THE UNIVERSITY WORK OF TEACHERS
A Follow-Up Study of a Group of
Male Entrants to a Teachers' College

A Thesis
Submitted to
The University of Canterbury

In Partial Fulfilment
of the Requirements for the Degree of
Master of Arts in Education

by
Desmond B. McSweeney

1961.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>The Problem</td>
<td>1</td>
</tr>
<tr>
<td>Importance of the study</td>
<td>2</td>
</tr>
<tr>
<td>Definition of terms used</td>
<td>6</td>
</tr>
<tr>
<td>Organization of the thesis</td>
<td>9</td>
</tr>
<tr>
<td>II REVIEW OF THE LITERATURE</td>
<td>10</td>
</tr>
<tr>
<td>New Zealand Literature</td>
<td>10</td>
</tr>
<tr>
<td>Australian Studies</td>
<td>22</td>
</tr>
<tr>
<td>English Studies</td>
<td>24</td>
</tr>
<tr>
<td>Summary</td>
<td>28</td>
</tr>
<tr>
<td>III METHODOLOGY</td>
<td>30</td>
</tr>
<tr>
<td>The sample</td>
<td>30</td>
</tr>
<tr>
<td>Methods of Investigation</td>
<td>37</td>
</tr>
<tr>
<td>Criteria of Success</td>
<td>44</td>
</tr>
<tr>
<td>Summary</td>
<td>50</td>
</tr>
<tr>
<td>IV PART-TIME STUDY AND THE TEACHING PROFESSION</td>
<td>51</td>
</tr>
<tr>
<td>The Historical Context</td>
<td>51</td>
</tr>
<tr>
<td>The Teachers' College Division &quot;A&quot; Course</td>
<td>60</td>
</tr>
<tr>
<td>Teaching Service</td>
<td>62</td>
</tr>
<tr>
<td>University Degree Courses</td>
<td>66</td>
</tr>
<tr>
<td>Interrelated Factors Involved</td>
<td>69</td>
</tr>
<tr>
<td>Summary</td>
<td>74</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>UNIVERSITY ACHIEVEMENTS</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>V</td>
<td>University Achievements</td>
</tr>
<tr>
<td></td>
<td>Introduction: The Whole Group</td>
</tr>
<tr>
<td></td>
<td>The Graduates</td>
</tr>
<tr>
<td></td>
<td>Stage III units</td>
</tr>
<tr>
<td></td>
<td>Age and marital status at time</td>
</tr>
<tr>
<td></td>
<td>Stage III unit was passed</td>
</tr>
<tr>
<td></td>
<td>Units failed</td>
</tr>
<tr>
<td></td>
<td>Time taken to graduate</td>
</tr>
<tr>
<td></td>
<td>Future degree intentions of the graduates</td>
</tr>
<tr>
<td></td>
<td>Extra-mural study</td>
</tr>
<tr>
<td></td>
<td>Present occupations of the graduates</td>
</tr>
<tr>
<td></td>
<td>A Comparison With Other Studies</td>
</tr>
<tr>
<td></td>
<td>The English groups</td>
</tr>
<tr>
<td></td>
<td>The Australian groups</td>
</tr>
<tr>
<td></td>
<td>The New Zealand groups</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
</tr>
<tr>
<td></td>
<td>The Masterate Group</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VI</th>
<th>UNIVERSITY ACHIEVEMENTS CONTINUED</th>
<th>134</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Non-Graduate Groups</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>Undergraduates passing six or more units</td>
<td>135</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Undergraduates passing from one to five units</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>Undergraduates securing no credits</td>
<td>174</td>
<td></td>
</tr>
<tr>
<td>The non-matriculated group</td>
<td>182</td>
<td></td>
</tr>
<tr>
<td>VII SUMMARY AND CONCLUSIONS</td>
<td>184</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>184</td>
<td></td>
</tr>
<tr>
<td>University achievements of the whole group</td>
<td>184</td>
<td></td>
</tr>
<tr>
<td>The achievements of the graduates</td>
<td>187</td>
<td></td>
</tr>
<tr>
<td>Status of the students attending university</td>
<td>188</td>
<td></td>
</tr>
<tr>
<td>Length of time spent at university</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Failure of units at university</td>
<td>191</td>
<td></td>
</tr>
<tr>
<td>Future degree intentions</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>Extra-mural study</td>
<td>196</td>
<td></td>
</tr>
<tr>
<td>Present occupations</td>
<td>198</td>
<td></td>
</tr>
<tr>
<td>Conclusions</td>
<td>203</td>
<td></td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>APPENDIX</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>The Questionnaire Form</td>
<td>220</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Distribution and Return of Questionnaire</td>
<td>40</td>
</tr>
<tr>
<td>II</td>
<td>University Achievements: the Whole Group</td>
<td>79</td>
</tr>
<tr>
<td>III</td>
<td>University Achievements: the Matriculated Group</td>
<td>79</td>
</tr>
<tr>
<td>IV</td>
<td>Age at which Stage III Unit was Passed</td>
<td>89</td>
</tr>
<tr>
<td>V</td>
<td>Marital Status at Time of Passing</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Stage III Unit</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>Distribution of Units Failed by Sixty-Two Graduates</td>
<td>95</td>
</tr>
<tr>
<td>VII</td>
<td>Incidence of Failure in Subjects Studied</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>by Sixty-Two Graduates</td>
<td></td>
</tr>
<tr>
<td>VIII</td>
<td>University Work of Graduates in Pre-College</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Period</td>
<td></td>
</tr>
<tr>
<td>IX</td>
<td>Extra-Mural Study of Eleven Graduates</td>
<td>105</td>
</tr>
<tr>
<td>X</td>
<td>Present Occupations of the Graduates</td>
<td>107</td>
</tr>
<tr>
<td>XI</td>
<td>Further University Work of Seventy-Three</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Graduates</td>
<td></td>
</tr>
<tr>
<td>XII</td>
<td>University Study of the Masterate Group</td>
<td>126</td>
</tr>
<tr>
<td>XIII</td>
<td>Percentage of Masterate Students in Five Groups Studied</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Five Groups Studied</td>
<td></td>
</tr>
<tr>
<td>XIV</td>
<td>The Undergraduate Groups</td>
<td>134</td>
</tr>
<tr>
<td>XV</td>
<td>Time from Matriculation until Passing of Most Recent Unit: Twenty-One Undergraduates</td>
<td>139</td>
</tr>
<tr>
<td>TABLE</td>
<td>Analysis of Questionnaires of Fifteen Undergraduates Passing Six or More Units</td>
<td>141</td>
</tr>
<tr>
<td>XVI</td>
<td>Incidence of Failure in Subjects Studied by Fifteen Undergraduates Passing Six or More Units</td>
<td>144</td>
</tr>
<tr>
<td>XVII</td>
<td>Distribution of Units Failed by Fifteen Undergraduates Passing Six or More Units</td>
<td>146</td>
</tr>
<tr>
<td>XVIII</td>
<td>Time from Matriculation until Attempting of Most Recent Unit</td>
<td>147</td>
</tr>
<tr>
<td>XIX</td>
<td>Extra-Mural Study of Seven Undergraduates who Passed Six or More Units</td>
<td>150</td>
</tr>
<tr>
<td>XX</td>
<td>Distribution of Units Passed by the Ninety-Five Men in the Group</td>
<td>156</td>
</tr>
<tr>
<td>XXI</td>
<td>Full-Time Study of Six Men in One-To-Five Unit Group</td>
<td>157</td>
</tr>
<tr>
<td>XXII</td>
<td>Incidence of Failure in Subjects Attempted by Seventy-One Undergraduates Passing One-To-Five Units</td>
<td>159</td>
</tr>
<tr>
<td>XXIII</td>
<td>Distribution of Units Failed by Seventy-One Men Passing One-To-Five Units</td>
<td>163</td>
</tr>
<tr>
<td>XXIV</td>
<td>Age at which Seventy-One Undergraduates with One-To-Five Units Attempted Most Recent Unit</td>
<td>165</td>
</tr>
<tr>
<td>TABLE</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>XXVI</td>
<td>Number of Years Elapsing Between Matriculation and Attempting of Most Recent Unit by Seventy-One Undergraduates</td>
<td>166</td>
</tr>
<tr>
<td></td>
<td>Passing One-To-Five Units</td>
<td>166</td>
</tr>
<tr>
<td>XXVII</td>
<td>Extra-Mural Study of Twenty-Seven Undergraduates who Passed One-To-Five Units</td>
<td>169</td>
</tr>
<tr>
<td>XXVIII</td>
<td>Present occupations of Ninety-Five Men Passing One-To-Five Units</td>
<td>172</td>
</tr>
<tr>
<td>XXIX</td>
<td>Distribution of Units Failed by Twenty-Nine Men Securing No Credits and Returning Questionnaire</td>
<td>176</td>
</tr>
<tr>
<td>XXX</td>
<td>Age at which Twenty-Nine Undergraduates with No Credits Attempted most Recent Unit</td>
<td>179</td>
</tr>
<tr>
<td>XXXI</td>
<td>Units Passed and Failed by 177 Matriculated Men who Returned the Questionnaire</td>
<td>192</td>
</tr>
<tr>
<td>XXXII</td>
<td>Present Occupations of the 280 Men in the Group</td>
<td>200</td>
</tr>
<tr>
<td>XXXIII</td>
<td>Occupations of the Fifty-Seven Men Engaged in Non-Educational Occupations</td>
<td>202</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Description</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Analysis of Later Academic Careers of 280 Men Who Entered Christchurch Teachers' College, 1947 - 1950</td>
<td>77</td>
</tr>
<tr>
<td>2</td>
<td>Analysis of Later University Careers of 233 Men in Figure 1 who Matriculated</td>
<td>78</td>
</tr>
<tr>
<td>3</td>
<td>Stage III Units Held by Seventy-Three Graduates and Status of Students at Time They Were Passed</td>
<td>83</td>
</tr>
<tr>
<td>4</td>
<td>Comparison of Three Separate Studies to Show Proportion of Total Stage III Units Held in Particular Subjects</td>
<td>86</td>
</tr>
<tr>
<td>5</td>
<td>Number of Years from Matriculation to Graduation Taken by the Seventy-Three Graduates</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Comparison of Times Taken to Graduate: Teachers' College Group with New Zealand Science Group (Dick)</td>
<td>103</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of Graduates Coming from Those who Matriculated in the Eleven Groups Discussed</td>
<td>110</td>
</tr>
<tr>
<td>8</td>
<td>Units Passed by Twenty-One Undergraduates who Passed Six-Or-More Units</td>
<td>137</td>
</tr>
<tr>
<td>FIGURE</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Units Passed by Fifteen Undergraduates who Passed Six Or More Units and Returned Questionnaire</td>
<td>142</td>
</tr>
<tr>
<td>10</td>
<td>Units Failed by Fifteen Undergraduates who Passed Six Or More Units and Returned Questionnaire</td>
<td>143</td>
</tr>
<tr>
<td>11</td>
<td>Units Passed by Ninety-Five Undergraduates who Passed from One To Five Units</td>
<td>154</td>
</tr>
<tr>
<td>12</td>
<td>Units Passed by Seventy-One Men who Passed from One To Five Units and Returned Questionnaire</td>
<td>160</td>
</tr>
<tr>
<td>13</td>
<td>Units Failed by Seventy-One Men who Passed from One To Five Units and Returned Questionnaire</td>
<td>161</td>
</tr>
<tr>
<td>14</td>
<td>Units Failed by Twenty-Nine Men who Secured No Credits and Returned Questionnaire</td>
<td>178</td>
</tr>
<tr>
<td>15</td>
<td>Percentage of Passes Obtained in Subjects Attempted by the 177 Matriculated Men who Returned the Questionnaire</td>
<td>194</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

I. THE PROBLEM

The Committee on New Zealand Universities\(^1\) has reported adversely on the system of part-time study and within the universities many criticisms have been levelled against this system and the performance of the students for whom it caters. As the demand for teachers with a university qualification grows, the teachers' colleges continue to encourage students to pursue concurrent studies. The New Zealand Educational Institute, voicing the wishes of primary teachers, has consistently advocated an improvement in the facilities for part-time study. Yet little evidence exists to show what benefits teachers gain from such study.

**Statement of the problem.** It was the purpose of the present study to investigate the university achievements of the 280 men, who, between February, 1947 and February, 1950, enrolled at Christchurch Teachers' College in the Division "A" course to prepare for teaching in

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\(^1\) Report of the Committee on New Zealand Universities, Sir David Hughes Parry, Chairman, (Wellington Government Printer, 1959), 130 pp. (referred to throughout this study as the Parry Report).
primary schools. Answers were sought to the following specific questions:
What proportion of the group matriculated and what proportion graduated? How did the proportion compare with that of other university groups? What was the length of time between matriculation and graduation? What was the incidence of failure in university study? In what subjects and at what stages did it occur? What proportion of full-time and extra-mural study was undertaken by the group?

II IMPORTANCE OF THE STUDY.

The need for more highly qualified teachers. At present graduate teachers in New Zealand are coming from two main sources: from the post-primary teacher bursary scheme and from the group of teachers who have studied as part-time students. As the demand for graduate teachers will continue to grow, the extent to which this demand can be met from these two sources needs to be known. Detailed records are kept of the post-primary teacher bursary scheme and the university performance of students in the scheme can be readily determined. No such complete records are

available to assess to extent to which part-time study leads to graduate teachers. About 10 per cent of primary school teachers and 60 per cent of post-primary teachers are graduates.\textsuperscript{3} The supply of teachers with university qualifications falls far short of the demand.\textsuperscript{4} In such a situation all possible information should be available.

**Teachers' College encouragement of part-time study.** The authorities at Christchurch Teachers' College have consistently encouraged their more able students to pursue concurrent studies at the University of Canterbury.\textsuperscript{5} The College is able to obtain information on the university work of these students during the first two, or occasionally three, years of the degree course. Accurate information on subsequent university work is lacking. Whilst the Teachers' College staff look upon part-time attendance at university as a valuable experience in itself and as a useful aspect of education for teaching, they would probably agree that they attach an even greater significance to it because it represents a first step towards graduation. As this policy of encouraging concurrent

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\textsuperscript{4} Report of the Committee on New Zealand Universities, op. cit., p.19.

\textsuperscript{5} Submissions of the Christchurch Branch, New Zealand Teachers' Colleges Association, to the Committee on New Zealand Universities, p. 1, Minco, 1959.
studies is to be continued, knowledge of the subsequent, as well as the initial, university careers of former students would be valuable.

**Part-time study under review.** In the post-war years widespread public discussion has centred on the topic of part-time university study. Two statements, which indicate the divergence of opinion on such study, have been made recently and are quoted to show that the issue of full-versus part-time study is at present far from being resolved. The Prime Minister (Mr. Nash) in an address to the annual congress of the New Zealand Universities Students' Association, described part-time study as a valuable and efficient means of making a university education possible for those unable to attend as full-time students. Those who took their degrees as part-time students, declared Mr. Nash "...had a contribution to make to the welfare of society, a contribution which many men who took the degrees after studying full-time never made." Against this view the Parry Committee criticised the part-time system and stated:

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...that complete immersion in university life before commencing paid employment is of much greater long-run benefit to the student, financially and otherwise, than an attempt to combine study with a full day's work outside the university.\(^8\)

In the face of such contrary opinions objective information on part-time study is needed if sound pronouncements are to be made.

**A problem of long standing.** In 1936, Rae, the principal of the Auckland Teachers' College, reported that:

> It would be a very great advantage if it were made impossible for students to attempt University courses concurrently with Training-college work. It would be very interesting to follow-up the careers of those students who commence University work in their first year in College and then go into the country for some years. I believe that the majority of these students have only interrupted their two years' training without securing any advantage from University work.\(^9\)

In the twenty-four years that have elapsed since these remarks were made the system of concurrent study has continued. To date, no detailed study has been made to supply the sort of information for which Rae felt a need.

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III. Definition of Terms Used.

Country service. Teachers in State primary and post-primary schools are required to teach for a specified period, usually three years, in country schools. Teaching which fulfills this requirement is known as country service.

Current student. The most recent university records used in the study were those for the 1953 academic year. Students who were enrolled for a degree course in that year have been described as "current students".

Division "A". This term refers to the division into which students entering teachers' college, to undertake a three-year course in preparation for primary school teaching, are admitted.10

Division "U". Students who are awarded an Education Department bursary to attend university as full-time students in preparation for post-primary teaching are classified as Division "U".

Extra-mural student. A student who has been granted

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10 The various divisions into which teachers' college students are admitted are defined as Regulation 13 of the Teachers' Training College Regulations, (Wellington, Government Printer, 1959), p. 5.
permission by the university to enrol and sit examinations without attending lectures is termed an extra-mural student or alternatively an exempted student. Unless otherwise stated in the text, extra-mural students will normally be grouped with the part-time, intra-mural students.

**Full-time student.** This term is used to describe a student who spends the whole of an academic year in university study and the pursuits allied to it.

**Part-time student.** "The part-time student is by definition a person whose main occupation is something other than university student. Typically he holds a full-time job and enrols for one or two university courses per year". In this study the term will normally refer to students attending teachers' college or to teachers in primary or post-primary schools.

**Teachers"C" certificate.** This certificate is awarded by the Education Department to students who have satisfactorily completed a prescribed course of training and entitles the holder to teach as a certificated teacher

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in primary or post-primary schools. Normally it is awarded to those who complete a two years' course at teachers' college, followed by a year as a probationary assistant in a school.

**Teachers 'B' certificate.** This is a certificate awarded to holders of 'C' class certificates who, in addition, have been credited with not less than six units in at least three subjects of an arts degree or five units in at least two subjects of a science degree, or to graduates who have completed an approved course of training.

**University of Canterbury.** Prior to 1958 this university was a constituent college of the University of New Zealand. Though references to it prior to that date should describe it as Canterbury University College, for purposes of simplicity the term University of Canterbury has been used throughout the text.

**Year of Graduation.** "In all cases this was taken as the year in which the student finally satisfied all examination requirements for the degree. (These dates were, of course, earlier than the "capping" dates recorded in published lists of graduates)." 12

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IV ORGANIZATION OF THE THESIS

In Chapter I the problem has been stated, its importance discussed and some definitions given. A survey of relevant literature will be given in Chapter II, to be followed in the next chapter by a description of the sample studied and of the methods of investigation used. The circumstances surrounding part-time university study by teachers are outlined in Chapter IV and include a description of teachers' college and university courses as well as conditions of teaching service in primary schools. The next two chapters will deal with the actual university achievements of the group: in Chapter V a broad outline of these achievements will be given and the performance of the graduates analysed in detail and compared with that of other groups of university students. An analysis of the non-graduates' university performance will be given in Chapter VI. In the final chapter conclusions will be drawn and some implications discussed.
CHAPTER II

REVIEW OF THE LITERATURE

An increasing amount of literature concerned with university study is being published, both in New Zealand and overseas. Much of it, particularly those sections concerned with final graduation percentages, is relevant to the present study. Certain unpublished New Zealand studies are also relevant and will be discussed.

Because of the peculiar relationship which exists between the university and the part-time student in New Zealand, considerable caution must be exercised in interpreting the contribution which overseas literature is able to make to the study. Australian conditions for part-time study are to some extent similar to those in New Zealand and the findings of several investigations are cited below. In Great Britain, the tradition of full-time study is more firmly established and comparisons are correspondingly more difficult to make.

I. NEW ZEALAND LITERATURE

Three main types of literature contribute to this study. Firstly, the reports of commissions: their value lies in the fact that they contained opinions and recommendations which were based on a wide range of evidence
interpreted by experienced investigators. Two such reports are reviewed and both contained specific reference to part-time study. The second type of literature consists of reports of major studies of student performance at university. From such studies information on which to base comparisons was obtained. A third type comprises reports and submissions on specific topics and problems.

