economics hours variable was significant at the .05 level and core courses completed was significant at the .001 level. In both instances, the significance stemmed from larger proportions of the high self-evaluation teachers being in the greater preparation categories and in larger proportions of the low self-evaluation teachers being in the lower preparation categories. Thus, the lower self-evaluation partially reflects lower subject matter preparation and higher self-evaluation partially reflects higher subject matter preparation. The differences for professional education preparation were not significant.

Three of the variables of professional activity measured showed significant differences. The number of contacts with economists was significant at the .001 level, professional readings at .01, and research and publication was significant at the .01 level. In all three cases, the significance stemmed from a combination of higher activity for the higher self-evaluation group and lower activity for

Table XXVII.- Significant Differences by Self-Evaluation Sub-Groups on Major Variables of Teacher Preparation and Professional Activity.

Variables of Preparation	Degrees of Freedom	Chi Square	Levels of Significance
Actual Preparation			
Degree Levels	2	2.56	--
Major vs. Non-Major	2	4.81	--
Economics Hours	2	10.95	.05
Core Courses	2	78.80	.001
Education Hours	2	2.88	--
Thesis	2	2.53	--
Professional Activity			
Additional Study Plans	2	5.58	--
Contacts with Economists	4	19.10	.001
Professional Readings	2	10.39	.01
Prof. Society Activity	2	2.59	--
Research and Publications	2	10.42	.01
Recommended Preparation			
Degree Levels	2	.42	--
Major vs. Non-Major	2	1.38	--
Economics Hours	2	1.86	--
Core Courses	2	1.97	--
Education Hours	2	.09	--
Practice Teaching	2	2.74	--
Thesis	2	.62	--
Actual Prep. More Than, Equal To or Less Than Admin. Minimum Standards	4	14.64	.001

the lower self-evaluation group. Thus, lower self-evaluation partially reflects lower professional activity and higher self-evaluation partially reflects higher professional activity.

None of the variables of recommended preparation showed any statistically significant differences according to the self-evaluation sub-groups.

For the specific sub-hypothesis, a comparison was made between teachers whose preparation was less than, equal to or more than the administrator's minimum and the teachers' self-evaluation according to the categories of high, medium, and low. The resulting chi square was significant at the .001 level. Among the teachers whose preparation was equal to their administrator's minimum standards the largest proportion evaluated themselves in the medium category with the remainder about equally divided between the high and low evaluation. The significance of chi square stemmed from larger proportions of the teachers with preparation in excess of the administrator's minimum being in the medium to high self-evaluation category, while larger proportions of the teachers with less preparation than their administrator's minimum were in the low to medium categories of self-evaluation. Thus, the lower self-evaluation partially reflects actual preparation below the administrator's minimum

standards while higher self-evaluation partially reflects actual preparation above the administrator's minimum standards.

The hypothesis that convergences between actual teacher preparation and administrator expectations concerning preparation will result in higher self-evaluation must be accepted.

Summary

This chapter has investigated the sub-hypotheses of this study which were based on situational variables in the schools that were expected to result in significant differences in actual and recommended levels of preparation. Many of the expected differences were not borne out.

When the total sample was divided according to, 1. the age of the institution, 2. whether schools were accredited by the State of New York only or by the Middle States Association as well, and 3. whether advanced or elementary economics courses only were taught, the differences that existed were not statistically significant.

The hypotheses of greater convergence on the major variables of preparation measured between professional academicians' recommendations and a.) teachers and b.) administrators in older institutions, in schools where advanced courses were taught, and in schools with Middle States accreditation had to be rejected.

Only minor significant differences were found when the total sample was divided according to, 1. private versus public control, 2. high, medium and low teacher salary categories, 3. whether the economics courses were serving primarily the terminal students or large numbers of prospective transfer students, and 4. educational specialists versus non-educational specialists filling economics teacher positions. In these instances, the significant differences did not indicate any overall patterns of greater convergence or divergence on the major variables of preparation.

The teachers of the transfer students appeared to be more active professionally. There was significantly more divergence from the professional academicians on actual degree levels in the private schools due to more teachers who hold the bachelor's degree only, and these bachelor's holders were found in significantly larger numbers in the low salary category. Except for the significant differences forced by the nature of the sub-groups, the preparation of the educational specialist was not significantly different from the others, but they were significantly less active professionally.

The hypotheses of greater convergence on the major variables of preparation measured between professional academicians recommendations and a. teachers or b. administrators in private controlled schools; for higher salary teachers; when the transfer function was being served; and when

non-educational specialists were filling the economics teacher positions had to be rejected because no overall pattern of greater convergence or divergence in the existing differences was found.

Substantial patterns of significant differences were found when the total sample was divided according to: 1. the number of disciplines that administrators expected their faculty to be prepared to teach in and 2. whether the teachers were full-time or part-time teachers of economics.

In schools where administrators expected teacher preparation in only one subject area and where teachers were full-time teachers of economics, teacher actual and recommended subject matter preparation and administrators' minimum acceptable subject matter preparation were significantly more convergent with the minimum preparation recommended by the professional academicians concerning subject matter. On the other hand, with both sub-groupings the actual and recommended professional education preparation was significantly more divergent from the professional academicians' minimum recommendations.

The hypotheses of greater convergence on the major variables of preparation measured between the professional academicians' recommendations and a. teachers or b. administrators when only one discipline was expected and when the teachers were full-time economics teachers had to be accepted

as far as subject matter preparation was concerned and rejected as far as professional education preparation was concerned.

When the total teacher sample was divided according to teachers who had preparation greater than, equal to, or less than their administrator's minimum requirements, several points of significance were found.

As would be expected, the teachers whose preparation was equal to or more than their administrators' minimum were significantly more convergent with the professional academicians' recommendations, while the "less than" teachers were more divergent. This was especially true for subject matter preparation.

Teacher recommended preparation resulted in no statistically significant differences. This was significant in itself, because the lack of statistical significance reflected the fact that all three groups tended to recommend subject matter preparation at the higher levels in roughly the same proportions.

Professional activity showed significant differences because a larger proportion of teachers in the "more than" group were in the most active categories while the "less than" teachers tended to be found in the least active categories.

The hypothesis that there would be latent conflict evidenced by professional apathy on the part of teachers

with preparation in excess of their administrators' minimum standards had to be rejected. Latent conflict may have existed, but it did not show up in the form of professional apathy.