In the Report of the Royal Commission on University Education in New Zealand,¹ the system of part-time study was trenchantly criticised. The Commission questioned the financial necessity for such study and pointed to the harmful effects it had on the mental and physical well-being of students as well as on the general quality of university education. Public opinion was seen as a key factor in any attempt to reduce part-time study but the Commission stated that the university should take a firm stand and: "should not allow part-time students to enrol as a matter of right."² One recommendation of interest in the light of the current Division "u" bursar scheme was that: "The Education Department should endeavour to so

² Ibid., p. 16.
organize the system of training teachers that student teachers may be able to devote full time to university work.\textsuperscript{3}

The Parry Report\textsuperscript{4} included a chapter on part-time study. The report contained adverse comment on the efficacy of this system of study. The evidence of Parkyn,\textsuperscript{5} the Victoria University of Wellington\textsuperscript{6} and the Royal Commission on University Education in New Zealand was cited to show that such a system was: "...patiently inefficient and expensive, particularly when the demand for well qualified graduates is so great."\textsuperscript{7}

The subsequent university careers of the 3,466 candidates, who passed the University Entrance Examination in the years 1926 and 1927, were followed up by Beeby and

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\item \textsuperscript{3} \textit{Ibid.}, p. 89.
\item \textsuperscript{6} Submissions of the Council of the Victoria University of Wellington to the Committee on New Zealand Universities, chapter 18, paragraphs xxx - xxxii, mimeo, 1959.
\item \textsuperscript{7} \textit{Report of the Committee on New Zealand Universities}, \textit{op. cit.}, p. 40.
\end{itemize}
\end{flushright}
Oram's twelve years after the first group sat the examination. The performance of the men in this group was shown separately, though no indication was given as to the full- or part-time status of the students or the faculty in which they were enrolled. Of the 1,134 men who began a degree, 35 per cent had graduated by the end of 1938. The men in the study who graduated took an average of 1.1 years above the minimum time to do so. Including males and females 13 per cent of the graduates completed masters' degrees. 

Like Parkyn's more recent work, Beeby and Oram's study was primarily concerned with problems associated with the standard of entrance to the university. Because Beeby and Oram investigated a much longer period in the university life of the students in the group, valuable information regarding final graduation percentages was obtained. However, because the proportion of the population who matriculated in the period immediately following 1927 was considerably smaller than in the post-war years, points


9 Ibid., Table xli, p. 115.

10 Parkyn, op. cit.

of apparent contrast with and similarity to the performance of this earlier group and that of later groups studied, should be viewed with considerable caution.

In a bulletin in which the latest university records used were those for the 1950 academic year, Dick, Williams, and Dermot Straker reported on a study in which they investigated the academic record of the 4,852 students who enrolled for a science course at the various constituent colleges of the University of New Zealand in the years 1930 - 1948 inclusive.\textsuperscript{12} By 1950, 41 per cent of the students had graduated in science.\textsuperscript{13} If graduates in other faculties are included, the percentage of graduates is increased to 45. The authors pointed out that there were likely to be further graduates coming from the current student group. Throughout the study no indication was given as to the full- or part-time status of the students. However, separate figures were given to show the performance of male students only, of whom there were 4,068; of this number 1963 or 48 per cent graduated, including 386 graduates in

\textsuperscript{12} I.D. Dick, R.M. Williams, and Dermot Straker, \textit{The Academic Record of Science Students in the University of New Zealand}, (Wellington: Department of Scientific and Industrial Research, 1955), 64 pp.

\textsuperscript{13} \textit{Ibid.}, Table 17, p. 37.
faculties other than science. Students in the study who advanced to the master's level took a significantly shorter time to obtain a bachelor's degree than did those who did not complete the higher degree. The percentage of the master of science students who obtained the bachelor's degree in the minimum time of three years was 65 compared with 30 for the remainder of the science graduates. The mean time taken to obtain the bachelor's degree by all science graduates, except those who were granted rehabilitation concessions, was 4.07 years.

Several special features of this investigation should be mentioned. Firstly, it was a follow-up study based on a comparatively long span of years, giving time for the general pattern of degree completions to assume an almost final shape. Secondly, though the chief criterion of success was graduation, the performance of students who failed to graduate was not considered absolutely unsatisfactory: "It seems probable that not all of the 25.9 per cent of units that did not lead to a science degree should be regarded as wasted effort." This consideration applied particularly to two categories of non-graduates: teachers, who required a minimum of five science units to qualify for

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14 Ibid., Table 13, pp. 34 - 35
15 Ibid., p. 15.
a "B" certificate, and technicians: "...who had no real expectation of completing a degree, but required some academic training in a particular subject...". Three categories into which students in the study were divided seemed particularly well suited to the conditions under which university work is undertaken in New Zealand. The first was made up of all those who had graduated by 1950, the second, referred to as "obsolete science students", was made up of those who had not graduated in science and who had not enrolled for a science unit during the preceding six years. The third group, termed "current science students", was made up of the remainder of the students in the study. Some students in this last group were considered likely to graduate eventually, the remainder would in time become obsolete science students. Contact with individual students in the study was not made. The records used were those from within the university and the nature of these records limited the study in certain respects. The full- or part-time status of the students was not shown. Though the amount of part-time study undertaken by the group would have been considerably less than that of a comparable group

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Ibid.
of arts' students, information on its extent would have given a clearer picture. Some students undertake university study some years after leaving post-primary school. Information in the survey was given on length of course but the age at which students enrolled, graduated, or abandoned their course was not shown.

Parkyn investigated the performance of 4,028 students attempting Stage I units to ascertain the extent of failure and to discover the relationship between such failure and the entrance qualification. For purposes of simplicity Parkyn treated all part-time students as one group, but indicated that teachers' college students within this group performed rather better than did other part-time students. Because the number from whom adequate background information could be obtained was too small to ensure a representative sampling, extra-mural students were excluded from the study. Likewise students who withdrew from their classes during the first term and did not enter for the degree examinations were also excluded. Parkyn found that full-time students: "...not only attempt about twice as many units per year as do part-time students, but they pass

18 Parkyn, op. cit.
19 Ibid., p. 96.
a greater proportion of those they attempt."²⁰ In the more advanced stages of the degree, however, this disparity is considerably reduced. In terms of "weighted units,"²¹ first year, full-time male students at the University of Canterbury in 1955 passed 69 per cent of the Stage I units they attempted, whereas first year part-time male students passed 31 per cent. Advanced year full-time men passed 65 per cent of units attempted contrasted with the 58 per cent passed by the advanced year, part-time men.²²

An aspect of Parkyn's investigation of interest in the present study concerned the relationship between the prior ability of the students and their subsequent performance in Stage I subjects. This relationship was not found to be very close: "Among the advanced-year students and the first year part-time students, indeed, the correlation was very low; only among the first year full-time students did the coefficients reach a moderate size."²³ A conclusion Parkyn reached regarding the part-time group was that differences in schooling had little bearing upon differences in university performance and that the circumstances under which part-time study was carried on probably had a major

²⁰ Ibid., p. 97. ²¹ Ibid., p. 65. ²² Ibid., p. 98. ²³ Ibid., p. 200.
influence on performance. He further concluded that: "... most of the part-time students had the ability to take up university work."\(^{24}\) (Burnham\(^{25}\) in 1955, administered a series of tests to first-year entrants to the University of Canterbury. The results he obtained showed that one-third of the higher scoring students on the Adult Test (B 40) of the Australian Council for Educational Research (a test of general intelligence), were part-time. Burnham's findings confirmed those of Parkyn and showed, in addition, that in terms of intelligence, a section of the part-time group should be capable of a high standard of university work).

Parkyn's study was concerned with the university performance of a particular group of students studying Stage I subjects. The criterion of satisfactory work was the passing of units attempted. No investigation was made of the long-term university performance of the group to discover the percentage who graduated.

A progress report on a longitudinal study of entrants to the teaching profession was presented to the Ninth Science Congress in May, 1960.\(^{26}\) Very detailed information was

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\(^{24}\) Ibid., p. 226


obtained from over 2,000 students who entered the teachers' colleges in 1957, and random samples of students in the various divisions of teaching are being followed up for at least their first five years of teaching. In this, and in earlier reports, Watson has shown that the average intelligence of male entrants to the teachers' colleges was consistently higher than that of the women entrants and that there was a decline from the pre-war level in the intellectual quality of entrants to the colleges which reached its lowest point in 1953. A comparison of the ability of teachers' college and full-time students, based on tests administered to first-year university students at the University of Canterbury in 1955 and to first-year students at Dunedin Teachers' College (1955 and 1956) and first and second year students at Auckland Teachers' College (1951), showed that the teachers' college students tended to obtain a slightly lower score. Of more significance than this, though, was the great spread of ability which gave a considerable overlap between the two groups. Watson concluded that within the teachers' colleges there were students whose ability was such that they could be expected.

to cope more than adequately with university work. In the 1956 report it was shown that a steadily declining percentage of teachers' college men were taking university work in spite of the fact that many of them were of high intellectual ability.

Figures given in the most recent (1960) report show that 46 per cent of the men who entered the Division "A" section of the colleges in 1957 had enrolled at a university within the following three years, almost all as part-time students. By the end of 1959: "...about one in ten of the men in this complete 1957 intake had passed four units of a bachelor's degree, one in sixteen had passed six units and one in forty had earned a full degree."26 The overall pass rate for the men was 39 per cent.

The value of Watson's work lies in the fact that it is concerned with a large number of students on whom detailed records have been kept. In addition, the university work undertaken by the students in the study is viewed against a background of intellectual ability and professional responsibilities. Its contribution to the present study is limited mainly because of the short time it has been in progress.

26 Watson, "Entrance to the Teaching Profession," op. cit., p. 10.
The Christchurch Teachers' College Division "U" Annual Report for 1959 contained information on the subsequent academic progress of the forty students admitted as first-year Division "U" students in 1956. By the end of 1959, thirty had graduated and fourteen of these graduates had completed a master's degree.

Unpublished material which contains information on part-time university study has been produced in considerable quantity for presentation to the Parry Committee and more recently to the Commission on Education in New Zealand. Submissions which have been used in this study are those of the Christchurch Branch of the New Zealand Teachers' Colleges Association to the Commission on Education, and those of the University Council of Victoria University of Wellington to the Parry Committee.

II. AUSTRALIAN STUDIES

Frederick has given a very broad analysis of the causes of student failure at university. Like Parkyn, he


looked backward to the post-primary school and forward to the university itself for the seeds of failure. In relationship to part-time study it is interesting to note several conditions which he believed should make for successful study, namely, a year in the upper sixth form and adequate study facilities conducive to what he termed "tranquility of spirit." In a brief reference to failure rates at university he reported: "Of every hundred day students who commence courses at Australian Universities, some sixty-five fail to graduate in minimum time and forty-two fail to graduate at all." In this article the widespread concern evidenced in Australia with regard to failure at university was brought to the fore and the need, at the university level, to take some action to lessen the failure rate was stressed. Frederick showed clearly the very complex nature of the components of failure and the difficulty of attributing failure to any particular cause.

Hohne followed up the university careers of 395 arts students, men and women, full- and part-time, from the time of their enrolment in 1943 and 1944 at the University of Melbourne, until 1951. His chief concern was to

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31 Ibid., p. 8.
32 Ibid., p. 3.
investigate methods by which university success could be predicted, particularly by the use of psychological tests. The relevant part of his study, as far as the present investigation is concerned, was a report on the performance of the part-time male students in this group. However the numbers involved were very small and the influence of war-time conditions should not be ignored. His chief findings with regard to the part-time students showed that they were the group at university least likely to graduate and that their chances of graduation were much less if they had no period of full-time study.  

III. ENGLISH STUDIES

In a study which was concluded in 1957 Mountford followed up the academic progress of the students who entered the University of Liverpool in the years 1947, 1948 and 1949. He selected these particular years to avoid the post-war flood of ex-servicemen, and yet have a group from years which were sufficiently far back for the pattern of degree completions to show up. His concept of the terms success and failure was linked to an overall

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34 Ibid., P. 38.
35 James Mountford, How They Fared, a Survey of a Three Year Student Entry, (Liverpool University Press, 1957).
picture of degree completions rather than to year by year examination results. He affirmed much more strongly than did Frederick at the University of Melbourne, that success was represented by graduation and failure by non-graduation.

His sample was a large one, comprising 617 students in the arts faculty and 425 in the science faculty. With 71 per cent of his total group having satisfactory and undelayed progress throughout their course, the results were considerably better than those achieved by most of the New Zealand groups studied. A feature which showed up clearly and which might have a bearing on New Zealand results is that whereas the "delayed students" (those who, though finally graduating, did not do so in minimum time) tended to be delayed for one, or with very rare exceptions, no more than two years, "...a considerable sprinkling of those who abandon their courses stay in the University for three, four, or in some cases five, six or seven years before the 'struggle is given up'." 36

There are dangers inherent in a comparison of the performance of English university students with the performance of students in New Zealand and Australia where failure rates tend to be considerably higher. Frederick 37

36 Mountford, op. cit., p. 9. 37 Frederick, op.cit.p.4.
mentions the finer quality of English sixth form teaching, the greater age of English students on entering the university and the smaller, and presumably more rigorously selected, proportion of the population who enter English universities. Even granted that these points were valid, Mountford's work is still very relevant, particularly where it directs attention to factors, other than the ability of the students, which can make for success or failure at university. In a country in which less than half the students who enrol for a degree course graduate, the following comment of Mountford's makes disquieting reading:

As a general proposition I would suggest that when more than ten per cent of a class fails, something is seriously wrong with the selection of students, or the teaching they have received, or the examination to which they have been subjected; and that when the failure rate reaches 25 per cent it is time for what might euphemistically be called a staff reorganization.


Mallinson 40 reported on the academic progress of 551 students who enrolled at University College, London, in the years 1948 - 1951. The total number of students who entered the faculties of arts and science was 349, of whom 85 per cent finally graduated. His study was concerned, in the main, with full-time students.

In a further study of full-time students, Dale, like Parkyn, investigated the relationship between post-primary schooling and subsequent university performance. 41 He made two points which are very relevant to the present study: the obtaining of a degree is a much more reliable indicator of success than is the passing of subjects in the initial stages of university study. In the case of such initial failure, unsettling factors may well be present but be of a temporary nature. He commented secondly that failure at university is a complex affair and that fully to understand it a case study approach is necessary as each case of failure presents its own particular problems. He was able, though, on the basis of case studies, to add:


"...that the chief cause of most failures is not lack of ability but lack of application to work."\[42\]

**SUMMARY**

Part-time study has been freely commented on in the New Zealand literature. In the Reichel-Tate and Parry Reports very adverse comments on the system were passed. These reports did not contain detailed analyses of the performance of part-time students who were also teachers, though conclusions drawn and statements made were based on extensive evidence. Detailed reports on the university performance of teachers' college students and primary school teachers have come chiefly from the teachers' colleges and from the New Zealand Council for Educational Research.

The value of the overseas literature reviewed lay chiefly in the information given on graduation percentages and in the emphasis which was placed on the variation, both in performance and in ability, between individual students in a study. Studies in Australia and England also revealed the influence of factors other than intelligence on university performance. English studies, unlike the Australian and New Zealand ones, were concerned almost entirely with full-time students.

CHAPTER III

METHODOLOGY

I. THE SAMPLE

The sample studied consisted of the 260 men who, between February, 1947 and February, 1950, enrolled in the Division "A" course at Christchurch Teachers' College. The ages of the men, at the time they entered College, ranged from seventeen to thirty-one years with a mean age of twenty years. Educational qualifications at the time of entry also showed a wide range: 2 per cent of the men held degrees, 17 per cent were undergraduates with one or more units, 63 per cent held the university entrance qualification but had not passed any university units and 18 per cent did not have the university entrance qualification. Typically, a student in the group had spent four or five years at secondary school where he had gained the university entrance qualification and had then either gone straight to Teachers' College or had spent one or two years in another occupation before entering the College. Ex-servicemen comprised a small group of older men. The presence, in Teachers' College, of a significant number of students who had previously engaged in other employment or who had attended university as full-time students has been noted in a study
of more recent entrants to the Teachers' College.¹

Several specific features of the group should be mentioned.

**Men only were selected.** There is a significant difference in the amount of university work undertaken by men and women teachers' college students. A smaller proportion of the latter undertake such work² and those who do so attempt fewer units a year than do men, but secure a higher proportion of passes.³ There is also a significant difference in the amount of teaching service which women students subsequently give: though they are admitted to teachers' college in greater numbers than men⁴ they tend, chiefly because of marriage, to teach for a shorter period⁵ and on

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³ Ibid., p. 10.

⁴ In the 1947 - 1950 period women outnumbered men at Christchurch Teachers' College by eight to five.

the whole to persist for a much shorter period with part-
time study. In general, men are more committed to teaching
as a life-time vocation than are women; a recent report has shown that of the women entering the primary service, less than a fifth are still teaching nine years later. The inclusion of both men and women in the one study would have led to an obscure picture, representative neither of the men nor the women students. A further practical consideration leading to the exclusion of women was the difficulty they would have presented in the gathering of information: most of the women had their teachers' college and university records entered under their maiden name and the problem of locating such students would have been very difficult. Throughout this study the exclusion of women should be kept in mind. Had they been included the proportion of graduates would have been considerably smaller as also would the proportion who attempted university study. The proportion of the group still teaching would also have been considerably reduced.

A decade was allowed for graduation. One of the

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6 Watson, op. cit., p. 10.

main questions this study sought to answer concerned the proportion of matriculated students who finally graduated. The minimum time in which a full-time student can complete a bachelor's degree is three years. However, a delay of one or more years is not unusual. Part-time students usually attempt one or two units a year compared with the three or four units attempted by full-time students. Therefore, in the case of the former group, a longer time will usually be taken to graduate. Attempting and passing one unit a year a part-time student would complete an arts degree in nine years. If allowance is made for the failure of some units and for the possible discontinuance of university study for a year or more (especially during periods of country teaching) then at least ten years in necessary for the pattern of graduation, in a group of part-time students, to be revealed. The 1947 - 1950 period was chosen with this consideration in mind. University degree examination results for the 1958 academic year were the most recent ones used in the study, giving those who entered the College in 1950 a period of nine years in which to undertake university study. Earlier intakes had a correspondingly longer period in which to do so.

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Wartime influences were not entirely avoided. The intake of men to the Teachers' College in the immediate post-war years reflected the influence of wartime conditions, particularly in the influx of older male students with war service. Though a number of men entering the College after 1946 were ex-servicemen, the proportion of such men was decreasing. Therefore, 1947 was taken as a starting point. In order to obtain a reasonably large sample and to avoid the restrictions imposed by, and possible special conditions which may have entered into, a single year's intake, the men who enrolled over the period 1947 - 1950, were included. An additional seventeen men enrolled over this period but failed to complete the two years at College and were excluded from the study. In most cases they attempted no university work and remained at College for a very short time. Like Parkyn's Stage I students who did not enter for the examination the seriousness of purpose of these men was open to doubt.

Mountford advanced very similar reasons for selecting the entrants to the University of Liverpool in the years 1947 - 1949 for his study, concluded in 1957. He


11 James Mountford, How They Failed, a Survey of a Three Year Student Entry, (Liverpool University Press, 1957, p. 3.)
stated that:

These three particular years have been chosen for several reasons. In the first place it is very desirable that such an enquiry should not be too restricted since the analysis of a single year would be open to the objection that some special conditions may operate which would result in a distorted picture. Secondly, 1949 is the latest year which can conveniently be taken since the final results of ... students entering after 1949 are ... not yet available. Thirdly, 1947 is itself a good starting point since ... the influx of ex-servicemen (though still far from negligible) had passed its peak ...  

The group is not typical of later male entrants to Division "A". The intention in the present study was not to secure a series of findings which could be used to predict the future university success of the Teachers' College students. Rather was it the intention simply to describe the university work of a particular group and to draw some conclusions from it. However, to give a fuller understanding of the study, it would be well to indicate some of the major areas of difference between this and more recent intakes of men to the Division "A" course of the Teachers' College.

At the time the men in the study entered the College the Division "B" bursar scheme had not been introduced. Students in this division receive an allowance very similar to that paid Division "A" students. 13 In the 1947 - 1950

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12 Ibid.

period full-time university study, as a prelude to teaching, normally involved a student in considerable expense. Under such financial circumstances it seems likely that a section of the students who, today, are awarded a Division "U" bursary would, in the absence of this bursary, have elected to enter the Division "A" course. Present intakes of Division "A" students are drawn from the same general pool of potential teachers as are Division "U" students. The attractive bursary offered these latter students acts as a tempting inducement to senior pupils in secondary schools and probably influences the quality of the applicants for the Division "A" course.

Watson¹⁴ showed that there was a steady decline from the pre-war standard, in the intellectual quality of entrants to the teachers' colleges, which reached its lowest point in the early nineteen fifties. Allied with this was a corresponding decline in academic qualifications¹⁵ from the pre-war period, when 90 per cent held the university entrance qualification, to the post-war period when the percentage had fallen away to 40. The recent trend has been for an improvement in the intellectual quality and academic


qualifications of entrants to take place; in 1960, 56 per cent of the entrants to the Christchurch Teachers' College Division "A" course held the university entrance qualification. The men in the present study attended teachers' college in a period characterized by lower intellectual quality and academic qualifications than those obtaining in more recent times. It does not therefore follow, that the more recent entrants to the teachers' colleges will perform better at university.

II. METHODS OF INVESTIGATION

The two chief sources of information used were university records and questionnaire returns. The records of the Education Department and of the Christchurch Teachers' College were also used to a lesser extent. The initial information, which gave the names and home addresses of the men entering the Teachers' College in the 1947-1950 period,


17 Submissions of the Christchurch Branch of the New Zealand Teachers Colleges Association to the Commission on Education in New Zealand, p. 75, misc., 1960.

18 For a discussion on this point see Watson, "Intellectual Status of Students Entering Teachers' Colleges, 1941 - 1956," op. cit., pp. 10 - 11.
was obtained from College records. These records also contained information on the academic records of the students at secondary school and at Teachers' College but this information has not been used. It was hoped that use could have been made of the records of intelligence test scores but these were not entered on the College records consistently and this aspect of the study could not be included.

The Registrars of the Universities of Canterbury and Auckland and of the Victoria University of Wellington supplied information on the men in the group, which gave the subjects and stages passed, year of passing and, for the years following 1950, the grade of pass obtained. Any war concession units granted were also shown as also was the year of graduation, where this occurred. Transfer to another university was shown and the record of transferred students was subsequently followed-up. Students who had not matriculated were shown as "No Record"; those who had matriculated but failed to pass any units were shown as "No Credits". For master's degree students, the subject studied and the class of degree obtained was shown.

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19 There were only two transfers to the University of Otago and personal contact was made with both students concerned.

20 It should be pointed out that university records are confidential. The information supplied was that which an observant student could have compiled from university notice boards and the daily press. No information was given concerning units failed or the status of the students.
In order to obtain information of a more detailed and personal nature a questionnaire was prepared for distribution to the men in the group. A copy of the questionnaire form and of the letters which accompanied it appear as Appendix A. A certain amount of the information asked for has not been used. The main objectives in distributing the questionnaire were to obtain information concerning the conditions under which university study was undertaken, the failure rate in university study and intentions regarding future university work. In addition, information was sought on the pattern of degree structures, especially the considerations leading to the selection of subjects to take to advanced stages, on present occupation and on secondary school career.

The present addresses of the men in the group were obtained from a variety of sources including: Education Department records, Education Board records, Teachers' College records, public directories and electoral rolls. All but twenty-one men in the group were traced. The first questionnaire was posted in November, 1959, and a second one, to those who had not returned the first, in February, 1960. The number of questionnaires distributed and returned, in relation to the performance of the students, is shown in Table I. As might have been expected, those who had coped
TABLE I

DISTRIBUTION AND RETURN OF QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Classification</th>
<th>No. of Men</th>
<th>Traced and Circulated</th>
<th>No. not Traced</th>
<th>Ret'd</th>
<th>Ret'd. as Percentage of No. of Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td>160</td>
<td>147</td>
<td>13</td>
<td>115</td>
<td>72</td>
</tr>
<tr>
<td>Bachelors</td>
<td>53</td>
<td>50</td>
<td>3</td>
<td>42</td>
<td>79</td>
</tr>
<tr>
<td>Masters</td>
<td>20</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Total Matriculated</td>
<td>233</td>
<td>217</td>
<td>16</td>
<td>177</td>
<td>76</td>
</tr>
<tr>
<td>Total Non-Matriculated</td>
<td>47</td>
<td>42</td>
<td>5</td>
<td>23</td>
<td>49</td>
</tr>
<tr>
<td>Totals</td>
<td>280</td>
<td>259</td>
<td>21</td>
<td>200</td>
<td>71</td>
</tr>
</tbody>
</table>

Well with university work were more inclined to return the questionnaire than were those who had coped less well or who had not matriculated. With a 100 per cent return of the questionnaire, all the information sought from the students with a master's degree was obtained whereas for the non-matriculated men information was based on the returns of only 49 per cent of the group. Of the 233 men who matriculated, 76 per cent returned the questionnaire. As the
characteristics and performance of each group shown in Table I are discussed this aspect of the reliability of the information will be indicated.

An additional source of information, concerning present occupation, was made available by the Education Department. Among the eighty men from whom a questionnaire return was not received were the twenty-one who were not traced. Of the remaining fifty-nine a small proportion probably did not receive the questionnaire even though there was some certainty as to the accuracy of the address. A list of all the men about whom there was any doubt regarding occupation was sent to the Education Department where information on the most recent teaching position held by the men on the list was given.

After information from these various sources had been collected it was analysed with a view to providing answers to questions concerning eight different aspects of the problem as stated on page one:

**University Achievements of the Whole Group:**

What proportion of the whole group matriculated and of those who matriculated what proportion graduated?

How did this proportion of graduates compare with that reported in other studies of university students?
How many undergraduates are still likely to graduate?
What proportion of the undergraduate group appears to have derived some benefit from university study?
What subjects were most frequently studied by the group?

**The University Achievements of the Graduates:**

In what faculties were degrees obtained?
What proportion of the graduates obtained higher degrees and what was the quality of these higher degrees?

**The Status of Students Attending University:**

What proportion of the students did all their university work on a part-time basis?
At what stage in the students' teaching careers was full-time study undertaken?
What was the status of the men who obtained a master's degree?

**Length of Time Spent at University:**

What was the length of time taken by the graduates to complete a degree?
How persistent in their studies were the undergraduates?
Was failure to graduate associated with a short time spent at university?
Failure of Units at University:

What was the incidence of failure involved in the university work of the group?
Did failure tend to be associated with the initial or advanced stages of the subjects studied?
Did students tend to encounter a relatively greater amount of failure in some subjects than in others?

Future Degree Intentions:

How many undergraduates still had the intention of completing a degree?
What were the intentions of the graduates regarding future university work?

Extra-Mural Study:

How much extra-mural study was attempted by the group?
What proportion of the extra-mural units attempted was passed? How did this compare with the intra-mural proportion?
What subjects were most frequently studied extra-murally?
Was the proportion of passes to failures significantly higher in certain subjects?
Present Occupations:

What proportion of the group was still teaching in 1958?
What was the relationship between university achievements and occupation?
What were the occupations of those who had left teaching?

III. CRITERIA OF SUCCESS

What is unsatisfactory performance? In the opinion of most university teachers with whom I have discussed the question, the practical answer is that those students who fail are the ones whose work is unsatisfactory, and that those who do satisfactory work pass. 21

Before discussing the university achievements of the group it is necessary to consider the meaning of the term "success" as applied to university performance. Parkyn's criterion given above was used with reference to a year's work by individual students in particular subjects. The supporters of such a criterion would probably agree that ultimate success at university is indicated by the completion of a degree and failure by the non-completion of a degree. This criterion is traditional and claims wide popular support. However, the implication that those who do not graduate are failures is arbitrary if not misleading. The writer believes that those who do not graduate may nevertheless gain some benefit and achieve a measure of

21 Parkyn, op. cit., p. 79.
success from university study and that even failure itself may in some cases provide a useful stimulus. Particularly for teachers, attendance at university, the partial completion of a degree and the mental stimulation arising from contacts made at university are likely to have beneficial effects on personal and professional growth which outweigh any harmful effects which accompany failure to obtain a degree. This view is supported by other writers:

"...love's labour with unsuccessful students is not entirely lost. It seems reasonable to assume that even if they have breathed the air of a university for no more than a year they will have drawn some stimulation from lectures, from reading, and from the shared life, the conversation and the argument of the university community. If they leave without having received a degree or diploma they do not necessarily leave without having received some benefit." 22

However, this view expressed by Frederick is not supported by his fellow-countryman, Cunningham, who says: "In general, however, "failure" would seem to indicate that it would have been better if the student had not attempted the particular subject, or the particular course, as the case may be." 23

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A United States view of university success\textsuperscript{24} is that a summary of grades passed is an insufficient indication of success: a wide range of activities, including such things as philosophy of life, practical competence and social and physical fitness are also essential criteria of a satisfactory university career.

English universities tend to take a more restricted point of view, influenced to a considerable extent probably, by the tradition of full-time study and consistent with conditions in which entry to the university has tended to be highly competitive. Mountford expressed the English view thus:

"The students who abandon their course without obtaining their qualification, whatever advantage they may have gained from their years at the university, have certainly not justified their admission; and in a competitive entry their presence has deprived other applicants of the opportunity of proving their worth." \textsuperscript{25}

Whilst it must be conceded that the approach adopted by Parkyn and Mountford offers many practical advantages in simplifying the analysis and interpretation of university performance, it was found to be inadequate in the present study. It did not make possible a finer analysis of

\textsuperscript{24} D. Chamberlin, and others, \textit{Did They Succeed in College?} (New York: Harper and Brothers, 1942), pp. 3-4.

\textsuperscript{25} Mountford, \textit{op. cit.}, p. 9.
performance and tended to conceal the wide variation in ability, level of aspiration and study conditions which existed in the group. Several particular circumstances which add meaning to the term "success", as applied to this group, should be mentioned.

Traditionally, the quality of university work is compared with an absolute standard or with the work of other students rather than with a particular student's previous performance. Students at university vary in intelligence; some will produce pass-level work with little effort while others will fail after much hard work. Such intellectual differences are not considered in the marking of examination scripts. Thus "success" must be qualified: it is success relative to an absolute standard or to the performance of others.

The grade of pass or fail obtained in examinations can be used as a criterion of success but has not been so used in this study: for the years 1947-48-49 the University of Canterbury marked on a percentage scale, with 50 per cent as the pass mark. Notification of examination marks was given individually to students but the marks were not

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26 Parkyn, op. cit., pp. 79-80, illustrates this point very clearly.

27 To appreciate the great range in intelligence see, for example, P.B. Burnham, Entrance to a University College, (Christchurch: Canterbury University College, 1955), p. 25.
published. In the year 1950 no mark or grade of pass was released to students other than a "pass" or "fail" result. From 1951 onwards a five-point letter scale has been used. Marks awarded in the years prior to 1951 were not obtainable for this study from university records and information on marks as supplied in the questionnaire was very sparse.

Because of the various methods used by the university during the period to express quality of pass and because of the unreliability of questionnaire information regarding marks, grade of pass or fail was not used as an index of success or failure.

Prior to the passing of the Education Amendment Act, 1955, teachers in the primary service were awarded numerical grading marks on the basis of which appointments to new positions were made. The holding of a "B" certificate entitled a teacher to six additional grading marks and thus enhanced his chances of promotion. In addition the holding of this certificate was (and still is) a pre-requisite to appointment to certain positions and counted towards the qualification marks awarded to post-primary teachers.  

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29 Ibid., p. 252.
This certificate has thus provided teachers with a more immediate goal than graduation and one that can be attained whilst still an undergraduate. Teachers who strive for and attain this goal can scarcely be said to have failed at university. In this particular instance success is related to the level of aspiration of individual students.

Part-time students fail a higher proportion of their units and take a longer time to graduate than do full-time students. The Parry Report[^30] cited a Victoria University of Wellington study in which 115 Bachelor of Commerce graduates were found to have taken an average of eight and a half years to complete a degree. Had they been full-time students such a result would have represented unsatisfactory performance. Part-time students can make very slow progress at university yet at the same time be achieving considerable success in their full-time occupation. For the individual part-time student, success can only be measured against the background of all his activities.

In the analysis of the university work of the group, therefore, these qualifications to the terms "success" and "failure" should be kept in mind. Especially is this necessary where comparisons are made with the performance of full-time students.

The sample consisted of 250 men who entered Christchurch Teachers' College just over ten years ago. Prior to entering the College, one-fifth of the men had attended university and four-fifths had obtained the university entrance qualification. To obtain information on units passed by the group, university records were used. More detailed information, especially concerning units failed and future degree intentions, was obtained from a questionnaire returned by 76 per cent of the men who matriculated.

Graduation was not taken as the sole criterion of success at university: the existence of more limited sub-goals, such as a teacher's "B" certificate, and the likelihood that some non-graduate teachers have derived some benefit from university study, made necessary a wider interpretation of the term "success".
CHAPTER IV

PART-TIME STUDY AND THE TEACHING PROFESSION

I. THE HISTORICAL CONTEXT

The first normal school in New Zealand was opened at Dunedin in 1876. By 1878 Fitzgerald, the rector, was able to report that: "In addition to the prescribed course, several of the juniors took classes at the university, having satisfied me that they could safely undertake the additional study." Such encouragement to attend university was given: "... so that, while attending the Normal School, students may take their first steps in the University course towards graduating."2

The North Canterbury Education Board, in 1878, adopted a resolution permitting advanced students to carry on general studies at university and receive only technical instruction and professional training at the Normal School. The principal, Howard, viewed the scheme with pessimism because of the difficulty of the university work and stated: "I do not think many will be able to pursue with advantage

1 Annual Report of the Department of Education, N. 1, 1878, p. 100.
2 Ibid.
both courses at once."³ In the first year of such study (1878) only one student was able to attend university classes. In 1881 a new principal, Malcolm, made a strong plea for concurrent studies, maintaining that contacts with others outside the narrow confines of teaching were a necessary part of teacher training: "It seems to me, however, that the University should be regarded as the complement of the Normal School, and that attendance at both should be insisted on."⁴ At the short-lived first Normal School in Auckland the principal, McArthur, held very similar views and reported that: "The attendance of teachers at University College classes will form a strong link between higher education and the primary system, and every fair means should be used to strengthen this link."⁵ Meanwhile, at Christchurch, Malcolm's faith in the value of concurrent studies was being confirmed: in 1883 two of his former students secured master of arts degrees, one with first class honours, the other with second and Malcolm remarked, regarding the university: "Every year's experience convinces


me the more of the advisability of enabling the students to attend the lectures there. 6

By 1898, White, the principal at Dunedin Normal School, was thinking in terms of full-time university study for his students in the post-normal school period and urging the Otago Education Board to grant small bursaries to deserving students. 7 Emphasis in the Principals' Reports about this time was placed, in the main, on the success of normal school students at university and on the desirability of extending provision for concurrent studies. As White indicated in 1900, though, not all the normal school students were capable of university work: "By far the larger number of students, however, are not sufficiently advanced in their studies to take advantage of a university course." 8

In 1903 a Select Committee on Education reported favourably on concurrent studies and recommended that all training colleges be sited in university centres; that, in order to produce teachers with breadth of view and avoid duplication, literary and scientific aspects of teacher

training be provided at the university and that education lecturers at training colleges be given the status of university lecturer or professor. As a result of this report training college students in the period 1905 - 1920 were required to attend some lectures at university, the two university subjects, English and education, being made a compulsory part of the course. The difficulties inherent in such large-scale attendance at university were soon apparent: White from Dunedin reported, regarding the English course at university, that: "The work of this class is quite beyond many of our students." At Christchurch, where training college students and staff enthusiastically supported the system of concurrent studies, difficulties were encountered in co-operating with an institution (the university) over which the Education Board had no control and to which the training college had to accommodate itself, even though 50 per cent of the passes at university were secured by training college students.

In the years just prior to World War I the strain imposed on students who undertook concurrent studies, the

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harmful effect of university study on professional training and the excessive amount of such study undertaken by some students were subject to comment in Principals' Reports. By 1908 the Christchurch principal, Watkins, was allowing his students to undertake university study in a great variety of subjects, though he suggested a maximum of three subjects per year. His actions prompted the Director of Education to question the effect of too much university study on training college work:

"It is also a question of whether some other modification is necessary to prevent some of the students subordinating their legitimate training as teachers altogether to the object of taking a university degree." 12

Watkins, in the following year, reluctantly bowed to the Department's insistence on more professional training and, much to the resentment of his students, cut down the amount of university study they could undertake. 13 Watkins died the following year and his successor, Foster, was quick to report on the strain concurrent studies imposed on students: "... for the rank and file it is undesirable that a full course, both at Training College and University

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College should be attempted.\textsuperscript{14} Nevertheless, the Education Department still looked to the university to provide a general education for training college students and reiterated the view that:\textsuperscript{15} . . . where possible . . . it is contemplated that the general education of students should be in the main continued at the university.\textsuperscript{15} At this time the principal of the Dunedin Normal School, Finder, was reaffirming the belief of his predecessor, White, in the need for full-time university study:

\". . . I am convinced that the connection between training college and university would be a more valuable one if promising students were granted an extension of their Training College bursary for a third year for the purpose of intensive University work; there would be less pressure and better results.\textsuperscript{16}"

In the period following World War I concurrent studies continued but restrictions were being imposed both by the training colleges and the university. A change in the official attitude to such study from that held at the time the Select Committee reported in 1903\textsuperscript{17} was well illus-


\textsuperscript{17} Annual Report of the Department of Education, E. - 1E, 1904, op. cit.
trated by Tennant, the principal of Wellington Training College, who described attendance at university by training college students as a "privilege." In this period also, attention was being directed to the difficulty training college students were encountering in pursuing science courses. By 1922 the general education of training college students was being undertaken by the colleges themselves, which, with improved staffing, were becoming more nearly self-contained.

In the Report of Royal Commission on University Education in New Zealand concurrent studies were roundly condemned and probably influenced the Education Department in its decision to award the first third year scholarships, which enabled selected students to undertake a full year's university study in science and mathematics. In spite of the recommendations contained in the Reichel-Tate Report, the Parliamentary Recess Committee of 1930 found, in the

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20 cf. ante, p. 11
relationship of the training colleges with the university: "what can only be described as a system of reciprocal duplication in existence." Doctor James Hight, in evidence to this Committee, indicated some deficiencies in the system of concurrent studies: "One of the worst features is that the supply of teachers with a sound training in science is seriously deficient owing to the fact that the present arrangement does not allow of student teachers in training taking a full science course."  

The depression years of the early nineteen thirties led to the closing of all training colleges by 1934. When they reopened in 1935 concurrent studies were resumed and training college students met a fair measure of success at university. In the post-war period the principle of part-time study was supported by a committee set up to report on the recruitment, education and training of teachers. This committee saw the need to have, within the primary service, teachers with a university education. This education could

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23 Ibid., p. 80.

best be obtained through initial concurrent studies followed, in the post-teachers college period, by full-time study for students who showed promise in university work. However, this post-war period was one in which a lower proportion of teachers' college entrants had the university entrance qualification and this was reflected in a smaller proportion of teachers' college students undertaking university work than was the case before the war. The standard of entrance has shown a tendency to rise since 1953 but: "... the overall percentage of really able students in the training colleges who take university work has been dropping sharply and steadily over the fifteen years under review." 26

In an interim report published in 1960, 27 the Commission of Education in New Zealand, acknowledged the large amount of university work undertaken by Division "A" students but expressed concern at the low pass rate obtained. Further reference to concurrent studies will be made in the


26 Ibid., p. 9.

final, as yet unpublished, report of the Commission.