Viewing the total sample, the teacher ideal self tended to be greater than the real self insofar as subject matter preparation was concerned, but this was not true for professional education preparation. It had been expected that when the teachers actual preparation was less than their administrators' minimum standards, their ideal self concerning preparation would be greater than their real self. While the evidence points to acceptance, the small number of teachers whose preparation was less than their administrators' minimum made it impossible to statistically determine whether their ideal self was significantly greater than for the whole sample.

An examination of the major variables of teacher preparation and professional activity measured by sub-groups of high, medium, and low self-evaluation indicated that higher self-evaluation is associated with higher subject matter preparation and higher levels of professional activity, but not with higher levels of professional education preparation. The hypothesis that convergence between actual teacher preparation and administrators' minimum standards would result in higher self-evaluation had to be accepted.

Chapter III provided an overview of convergences and divergences of the whole teacher and administrator samples with the standards of the professional academicians, and Chapter IV examined the institutional variables that might be expected to affect convergences. Attention can now be turned to the conclusions and recommendations suggested by the findings.

SUMMARY AND CONCLUSIONS

This study investigated the interrelationships between junior college economics teacher preparation and expectations concerning levels of preparation by teachers, administrators, and recognized professional academicians. Since the concept of proper teacher preparation is nondefinitive and varies in situation, it was decided to examine the problem in the light of an elementary role theory model.

The general hypothesis flowing from this was that comparisons of the expectations concerning preparation among these main groups would indicate patterns of convergence and divergence as well as latent conflict situations.

The study did not deal with the whole integration of aims, agents, matter, and methods of education. It focused on the preparation of the economics teacher as an agent of education in the limited part of the community-junior college curriculum devoted to economics. It was further limited to New York State junior colleges.

The need for greater quality and quantity of economic education is critical. Indirectly, this study is aimed at promoting economic education through the junior college.

The expectations of the professional academicians concerning preparation levels were determined by means of a review of the literature.

They recommend minimum academic training of a master's degree with thesis mainly taken in the subject taught. This constitutes about forty-five credit hours with courses taken at both the graduate and undergraduate level. When teachers are expected to teach more than one subject, preparation problems become acute. If the master's has been taken in one of the subjects taught, the approximate equivalent of a master's in course work in the additional subject(s) should prevail. The academic background must include study in certain core areas in economics. They include intermediate and advanced economic theory, statistics, history of economic thought, and sufficient study of the "real economy" to render the theory meaningful.

Professional education training should include a minimum of twelve, but preferably fifteen or more credit hours in certain commonly accepted areas. In addition, some form of supervised practice teaching should be completed, preferably an internship in the junior college.

Actual economics teacher preparation and expectations concerning preparation by teachers and administrators were determined by means of questionnaires. Teacher responses were received from 92.3 percent of the economics teachers in service in New York junior colleges at survey time. Administrator responses were received from 91.5 percent of the schools where economics was taught.

The pattern that emerged for the whole teacher sample typically indicated more divergence than convergence between actual preparation and the recommended minimum of the professional academicians. The master's degree and two years of graduate residence was typical. When subject matter criteria were applied, it was found that while approximately one-third met or exceeded the recommended minimum, two-thirds did not. A little less than half of those who met the minimum barely did so. Fifteen percent of the total came very close. The divergences of the rest were great. Slightly over one-fourth of the economics teachers had completed little or no formal training in economics.

When the professional education training criterion was applied, it was found that about one-half of the teachers met the minimum. Eight percent of the total barely met the requisite. The one-half that remained had little or no professional education preparation.

Combined application of subject and professional criteria found that only two of the eighty-four teachers met all of the minimum recommendations of the professional academicians. Thus, divergence rather than convergence was the rule.

Also investigated was professional activity which is a part of the real self and is indicative of the teachers self involvement in his status. Professional society activity,

professional subject matter readings, research and publications, and contacts with economists were measured.

For all of the variables of professional activity measured, the teachers who met or exceeded the minimum subject matter criteria of the professional academicians were consistently found in larger proportions among the professionally most active teachers.

Administrators indicated the minimum preparation levels for economics teachers acceptable to them. Most insisted upon at least a master's degree, but, for subject matter preparation, the administrators were very divergent from the minimum recommendations of the professional academicians. Acceptable major-minor combinations indicated that slightly over one-third were in agreement. Remaining divergences were great, with nearly one-half of the total being content with no major or minor or a single minor only. For minimum acceptable economics credits, only fourteen percent agreed with the professional academicians. Nearly one-third required little or no formal training in economics.

For professional education preparation, nearly two-thirds were in favor of practice teaching and required some education course work, but only about ten percent required education hours that would be clearly acceptable according to the professional academicians' recommended minimum.

Typically, the administrators who required the higher subject matter preparation were the ones with the lower professional education preparation requirements. Combined application of subject matter and professional education criteria found none of the administrators in agreement with all the minimum recommendations of the professional academicians. Thus, divergence rather than convergence was the rule.

The sub-hypotheses of this study were based on situational variables in the schools that were expected to result in significant differences on the variables of preparation measured. Many of the expected differences were not borne out. Those that were, emphasized the continuing problem of unbalanced preparation.

When the responses were divided to test the hypotheses of greater convergence on the major variables of preparation measured between professional academicians' recommendations and a.) teachers, and b.) administrators; 1. in older institutions, 2. in schools where advanced courses were taught; and 3. in schools with Middle States accreditation, the differences that existed were not statistically significant. Thus, these hypotheses were rejected.

Only minor significant differences were found when the responses were divided to test the hypotheses of greater convergence on the major variables of preparation measured between professional academicians' recommendations and

a.) teachers, or b.) administrators; 1. in private controlled schools, 2. for the higher salary teachers, 3. when the transfer function was being served, and 4. when non-educational specialists were filling the economics teacher positions. Thus, these hypotheses were rejected because no overall pattern of greater convergence or divergence was found.

A broader conclusion is implicit in the rejection of these seven sub-hypotheses. The lack of significance on the major variables of preparation measured according to these sub-groupings indicates that, while they are situational variables of the schools, they do not appear to influence the formation of the administrators' expectations concerning the preparation of the actor (economics teacher) in the particular situation (R in the original paradigm) as had been expected. At the same time, they do not appear to influence teacher expectations concerning preparation (D in the paradigm) as had been expected.

It cannot be said absolutely that there is no influence on role expectations from these situational variables. It is possible that other forces including those identified as S_{e-n} in the model outweigh these that were isolated in the particular sub-hypotheses.