II THE TEACHERS' COLLEGE DIVISION "A" COURSE

This course is of three years' duration. The first two years are spent at teachers' college and in the third year students are normally appointed to primary schools as probationary assistants. The first two years of the course consist of lectures and demonstrations in teaching method, content lectures in subjects of general educational nature and practice sections in primary schools. In the probationary year students teach a small class of children under the general supervision of the headmaster of the school in which they are working. The college year normally commences in the first week of February and ends early in December. The minimum entry qualification is School Certificate though many entrants, particularly men, have higher qualifications.28

Students entering Christchurch Teachers' College are drawn from various education board districts. The proportion from particular boards varies from year to year but in general all students in the Nelson and Westland districts and in that part of Canterbury to the north of the Rakaia

River enter Christchurch Teachers' College. Students from the Wanganui and Hawke's Bay education board districts were also admitted during the period covered by this study. Normally the year as a probationary assistant is spent in a school in the board area from which the student was originally drawn. However, a limited number of third year studentships are granted each year and for purposes of certification are equated with the probationary year. In the 1947 - 1950 period such studentships were offered in speech, nature study, education of the deaf, physical education, music and arts and crafts. Studentships in the first three subjects were tenable at Christchurch and in the case of the first two, part-time university study was a mandatory part of the course.

The University of Canterbury is located within ten minutes walking distance of the College. Though students are given considerable encouragement to pursue concurrent studies, the attitude of Teachers' College is that the students' first duty is to their employing authority, the Canterbury Education Board, and that university work should not interfere unduly with College work. However, in instances where a duplication of courses seems likely to occur, students may be granted exemption from the particular course of lectures being given at the College. Where the
university timetable demands it, students may be released for the necessary period from College work.  

III TEACHING SERVICE

Conditions of service encountered in teaching influence markedly the ease with which teachers can carry on university study. A description of such conditions in the primary service is necessary if the performance of the men in the present study is to be fully understood.

Upon satisfactory completion of the probationary year students qualify to be certificated as teachers. The certificate is awarded by the New Zealand Education Department and may be Class "G" or Class "B". The securing of his first teaching post is the responsibility of the young teacher and he is free to apply for a position with any education board. At the time the teachers in this survey first took up appointments the numerical grading system was in operation. Under this system a teacher, on completion of his probationary year, was awarded a grading mark allocated to him on the basis of inspection visits made during the year by Education Department inspectors. In appointments to positions within the general teaching

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29 Submissions of the Christchurch Branch, New Zealand Teachers' Colleges Association to the Committee on New Zealand Universities, p. 1, Mimeo, 1959.

30 cf. ante, p. 48
service the highest graded applicant was normally appointed. It is not unusual for newly certificated male teachers to experience some difficulty in obtaining a permanent teaching position. Particularly is this so for those who wish to remain in a university centre, where competition for positions is keener than it is in smaller centres. A teacher who is unable to obtain a permanent position will usually act as a relieving teacher. Because of the frequent transfers involved, such service does not fit in easily with part-time university study.

The country service requirement\(^{31}\) is a measure designed to give adequate staffing in rural areas. To fulfil this requirement teachers must normally serve for a period of three years in country schools. Failure to do so results in a loss of salary increments and acts as a barrier to promotion. This barrier to financial and professional progress is normally set in the sixth year of teaching in the primary service and in the tenth year in the post-primary service. In certain positions the country service requirement does not apply and in other cases service in certain urban positions can be counted as "country service". The country service requirement may influence a young

\(^{31}\) cf. ante, p. 6
teacher, who wishes to continue university studies, to act in any one of a variety of ways. He may decide to fulfill his country service obligation as soon as possible and then return to a university centre to complete his degree. Whilst teaching in the country he may enrol as an extra-curricular student. An alternative course he may decide upon is to take up an urban position and continue with university work in the hope of completing his degree before being required to move to the country. If his finances permit it he may decide to spend some time as a full-time student. On the basis of information given later in this study it seems likely that some undergraduate teachers move to the country, find rural conditions to their liking and in practice give up their earlier intention of obtaining a degree. In the case of young married teachers the attraction of a house, which often accompanies a rural position, might prove stronger than the desire to teach in a university centre under unsatisfactory living conditions.

The primary school day, particularly in city areas, usually commences at nine o'clock and continues through until three o'clock in the afternoon. It is thus possible for teachers in the city and surrounding areas to attend lectures from four o'clock onwards. In isolated instances attendance at lunch hour lectures is possible. The Parry
Report stated that: "about 60 per cent of those taking courses in arts ... are part-time students," 32 The university timetable is designed to cater for the needs of these students by offering lectures in the late afternoon and early evening. It is possible for teachers studying in the arts faculty, particularly at the Stage I level, to select from a fairly wide range of subjects.

Teachers are encouraged by the Education Department and by their employing Education Board to improve their academic qualifications. Within the last few years this encouragement has been given in a practical way:

"... agreement was reached on a salary scheme ... which did give increase in just those places where they were most likely to tempt young teachers to struggle for higher academic qualifications and recompense older teachers who had already done so." 33

However, no official provision exists for teachers to be released from their classes to attend the university, except on the day or days of their final examination. 34 An interesting exception to this statement, which illustrates well the current emphasis being placed on academic qualifications,

is the granting of leave on full pay for one academic year, to a limited number of teachers, to enable them to attend university to complete degrees.\textsuperscript{35} Two teachers in the present survey were granted such leave in 1959. As this year is outside the time limit set for the study their performance during this year has not been included.

**IV UNIVERSITY DEGREE COURSES**

Students enrolling for degree courses at the University of Canterbury must previously have obtained the university entrance qualification. Provisional admission may be granted to students over the age of twenty-one years; on passing three units such students become eligible to be matriculated.

Teachers' College students normally enrol in the faculties of arts or science.\textsuperscript{36} The obtaining of a degree in either of these faculties entails the passing of a certain number of units, each of which represents one year's work in a given subject at a particular level. Normally, there are three stages in each subject. The degree of


\textsuperscript{36} Submissions of the Christchurch Branch, New Zealand Teachers' Colleges Association to the Commission on Education in New Zealand, p. 34, Memo, 1960.
Bachelor of Arts consists of nine units, including at least three units higher than Stage I and at least one subject advanced to Stage III. Stage I units may be selected from a wide range of subjects, the only essential one of which is a language. The Bachelor of Science degree consists of eight units, including at least three higher than Stage I, and one subject advanced to Stage III.

The minimum time in which a bachelor's degree can be completed is three years and students who study full-time normally hope to graduate at the end of this period, after passing three or four units a year. Part-time students usually attempt only one or two units a year: "Consequently, the average part-time student, if he graduates at all, takes a very long time to do so."  

To advance to a master's degree in either arts or science a student must have obtained a bachelor's degree and have passed the three stages of the subject he wishes to study at the master's level. In most subjects a master's course involves the sitting of four papers and the presenta-

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37 For a discussion on the concept of 'normal time to graduate' see James Mountford, How They Fared, a Survey of a Three Year Student Entry, (Liverpool University Press, 1957), p. 7

38 Report of the Committee on New Zealand Universities, loc. cit.
tion of a thesis. Full-time students normally take at least one year to complete such a course. To be eligible for the award of honours a student must complete the master's course within three years of passing the final unit of his bachelor's degree. No extension of time is available to part-time students.

Course regulations, particularly in the faculty of arts, are very similar in the various New Zealand universities. In most cases students can readily transfer from one university to another without undue interference with their degree course. In the case of teachers, who tend to move fairly frequently in the earlier stages of their career, such ease of transfer facilitates degree studies.

Provisions governing extra-mural study have changed considerably over the last ten years. At the University of Canterbury there has been a tendency for exemption from lectures to be increasingly less readily granted. In 1950 it was theoretically possible for exemption to be obtained in any subject and the calendar stated that: "Lists of textbooks and an outline of the course of reading to be followed and a timetable or plan of the year's work will be supplied to exempted students". 39 In 1960 a range of subjects,

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39 Canterbury University College Calendar, 1950, pp. 33 - 34.
including geography and psychology at all stages, and
normally Education III, was specified for which exemption
would not be granted. With the exception of education, no
mention was made of any tuition which exempted students
could expect to obtain. Set against these more difficult
conditions is the extra-mural tuition available as from
1960, at the Palmerston North College of the Victoria
University of Wellington, in the subjects, English I,
History I, Education I and Pure Mathematics I.\(^4\)

V. INTERRELAT E D FACTORS INVOLVED

Bearing in mind the particular conditions encountered
in teachers' college study, in university study and in
primary teaching service, it will be profitable, before
considering the performance of the particular group of men
studied, to discuss in general terms the influence of these
conditions on the university work of teachers.

"... the average intellectual calibre of at
least the men who enrol to be prospective primary
teachers is not far below that of students
enrolling in the faculties of arts, law, and
commerce in the university ..."\(^5\)

\(^4\) The University of Canterbury, Calendar, 1960,
p. 104.
\(^5\) Ibid., p. 104.
\(^6\) Ibid., "Entrance to the Teaching Profession,"
op. cit., p. 5.
As is to be expected though, a wide range of intelligence and attainment is represented. Some students enter teachers' college with School Certificate after having failed this examination one or more times. Others enter following a year or more of university study. This spread of ability is reflected in university work. Some students will not matriculate; some will attempt one or two units, meet with failure and abandon ideas of obtaining a degree; some, through performing indifferently, will persist in their efforts while others will meet with immediate and continuing success. Selection of entrants to teachers' college does not rule out individual differences in intelligence or attainment though it may reduce them. Such differences represent a major factor in the ability of students to cope with university work.

Professional considerations, additional to those involved in country service, influence the university work of teachers. Some men holding posts of responsibility may find it more difficult to attend lectures than do assistants.

43 Of Watson’s 1957 sample (Ibid., p. 7) less than a third had School Certificate only (mainly women) and about 15 per cent of the men had some prior university experience.

in large city schools. Teachers working in various avenues of special education may have a more flexible programme which makes possible more diverse university study. The extra-curricular aspects of teaching can be demanding of a teacher's time and energy. Supervision of sports teams and youth clubs, attendance at parent-teacher gatherings, school fairs and flower-shows, membership of professional bodies - such multifarious activities of a teacher can lessen opportunities for successful part-time study. Social activities of a more recreational nature likewise tend to conflict with the demands of university study. The willingness of a teacher to forego these activities will, in part, be a measure of his ambition to complete a degree.

Until very recently the financial return that a graduate teacher received in recognition of his degree qualification was not great: in 1954 the additional annual salary payable to an assistant teacher who held a degree was twenty pounds.\textsuperscript{45} The expenses involved in taking one university unit, including tuition, examination and Students' Association fees, as well as books and transport, would in the same year have been unlikely to amount to less than

twenty pounds. One of the results of a new salary scale for teachers was to increase the amount payable for a bachelor’s degree to thirty-five pounds. Allied to this financial aspect of graduation is the fact that teachers who graduate enhance their chances of promotion: certain positions in the teaching service, such as teachers’ college lectureships and the inspectorate, are normally limited to graduates. Financial incentives to complete a degree are greater now than was the case a decade ago and it seems likely that this factor will assume increasing importance as an aspect of the university work of teachers.

A variety of physical conditions encountered in teaching influence the university work of teachers. Those who live in a university centre are normally able to attend lectures. Many teachers, though, particularly in their early teaching years, live in areas remote from a university. It should be realized that this remoteness is not alone geographic: the stimulus of a library and of association with others who have similar interests and problems will probably be equally remote. Teachers who live up to about

46 Canterbury University College Calendar, 1950, pp. 87 - 92.
thirty miles from a university may be able to attend lectures. Normally though, distances of no more than about ten miles are travelled. It will be shown below that extra-mural facilities do not overcome the limitations imposed by distance of residence from a university.

Domestic conditions influence the work of older part-time students. Men entering teachers' college are usually about eighteen years old. Soon after completing their probationary year many of them, now in their early twenties and with a partially completed degree, will be contemplating marriage or in a few cases will have already married. Such young teachers are therefore faced with the prospect of university study, professional duties and domestic responsibilities. The demands that these sometimes conflicting duties make can be very great, imposing on some teachers what Watson describes as a "frightful burden." 48 A teacher's willingness to continue university work under such circumstances will be influenced by his value judgements, ambition, organizational ability, family commitments and the support he receives from his wife.

The capacity of a student to undertake successful university study is not dictated solely by his intelligence and the comments that Dale makes about students at an

48 Watson, op. cit., p. 11
English university can be applied equally well to New Zealand primary school teachers who study part-time:

"A multiplicity of non-academic influences affects the quality of a student's work . . . . There is however, one factor which has a powerful controlling effect over many of the others, whether it be called determination, application to study, industry or what you will." 49

In the following two chapters which analyse the university performance of the men in the group, the influence of non-academic factors should be borne in mind. The importance of Dale's "determination" will in some cases become abundantly clear.

SUMMARY

In this chapter part-time study has been discussed in relation to its historical context and to conditions within the teachers' colleges, the primary school service and the university.

Such study has always been a feature of New Zealand teachers' colleges and in the early years of this century was an integral part of the programme. Though surviving the criticism of various education commissions, part-time

study is now undertaken by a smaller proportion of teachers' college students. Within the colleges, though, it continues to be encouraged and facilities for it made available. Teaching service, because of the demands it makes, has had the effect of limiting university study, both in the amount undertaken and in the range of subjects studied. Within the limits imposed by such service, teachers have been encouraged by the Education Department to undertake part-time study.

The tendency within the university has been to emphasise the value of full-time study; at the same time, in order to cater for the needs of part-time students, a range of courses offering late afternoon and evening lectures, has been made available, particularly in the arts faculty.

The demands that teachers' college, primary teaching service and university make upon teachers have a bearing on the quality and quantity of university work undertaken. However, individual differences, particularly in ability, level of aspiration and study conditions must also be considered.
CHAPTER V

UNIVERSITY ACHIEVEMENTS

I INTRODUCTION: THE WHOLE GROUP

By the end of 1958, 233 of the 280 men in the study had matriculated and 73 had graduated; of the graduates 20 had advanced to a master's degree. Forty-seven men did not matriculate. This information is shown in Figures 1 and 2. Figure 1 shows results for the whole group and expresses university performance as a percentage of those who attended Teachers' College. Figure 2 excludes the 47 men who did not matriculate and university performance is expressed as a percentage of the 233 men who enrolled at university. It should be noted that units failed are not shown in these Figures, nor is the extent of full-time university study and study prior to entering Teachers' College indicated.

The largest group in Figure 1 is that made up of undergraduates: they comprise 57 per cent of those who entered Teachers' College. Expressed in terms of matriculated students this percentage would rise to 69. However, classifying all undergraduates under one heading may be misleading in that it does not show the wide range of university achievements that was present in the group: of the 160 undergraduates, 44 had secured no credits, 95 had
FIGURE 1

Analysis of later academic careers of 280 men who entered Christchurch Teachers' College, 1947-1950
FIGURE 2

Analysis of later University careers of 233 men in Figure 1 who matriculated.
passed from one to five units and 21 had passed six or more units. (Tables II and III).

**TABLE II**

**UNIVERSITY ACHIEVEMENTS: THE WHOLE GROUP**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of Men</th>
<th>Per Cent of 280</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Matriculated</td>
<td>47</td>
<td>17</td>
</tr>
<tr>
<td>Matriculated</td>
<td>233</td>
<td>83</td>
</tr>
<tr>
<td>Undergraduates</td>
<td>160</td>
<td>57</td>
</tr>
<tr>
<td>Graduates</td>
<td>73</td>
<td>26</td>
</tr>
</tbody>
</table>

**TABLE III**

**UNIVERSITY ACHIEVEMENTS: THE MATRICULATED GROUP**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of Men</th>
<th>Per cent of 233</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Credits</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td>One to Five Units</td>
<td>95</td>
<td>41</td>
</tr>
<tr>
<td>Six or More Units</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>(Undergraduates)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>53</td>
<td>23</td>
</tr>
<tr>
<td>Masters</td>
<td>20</td>
<td>8</td>
</tr>
</tbody>
</table>
Those with one to five units thus included over half the undergraduates and comprised 41 per cent of those who matriculated.

The seventy-three graduates made up 26 per cent of the whole group and 31 per cent of those who matriculated. Sixty-five degrees were held in the arts faculty, seven in the faculty of science\(^1\) and one in the commerce faculty. Twenty-seven per cent of the graduates had advanced to a master's degree and of these, two had been awarded the doctorate of philosophy and four more were working on doctoral studies.

Of all the units attempted by the 177 matriculated men who returned the questionnaire, 71 per cent were passed. In the case of extra-mural units the percentage was 42. Thirty-nine per cent of those who returned the questionnaire expressed a firm intention of continuing with university study. Eleven years after the first group of men in the study entered Teachers' College 30 per cent of the 280 men were still teaching.

It is now proposed to consider each group in turn. The remainder of this chapter will be concerned with the graduates. In Chapter VI the non-graduates will be dis-

\(^{1}\) Two of these seven men also held a degree in arts.
cussed. With the university records forming a base, the questionnaire material and related studies will be used to examine the performance of each group.

II THE GRADUATES

Seventy-three (31 per cent) of the 233 matriculated men had completed a degree by the end of 1958. Sixty-five of the graduates obtained arts degrees, one a commerce degree and seven science degrees; two of the men in this last faculty also obtained an arts degree. Conventionally, these seventy-three students would be said to have succeeded at university. Their performance can best be described by considering the composition of the degrees they obtained and the circumstances under which their university work was undertaken and by comparing their performance with that of other university groups.

Stage III units. Normally, a bachelor's degree contains only one Stage III unit. Occasionally two units may be taken at this stage. Particularly in the post-primary service the Stage III unit will usually influence

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2 The small proportion of science to arts graduates in the primary service has been shown in a recent survey ("Interim Report on Post-Primary Staffing and Recruitment," Commission on Education in New Zealand, Appendix D., p. 89) where only 5 of the 115 graduates in the sample had passed a Stage III science unit.
to a marked degree the subjects a graduate will be called upon to teach.3

Figure 3 records the subjects advanced to Stage III by the seventy-three graduates. Eighty-two Stage III units are shown: nine men obtained two Stage III units, four of them passing history and geography, two education and geography, one geography and botany and two education and psychology. The Figure also shows the status of the students at the time the Stage III unit was passed.

The most obvious feature in the Figure is the twenty-eight geography units, seventeen of which were passed by teachers in the post-teachers' college period. If the seven men who passed Geography III as well as another Stage III unit are included, it can be said that one-third of the graduates in the group obtained a degree in which geography was a major subject. A second feature, which also concerns geography, is that almost three-quarters of the Stage III units which were passed by practising teachers were in geography or education.

Education III, not unexpectedly, was a subject studied by teachers: one man passed the unit in his second year at teachers' college, two took a year's leave from

3 Ibid., p. 55.
FIGURE 3

STAGE III UNITS HELD BY SEVENTY-THREE GRADUATES AND STATUS OF STUDENTS AT TIME THEY WERE PASSED
teaching to study full-time and the remaining fourteen men were teaching at the time they passed this unit.

The proportion passing History III reflects a feature mentioned in the discussion on the characteristics of the group: the post-war influx of older students to Teachers' College included some who had previously studied full-time and who had passed History III while at College. The seven who passed in this way all had at least one year of full-time study before entering the College. Two of the men shown as passing in the post-Teachers' College period had failed the unit the previous year while at Teachers' College. The third man in the teacher group passed both History III and Geography II at the first attempt, during his probationary assistant year.

Choice of subject to advance to Stage III can be limited by the status of a student: the demands of practical work or the times at which lectures are given exclude part-time students from various Stage III subjects.

Especially is this so for teachers, most of whom are unable to attend lectures between nine o'clock in the morning and four o'clock in the afternoon. Full-time study is almost a pre-requisite to the passing of a Stage III science.

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4 c.f. ante p. 34

5 c.f. ante p. 64
unit. Zoology, geology and botany were the only science subjects advanced to Stage III and of these botany was the only one in which part-time study was involved. In this particular case the student concerned secured in the one year an "A" class pass in Botany III and a "B" pass in Geology I but though classed as a part-time student was, in fact, only teaching on a part-time basis.

It should be noted that one-sixth of the students passed a Stage III unit before entering Teachers' College and one-fifth while at College. A period of full-time study before entering Teachers' College was associated with the group of older men who attended College in the immediate post-war years and their presence in the group accounted for a section of these Stage III units.

The tendency for particular subjects to receive more than their proportionate share of Stage III students, relative to the total number of subjects available in a faculty, has been shown in other recent studies. In Figure 4

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7 Geography, philosophy and psychology may be included in a science course though are generally taken as arts units.
8 See I.D. Dick and others, The Academic Record of Science Students in the University of New Zealand, (Wellington Department of Scientific and Industrial Research, 1955); and "Interim Report on Post-Primary Staffing and Recruitment," op. cit., p. 90.
FIGURE 4

COMPARISON OF THREE SEPARATE STUDIES TO SHOW PROPORTION OF TOTAL STAGE III UNITS HELD IN PARTICULAR SUBJECTS
this point is illustrated by comparing the Teachers' College men with the 1,267 science students who graduated with only one Stage III unit between the years 1930 - 1948,\(^9\) and with 116 men drawn, as a sample, from the graduates listed in the 1957 Primary Teachers' Register.\(^{10}\) The similarity between the three histograms is apparent. Particularly noticeable is the marked concentration of Stage III units in one or two subjects: chemistry in the case of the science group and education and geography in the case of the teacher groups. In the Commission on Education's survey only 45 per cent of the Stage III subjects passed by the men were "... directly applicable to secondary teaching."\(^{11}\) Using the same method of classifying Stage III subjects the percentage for the graduates in the present study was 65. A marked movement of graduates from primary to post-primary teaching is noted later\(^{12}\) and the selective nature of this movement in favour of those with post-primary "teaching" degrees probably accounts for this difference between the two groups.

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\(^9\) Dick and others, *op. cit.*, p. 32.

\(^{10}\) "Interim Report on Post-Primary Staffing and Recruitment," *op. cit.*, p. 90.

\(^{11}\) Ibid., p. 89.

SUMMARY

Almost three-quarters of the seventy-three graduates held degrees with either geography or education as a Stage III unit; these two subjects also accounted for four-fifths of the Stage III units passed by part-time students in the post-teachers' college period. This tendency for certain subjects to receive more than their proportionate share of Stage III students has been shown in other studies.

Though thirteen of the graduates had passed History III only three passed it in the post-teachers' college period and of these, two had previously failed the unit. One graduate in nine passed a Stage III science unit and 65 per cent of all the Stage III units passed were directly applicable to post-primary teaching.

Age and marital status at the time Stage III unit was passed. Students who undertake part-time university study may be relatively old by the time they graduate and may, in the latter stages of their degree studies, have considerable family responsibility. These two aspects of the graduate group were investigated in this section. Table IV shows the ages at which the various Stage III
<table>
<thead>
<tr>
<th>Subject</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
<th>Total</th>
<th>Mean</th>
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</thead>
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<tr>
<td>Educ.</td>
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<td>2</td>
<td>3</td>
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<td>1</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td>17</td>
<td>24.5</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>22.5</td>
</tr>
<tr>
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<td>4</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>23.4</td>
</tr>
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<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>22.5</td>
</tr>
<tr>
<td>Pol.Sc.</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>22.5</td>
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<td>Psych.</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
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<tr>
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<td></td>
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<td>19.0</td>
</tr>
<tr>
<td>Book.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>2</td>
<td>23.0</td>
</tr>
<tr>
<td>Botany</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>23.5</td>
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<td>6</td>
<td>9</td>
<td>11</td>
<td>7</td>
<td>14</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>73</td>
<td>23.0</td>
</tr>
</tbody>
</table>

units were passed.13 Because of the very small numbers involved, too much significance should not be attached to the mean age calculations for individual subjects; in the

13 All calculations in this section for the men with two such units are based on the first Stage III unit passed.
case of psychology, for example, the mean age of the four students involved was considerably influenced by the thirty-nine year old student. In spite of this limitation, though, the table makes several points clear: with an overall mean age of twenty-three years the men in the group would have been considerably older than students normally encountered at university. Several of the students who returned the questionnaire expressed the opinion that this greater age gave the maturity needed for advanced university study.

Education, geography and psychology can fairly conveniently be studied by part-time students. In addition, they are considered valuable subjects for primary teachers. It is not therefore surprising to find students in their late twenties and even thirties studying these subjects. However, more apparent than age differences is the very great similarity in the ages at which most of the men passed their Stage III unit. If six nineteen-year-old men and six above the age of twenty-six years are excluded, the remaining 83 per cent of the graduates all fall into the twenty to twenty-six years old group. Education and psychology tended to be studied by older students who, at the time, were teachers.14 The position of geography needs some

14 c.f. ante, Figure 3, p. 83.
comment: though it was the subject most commonly advanced to Stage III by the graduates and though over half the students passing the unit were practising teachers at that time, these teachers contrast quite markedly with those who passed Education III. The mean age of the students passing Geography III was twenty-two years and only four were married. From the questionnaire information it is apparent that the geography students tended to pass one or two geography units at College; shortly afterwards, in several cases in the probationary assistant year, they passed Geography III.

Family responsibility was frequently mentioned by the undergraduates who returned the questionnaire; they considered it a factor influencing them against further university study. The year in which the Stage III unit is studied tends to be the most demanding one in a degree course; family responsibilities in addition to this study can make very heavy demands upon a student. The extent of these responsibilities is shown in Table V. One-third of the students in the group were married and almost half of these had one or more children at the time of passing the Stage III unit. The contrast between education and the other subjects in the table is marked: eleven of the seventeen education students were married; in the other subjects
TABLE V

Marital Status at Time of Passing Stage III Unit

<table>
<thead>
<tr>
<th>Subject</th>
<th>Single</th>
<th>Married</th>
<th>1 Child</th>
<th>2 Chn.</th>
<th>3 Chn.</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educ.</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>English</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Geog.</td>
<td>18</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>History</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Philos.</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pol. Sc.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Psych.</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Econ.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Book.</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Botany</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Zoology</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Geology</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>73</td>
</tr>
</tbody>
</table>

(with the exception of bookkeeping) no more than half the men were married. The eleven married men who passed Education III did so while they were teaching.
The mean age at which the graduates passed their Stage III unit was twenty-three years; at the time the unit was passed one-third of the men were married. Education students, of whom two-thirds were married, made up an older group. Students who passed Geography III tended to do so early in their teaching careers while still single.

Units failed. As information on units failed was not supplied by the university this section has been based on figures given by the sixty-two graduates who returned the questionnaire. It is likely that had the information been available for the whole graduate group the average number of units failed may have been somewhat greater; as shown above a higher proportion of the successful students were more inclined to return the questionnaire.\textsuperscript{15} A further indication of this tendency is the longer mean time taken to graduate by the whole group (5.97 years) compared with the 5.76 years of those who returned the questionnaire. No information on subjects failed has been obtained from other studies for comparative purposes. In calculating the number of units failed those marked in the questionnaire as,

\textsuperscript{15} c.f., ante, Table I, p. 40.
"Did Not Sit," have been included as failures. Parkyn, in his study, considered that those who did not sit were likely to have failed had they done so and accordingly classified them as failures. A point that should be considered in this section is that a student who fails several units during the course of his degree studies is not necessarily less successful than one who has had no failures: where the slow, cautious plodder is content to study one unit a year, fail none and graduate in nine years, another student might attempt two units a year, fail two during his course and graduate in six years. It can scarcely be said that the latter is less successful than the former.

Some measure of failure has been the experience of almost half the sixty-two men studied, (Table VI.) In the case of the seven men who failed four or more units, failure must be counted as a major experience in the obtaining of a degree. It is interesting to note that one of the men who failed six units and took seven years to obtain a bachelor's degree subsequently completed a master's degree in two years. The mean number of units failed by the group was 1.2. The relative success achieved by this graduate group is well illustrated by the 51 per cent who failed no units; the corres-

ponding percentage for the 115 undergraduates who returned the questionnaire was 11.

**TABLE VI**

**DISTRIBUTION OF UNITS FAILED BY SIXTY-TWO GRADUATES**

<table>
<thead>
<tr>
<th>Number of units failed</th>
<th>:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>:</td>
<td>32</td>
<td>11</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total number of units failed</td>
<td>:</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean number of units failed per graduate</td>
<td>:</td>
<td>1.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The possibility that failure tended to be associated with particular stages of the subjects attempted was investigated. The sixty-two graduates attempted a total of 376 Stage I units and 234 advanced (Stages II and III) units. Of the Stage I units 13 per cent were failed compared with 11 per cent of the advanced units. These figures indicate that in general there was no marked difference in the incidence of failure in the advanced, as compared with the initial, stages of the units attempted.

Another possibility regarding failure is that it was
encountered relatively more frequently in some subjects than in others. This aspect of failure was investigated and the results are shown in Table VII. In this table the subjects studied are listed and the total number of units attempted, passed and failed in each subject is shown. Passes are then expressed as a percentage of the total units attempted. In subjects in which less than twenty units were attempted the information on pass rates should be viewed very cautiously; these subjects have been included in the table more to give it completion than to be used as evidence for the drawing of conclusions. The seven subjects in which more than twenty units were attempted are listed first in the table and are ranked in descending order according to the percentage of passes obtained relative to the units attempted. Thirty students attempted political science and only one failed, to give a 97 per cent pass rate. Of the seven subjects, English, with an 83 per cent pass rate, came last. It also accounted for 20 per cent of all the units failed by the sixty-two graduates. A possible explanation for the relatively low pass rate in English is that students tend to select for their degree those subjects in which they are particularly interested and perhaps already fairly strong. Because a language unit is a compulsory part of a bachelor of arts degree it is probable that English I classes contain
## TABLE VII

INCIDENCE OF FAILURE IN SUBJECTS STUDIED BY
SIXTY-TWO GRADUATES

<table>
<thead>
<tr>
<th>Subject</th>
<th>No. of Units attempted</th>
<th>Passed</th>
<th>Failed</th>
<th>Passed as % of attempted</th>
</tr>
</thead>
<tbody>
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<td><strong>Part A</strong></td>
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<td></td>
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<td>Econ.</td>
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<td>28</td>
<td>3</td>
<td>90.3</td>
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<td>101</td>
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<td>83.0</td>
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<td>Bookkeeping</td>
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<td>3</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
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<td>1</td>
<td>1</td>
<td>50.0</td>
</tr>
<tr>
<td>Pure Maths.</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>33.3</td>
</tr>
</tbody>
</table>
a rather higher proportion of students who lack an ability for, or interest in, the subject than is the case in other arts subjects. The compulsory nature of the language study is probably reflected in the relatively high failure rate in English I. The second highest pass rate was in education with 93 per cent. Bearing in mind that this was a group of students who had in all cases received some Teachers' College lectures in education and who were in many cases practising teachers at the time of sitting the examination this result is not surprising.

**SUMMARY**

Almost half the sixty-two graduates failed at least one unit and the mean number of units failed was 1.2. Comparing the advanced with the Stage I units no marked difference in the incidence of failure was observed. However, a comparison of the subjects attempted revealed quite marked differences in the incidence of failure. Among the subjects most frequently attempted by the group the highest failure rate was encountered in English (17 per cent of all the units attempted in this subject were failed) and the lowest was in political science in which 3 per cent of the units attempted were failed. English accounted for a fifth of all the units failed by the sixty-two graduates.
Time taken to graduate.

"One cannot but admire the fortitude of many of them [the primary school teachers] in sticking at their studies until they achieve success". 17

Two-thirds of the seventy-three graduates completed their bachelor's degree in six years or less and the mean time taken by the group was 5.97 years. A quarter of the men graduated in their sixth year of degree studies and the longest time taken was fourteen years. (Figure 5) The calculation of time to graduate was based on the years covering the first and last examinations for a bachelor's degree. Degree completion was, for a section of the men in the group, a very prolonged affair. Considering that over fifty of the undergraduates intended continuing with university study, the longest graduation time of fourteen years might well be exceeded by others in future years. The ten three-year graduates comprised six pre-College graduates and four who completed their degree in their first year at College.

In this study university work undertaken in the pre-Teachers' College period was a factor which influenced the time taken to graduate. In Table VIII this work is shown.

FIGURE 5

NUMBER OF YEARS FROM MATRICULATION TO GRADUATION TAKEN BY THE SEVENTY-THREE GRADUATES
TABLE VIII

UNIVERSITY WORK OF GRADUATES
IN PRE-COLLEGE PERIOD

<table>
<thead>
<tr>
<th>No. of units passed</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of students</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Six students had completed degrees before entering Teachers' College and thirty-four others, though still undergraduates, had passed some units: sixteen had passed from one to five units and eighteen had passed six or more units. This latter group thus contained students who were quite close to graduation before entering College. Forty of the seventy-three graduates held university credits before entering Teachers College.\(^{18}\)

The time this group took to graduate was very similar to that of an Australian group of part-time male students but considerably longer than that taken by a large group of

\(^{18}\) Fifteen students were granted rehabilitation concession units. Of these students ten were granted one Stage I unit and five were granted two Stage I units.
New Zealand science students. Hohne\(^{19}\) at the University of Melbourne, surveyed a group of male arts students seven years after they matriculated.\(^{20}\) The mean time taken to graduate was 4.83 years compared with the 5.97 years of the graduates in the present study. With a sixth of Hohne's group still working for a degree at the time he conducted the survey, it is likely that the mean time taken to graduate would eventually be similar to that of the Teachers' College group.

Twenty-five per cent of the graduates in the latter group obtained their degree in their sixth year of study; in the case of the Australian group a similar percentage graduated in their seventh year of study. Dick's\(^{21}\) New Zealand science group was made up of men and women students, both full- and part-time and the survey was conducted twenty-seven years after the first group matriculated. The mean time taken to graduate was 4.07 years. Figure 6 compares the time the science group took to graduate with the time taken by the graduates in the present study. In the science group

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\(^{20}\) *ibid.*, p. 114.

\(^{21}\) Dick and others, *op. cit.*, p. 15.
FIGURE 6

COMPARISON OF TIMES TAKEN TO GRADUATE: TEACHERS' COLLEGE GROUP WITH NEW ZEALAND SCIENCE GROUP (DICK)
73 per cent graduated in four years or less; only 30 per cent of the teacher group graduated in this time. Although over 90 per cent of the science group graduated in six years or less it should be noted that delayed graduation was not restricted to the teacher group.

SUMMARY

The mean time taken to graduate was almost six years and two-thirds of the men who graduated did so in less than seven years. The longest time taken to graduate was fourteen years and it is likely that this time will be exceeded in the future by further graduates who come from the present undergraduates. A group of part-time, male students at an Australian university took a rather similar time to graduate but a group of New Zealand science students took considerably less time: 90 per cent of the latter group graduated in less than seven years.

Future degree intentions of the graduates. Of the sixty-two graduates who returned the questionnaire twenty-five (40 per cent) expressed a firm intention of continuing university study, twenty-one did not intend to do so and sixteen were scored as uncertain. Included in the group who intended continuing university work were three men currently engaged on doctoral studies and seven on the
completion of masters' theses. There were also two who proposed undertaking doctoral studies, three studies for a master's degree, one for an accountancy degree and eight for an education diploma.

**Extra-mural study.** Twenty units were attempted extramurally by eleven (18 per cent) of the sixty-two graduates who returned the questionnaire. The extra-mural performance of these eleven students is shown in Table IX.

### TABLE IX

**EXTRA-MURAL STUDY OF ELEVEN GRADUATES**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage I</td>
<td>II</td>
<td>I</td>
<td>II</td>
<td>I</td>
<td>II</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>II</td>
<td></td>
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<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
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<td>P</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>1</td>
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<tr>
<td>6</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
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<td>P</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1P</td>
<td>1F</td>
<td>3P</td>
<td>1F</td>
<td>1P</td>
<td>1P</td>
<td>3P</td>
<td>1F</td>
<td>1P</td>
<td>1P</td>
<td>16</td>
</tr>
</tbody>
</table>

* These students passed after previous failure as full-time students.
Sixteen (80 per cent) of the extra-mural units were passed and four were failed. Three passes were secured at the Stage II level: in political science, history and French. No science units were attempted extramurally.

As less than 4 per cent of the units attempted by the graduates were studied extramurally, this form of university study was not a major factor in the university work of the group. Though the pass rate for extra-mural study was rather lower than that generally obtained by the graduates attempting intramural study it will be shown later to be considerably better than that obtained by the undergraduates who attempted extra-mural study.

**Present occupations of the graduates.** Throughout this study the method of occupational classification used has been such as to list as "Educational" all those men who were actively engaged in some branch of teaching. Under such a method, education officers in the armed services and clergymen who were engaged in full-time teaching were grouped with the teachers; so also were psychologists employed by the Education Department. Information on the present occupations of the graduates was obtained from the questionnaires and from Education Department records.

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22 Such clergymen are grouped under "Private post-primary" in Table X.
Sixty-three (36 per cent) of the seventy-three graduates were still engaged in some branch of education. Less than a third of those still teaching were employed in the primary service; thirty-three were post-primary teachers, six were lecturing in universities or teachers’ colleges, two were employed by the Education Department and two, both of whom intended returning to either primary or post-primary teaching in the near future, were education officers in the Royal New Zealand Air Force. One man, listed in the “Private post-primary” category in Table X, was the headmaster of a missionary school in the Pacific Islands.

**TABLE X**

**PRESENT OCCUPATIONS OF THE GRADUATES**

<table>
<thead>
<tr>
<th>Educational</th>
<th>Non-Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Primary</td>
<td>Clergyman</td>
</tr>
<tr>
<td>Public post-primary</td>
<td>Scientific research</td>
</tr>
<tr>
<td>Private post-primary</td>
<td>Journalist</td>
</tr>
<tr>
<td>Teachers’ college</td>
<td>Company manager</td>
</tr>
<tr>
<td>University</td>
<td>Other</td>
</tr>
<tr>
<td>Education Department</td>
<td></td>
</tr>
<tr>
<td>Education officer</td>
<td></td>
</tr>
<tr>
<td>Total educational</td>
<td>Total non-educational</td>
</tr>
<tr>
<td>63</td>
<td>10</td>
</tr>
</tbody>
</table>
Among the ten graduates who had left the teaching service were three clergymen, a journalist, a company manager and two scientists, both of whom had obtained masters' degrees in science while still teaching. One graduate was deceased but prior to his death worked in the Inland Revenue Department. Two men were untraced and are presumed to have left the teaching service.

III. A COMPARISON WITH OTHER STUDIES

In this section the teacher group is compared, in respect of the percentage of graduates coming from those who matriculated, with other groups of university students, both in New Zealand and overseas. Such a comparison is fraught with problems. Frederick indicated that the circumstances under which students in English universities study for degrees differ from those obtaining for Australian students in these respects: English students are older at entry, the proportion of the population who enter the university is lower and sixth form teaching is at a higher level. Frederick's comments, though made with Australian conditions in mind, are very relevant to New Zealand. The English universities,

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with their tradition of full-time study, contrast sharply with those in New Zealand where almost half the university students attend university on a part-time basis. A further problem in this section is that part-time students are compared with full-time students, male students are compared with groups made up of men and women, students from many faculties are compared with students from one or two faculties, students who took three to five years to complete a degree are compared with those who took up to fourteen years. In the comparisons which follow, the limitations outlined above should be borne in mind.

In Figure 7 the relative performance of students in eleven different studies is shown. Of the eleven studies compared, a large group of students at Liverpool University obtained the highest proportion of graduates. With 90 per cent of the students obtaining a degree the performance of this group contrasts markedly with that of a group of male part-time students at the University of Melbourne, 27 per cent of whom graduated. Two follow-up studies of large groups of New Zealand students are included in the comparison. Of the first group, made up of male science students studied by Dick and others, just over half graduated. The

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FIGURE 7

PERCENTAGE OF GRADUATES COMING FROM THOSE WHO MATRICULATED IN THE ELEVEN GROUPS DISCUSSED
second group, studied by Beeby and Oram, comprised male arts and science students; 36 per cent of this group graduated. In the Figure it can be seen that of the New Zealand groups compared, the División "U" bursars who entered the University of Canterbury in 1956 secured the highest proportion of graduates; three-quarters of this group had obtained a degree after four years. Of the men in the present study 31 per cent graduated; if those considered likely to graduate in future are included the percentage of graduates would be very similar to that obtained by Beeby and Oram's group.