Substantial patterns of significant differences were found when the responses were divided to test the hypotheses of greater convergence on the major variables of preparation

measured between the professional academicians' recommendations and a.) teachers or b.) administrators; 1. when preparation for teaching one discipline was expected, and 2. when the teachers were full-time teachers of economics.

When administrators expected teacher preparation in only one subject and when teachers were full-time teachers of economics; teacher actual, teacher recommended, and administrator minimum acceptable subject matter preparation was significantly more convergent with the minimum subject matter levels recommended by the professional academicians. With both sub-groupings, the actual and recommended professional education preparation was significantly more divergent from the professional academicians' recommendations. The hypotheses were accepted as far as subject matter preparation was concerned and rejected as far as professional education preparation was concerned.

Important significant differences were found when responses were divided according to teachers who had preparation greater than, equal to, or less than their administrator's minimum requirements.

Teachers with preparation "equal to" or "more than" their administrator's minimum were more convergent with the professional academicians' recommendations, while the "less than" teachers were more divergent. This was especially true for subject matter preparation. No statistically significant

differences existed for teacher recommended preparation. This lack of significance was significant in itself because it reflected the fact that all groups tended to recommend subject matter preparation at higher levels in about the same proportions.

Professional activity showed significant differences because a larger proportion of the "more than" teachers were in the most active categories while the "less than" teachers tended to be found in the least active categories. The hypothesis that there would be latent conflict evidenced by professional apathy on the part of teachers with preparation in excess of their administrators minimum standards was rejected. Latent conflict may have existed, but it did not show up in the form of professional apathy. It would seem that some other forces of the total role situation impinge upon these teachers so that they maintain the higher levels of professional activity.

Overall, the teacher ideal self was greater than the real self for subject matter preparation, but not for professional education preparation. It had been hypothesized that when the teacher's preparation was less than their administrators minimum standards, their ideal self would be greater than their real self. General evidence points to acceptance, but the small number of teachers with preparation less than their administrators minimum made it impossible to

statistically determine whether they differed significantly from the whole sample.

Examination of the major variables of preparation and professional activity measured by sub-groups of high, medium and low self-evaluation indicated that higher self-evaluation goes along with higher subject matter preparation but not with higher levels of professional education preparation. Thus, the hypothesis that convergence between actual teacher preparation and administrators' minimum standards would result in higher self-evaluation was accepted for subject matter preparation.

The most striking observation of the study seems contradictory on the surface. Stated briefly, most teachers and administrators fell far short of the recommended standards, but nearly all teachers met their administrators' minimum standards. More precisely stated, there was <u>extreme divergence</u> between the minimum standards of the professional academicians and the actual and expected levels of preparation by teachers and administrators, while there was <u>extreme convergence</u> between the administrators' minimum standards and the teachers actual and expected preparation. In addition, these latter hypotheses summarized isolated situational variables that resulted in significant differences which underscored the long standing problem of unbalanced preparation.

A role theory interpretation makes these apparent inconsistencies understandable.

According to role theory, the actor's preparation brought to the situation (A) and his expectations concerning preparation (D) would be expected to come close to the administrator's expectations concerning the preparation of the actor in the particular situation (R).

It should be recalled that the minimum standards of the professional academicians are primarily based upon the results of their research studies. Depending upon the strictness of application of these criteria, between one-fourth and one-third of the teachers met the subject matter standards which is a very low proportion. Adding the professional education criterion, only two out of eighty-four teachers met all of the applied standards. On the other hand, eighty-one percent of the teachers had preparation which equalled or exceeded their administrators' minimum expectations. When this real self concerning preparation was combined with the ideal self as evidenced by teacher recommended preparation, only eight percent of the teachers fell below their administrator's standards. Thus, the convergence between teachers and their administrators was nearly as marked as was the divergence from the minimum preparation recommendations of the professional academicians.

Concerning unbalanced preparation, the tendency was for administrators with high subject matter preparation expectations to have very low professional education expectations. While many had barely adequate minimum expectations, only a few could be said to have high expectations on this criterion. As would be expected from role theory, the teachers expectations concerning professional education preparation were indicative of the same imbalance.

While role theory in no way justifies such low levels of (economics) teacher preparation or the unbalanced preparation, it does provide an explanation.

In the first place, divergence from the professional academicians can be understood from the fact that they are <u>not directly</u> involved in the interaction process <u>in situation</u>. Consequently, their expectations are likely only to weakly impinge upon the expectations of the actors in situation. On the other hand, behavior in the situation does directly involve interaction between administrators and teachers.

Both administrators and teachers must be concerned with problems of preparation, but it is the primary responsibility of the administrator to interpret and carry out the aims of the particular institution. In this process the administrator forms his expectations concerning (economics) teacher preparation (R). According to role theory, the actor (economics teacher) in situation forms his expectations

concerning preparation which is his estimate of what others (the administrator etc.) expect of him concerning preparation in the situation (D).

Few of the teachers studied had a real and/or ideal self less than their administrators minimum expectations. The few that did could easily be accounted for through such factors as tenure, expediency in filling economics teacher vacancies, teacher possession of other positive qualifications not adequately measured which might be viewed as offsetting the lower preparation, etc.

Role theory suggests that if actual levels of balanced economics teacher preparation in the New York State community-junior colleges are to be raised towards the minimum standards derived from the research studies, the administrators' expectations concerning preparation levels (R) must be raised.

With such a change, administrators would exert their influence on teacher expectation through the interaction process. Since there is flow and feedback in both directions between administrators and teachers leading to a constant process of redefining of role expectations, it is possible for higher expectation to come about from teacher influence on the administrator. However, because of the administrators' unique position as employer, the greatest influence is probably from administrator to teacher rather than the reverse.

In the absence of higher expectations concerning preparation on the part of the administrator, actual economics teacher preparation and teacher expectations concerning preparation can be expected to remain low. The administrators seem satisfied in accordance with their minimum expectations.

Implicit in these stated conclusions is the assumption that the minimum standards of preparation recommended by the professional academicians should not be lowered. Nothing in the data strongly suggests that they should be.

In the first place, the standards are based upon numerous research studies. In addition, several points from the data support this conclusion.

Generally, the teacher ideal self concerning preparation was greater than the real self. This was especially true for subject matter preparation. Furthermore, this ideal self concerning preparation was much closer to convergence with the recommended minimum than was the actual preparation.

Nearly all of the teachers with "adequate" subject matter preparation recommended "adequate" levels. A large number of those with "inadequate" subject matter preparation recommended higher and often "adequate" levels. The fact that divergences remained concerning recommended preparation levels could probably be explained by such factors as defensiveness of their low preparation on the part of the low preparation teachers; lack of depth of subject knowledge

leading the teacher to feel secure with the little possessed; self-education resulting in adequate subject knowledge; etc.

The teachers self-evaluation of their teaching of economics gave strong positive evidence that high levels of subject matter preparation and high levels of professional activity are associated with high self-evaluation. Thus, the teachers who had subject matter preparation that met the standards, typically rated themselves as the most effective teachers of economics.

The lack of agreement with the professional academicians on professional education preparation could probably be accounted for by poor experiences with education courses taken or, through inexperience, a lack of appreciation of the need for professional education preparation.

On the basis of this evidence, it is recommended that the minimum preparation levels recommended by the professional academicians should remain unchanged.

Recommendations for Further Study

Several recommendations for additional study can be made. Two of the weaknesses of this study were the lack of direct measurement of the self-education of the economics teachers and the lack of measurement of the product of education which is the primary concern of the educational

process. These were not measured because of methodological limitations placed on the study.

Serious consideration should be given to study of teacher self-education in economics and the relating of these results to the classification of the teachers qualifications. There is nothing magic about the criteria that have been applied. The task of measuring self-education would not be an easy one, but 'Tests of Economic Understanding' have been devised and widely used. The use of such a test might support or weaken the value of the subject matter criteria used for this study. In any case, it would give due recognition to teachers who had mastered the discipline on their own.

The same approach of using a 'Test of Economic Understanding' might be applied to measuring the product of economic education. While there is probably a close relationship between "proper" teacher preparation and teacher effectiveness, this is not guaranteed. Evaluation of adequacy of economics teacher preparation would be made more meaningful with such a study of the product.

With little or no change in the method of analysis employed for this study, a regional or national sample that would provide larger numbers for analysis would be beneficial. In this study, many comparisons involving the preparation criteria had to be made on an either-or basis. Larger numbers

would improve the analysis by permitting comparison of several different degrees of preparation.

Finally, much useful information could be gained by asking both administrators and teachers what their preferred levels of preparation as well as minimum levels of preparation would be. Coupled with this, the reasons why the administrators and teachers have such low economics teacher preparation expectations should be explored.

The results of research must be brought closer to the actual role situation where behavior in interaction, primarily between the administrator and teacher, defines actual and expected levels of teacher preparation. Only then will adequate standards of balanced economics teacher preparation be obtained and maintained.

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A summary of his doctoral research findings with expanded recommendations flowing from that study. Valuable for time perspective.

Geyer, D. L., "Qualities Desired in College", School and Society, Vol. 63, Apr. 1946, p. 270-271.

Reports his investigation of desirable attributes for college teachers. The report is in substantial agreement with similar studies.

Gleazer, Edmund, "Preparation of Junior College Instructors", Junior College Journal, Vol. 35, Sept. 1964, p. 3-4.

A recent statement by the executive director of the A.A.J.C. of what the minimum preparation for academic teachers in the junior college should be. Valuable for current top authoritative opinion.

Guillebaud, C. W., Ed., The University Teaching of Social Sciences: Economics, UNESCO, Paris, 1954, viii-300 p.

A U.N.E.S.C.O. report of the results of a conference by an international group of experts on economic education. Of particular import is their unanimous agreement on minimum course areas to be studied by all who profess economics. Very valuable on subject matter preparation.

Harper, William A., Ed., Junior College Directory, Washington, D. C., American Association of Junior Colleges, 1966, p. 35-37.

A complete yearly listing of all U. S. Junior Colleges with pertinent factual data about the institutions.

Hawkins, T. G., "The Junior College Teacher: Some Unique Characteristics," Junior College Journal, Vol. 25, Jan. 1955, p. 298-302.

The most comprehensive, but brief article available which is representative of authoritative opinion on attributes and competencies desired in junior college teachers.

Ingalls, R. C., "Problems of Staffing the Community College", National Association of School Principals Bulletin, Vol. 37, Apr. 1953, p. 393-401.

Describes the many problems of staffing junior colleges with an especially pertinent statement on the problem of unbalanced teacher preparation.

Kinnerson, Kendall Scott, A Study of the Academic and Professional Preparation of Junior College Teachers of Physical Science, Unpublished Doctor's dissertation, Michigan State University, 1957, ix-177 p.

Thorough investigation of preparation levels for junior college physical science teachers. Examines the need for extensive additional study by the teacher expected to teach in more than one subject. His recommendations on professional education preparation are representative of most research studies. Very valuable.

Koos, Leonard V., "Junior College Teachers: Degrees and Graduate Residence", p. 77-79, "Subjects Taught and Specialized Preparation", p. 196-209, "Preparation in Education", p. 332-344, "Background of Experience", p. 457-469, Junior College Journal, Vol. 18, Oct. 1947, Dec. 1947, Feb. 1948, April 1948.

A valuable series of four articles reporting a very comprehensive and well documented project of the research office of the A.A.J.C. on the major facets of junior college teacher preparation.

Langsdorf, William B., "The Preparation of the Academic Teacher--Problems of Depth and Breadth", Junior College Journal, Vol. 29, Sept. 1958, p. 368-371.

Recommends levels of preparation to insure breadth and depth. Stresses that breadth of preparation does not necessitate training to teach in several subjects. Valuable for understanding the breadth versus depth issue.

McKee, C. W. and H. G. Moulton, A Survey of Economic Education, Washington, D. C., Brookings Institution, 1951, viii-63 p.

This study substantiated the fact of economic illiteracy and reported weaknesses of economic education. It sparked extensive study by economists designed to promote and improve economic education.

Odom, S. L., "An objective Determination of the Qualities of a Good College Teacher", Peabody Journal of Education, Vol. 21, Sept. 1943, p. 109-116.
Reported research findings on the desirable attributes and competencies of a good college teacher. The report is in substantial agreement with similar studies.

Ostlie, Selmer, The Selection and Retention of Junior College Teachers, Unpublished Doctor's dissertation, Univ. of Southern California, 1951, xxxiii-602 p.
A general research report of policies and practices used in the selection and retention of U. S. junior college teachers. Of particular importance for this study is his treatment of desirable attributes and competencies of teachers.