The Figure should be interpreted in the light of the following specific comments on the groups compared.

A. The English Groups.

1. Mountford conducted a survey at Liverpool University. He followed up the academic progress of 2,214 students who entered the University in the years 1947 to 1949 inclusive. The students attended in a full-time capacity and included both men and women, these latter accounting for slightly less than one-quarter of the total enrolment. There was no marked difference between the percentage of students graduating in the faculties of science

(90.6 per cent) and arts (92.4 per cent). Mountford concluded his study in 1957 and considered it unlikely that many further graduates would have emerged from the group. Of the 925 arts and science students in the group 91 per cent graduated.

2. Mallinson\textsuperscript{26} followed up the academic progress of 551 students entering University College, London, in the years 1948 to 1951 inclusive. As with Mountford's study, it has not been possible to extract from Mallinson's report figures for men only. The results given here are for men and women students enrolled in full-time courses in the faculties of arts and science. Mallinson noted that there was no significant difference in the percentage of men and women failing to graduate though the women obtained a lower percentage of first and third class passes and a higher percentage of second class passes. Of the 349 arts and science students in his group 88 per cent of the arts students graduated compared with 83 per cent of the science students. The combined graduation percentage was 85.

\textbf{B \ The \ Australian Groups.}

Like New Zealand, Australia fails to obtain from her

matriculated students the percentage of graduates which has come to be expected in English Universities: "The rates of failure in British Universities are considerably lower than our own."27 Some quite recent studies indicate the extent of this failure.

1. Frederick,28 in a recent paper, referred to a "Progress Study of the Records of Students Enrolled in First Year for the First Time and Entering the 1951 Annual Examinations." This study covered students in six Australian universities and the report on it was prepared by the Commonwealth Office of Education in 1957. Over three thousand students were included in the study and comprised both men and women, full- and part-time, studying in a variety of faculties. Frederick expressed the results of the study thus: "... of every hundred day students who commence courses at Australian universities some sixty-five fail to graduate in minimum time and forty-two fail to graduate at all."29 For purposes of comparison, then, it can be said that 58 per cent of this particular Australian sample graduated.

27 Frederick, op. cit., p. 4.
28 Ibid., p. 3.
29 Ibid.
2. The Murray Report\textsuperscript{30} used findings from the same study as that mentioned in (1) above. The Murray Report was published before Frederick prepared his paper and the final figures for the percentage of graduates which the Murray Report gave were only tentative. However, these figures merit inclusion in this comparison for the figures were broken down to show arts and science faculties separately. These may be seen\textsuperscript{31} as a total arts and science enrolment of 1,666, with graduates or expected graduates numbering 908.\textsuperscript{32} This gives a graduation percentage, for the arts and science students in the study, of 55.

3. Hohne\textsuperscript{33} followed up the university careers of 395 students who enrolled in the arts' faculty of the University of Melbourne in 1943 and 1944. This is the only study among those being used for comparative purposes in which separate figures were given showing the percentage of graduates coming from a group of part-time male students.


\textsuperscript{31} Ibid.

\textsuperscript{32} Frederick, op. cit., p. 3 confirmed the number of expected graduates.

\textsuperscript{33} Hohne, op. cit.
Unfortunately, the number of men involved was very small and Hohne suggested that the 1944 group of part-time men was poorer than normal. He said of them: "Part-time graduation is appallingly small . . . by July, 1950 only 11 per cent had graduated." Of the forty-five part-time men in the study twelve (27 per cent) had secured degrees by 1951, and a further seven were still studying. The proportion which could be expected to graduate eventually would be unlikely to reach 40 per cent.

C. The New Zealand Groups.

It has already been pointed out that the findings of the present study are not directly applicable to any seemingly comparable group of students: for example, present day teachers' college Division "A" men. The primary concern has been to see how the group coped with university work and under what conditions the work was done. Nevertheless, a comparison of the proportion of students who eventually graduated, with that obtained by other groups of students, is of value. For the comparison to become meaningful the circumstances under which each group worked must be fully understood.

34 Ibid., p. 35.
35 c.f. ante, p. 35.
The performance of students in five other New Zealand studies has been compared with that of the men in the present study. To clarify the comparison an attempt has been made, in the five studies, to take out figures in the faculties of arts and science, for male students only. Where possible, the part- or full-time status of the students has been indicated.

1. Beeby and Oram\textsuperscript{36} followed up the university careers of a group of pupils who sat the University Entrance Examination in the years 1926 and 1927. Several points should be considered in this study: the proportion of the population matriculating in the years immediately following 1926 and 1927 was considerably less than in the immediate post-World War II period:

"In the middle nineteen thirties about 2,100 to 2,300 boys and girls qualified for university entrance each year, and less than 40 per cent of them in fact proceeded to the university; between 1952 and 1953 the numbers qualifying for university entrance each year rose from about 2,600 to about 4,800, and about two-thirds of those qualifying have been embarking on a course of study at a university."\textsuperscript{37}


\textsuperscript{37} Report of the Committee on New Zealand Universities, op. cit., p. 22.
It is likely that those matriculating in the earlier period would in general be the more able students. The study was concluded in 1936, thus giving the students up to twelve years to graduate. As this group included both full-time, part-time and extra-mural students, the time available for graduation before completion of the study was rather more generous than the minimum of nine years available to the Teachers' College group. Of the 1,134 men who matriculated in the faculties of arts and science, 397, (35 per cent) finally graduated.

2. Dick and others\(^{38}\) investigated the academic records of students who enrolled in the science faculties at New Zealand universities in the years 1930 - 1947 inclusive. From the report of this investigation, it was possible to isolate the performance of men only.\(^{39}\) Of the 4,043 men who matriculated in the science faculties, 1,963 (48 per cent) had passed the examinations for a degree by the end of 1950, 1,575 in the science faculties and 388 in other faculties. It is possible that Dick's students, like those of Beeby and Oram, were also a more able group than those surveyed in the present study. It must be remembered

\(^{38}\) Dick and others, op. cit.

\(^{39}\) Ibid., pp. 24 - 25.
that Dick's study was concerned with science students, although both English\textsuperscript{40} and New Zealand\textsuperscript{41} studies indicated that there was little difference in the proportion of students in each faculty who finally graduated.

Dick's students, of whom 48 per cent graduated and those of Beeby and Oram, of whom 35 per cent graduated, were surveyed some years after they matriculated. It is unlikely that the proportion of graduates in the groups would have varied after the studies were completed. In the following studies, however, further graduates can be expected and will increase the proportion of graduates.

3. Parkyn\textsuperscript{42} followed up the university careers of a group of students who enrolled in 1955 as full-time students in the faculties of arts and science at New Zealand universities. The minimum time in which the students could have been expected to graduate was three years. Of the 278 men studied, 130 enrolled in an arts faculty and 148 in a science faculty. After four years, 46 per cent of the arts students had graduated and 44 per cent of the science students. This study was completed four years after the

\textsuperscript{40} Mountford, \textit{op. cit.}, p. 24.

\textsuperscript{41} Report of the Committee on New Zealand Universities, \textit{op. cit.}, p. 25.

\textsuperscript{42} Ibid.
group had matriculated and, at least in their first year, all the students attended university in a full-time capacity. Forty-five per cent of the 278 men had graduated after four years.

4. At the Victoria University of Wellington a study was made of the academic careers of those students who entered the University in 1951 and did not transfer to another university. Of the 328 students who enrolled in the faculties of arts, law, science and commerce, (36 per cent) had completed their examinations for a degree by the end of 1958. This study is of particular interest because the group was broken down into those who commenced the course as full- or as part-time students. However, because separate figures were not given for men and women, and because a considerable number in the part-time group were women teachers' college students, comparisons with the Christchurch Teachers' College group were difficult to make. In the arts faculty 59 per cent of those commencing with a full-time year had completed a degree by 1958 but of

43 Submission of the Council of the Victoria University of Wellington to the Committee of New Zealand Universities, Chapter 18, paragraphs xxx-xxxll, mimeo., 1959.
the part-time students only 12 per cent had completed degrees.

5. The academic progress of the forty students who were awarded post-primary bursaries and commenced their courses at the University of Canterbury in 1956 was reported on in 1959. At the end of four years' study thirty (75 per cent) of the forty students had graduated and fourteen (35 per cent) of the graduates had completed a master's degree. Students entering the university under the Division "U" scheme, especially the 1956 group, were highly selected. Burnham administered three tests of scholastic aptitude to all new entrants to the University of Canterbury in 1955 and found that part-time students gained lower mean scores than full-time students. However about one-third of all higher scores (I.Q. 120 and above) were made by part-time students. Because of the nature of

47 B 40, CSEB SAT-V and CE&B SAT-II.
their selection it is likely that the Division "U" students who matriculated in the following year would have scored above the average for part-time students. In addition they all had very good post-primary records with two years in the sixth form and in their university study had the benefit of a full-time counsellor.

**SUMMARY**

The conditions surrounding university study should be considered when the performance of different groups of university students is compared. Particularly is this so when the comparisons involve universities in different countries and students who attend university in different capacities.

A higher proportion of the students in the English studies cited in the comparison graduated than was the case in the Australian or New Zealand studies; a higher proportion of graduates came from groups of full-time students than from groups made up of full- and part-time students. The lowest proportion of graduates was found in groups of part-time students.

One-third of the matriculated men in the present study graduated compared with nine-tenths in an English group and one-half of a group of New Zealand science
students. The overall proportion of Australian university students who graduated was slightly over a half. In a highly selected group of full-time New Zealand students a graduation percentage of 75 has been reported.

IV. THE MASTERATE GROUP

A. DISCUSSION

Twenty of the seventy-three graduates completed a master's degree. In this section the performance of these twenty students is analysed, having particular regard for: the proportion of the graduates who advanced to the higher degree; the faculties and subjects in which the degrees were taken; the quality of the degrees obtained; the length of time spent on masters' studies and the relative amounts of full- and part-time study involved. In a concluding section the masters' group will be compared with other groups of university students.

Including one student who advanced straight from a bachelor's degree to a doctor's degree, the masters' group represents 9 per cent of those who matriculated and 27 per cent of those who obtained a bachelor's degree. Twenty-five per cent of the arts graduates took a master's degree compared with 57 per cent of the graduates in science. All twenty men returned the questionnaire and, in addition,
personal contact was made with most of them. It will be noticed in Table XI that an additional seven students sat papers for a master's degree but had not completed a thesis. All seven expressed a firm intention of doing so. Thus it is quite possible that in the future one-third of the graduates will have taken a master's degree.

Two men in the group were awarded the doctorate in philosophy, one in education, the other in history, both at English universities. Four other men indicated in the questionnaire that they were working on doctoral studies and all seem very likely to complete this degree; two were studying zoology at overseas universities and two were working in New Zealand, one in psychology and the other in botany. A possible six doctorates in philosophy in a group of seventy-three graduates is a very high number indeed in a group whose work has been characterized by a considerable amount of part-time study. This performance illustrates clearly the fact that among part-time students are some very able students whose performance ranks with that of the best of the full-time students. Parkyn,48 Watson49 and Burnham50

48 Parkyn, op. cit., p. 141.
49 Watson, op. cit., p. 6.
50 Burnham, loc. cit.
<table>
<thead>
<tr>
<th>Subject</th>
<th>First Class</th>
<th>Second Class</th>
<th>Total Bachelor Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Zoology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Sociology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>History</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Geography</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>English</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Economics</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Science</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Psychology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Biology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Zoology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Botany</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Zoology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Sociology</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>History</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Geography</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>English</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Economics</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Science</td>
<td>19</td>
<td>19</td>
<td>38</td>
</tr>
</tbody>
</table>
have each observed the high intellectual ability of a section of the part-time students; in each case these observations were based on studies of undergraduate groups. The present study confirms these observations at the post-graduate level.

The science group is of particular interest but because of its smallness undue significance should not be attached to the university record of its members. Though the science graduates formed a very small proportion of the bachelor group, five of the seven graduates in science obtained masters' degrees. Three of the four were awarded First Class Honours and in addition seem very likely shortly to qualify for doctors' degrees. It is also worthy of comment that all four masterate students in science undertook a third year course in nature study at Christchurch Teachers' College. Part-time university study in zoology, the major degree subject for three of the four students, was a mandatory part of this course.

The quality of a master's degree in the University of New Zealand is expressed in terms of Pass, Second Class

---

51 This situation still exists: "There is a significant lack of students taking degree units in Maths and all Sciences . . ." (Submissions of the Christchurch Branch of the New Zealand Teachers' Colleges Association to the Committee on New Zealand Universities, September, 1959, p. 3., Mimeo., 1959.)
Honours, and First Class Honours. Excluding the student who obtained a doctor's degree without a master's degree, eleven Pass degrees were obtained and eight Honours degrees, three of the latter being Second Class and five First Class.

Full-time study was an important aspect of the work of the maste-rate group. The amount of such study undertaken by the twenty students for both the bachelor's and master's degrees is shown in Table XII. The table also shows the time these students took to complete their degrees.

**TABLE XII**

**UNIVERSITY STUDY OF THE MASTE-RATE GROUP**

<table>
<thead>
<tr>
<th>Number of Years:</th>
<th>Total Students</th>
<th>Mean Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

| From Matric. to Bach. degree | 4 7 4 2 2 1 | 20 | 4.7 |
| From Matric. to Complete Mast. degree | 5 8 5 2 | 20 | 2.2 |
| Of Full-Time Bach. study | 6 6 4 4 | 20 | 1.3 |
| Of Full-Time Mast. Study | 11 9 | 20 | 0.5 |
Nine of the twenty students spent one year in full-time masterate study and the mean time taken to complete a master's degree was 2.2 years. (The mean age of the men at the time of completing this degree was twenty-six years). While studying for a bachelor's degree, four of the masterate group spent three years as full-time students; two of the four had completed this degree before entering Teachers' College. Four others spent two years in full-time bachelor's study, all in the post-Teachers' College period and six had one full-time year, one of the six before entering College and the remaining five after the completion of the College course. The mean time spent on full-time bachelor study was 1.3 years.

It can be seen from the above figures that full-time study must be considered when viewing the performance of those who obtained a master's degree. Only four students of the twenty did not have the benefit of at least one full-time year at some stage in their university career. In no case was a master's degree completed before entering Teachers' College. The mean time taken to complete a master's degree was 2.2 years; the eleven men who did all their masterate studies as part-time students took an average of 2.4 years. The university regulations which impose a time limit for the award of an honours
degree probably had the effect of hastening the completion of the degree. Of the seven students who sat their papers but had yet to complete a thesis, four were, in 1958, still within the time limit set for the award of honours.

In 1958 twelve of the masterate group were post-primary teachers, one in Australia and the remainder in New Zealand. Four, one of whom was in Australia, were university lecturers. Of the remaining four one was a primary school teacher, one lectured at a teachers' college and two were engaged in scientific work for government departments. Thus nine-tenths of the masterate group were still engaged in educational work.

The general pattern revealed in this survey of students who obtained master's degrees was one of success. They coped well with university work, tended to remain in some avenue of the teaching service and, in general, obtained rapid promotion.

E. A Comparison With Other Studies.

As with the bachelors' group so with the masters', it is of interest to attempt a comparison with other studies. Many of the difficulties regarding such comparisons already mentioned in connection with the bachelor's

52 c.f. ante, p. 68.
degree apply equally well to the master's degree.

Four other groups, one in Australia and three in New Zealand, have been used for the comparison. This comparison has been made on the basis of two percentages: the masters' group can be viewed as a percentage of those who matriculated and as a percentage of those who obtained a bachelor's degree. If the percentage of a matriculated group who obtained a master's degree was rather similar to that obtained by other groups studied yet considerably lower when expressed in terms of the number who obtained a bachelor's degree then it is likely either that potential masterate students were not advancing or that the group as a whole was of lower ability and was extended to reach the bachelor level.

In Table XIII the Teachers' College masterate group is compared with Hohne's University of Melbourne group, with Dick's New Zealand science group, with Beeby and Oram's pre-war arts and science group and with the Division "U" post-primary bursar group.

53 Hohne, op. cit.
54 Dick and others, op. cit.
55 Thomas, Beeby and Oram, op. cit.
<table>
<thead>
<tr>
<th>Division &quot;U&quot; Bursars</th>
<th>40</th>
<th>30</th>
<th>14</th>
<th>35.0</th>
<th>46.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beeby and Oram's Group</td>
<td>1587*</td>
<td>555</td>
<td>208</td>
<td>13.1</td>
<td>37.4</td>
</tr>
<tr>
<td>Dick's Science Group</td>
<td>4043</td>
<td>1963</td>
<td>663</td>
<td>16.4</td>
<td>33.8</td>
</tr>
<tr>
<td>Teachers' College Group</td>
<td>233</td>
<td>73</td>
<td>20</td>
<td>8.6</td>
<td>27.4</td>
</tr>
<tr>
<td>Hohne's Melbourne Group</td>
<td>395</td>
<td>195</td>
<td>18</td>
<td>4.6</td>
<td>9.2</td>
</tr>
</tbody>
</table>

* Not related to the number of students involved in the bachelor comparison given earlier. The masterate number is based on Beeby and Oram's Table XII (p 115) and includes both men and women.
Mohne did not separate part-time students from full-time students or men from women at the master's level as he did for the bachelor's degree. He showed that seven years after matriculation eighteen of the 395 students had obtained a master's degree. This represents 5 per cent of the matriculated group and 9 per cent of those who obtained a bachelor's degree.

The number of male masterates in Dick's New Zealand science study was estimated at 663, double masters being counted as one only and masterates in other faculties were estimated at thirty-one. (Figures were not given separately for men). These 663 master's degrees represent 16 per cent of the matriculated students and 34 per cent of the bachelor group.

The pre-war arts and science group investigated by Beeby and Oram was a mixed one and at the master's level figures were not given separately for men and women. A total of 13 per cent of those who matriculated and 37 per cent of the bachelor group secured a master's degree.

Of the forty students studied in the Division "U" bursar group 35 per cent obtained a master's degree. Expressed in terms of the thirty bachelor's degrees the percentage rises to 47. In this highly selected group of students very generous provision was made for advanced
studies to be pursued.\textsuperscript{57} The small number of students involved in this study and the fact that only four years had elapsed between matriculation and the taking out of the figures, allowing insufficient time for the masterate pattern to be fully revealed, should be taken into consideration.

The twenty men in the present study who obtained master's degrees represent 9 per cent of the 233 matriculated men and 27 per cent of the seventy-three men who obtained a bachelor's degree. The highest percentage of master's degrees, expressed both in terms of the matriculating group and in terms of those who were awarded bachelor's degrees, was obtained by the Division "U" bursar group. Expressed in similar terms Hohne's Melbourne group obtained the lowest percentage and the Teachers' College group the second lowest.

**SUMMARY OF GRADUATE PERFORMANCE**

Seventy-three of the 233 matriculated men in the study graduated and twenty of the graduates advanced to a master's degree. Two students gained doctor's degrees and four more were accepted for doctoral studies.

\textsuperscript{57} \textit{Ibid.}, p. 4.
There was a marked tendency for the graduates to pursue similar degree courses: five-sixths of the degrees were taken in the arts faculty and of all the degrees obtained almost three-quarters included education or geography as a major subject.

There was a wide range in the time taken to graduate though two-thirds of the students took less than seven years to do so. Certain subjects, notably education, tended to be studied by older students.

Some measure of failure was encountered by half the graduates. In the 3 per cent of units studied extramurally the failure rate was higher than was the case with those units studied intramurally. Though all the subjects studied were failed by some students the incidence of failure, in the subjects most frequently attempted, was highest in English. No marked difference was noted in the incidence of failure in initial as compared with advanced units.