Parsons, Talcott and Edward A. Shils, Eds., Toward a General Theory of Action, Cambridge, Mass., Harvard Univ. Press, 1951, xi-506 p.
Provides a general theory of action proposed as "a unified conceptual scheme for theory and research in the social sciences" of which role theory is a part. Contains essential background for understanding role theory.

Pugh, David B. and Roy E. Morgan, "Shortcomings in Preparation of Instructors", Junior College Journal, Vol. 14, May 1944, p. 405-415.
Identifies key weaknesses of junior college teacher preparation, recommends levels of preparation, and points to the need for detailed studies of desirable preparation in each of the subject areas. Its main relevance for this study is from the latter point.

Reeves, F. W., "How to Improve Instruction in Junior Colleges", Nations Schools, Vol. 3, April 1929, p. 69-75.
An early comparison of junior and senior college teachers to identify major differences between the two. Important for providing time perspective on differences.

Sarbin, Theodore, "Role Theory", in Handbook of Social Psychology, Cambridge, Mass., Addison-Wesley, 1954, p. 223-258.
A valuable explanation of the historical development and fundamental tenents of role theory.

Stone, James C., "The Preparation of Academic Instructors for the Junior College", Junior College Journal, Vol. 28, March 1958, p. 368-371.

Representative of the few writers who stress the broad fields approach to academic preparation of the teacher. Recommendations on professional education training are typical.

Travers, Robert M. W., "Appraisal of the Teaching of the College Faculty", Journal of Higher Education, Vol. 21, Jan. 1950, p. 41-42 and 56.

A survey of methods of appraising faculty competence which points to a lack of suitable methods for effective appraisal. Of negative value from this latter point.

Vairo, Philip D., "Faculty Quality: A Challenge to the Community College", Journal of Higher Education, Vol. 36, April 1965, p. 217-220.

Extensive report of unfavorable comparison of North Carolina junior college teachers with their senior college counterparts. While well done, it may not be representative of conditions in other states.

APPENDIX 1

QUESTIONNAIRE
FOR
JUNIOR COLLEGE ADMINISTRATORS

If no economics courses are taught, please check here ____, answer questions 1, 9, 10, 13, 17, 18, 19 and 20 and return questionnaire.

1. What is the controlling agency for your institution?
   1. ____ State 2. ____ County 3. ____ Community
   4. ____ School District 5. ____ Private 6. ____ Private Religious

2. How many full-time teachers do you have teaching one or more economics courses?
   1. ____ None 2. ____ One 3. ____ Two 4. ____ Three
   5. ____ Four 6. Other (specify) ____

3. How many of your full-time teachers who teach economics spend full-time teaching economics?
   1. ____ None 2. ____ One 3. ____ Two 4. ____ Three
   5. ____ Other (Specify)

4. How many of your teachers of economics hold full-time nonteaching jobs off campus?
   1. ____ None 2. ____ One 3. ____ Two 4. ____ Three
   5. ____ Other (specify)

5. What economics courses are offered at your college?
   1. ____ Principles 2. ____ Economic Geography
   3. ____ Labor Economics 4. ____ Money and Banking
   5. ____ Economic History 6. ____ Comparative Systems
   7. Other (specify) _____

6. Which of the following phrases best describes the type of program of the students in the various economics courses?
   1. ____ Predominantly in Terminal programs
   2. ____ Predominantly in Transfer programs
   3. ____ Substantial numbers of both

7. What are your requirements for a teacher of economics?
   a. Minimum degree acceptable:
      1. ____ Bachelor's 2. ____ Master's 3. ____ Doctor's 4. ____ None
   b. Major-minor: (Check all acceptable combinations.)
      1. ____ Graduate and undergraduate major in economics
      2. ____ Graduate major in economics
      3. ____ Graduate and undergraduate minor in economics
      4. ____ Undergraduate major in economics
      5. ____ Graduate minor in economics
      6. ____ Undergraduate minor in economics
      7. ____ No major or minor in economics required
   c. Minimum total semester hours in economics acceptable:
      1. ____ 12 or less 2. ____ 13–18 3. ____ 19–24
      4. ____ 25–30 5. Over 30 (specify) ____
   d. Other requirements: _____

8. How many additional teachers of economics do you contemplate hiring in the next five years?
   1. ____ None 2. ____ One 3. ____ Two 4. ____ Three
   5. Other (specify) ____

9. In recruiting new teachers, where do you prefer to secure them from?
   1. ____ High schools 2. ____ 4 year colleges
   3. ____ New MA recipients 4. Other _____

10. In what salary range would a new Master's degree recipient fall?
    1. ____ $5000–$5499 2. ____ $5500–5999 3. ____ $6000–$6499
    4. ____ $6500–$6999 5. ____ $7000–$7499 6. Other (state) _____

(over)

11. In how many discipline areas, including economics, should a teacher of economics be prepared?

1. ____ One 2. ____ Two 3. ____ Three 4. ____ Four

12. What collateral discipline(s) would be most appropriate for a teacher of economics?

1. ____ Accounting 2. ____ Business 3. ____ Education
4. ____ Geography 5. ____ History 6. ____ Political Science
7. ____ Psychology 8. ____ Sociology 9. Other _____

13. What would be your attitude toward hiring a person who had completed all requirements for the Master's except the thesis?

1. ____ Would hire without question 2. ____ Would not consider hiring
3. ____ Would hire on condition of completion of thesis before the next school year 4. Other (specify) _____

14. What is your policy toward attendance by your economics teachers at professional economics meetings and workshops?

1. ____ Give financial assistance 2. ____ Give released time
3. ____ Discourage 4. ____ No set policy
5. Other _____

15. How many hours of education course work do you feel essential for a Junior College teacher of economics?

1. ____ None 2. ____ 6 or less 3. ____ 7–12 4. ____ 13–18
5. ____ 19–24 6. ____ Over 24 (specify)

16. What do you consider to be the greatest need of your economics teaching staff?

1. ____ More training in economics 2. ____ More training in education
3. Other (specify) _____

17. Do you believe it is essential for a Junior College faculty member to be engaged in research to remain a good teacher?

1. ____ Yes 2. ____ No Why or why not? _____

18. Do you believe a thesis should be required in a Master's program to train Junior College economics teachers?

1. ____ Yes 2. ____ No Why or why not? _____

19. Do you believe that some form of supervised practice teaching should be required in a Master's program to train Junior College economics teachers?

1. ____ Yes 2. ____ No Why or why not? _____

20. Please rank in order of importance, the factors you use in evaluating faculty members.

1. ____ Classroom teaching
2. ____ Personal attributes
3. ____ Student advising
4. ____ Committee work
5. ____ Length of service in rank
6. ____ Professional Society activity
7. ____ Public service
8. ____ Research and Publications
9. Other (specify) _____

21. What is the maximum amount of formal contact that you have had with economics?

1. ____ Graduate or undergraduate major 2. ____ Graduate or undergraduate minor 3. ____ Several courses with no major or minor 4. ____ One course
5. ____ No courses

In order to permit adequate statistical control, would you please list the members of your faculty who teach economics? All replies will be held in strict confidence.

APPENDIX 2

QUESTIONNAIRE
FOR
JUNIOR COLLEGE INSTRUCTORS IN ECONOMICS

RUSSELL SAGE COLLEGE
Troy, New York
12180

Dear Colleague:

There is abundant evidence that Americans are economic illiterates. As you know, the American Economic Association has been deeply interested in the problem of economic illiteracy for some time. One outgrowth of their concern was the study by the National Task Force on Economic Education. Their report, published by the Committee for Economic Development, indicates that the solution to the problem of economic illiteracy seems to lie in promoting economic education at the high school level.

As a member of the profession and as a teacher of economics at both Russell Sage College and the Junior College of Albany, a division of Russell Sage, I have a special interest in this phase of higher education.

Those of us in the Community-Junior College movement, as we witness rapidly expanding enrollments, can readily see that we provide an excellent "second line of defense"—indeed, in some respects, the last line of defense for promoting learning and in particular economic learning.

It is axiomatic that effective learning relies heavily upon effective teaching. Effective teaching, in turn, relies heavily upon the proper mix of the diverse elements necessary for proper faculty preparation. This study is an inquiry into the state of preparation of economics teachers in the Community-Junior Colleges of New York State. A similar study of California and Florida Junior Colleges was recently reported by J. K. Davies in the Junior College Journal. The data gathered from this questionnaire is to be used for the author's doctoral dissertation to be submitted to the University of Ottawa.

In trial administration of the questionnaire, respondents have taken 12-18 minutes for its completion. It is recognized that there are many demands of this type on your time. I hope, however, that there will be a sufficiently high percentage of responses to permit statistical reliability and validity for the conclusions that will be drawn. The results of this study should help point the way for something better in economics education in the Community-Junior Colleges in New York State.

Sincerely yours,

James P. Moran
Department of Economics

1. What is your age and sex?
   1. Age ____ 2. Sex (circle) M F

2. What is the controlling agency of the school where you teach?
   1. ____ State 2. ____ County 3. ____ Community
   4. ____ School District 5. ____ Private 6. ____ Private Religious

3. What is the highest degree you have earned?
   1. ____ Bachelor's 2. ____ Master's With thesis? Yes ____ No ____
   3. ____ Doctor's

4. What is the total number of graduate credit hours you have accumulated?
   1. ____ Please specify total hours.

5. What was your graduate major?
   1. ____ Business 2. ____ Economics 3. ____ Education
   4. ____ History 5. ____ Sociology 6. ____ Political Science
   7. Other (specify) _____

6. What was your undergraduate major?
   1. ____ Business 2. ____ Economics 3. ____ Education
   4. ____ History 5. ____ Sociology 6. ____ Political Science
   7. Other (specify) _____

7. What were your graduate minors?
   1. ____ Business 2. ____ Economics 3. ____ Education
   4. ____ History 5. ____ Sociology 6. ____ Political Science
   7. Other (specify) _____

8. What were your undergraduate minors?
   1. ____ Business 2. ____ Economics 3. ____ Education
   4. ____ History 5. ____ Sociology 6. ____ Political Science
   7. Other (specify) _____

9. How many semester hours of course work have you had in economics?
   1. ____ 6 or less 2. ____ 7–12 3. ____ 13–18 4. ____ 19–24
   5. ____ 25–30 6. Over 30 (specify) _____

10. Which of the following college or university economics courses have you taken?
    1. ____ Principles 2. ____ Labor Economics
    3. ____ Money and Banking 4. ____ Statistics
    5. ____ Intermediate Theory 6. ____ Advanced Theory
    7. ____ Economic History 8. ____ History of Economic Thought
    9. ____ Economic Geography 10. ____ Government and Business
    11. ____ International Trade 12. ____ Comparative Systems
    13. ____ Public Finance 14. ____ Business Cycles
    15. Other (specify) _____

11. Are you presently a full time Junior College teacher?
    1. ____ Yes 2. ____ No

12. If yes, how much of your time is spent teaching economics?
    1. ____ 25% or less 2. ____ 26–50% 3. ____ 51–75%
    4. ____ Over 75%

13. In what other fields are you currently teaching?
    1. ____ None 2. ____ Business 3. ____ Accounting 4. ____ History
    5. ____ Political Science 6. ____ Sociology 7. Other ____

14. What is the usual number of contact hours you teach per semester including any extra compensation courses?
    1. ____ 9 hours 2. ____ 12 hours 3. ____ 15 hours
    4. ____ 18 hours 5. ____ 21 hours 6. ____ Other (specify)

15. If you are not a full time Junior College teacher, what is your usual occupation?
    1. ____ Accountant 2. ____ Businessman 3. ____ Economic Consultant
    4. ____ Retired 5. ____ School Administrator
    6. Other (specify) _____

16. Which of the following economics courses have you taught at a Junior College?
    1. ____ Principles 2. ____ Labor 3. ____ Money and Banking
    4. ____ Economic Geography 5. ____ Economic History
    6. ____ Statistics 7. Other (specify) _____

17. In what fields other than economics have you taught at the Junior College level?
    1. ____ None 2. ____ Accounting 3. ____ Business
    4. ____ History 5. ____ Political Science 6. ____ Sociology
    7. Other (specify) _____

18. In which of the following have you done some reading since beginning your teaching of economics?

1. ____ American Economic Review
2. ____ Journal of Political Economy
3. ____ Quarterly Journal of Economics
4. ____ C.E.D. Publications
5. ____ New York Times
6. ____ Wall Street Journal
7. Other _____