The graduates tended to remain in some branch of the education service: only ten were engaged in other occupations and of these three were clergymen and two were scientists. Over half of those still teaching were working in post-primary schools.
CHAPTER VI

UNIVERSITY ACHIEVEMENTS CONTINUED

THE NON-GRADUATE GROUPS

Two hundred and thirty-three men in the present study matriculated; 73 of these had graduated by the end of 1958, leaving 160 as undergraduates. In this chapter the performance of these 160 men is discussed. A very wide range of achievement in university work was found in this group and has already been indicated earlier in this study.\(^1\) Because of this wide range the undergraduate group has been divided into three to make possible a more accurate analysis of university performance. The composition of these groups may be seen in Table XIV.

TABLE XIV

The Undergraduate Groups

<table>
<thead>
<tr>
<th>Classif.</th>
<th>% of Total</th>
<th>No. Undergraduates</th>
<th>No. Returning Questionnaire</th>
<th>% Returning Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six or more units</td>
<td>21</td>
<td>13.1</td>
<td>15</td>
<td>71.4</td>
</tr>
<tr>
<td>One to five units</td>
<td>95</td>
<td>59.4</td>
<td>71</td>
<td>74.7</td>
</tr>
<tr>
<td>No credits</td>
<td>44</td>
<td>27.5</td>
<td>29</td>
<td>66.0</td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>100</td>
<td>115</td>
<td>71.9</td>
</tr>
</tbody>
</table>

\(^1\) cf. ante, p. 73
The first group is made up of the twenty-one men who had passed six or more units and it is chiefly from this group that the future graduates can be expected to come. By far the largest group of undergraduates was that which contained students who had passed from one to five units. The ninety-five men in this second group represent 59 per cent of the total undergraduates. The third group consisted of forty-four undergraduates who had secured no credits. These three groups will now be discussed separately, particularly with reference to: status while at university; subjects passed and failed; age at the time of attempting most recent unit; future degree intentions; extra-curricular study and present occupation. The chapter will conclude with a brief discussion on the forty-seven men in this study who did not matriculate.

1. UNDERGRADUATES PASSING SIX OR MORE UNITS.

In the discussion on the meaning of the term "success" the goal of a "B" certificate was mentioned as a factor which might influence some teachers to be satisfied with passing six units. It is because of this factor that the division has been made at six units. Furthermore, in any attempt to estimate future degree completions, undergraduates with six or more units must be counted among the men most likely to

---

2 c.f. ante, pp. 44 et seq.
graduate.

There were twenty-one men in the group. This number represents 13 per cent of the 160 undergraduates. Fifteen (71 per cent) returned the questionnaire and it was on the basis of these returns that a detailed study was made. However, from university records information concerning subjects passed and length of time spent in university study was obtained.

A. Information From University Records.

In Figure 3 the subjects and stages passed by the twenty-one men are shown. The three subjects, education, geography and English were the ones most frequently passed. The popularity of education and geography as subjects to advance to Stage III has already been shown for the graduate group. This popularity was found in the undergraduate group in the first and second as well as in the third stage of these subjects. English is the subject most commonly taken to fulfil conditions relating to a language study in an arts degree and it is not therefore surprising to see its relative position in the Figure.

Though the mean number of units passed by the twenty-

\[3 \text{ c.f. ante, Figure 3, p. 83.}\]
MEAN NUMBER OF UNITS PASSED = 6.7
STAGE II AND III AS PERCENTAGE OF TOTAL = 26.2

FIGURE 8
UNITS PASSED BY TWENTY-ONE UNDERGRADUATES WHO PASSED SIX OR MORE UNITS
one students was 6.7 it cannot be assumed from this that the group as a whole was quite near to graduation. Of the total units passed by the group only 26 per cent were passed at the second and third stages. Nine of the twenty-one men has passed a Stage III unit leaving twelve yet to pass that stage of the degree which usually demands much in terms of time and effort and which may prove for individual students an insuperable barrier. This point is illustrated by the case of one of the men in this group who sat and failed History III three times and indicated that he had abandoned the attempt to obtain a degree, in spite of the fact that this would have been his final unit.

In contrast to the graduate group which averaged 5.97 years for the completion of a degree, a mean of almost eight years elapsed from the time the men in this undergraduate group matriculated until they passed their most recent unit (Table XV). This table is somewhat misleading: had it been possible to base the calculation on time from matriculation until the attempting, rather than the passing, of the most recent unit the time taken would probably have been slightly greater. At the earliest the men in this group cannot be expected to graduate until they are in their late twenties or even early thirties, possibly by that time holding posts of responsibility in the schools and having

---

4 c.f. ante, Figure 3, p. 83.
considerable family responsibility. There was a big range in the time spent on degree studies: for two men the time between matriculation and the passing of the most recent unit was only four years, for another it was thirteen years.

**TABLE XV**

**TIME FROM MATRICULATION UNTIL PASSING OF MOST RECENT UNIT: TWENTY-ONE UNDERGRADUATES**

<table>
<thead>
<tr>
<th>Length of time in years</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students:</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

In the group were three cases of students entering Teachers' College after failure in the advanced stages of a science degree. On entering College they enrolled in the arts faculty, transferring science units, but still were unable to pass at the Stage III level. None of the three has attempted university work for some years and none seems likely to graduate.
E. Information From the Questionnaires.

Interesting light was thrown on the problem of delayed graduation when the fifteen questionnaires returned by the group were analysed. These questionnaires were not a representative sample: it is quite likely that there was a tendency, among the six who failed to reply, to be less enthusiastic about university study and perhaps to have suffered a greater degree of failure: the mean number of units passed by those who did not return the questionnaire was 6.4 and for those returning the questionnaire 6.8.

The following information should be viewed with this consideration in mind. The information contained in the questionnaires is recorded in Table XVI.

Status while at university. Nine of the fifteen men did all their degree studies as part-time students either at Teachers' College or subsequently while teaching; five of these nine attempted extra-mural study. The remaining six, in addition to part-time study, did a portion of their work as full-time students, four in the post-Teachers' College period and two before entering College.

Units passed and failed. The mean number of units passed by the group was 6.8 and the mean number failed was 2.8. In Figures 9 and 10 the subjects and stages of subjects passed
### TABLE XVI

**ANALYSIS OF QUESTIONNAIRES OF FIFTEEN UNDERGRADUATES**

**PASSING SIX OR MORE UNITS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All part-time</td>
<td>6</td>
<td>2</td>
<td>-</td>
<td>30</td>
<td>yes</td>
<td>prim.</td>
<td>yes</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>6</td>
<td>0</td>
<td>-</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>6</td>
<td>0</td>
<td>-</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>8</td>
<td>3</td>
<td>-</td>
<td>31</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>7</td>
<td>3</td>
<td>0 1</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>6</td>
<td>2</td>
<td>1 1</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>7</td>
<td>2</td>
<td>4 2</td>
<td>29</td>
<td>p-prim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>6</td>
<td>3</td>
<td>3 1</td>
<td>29</td>
<td>yes</td>
<td>prim.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>6</td>
<td>1</td>
<td>0 1</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1 full post TC</td>
<td>6</td>
<td>2</td>
<td>-</td>
<td>26</td>
<td></td>
<td></td>
<td>oil co.  no</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>8</td>
<td>2</td>
<td>3 0</td>
<td>28</td>
<td>yes</td>
<td>prim.</td>
<td>yes</td>
</tr>
<tr>
<td>12</td>
<td>2 full post TC</td>
<td>7</td>
<td>3</td>
<td>-</td>
<td>30</td>
<td></td>
<td></td>
<td>ed. of.</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>8</td>
<td>1</td>
<td>-</td>
<td>23</td>
<td></td>
<td></td>
<td>Navy</td>
</tr>
<tr>
<td>14</td>
<td>2 full pre. TC</td>
<td>7</td>
<td>6</td>
<td>-</td>
<td>23</td>
<td>prim.</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>15</td>
<td>3 full pre. TC</td>
<td>8</td>
<td>12</td>
<td>0 2</td>
<td>27</td>
<td>eng.</td>
<td>unc.</td>
<td></td>
</tr>
</tbody>
</table>

| Mean  |                   | 6.8         | 2.8         | 11 8 | 27.3          | 8          |        |           |
FIGURE 9

UNITS PASSED BY FIFTEEN UNDERGRADUATES WHO PASSED SIX OR MORE UNITS AND RETURNED QUESTIONNAIRE
MEAN NUMBER OF UNITS FAILED = 2.8
STAGE II AND III AS PERCENTAGE OF TOTAL = 33.3%
and failed are shown. There were marked differences in the incidence of failure encountered in the various subjects. These are shown in Table XVII for the four most frequently attempted units, geography, education, English and history. The incidence of failure encountered in the initial as compared with the advanced units attempted is also shown.

**TABLE XVII**

**INCIDENCE OF FAILURE IN SUBJECTS STUDIED BY FIFTEEN UNDERGRADUATES PASSING SIX OR MORE UNITS.**

<table>
<thead>
<tr>
<th>Subject</th>
<th>No. of Units</th>
<th>Passed</th>
<th>Failed</th>
<th>Passed as % Attempted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attempted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>22</td>
<td>19</td>
<td>3</td>
<td>86.5</td>
</tr>
<tr>
<td>Geography</td>
<td>23</td>
<td>23</td>
<td>5</td>
<td>92.1</td>
</tr>
<tr>
<td>History</td>
<td>13</td>
<td>8</td>
<td>5</td>
<td>61.5</td>
</tr>
<tr>
<td>English</td>
<td>24</td>
<td>14</td>
<td>10</td>
<td>58.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>No. of Units</th>
<th>Passed</th>
<th>Failed</th>
<th>Passed as % Attempted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>140</td>
<td>26</td>
<td>14</td>
<td>65.0</td>
</tr>
<tr>
<td>Initial</td>
<td>104</td>
<td>76</td>
<td>28</td>
<td>73.2</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>102</td>
<td>42</td>
<td>70.8</td>
</tr>
</tbody>
</table>

This undergraduate group encountered difficulty in the passing of English: only 58 per cent of the units attempted in this subject were passed. There was also a high rate of failure in history where 62 per cent of the
units attempted were passed. Though the incidence of failure in this undergraduate group was higher than that for the graduates, the relative position of the four subjects with regard to failure was very similar and in both cases English was the subject with the highest incidence.

The difference in failure rate between advanced and initial stages was not as marked as that between subjects. Thirty-five per cent of the advanced units attempted were failed compared with 27 per cent of the Stage I units. Failure, though rather more characteristic of the advanced units attempted, was also encountered at the Stage I level.

The distribution of failure among the fifteen men is shown in Table XVIII. The mean number of units failed (2.8) was heavily influenced by two students, one with six failures and the other with twelve; the former has abandoned his course; the latter, at the age of twenty-seven years, was uncertain about continuing. Mountford made a statement which applies as aptly to the Teachers' College group as it did to the Liverpool students:

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5 Table vii, p. 97.

TABLE XVIII

DISTRIBUTION OF UNITS FAILED BY FIFTEEN UNDERGRADUATES PASSING SIX OR MORE UNITS.

<table>
<thead>
<tr>
<th>Number of units failed</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Whereas students whose qualification is merely delayed are generally in the University for only one or two extra years, a considerable sprinkling of those who abandon their courses stay in the University for three, four or in some cases five, six or seven years before the struggle is given up.

The mean time taken by the fifteen men from matriculation until the attempting of the most recent unit was 8.9 years; the distribution of this time is shown in Table XIX. In the case of some of the students this time included periods of country service. The mean time taken by the whole group of twenty-one men from matriculation until the passing of the most recent unit was 7.95 years. The greater length of time taken by the men shown in Table XIX was accounted for largely by units failed subsequent to the passing of the most recent unit. The calculation based on units attempted appears to be the most meaningful one and is
used for the three undergraduate groups. The calculation based on units passed has been used with this undergraduate group only, chiefly as a means of comparison with the graduate group.

Age at the time when most recent unit was attempted. All but two of the fifteen men attempted university work in their middle to late twenties. The mean age at which the most recent unit was attempted was 27.3 years. The age tabulation given in Table XVI (p. 141) is important in that it shows that the group has tended, in most cases, to persist with university work until quite recently. Students number thirteen and fourteen in the table discontinued university work soon after leaving Teachers' College. (Student number thirteen enrolled again in 1959 but this year was outside the time limit set for the study.)
half the men in the group were continuing with degree studies in their late twenties.

**Future degree intentions.** In only two cases did students state that they had no intention of continuing with their degree studies; one other student was uncertain. The remaining twelve (80 per cent) indicated that they had a firm intention of continuing. The firmness of this intention can be gauged to a certain extent from information concerning current students (i.e. those enrolled for a degree course in 1958). Eight men, all of whom intended completing a degree, were enrolled in 1958. The four who intended completing a degree but were not current students included two country teachers, one of whom had passed four extra-mural units. The other two lived in cities; one took a unit in 1959, the other passed his last unit in 1957 and then took two years off from university to build a house. He intended continuing in 1960. On the basis of the foregoing information it seems likely that about two-thirds of the group will continue to work towards a degree. Perhaps one-half of the 15 men will eventually graduate.  

---

7 Three men in this group passed final degree units in the 1960 examinations.
Extra-mural study. Fourteen of the fifteen men in
the group spent some time teaching in a country district.
While in the country seven of the men availed themselves of
the extra-mural facilities offered by the universities. The
results of their efforts are recorded in Table XX. The
students are identified by the same number as was used for
them in Table XVI.

Of the nineteen units attempted extra-murally 53 per
cent were passed. A separate count of the intramural units
studied by the seven men showed that of the thirty-eight
units attempted 79 per cent were passed. The percentage of
passes for the whole group of fifteen men as part-time,
intramural students was 77. The above figures show that
passing as an extra-mural student was a relatively difficult
task. Added to the extra-mural student's greater chance of
failure was a second feature mentioned in questionnaire re-
turns: the greater effort required, frustration encountered
and sense of depression and "aloneness" engendered by extra-
mural study. Only three students, numbers, seven, eight and
eleven, can be said to have met with clear-cut success in
their extra-mural study. Two students passed Education I
and two passed English I. Education was the only subject
passed at the Stage II level. The pass in Geography III was
a case of terms being carried over from a previous year's
full-time study.
**TABLE XX**

**EXTRA-MURAL STUDY OF SEVEN UNDERGRADUATES**

**WHO PASSED SIX OR MORE UNITS**

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Education</th>
<th>Geog.</th>
<th>English</th>
<th>Hist.</th>
<th>Econ.</th>
<th>Phil.</th>
<th>Latin</th>
<th>Pure M.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage:</td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>I</td>
<td>II</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stud.No.:</td>
<td>5</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td>P</td>
<td>P</td>
<td>F</td>
<td>F. F.</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>F</td>
<td></td>
<td></td>
<td>F. F.</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>2P</td>
<td>1P</td>
<td>1F</td>
<td>1P</td>
<td>2F</td>
<td>1F</td>
<td>2P</td>
<td>1F</td>
<td>1P</td>
</tr>
<tr>
<td></td>
<td>1P</td>
<td>1P</td>
<td>2F</td>
<td>1F</td>
<td>2P</td>
<td>1F</td>
<td>1P</td>
<td>1P</td>
<td>2F</td>
</tr>
</tbody>
</table>
Present occupations of the men in the group. As is perhaps to be expected in a group whose members have almost completed a degree and who are in general still continuing with university study the majority (71 per cent) were, in 1958, still engaged in some avenue of teaching. Eleven were in primary schools and three were in post-primary schools; one was an education officer in the Royal New Zealand Air Force. Of the six who had left the teaching service, one was an instructor lieutenant in the navy, one an engineer and one an oil company executive; one was deceased and the occupations of two were unknown.

SUMMARY AND DISCUSSION

Thirteen per cent of the 160 undergraduates passed six or more units and it was chiefly from this small group of twenty-one men that graduates could be expected to come in the near future. The group passed a mean of 5.7 units and for over half the group the time from matriculation until the passing of the most recent unit was more than seven years.

English, education and geography were the subjects most frequently studied and over half the men in the group had yet to pass a Stage III unit. For at least four men in the group the passing of a Stage III unit appeared to
present an ability barrier which they were incapable of sur-
mounting. These men succeeded in passing Stage I units,
meeting a measure of failure in the process. In spite of
persistent efforts they were unable to pass Stage III, and
to a lesser extent Stage II units. This situation will be
further discussed in the concluding chapter.

Failure of at least one or two units characterized
the performance of the men in the group. Of the fifteen men
who returned the questionnaire only two failed no units.
The mean number failed was 2.8 and one student failed
twelve units. Failure tended to be associated with particu-
lar subjects; the highest incidence was in English and
history. In the former subject 42 per cent of all the units
attempted were failed. A similar failure rate was encount-
ered in subjects studied extra-murally; only three of the
seven students who attempted this form of study met with
clear-cut success.

In this group failure to graduate was not due to lack
of persistence; the mean age at which the most recent unit
was attempted was twenty-seven years and in the case of most
of the students, recent university work had been undertaken.
Lack of ability to cope with advanced university study while
at the same time carrying out full teaching duties seemed a
more potent cause of failure to graduate. Periods of
country teaching service also presented problems. In spite of these difficulties further graduates can be expected from the group. A conservative estimate of the number would be ten out of twenty-one.

II UNDERGRADUATES PASSING FROM ONE TO FIVE UNITS.

The largest group of undergraduates was made up of those who had passed from one to five units. Of the 160 undergraduates 95 (59 per cent) were included in this group. In attempting to estimate the chances of university work being undertaken, this group posed more problems than did the group made up of undergraduates with six or more units or the one made up of those with no credits. Most of the men in the former group seemed likely to continue university study, in the latter group most of the men seemed unlikely to do so. With the group under discussion affirmations as firm as these were difficult to make. Information on the university work of the group was obtained from two sources: university records and questionnaire returns.

A. Information from University Records.

Figure 11 records the subjects and stages passed by the ninety-five men in the group. The general pattern was very similar to that found in the case of the undergraduates,
MEAN NUMBER OF UNITS PASSED = 2.5
STAGE II AND III AS PERCENTAGE OF TOTAL = 14.0%

FIGURE II

UNITS PASSED BY NINETY-FIVE UNDER-GRADUATES WHO PASSED FROM ONE TO FIVE UNITS
with six or more units. In both groups education, geography and English, in that order, were the subjects most frequently passed. In respect of the proportion of advanced units passed, however, there was a marked difference: advanced units accounted for 26 per cent of the total units passed by the six-or-more-unit group but only 14 per cent in the case of the one-to-five-unit group. When it is realized that at least a third of the units in an arts degree must be passed at the advanced stages it is clear that the one-to-five-unit group tended to pass the first stages of degree subjects, having either failed at the advanced stages (a quarter of the units failed by those who returned the questionnaire were at advanced stages) or not attempted them.

The distribution of the units passed is shown in Table XXI which shows that more than half the men had passed less than three units. Only ten men had passed five units, with a mean of 2.5 units passed, only 14 per cent of which were passed at advanced stages, graduation for many of the men in the group was still a very distant prospect.

---

8 Figure 3, p. 137.
### TABLE XXI

**DISTRIBUTION OF UNITS PASSED BY THE NINETY-FIVE MEN IN THE GROUP**

<table>
<thead>
<tr>
<th>Number of units passed</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>27</td>
<td>24</td>
<td>19</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

---

**B. Information From The Questionnaires.**

Returns of the questionnaire were obtained from seventy-one (75 per cent) of the ninety-five men in the group. In the following sections questionnaire information is analysed and discussed. Where necessary, appropriate comparisons with the other two undergraduate groups will be made.