19. In what ways do you find the above readings helpful for your teaching?

	Little help	Helpful	Very Helpful
Keeping up with theoretical developments	____	____	____
Keeping up with domestic and international economic developments	____	____	____
Bringing current issues to class	____	____	____
Answering student questions	____	____	____
Other _____	____	____	____

20. Were you a regular viewer (3 or more times per week) of the *American Economy* TV series?

1. ____ Yes 2. ____ No If yes, how did it help you in your economics teaching? _____

21. Which of the following contacts have you had with professional economists since beginning teaching?

1. ____ University level courses
2. ____ Economics Workshops
3. ____ Economics Conventions
4. ____ Lectures
5. ____ Personal contacts
6. Other (specify) _____

22. What is your association with the following professional societies?

	Member	Attended Meetings Within 5 yrs.	Have Held Office	Participated in Programs
American Ass'n of University Professors	____	____	____	____
American Economic Ass'n	____	____	____	____
National Education Ass'n	____	____	____	____
N. Y. S. Ass'n of Junior Colleges	____	____	____	____
Other (include honorary societies) _____	____	____	____	____
_____	____	____	____	____

23. What are your plans for additional university work in economics?

1. ____ No plans for additional course work
2. ____ Advanced degree
3. ____ No degree, but
4. ____ Prepare to teach in a university
5. ____ Research

24. Do you believe that your *graduate training* adequately prepared you for the responsibility of teaching economics in the Junior College?

1. ____ Yes 2. ____ No If no, what were the major deficiencies?
Lack of education course work ____
Lack of economics course work ____
Lack of practice teaching ____
Other (specify) _____

25. How would you rate yourself in your economics teaching on this self rating scale?

	Outstanding	Above Average	Adequate	Poor	Inadequate
Scholarship	1. ____	____	____	____	____
Interest in subject	2. ____	____	____	____	____
Clarity in course organization	3. ____	____	____	____	____
Skill in presentation, explanation and questioning	4. ____	____	____	____	____
Stimulation of student interest	5. ____	____	____	____	____
Opportunity for student participation	6. ____	____	____	____	____

(over)

Relationships with students	7. ____	____	____	____	____
Quality and quantity of assigned work	8. ____	____	____	____	____
Caliber of examinations	9. ____	____	____	____	____
Fairness in grading	10. ____	____	____	____	____

26. Do you believe it essential for a Junior College teacher to be engaged in research to remain a good teacher?
1. ____ Yes 2. ____ No Why or why not? _____

27. Please indicate the number of your publications in the field of economics.
1. ____ None 2. ____ Books 3. ____ Articles
4. ____ Monographs 5. ____ Reviews 6. ____ Non-professional

28. If your research and publication activities are not adequately pictured above, please supply facts here.
1. Other research and publication activities: _____

29. How many semester hours in education course work have you completed?
1. ____ 6 or less 2. ____ 7–12 3. ____ 13–18 4. ____ 19–24
5. ____ 25–30 6. Over 30 (specify) _____

30. How many years have you been teaching?
1. Total years (specify) ____
2. Total years teaching economics ____

31. What professional teaching have you done other than in a Junior College? (State number of years in each.)
1. ____ High School 2. ____ Junior High 3. ____ Elementary
4. ____ 4 year college 5. ____ Graduate school 6. Other (specify) _____

32. If a full time teacher, in what range is your salary?
1. ____ $5000–$5499 2. ____ $5500–$5999 3. ____ $6000–$6499
4. ____ $6500–$6999 5. ____ $7000–$7499 6. Other (specify) _____

If you were designing a graduate program to train Junior College teachers of economics:

33. How many hours in economics would you require?
1. ____ 6 or less 2. ____ 7–12 3. ____ 13–24 4. ____ 25–30
5. ____ Over 30 (specify)

34. What 6 "core" courses in economics would you require to be taken or to have been taken by all? (Please select only six.)
1. ____ Money and Banking
2. ____ Statistics
3. ____ Intermediate Theory
4. ____ Advanced Theory
5. ____ Business Cycles
6. ____ Comparative Systems
7. ____ Public Finance
8. ____ Government and Business
9. ____ Labor Economics
10. ____ Economic History
11. ____ International Trade
12. ____ History of Economic Thought
13. ____ Economic Geography
14. ____ Other (name) _____

35. How many hours in education courses would you require?
1. ____ None 2. ____ 6 or less 3. ____ 7–12 4. ____ 13–24
5. ____ 25–30 6. ____ Other (specify)

36. What should be the minimum degree required?
1. ____ Bachelor's 2. ____ Master's 3. ____ Doctor's

37. Should a thesis be required?
1. ____ Yes 2. ____ No Why or why not? _____

38. Should some form of supervised practice teaching be required?
1. ____ Yes 2. ____ No Why or why not? _____

39. Should the teacher of economics be required to major in economics?
1. ____ Yes 2. ____ No Why or why not? _____

40. Who should control the training of Junior College economics teachers?
1. ____ Economics departments 2. ____ Education departments
3. ____ Joint administration by Economics and Education departments
4. Other (specify) _____

In order to insure adequate statistical control, will you please fill in your name. All responses will be held in strict confidence. If you object, omit, but please return the questionnaire. Name: _____

APPENDIX 3 COVER LETTER TO ADMINISTRATORS

RUSSELL SAGE COLLEGE

TROY, NEW YORK 12180

March 18, 1966

Dr. Robert A. Cook
President
The King's College
Briarcliff Manor, New York

Dear Dr. Cook:

The members of the economics profession have long been interested in promoting economic education. As a member of the profession and as a teacher of economics at both Russell Sage College and the Junior College of Albany, a division of Russell Sage, I have a special interest in this phase of higher education.

As my doctoral dissertation study, I am inquiring into the state of preparation of New York State Junior College economics teachers. It is an outgrowth of a similar study of California and Florida Junior Colleges by J. K. Davies, the results of which were published in the November 1962 issue of the Junior College Journal.

Your cooperation is requested in two respects. The first is to fill out the attached questionnaire for administrators and the second is to distribute copies of the enclosed questionnaire to both part-time and full-time teachers of economics. If no economics courses are taught at your institution, please look at the first entry on the Questionnaire for Administrators.

I realize that there are many demands upon your time. With this in mind, I have designed the questions so that the first few could be answered easily by your secretary. Whenever possible in the remaining questions, I have designed them so that your judgment could be indicated by a simple checkmark. The study is in no way restricted to the questions asked. Your comments on any related matters would be greatly appreciated. If you believe that certain questions can be answered only with qualifications, feel free to make them.

It is hoped that there will be a sufficiently high percentage of responses to permit statistical reliability and validity. The results of this study should help point the way for something better in economics education in the Community-Junior Colleges of New York State.

May I take this opportunity to thank you in advance for your cooperation.

Sincerely yours,

James P. Moran
Department of Economics

Enclosures

APPENDIX 4

FOLLOW-UP LETTER TO ADMINISTRATORS

RUSSELL SAGE COLLEGE
Troy, New York

April 2, 1966

Dr. William R. Kunsela, President
S.U.N.Y. Agricultural and Technical
College at Delhi
Delhi, New York 13753

Dear Dr. Kunsela:

On March 18th, I mailed questionnaires to you inquiring into the state of preparation of New York State Junior College economics teachers. The response has been gratifying, but several important institutions have not been heard from.

Standard procedures for carrying out mail surveys call for such gimmicks as enclosing a 25¢ piece for the trouble of filling in the questionnaire and stressing some alleged advantage to the respondents.

These gimmicks would be an insult to your intelligence. Instead, may I make a simple request that you try and find the time necessary to fill in my questionnaire. A high rate of response is critical for the results to be acceptable.

If you have misplaced the questionnaire or need more, please let me know. I would be happy to send you additional copies.

You may have answered my first request in the last two or three days. If so, please disregard this reminder.

Sincerely yours,

James P. Moran
Department of Economics

APPENDIX 5

FOLLOW-UP LETTER TO TEACHERS

RUSSELL SAGE COLLEGE
Troy, New York

April 22, 1966

Professor I. Levine
S.U.N.Y. Agricultural and Technical
College at Farmingdale
Farmingdale, New York 11735

Dear Professor Levine:

On March 18th I sent a package of teacher and administrator questionnaires to the presidents of each community-junior college in New York State. It was necessary to request administrators to distribute the teacher questionnaires, because no list of economics teachers exists. A list is now emerging as I receive responses from administrators.

It is quite possible that you never received a copy from my original mailing, so I am sending one along to you.

The project is for my doctoral dissertation, and a high percentage of response is essential for the results to be acceptable. Your cooperation in completing the enclosed form is earnestly requested.

You may have recently returned the questionnaire or have exercised the option of remaining anonymous by omitting your name. If so, please disregard this reminder.

Sincerely yours,

James P. Moran
Department of Economics

Enclosures

APPENDIX 6

SAMPLE 2 x k AND 2 x 2 CHI SQUARE APPLICATIONS

1. 2 x k Application.

For all 2 x k applications in this study, the computational procedure found in Table XXVIII was used.

Formula:

$$\chi^2 = \left(\frac{b^2}{n} - \frac{B^2}{N}\right) \frac{N^2}{AB}$$

2. 2 x 2 Application.

For all 2 x 2 applications in this study, the computational procedure indicated in Table XXIX was used.

Formula:

$$\chi^2 = \frac{N(AD - BC)^2}{(A+B)(C+D)(A+C)(B+D)}$$

Table XXVIII.- Sample 2 x k Chi Square Computation.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
k Categories of Schools by Type of Student.	2 Categories of Teacher Degree Levels					
	MA+	BA				
	a	b	b^2	n	$\frac{b^2}{n}$	Values
Type 1 Schools	20	3	9	23	.39	
Type 2 Schools	21	4	16	25	.64	
Type 3 Schools	31	5	25	36	.69	
	72 (A)	12 (B)	144	84 (N)	1.72:	$\Sigma b^2/n$
					1.71:	B^2/N
			Difference:		.01:	$\Sigma(b^2/n)-B^2/N$
					x 8.17:	N^2/AB
					.08:	χ^2

At P = .05 for 2 df χ^2 = 5.99

Table XXIX.- Sample 2 x 2 Chi Square Computation.

Type of School	Teacher Degree Levels		Marginal Totals
	Bachelor's	Master's Plus	
Elementary Course Only Schools	A 5	B 34	39 (A+B)
Advanced Course Schools	C 7	D 38	45 (C+D)
Marginal Totals	12 (A+C)	72 (B+D)	84 = N

χ^2 = .13

APPENDIX 7

ABSTRACT OF

A Role Theory Interpretation of the Preparation of New York State Junior College Economics Teachers[1]

Problem.- Rapidly expanding junior colleges provide an excellent school situation to combat economic illiteracy. Competent faculty are critical for success. Actual and expected levels of economics teacher preparation as seen by teachers, administrators, and professional academicians are studied using a role theory model. Convergences of role expectations concerning preparation among these groups are analyzed.

Procedure.- Minimum preparation expectations of professional academicians were determined from the literature. Expectations of New York junior college economics teachers and chief administrators were determined by questionnaires, with 92.3 percent response from both groups. Data were tabulated for an overview and divided to reflect situational variables of the schools. Chi square tests were then applied on major variables of teacher preparation and professional activity.

Summary and Conclusions.- The master's degree with two years of graduate residence was typical. Minimum subject matter criteria were met by 26.7 percent of the teachers and half met

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1 James P. Moran, doctoral thesis presented to the School of Psychology and Education, University of Ottawa, 1966, xvi-191.

the professional education criteria. Only 2.4 percent met all criteria. Teachers meeting subject criteria predominated among the most active professionally. None of the administrators met all standards, but 13.9 percent met subject criteria and half met the professional education criterion. Little or no formal economics training was possessed by a third of the teachers or required by a third of the administrators.

Significant differences were not obtained in testing convergences of role expectations concerning preparation among professional academicians, teachers, and administrators when samples were divided to reflect: school age; salary categories; whether educational specialists were teaching economics; and type of accreditation, school control, students, and economics courses. This indicates that these variables are not important or are offset by other aspects of the total role situation.

Full-time economics teachers and those expected to be prepared in only one subject had significantly higher subject but not professional education preparation. Higher self-evaluation was also associated with higher subject preparation and professional activity but not with higher education preparation. Nothing in the data suggests that minimum criteria be lowered.

Most startling of all was that most teachers and administrators fell far short of minimum standards derived from research reports, while nearly all teachers met their administrators' minimum standards. If adequate levels of balanced economics

teacher preparation are to be obtained and maintained, the results of research must be brought closer to the actual role situation where behavior in interaction, primarily between the administrator and teacher, defines actual and expected levels of teacher preparation.