**Status while at university.** Sixty-five (92 per cent) of the seventy-one men did all their university study as part-time students. This percentage is similar to that found in the "No Credits" group. Full-time study was a more important aspect of the university work of the undergraduates who passed six or more units: 40 per cent of the men in this latter group had at least one year of full-time
study. Five of the six men in the one-to-five-unit group who studied full-time did so before entering Teachers' College, three spending one year and two spending two years as full-time students. One man spent a year as a full-time student in the post-Teachers' College period. The performance of these men as full-time students is shown in Table XXII. With a mean of 3.3 units failed during this time and

### Table XXII

**Full-Time Study of Six Men in One-to-Five-Unit Group**

<table>
<thead>
<tr>
<th></th>
<th>Period</th>
<th>Time</th>
<th>Performance</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre.</td>
<td>Post</td>
<td>One</td>
<td>Two</td>
<td>Units</td>
<td>Units</td>
</tr>
<tr>
<td></td>
<td>T.C.</td>
<td>T.C.</td>
<td>Year</td>
<td>Years</td>
<td>Passed</td>
<td>Failed</td>
</tr>
<tr>
<td>Stud. No. 1</td>
<td>*</td>
<td>*</td>
<td>0</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>*</td>
<td>*</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>*</td>
<td>*</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>*</td>
<td>*</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>*</td>
<td>*</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>*</td>
<td>*</td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td>1.5</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.5 units passed and with no student passing more than two units in a full-time year, the group did not perform well; as part-time students there was no marked improvement in their performance though student number five still was continuing degree studies in 1953 and by that time had passed five units and failed seven.

Units passed and failed. The seventy-one men who returned the questionnaire passed a mean of 2.5 units and failed 2.3 units. In Figures 12 and 13 the units passed and failed by the seventy-one men are shown. The frequency with which particular subjects were studied was very similar to that found in the other undergraduate groups and in the graduate group: education, geography and English took the first three places and almost half the total number of units passed by the group were in education or geography (Table XXIII). Failure was a much more pronounced feature of the work of this group than was the case with the men, both graduates and undergraduates, who passed six or more units. The graduates passed 90 per cent of the units they attempted; the percentage for the undergraduates with six or more units was 70 and for the present group 53. The incidence of failure in the five subjects most frequently studied may be seen in the table. Though the proportion of units failed was higher than in the other groups discussed
### TABLE XXIII

**INCIDENCE OF FAILURE IN SUBJECTS ATTEMPTED**

*BY SEVENTY-ONE UNDERGRADUATES PASSING ONE TO FIVE UNITS*

<table>
<thead>
<tr>
<th>Subject:</th>
<th>Units attempted</th>
<th>Passed</th>
<th>Failed</th>
<th>Passed as % of attempted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>64</td>
<td>44</td>
<td>20</td>
<td>68.8</td>
</tr>
<tr>
<td>Psychology</td>
<td>33</td>
<td>21</td>
<td>12</td>
<td>63.3</td>
</tr>
<tr>
<td>Education</td>
<td>85</td>
<td>44</td>
<td>41</td>
<td>51.8</td>
</tr>
<tr>
<td>English</td>
<td>40</td>
<td>19</td>
<td>21</td>
<td>47.5</td>
</tr>
<tr>
<td>History</td>
<td>29</td>
<td>13</td>
<td>16</td>
<td>44.8</td>
</tr>
</tbody>
</table>

#### Stage:
- **Advanced**
  - 65
  - 25
  - 40
  - 38.5
- **Initial**
  - 277
  - 155
  - 122
  - 55.9
- **Total**
  - 342
  - 180
  - 162
  - 52.6

The relative positions of the various subjects with regard to failure remained very much the same with English and History still securing the lowest percentage of passes to units attempted; in the latter subject only 45 per cent of the units attempted were passed. One feature which merits some comment is the higher failure rate in Education in this group compared with the rate for the students who
FIGURE 12

UNITS PASSED BY SEVENTY-ONE MEN WHO PASSED FROM ONE TO FIVE UNITS AND RETURNED QUESTIONNAIRE

STAGE I
STAGE II
STAGE III

MEAN NUMBER OF UNITS PASSED = 2.5
STAGE II AND III AS PERCENTAGE OF TOTAL = 13.9%
FIGURE 13

UNITS FAILED BY SEVENTY-ONE MEN WHO PASSED FROM ONE TO FIVE UNITS AND RETURNED QUESTIONNAIRE

MEAN NUMBER OF UNITS FAILED = 2.3
STAGE II AND III AS PERCENTAGE OF TOTAL = 24.7%
passed six or more units. Sixteen of the eighty-five education units were attempted extramurally and of these sixteen, twelve were failed; the next highest number of extra-mural units attempted was in English with six. If the extra-mural units were excluded from the education figures the percentage of the attempted units passed would stand at 58. The relatively high pass rate in geography noted in the earlier groups was maintained by the men with one-to-five-units: they passed 69 per cent of the units they attempted in this subject.

Advanced units accounted for 19 per cent of the units attempted by the group and for 14 per cent of the units passed. Sixty-one per cent of the advanced units attempted were failed compared with 40 per cent of the Stage I units. The low proportion of advanced units attempted is not unexpected in a group which contained only ten men with five units: usually advanced units are attempted in the later stages of a degree. In the group a high rate of failure was encountered in Stage I units; in Stage II and III units the rate was even higher, three units out of every five attempted being failed.

In addition to subjects and stages failed a second aspect of failure to be considered is the distribution of failure among the seventy-one men. The mean of 2.3 units
failed does not indicate the spread of failure within the group. Table XXIV shows this spread and reveals that within the group were some men who experienced a considerable amount of failure whereas others failed no units. The dangers inherent in grouping students according to the number of units passed while neglecting to take account of other factors, are clearly illustrated in this group. The student

**TABLE XXIV**

**DISTRIBUTION OF UNITS FAILED BY SEVENTY-ONE MEN PASSING ONE TO FIVE UNITS**

<table>
<thead>
<tr>
<th>Number of units failed</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>12</td>
<td>19</td>
<td>15</td>
<td>9</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

in Table XXIV who failed nine units spent two years as a full-time student. During this period he passed two Stage I units. At Teachers' College he transferred to an arts degree and passed Psychology I and II but failed Education I and Physics I, the latter for the third time. As a probationary assistant he failed Psychology III. In 1958 he was still teaching and had attempted no further university work.
but expressed a "firm intention" of completing a degree, thus illustrating once more the reluctance of a proportion of the students to abandon hope in the face of obvious failure. Set against this case is that of another student who passed one unit in his second year at Teachers' College, another in his probationary assistant year, followed by Economics I and II and Education I extra-murally while sole-charge teaching. He failed no units and reported that he "firmly intended" to complete a degree. He is very likely to do so.

Twelve students failed five or more units; twenty-four failed more units than they passed. These two facts symbolize the university performance of the group as a whole. Such success as was achieved was mainly at the first stage of degree subjects and was accompanied in many cases by a considerable amount of failure. It seems unlikely that from this group of undergraduates more than perhaps ten graduates will emerge.

Age at the time when the most recent unit was attempted. For this group the expression of age in terms of a mean is perhaps deceptive: the spread of ages from those who passed a unit in their first Teachers' College year and have done no university work since, through to those who, now in their early thirties, are still persisting with degree studies, is very wide. Table XXV depicts this spread.
TABLE XXV

AGE AT WHICH SEVENTY-ONE UNDERGRADUATES WITH ONE TO FIVE UNITS ATTEMPTED MOST RECENT UNIT

<table>
<thead>
<tr>
<th>Age</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of students</td>
<td>4</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

The mean age of the seventy-one men at the time of attempting their most recent unit was 23.6 years. Twenty-four of the men were over the age of twenty-five years and seventeen gave up university study at or soon after leaving Teachers' College. In this, as in the other undergraduate groups, the range in age is perhaps more obvious than any tendency on the part of the group to give up university work at a particular age. Clearly, age alone does not influence students in this teacher group either to continue or to discontinue university study.

Though the group as a whole was still well short of graduation, a mean of 5.0 years had elapsed from the time of matriculation until the attempting of the most recent unit. The distribution of this time lapse is shown in Table XXVI.
TABLE XXVI

NUMBER OF YEARS ELAPSING BETWEEN MATRICULATION AND ATTEMPTING
OF MOST RECENT UNIT BY SEVENTY-ONE UNDERGRADUATES PASSING
ONE TO FIVE UNITS

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. students</td>
<td>4</td>
<td>16</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

This time should be compared with that for the undergraduates with six or more units (8.8 years) and that for those with no credits (1.9 years). An even more meaningful comparison is an internal one in which the mean time from matriculation until the attempting of the most recent unit (5.0 years) is compared with the mean number of units passed (2.5). Though part of the five years would represent time in which no university work was attempted most men in the group did in fact enrol for at least one unit each year.

The typical performance for the whole group can be summed up by saying that after attending university as part-time students for almost five years, three-quarters of the men had passed no more than three units and in addition had failed as many units as they had passed.
Future degree intentions. Thirty of the seventy-one men (42 per cent) expressed a firm intention of completing a degree, thirty-one did not intend to do so, and ten were uncertain. However, those who intended completing a degree gave less evidence to demonstrate the firmness of their intention than did the undergraduate group with six or more units: in this latter case eight of the fifteen men were current students and three more had undertaken recent university work. In the case of the present group only six of the thirty men who indicated that they intended continuing degree work were current students. Four of the thirty had attempted no university work since leaving Teachers' College, even though two of the four had spent several years teaching in a university town. With a mean age of 23.6 years at the time when the most recent unit was attempted, the men in the group tended to be less persistent than the undergraduates with six or more units, whose mean age was 27.3 years, and more persistent than the group securing no credits whose mean age was 21.1 years.

It is very difficult to predict how many in the group should finally graduate. Though there were only six current students in 1958, at least five more enrolled for degree courses in 1959. Ten men in the group mentioned the possibility of further degree studies following the opening of branch universities offering extra-mural facilities.\(^9\) With

\(^9\) Two such institutions, one at Palmerston North, the other at Hamilton, were opened in 1960.
only two students having passed a Stage III unit and with a mean of only 2.5 units passed, the chances of more than ten of the seventy-one men finally graduating are not great.

**Extra-mural study.** With sixty-one of the seventy-one students who returned the questionnaire still teaching it is certain that service in country schools has had some effect on university study. In the undergraduate group passing six or more units 47 per cent of those returning the questionnaire attempted extra-mural study. Of the units attempted 58 per cent were passed. In the case of the seventy-one undergraduates in the present group only twenty-seven (38 per cent) attempted extra-mural study. Their performance is shown in Table XXVII. These twenty-seven students met with much less success than did the "near-graduates". Of the forty-two units attempted only eleven (26 per cent) were passed. At the Stage II level ten units were attempted, in only one case (economics) successfully. The subject most commonly attempted extra-murally was education for which sixteen enrolments were received, four being at the Stage II level. Only four of these sixteen were passed, all at the Stage I level.

The last two columns of Table XXVII show the total units passed and failed. They also show the performance of individual students. Excluding the six students who passed one unit only, only one student (number four) can be said to
## TABLE XXVII
EXTRA-MURAL STUDY OF TWENTY-SEVEN UNDERGRADUATES WHO PASSED ONE TO FIVE UNITS

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<td>Stud. 26</td>
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<td>Stud. 27</td>
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</tbody>
</table>

| Totals | 12F | 4F | 1P | 3F,2F | 2F,1F | 1P,1F | 1F,2F | 1F,1F | 2F | 1F | 1P | 11 | 31 |
have succeeded in his extra-mural study. He passed the three units he attempted, Education I and Economic I and II, to give him a total of five units towards his degree. He has now (1960) taken a city position, enrolled for further degree studies and seems very likely to graduate. The perseverance of some students in the face of failure as extra-mural students is illustrated by the case of student number nineteen, who attempted and failed four extra-mural units over a period of four years, and was still, in 1958, continuing with extra-mural study, and has expressed a "firm intention" of completing a degree. This student sat examinations in ten degree units but passed only four.

As a group these seventy-one men found difficulty in coping with university study. The difficulty was accentuated in the case of extra-mural study to the extent that only two-fifths were prepared to attempt such study and of those who did so only a quarter were successful; in all but one case this success was at the Stage I level.

Present occupations of the men in the group. There was no marked difference between this group and the other undergraduate groups as far as occupation was concerned. As with the other groups, though, it should be remembered that those who did not return the questionnaire were more likely to be no longer teaching. Hence, of the ten men
whose occupations were unknown, it is unlikely that any were teaching.

Five men, two of whom were in District High Schools, were in the post-primary service, sixty-eight in the primary service, and one in an overseas teachers' college. Of the ten who were definitely known to have left teaching, three were farmers and two were clergymen. The remainder of the group was made up of an aircraft pilot, a clerk, a milkman, a funeral director and an entertainment promoter. The occupations of ten men were unknown.

Of the ninety-five men in the group seventy-four (78 per cent) were definitely known to be teaching in 1958. The classification of the ninety-five men into "educational" and "non-educational" occupations is set out in Table XXVIII.

SUMMARY AND DISCUSSION

The men who had passed from one to five units made up two-fifths of the matriculated group and three-fifths of the undergraduates. The mean number of units passed by the ninety-five men in the group was 2.5, over half of the units being in education or geography. Only two units were passed at the Stage III level and advanced units made up 14 per cent of the total units passed. Present indica-
**TABLE XXVIII**

**PRESENT OCCUPATIONS OF NINETY‐FIVE MEN PASSING ONE TO FIVE UNITS**

<table>
<thead>
<tr>
<th>Educational</th>
<th>Non-Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public primary</td>
<td>Clergyman</td>
</tr>
<tr>
<td>Public post-primary</td>
<td>Public relations off.</td>
</tr>
<tr>
<td>Teachers' college</td>
<td>Armed services</td>
</tr>
<tr>
<td></td>
<td>Farmer</td>
</tr>
<tr>
<td></td>
<td>Clerk</td>
</tr>
<tr>
<td></td>
<td>Entertainment promoter</td>
</tr>
<tr>
<td></td>
<td>Funeral director</td>
</tr>
<tr>
<td></td>
<td>Milkman</td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>Total educational</strong></td>
<td><strong>Total non-educational</strong></td>
</tr>
<tr>
<td>68</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>21</td>
</tr>
</tbody>
</table>

...ions are that about ten men in the group might eventually graduate.

The questionnaire was returned by three-quarters of the men in the group and provided additional information. Forty-seven per cent of the units attempted were failed, a considerably higher failure rate than that experienced by...
the two groups passing more than five units. The highest incidence of failure was encountered in English and history.

Extra-mural study was attempted by half the men who returned the questionnaire. Of all the units attempted extramurally only 26 per cent were passed and only one Stage II unit was passed extramurally. The men in this one-to-five unit group found difficulty with part-time intra-mural study; the added difficulty entailed in extra-mural study led to a very high failure rate and only one student met unqualified success as an extra-mural student.

Seventy-four of the ninety-five men were still teaching at the end of 1958, all but six of them in primary schools.

In this group failure to graduate was, with most students, not due to lack of persistence: two-thirds of the men continued university study after their twenty-first year and the mean time from matriculation to the attempting of the most recent unit was five years. A much more important aspect of failure to graduate was the high failure rate encountered in units attempted. Teaching service in country schools and the allied extra-mural study contributed towards this rate of failure.
III UNDERGRADUATES SECURING NO CREDITS

In Teachers' College there are some students who enrol at university for a degree course but fall very far short of the standard required to pass degree examinations. In fact, some might do little more than attend lectures early in the academic year before discontinuing university study. It was with the intention of investigating such early abandonment of a university course that the students with no credits were studied as a separate group.

Forty-four matriculated men (19 per cent of the matriculated group and 28 per cent of the undergraduates) had passed no degree examinations by the end of 1958. Because the university records simply showed the performance of these students as "No Credits", the only additional information about them was that contained in the questionnaires returned by twenty-nine (66 per cent) of these men. It is unlikely that information about the fifteen men who failed to return the questionnaire would have a marked effect on the general pattern, except perhaps concerning present occupation: only six of the fifteen men were known to be still teaching.

Status while at university. Twenty-seven of the twenty-nine men did all their university work as part-time students either while at Teachers' College or in the post-
Teachers' College period; one man spent a full-time year at university before entering College and another took a year's leave from his teaching position to attend as a full-time student. In this group, as in the group with one to five units, over 90 per cent of the men did all their university work as part-time students. This percentage was considerably higher than that for the undergraduate group with six or more units and that for the graduate group.

Subjects failed. A number of men in this group had such a brief association with the university that "failure" may be a misleading term to apply to their university career. Of the total of fifty-six units in which the students in this group enrolled, in twenty-six cases the final examination was not taken. Eight of the twenty-nine men enrolled in a university course while at Teachers' College, did not sit final examination and had not subsequently made any further attempt to complete a degree. Contrasted with such men were others who met with a considerable amount of failure at university in spite of fairly persistent efforts: one student sat Geography I in his second year at College; he sat the same subject the following year as an extra-mural student and again, still as an extra-mural student, in the third year. Thus at the end of three years' work he had still not succeeded in passing
one unit. Another man failed English I and History I in his first year at College; Geography I in his second year and six years later attended university as a full-time student, failing the three subjects history, geography and political science. Table XXIX shows that over half of the twenty-nine men failed only one unit but that at the other extreme one man failed six units.

**TABLE XXIX**

**DISTRIBUTION OF UNITS FAILED BY TWENTY-NINE MEN SECURING NO CREDITS AND RETURNING QUESTIONNAIRE**

<table>
<thead>
<tr>
<th>Number of units failed</th>
<th>Number of students</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
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<tr>
<td>3</td>
<td>2</td>
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<tr>
<td>4</td>
<td>2</td>
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<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

The mean number of units failed by the twenty-nine men was 1.9 compared with the 2.3 units failed by the men in the one-to-five-unit group. A general difference, though, between those with no credits and the other undergraduate groups was that the former, with few exceptions, very quickly gave up the attempt to secure a degree: twenty-four of the twenty-nine men with no credits attempted no university work after leaving Teachers' College and
the mean time from matriculation until the attempting of
the most recent unit was 1.97 years contrasted with 5.0
years for the undergraduates with from one to five units
and 8.8 years for those with six or more units.

Just over half of the twenty-nine men failed only
one unit then abandoned their university course. Very few
persisted for more than two years. In contrast to the
undergraduates who passed at least one unit, the men in
this group, failing to secure the incentive that comes from
even one university pass, tended to discontinue university
study after one or two years.

Figure 14 shows the distribution into subjects of
the fifty-six units failed by the twenty-nine men. As is
to be expected the subjects most commonly failed by the
less successful students tended also to be the ones most
commonly passed by the whole Teachers' College group. The
two subjects, geography and education, together made up
almost half the total number of subjects failed. Science
subjects were taken by two students, one failing one unit
and the other four units.

Age at the time when the most recent unit was
attempted. The mean age at which the most recent unit was
attempted was 21.1 years, (Table XXX), twenty of the men
being under the age of twenty-one years.
FIGURE 14

Units failed by twenty-nine men who secured no credits and returned questionnaire.
### TABLE XXX

**AGE AT WHICH TWENTY-NINE UNDERGRADUATES WITH NO CREDITS ATTEMPTED MOST RECENT UNIT**

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of students</th>
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<tbody>
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<td>18</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>10</td>
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<tr>
<td>20</td>
<td>6</td>
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<tr>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>0</td>
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<tr>
<td>26</td>
<td>1</td>
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<tr>
<td>27</td>
<td>1</td>
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<tr>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>2</td>
</tr>
</tbody>
</table>

This table reinforces the comment made above that the group as a whole persisted for a very short time with university studies. Two men in the group were in their late twenties on entering College and though they did no university work after leaving College their greater age had the effect of raising the mean age by slightly over one year.

**Future degree intentions.** Seven of the twenty-nine men expressed a firm intention of completing a degree, nineteen did not intend to do so and four were uncertain. These figures are valuable in that they indicate the caution with which statements made in a questionnaire should be interpreted: any firm intention to complete a degree may be very far removed from the reality of obtaining one. The best that can be done with such expressions of degree intentions is to interpret them in the light of
other evidence as to the firmness of the intention. Only one man in the group was enrolled for university study in 1958 and he was uncertain about completing a degree. Four of the seven who "intended completing" a degree had done no university work since their first year at Teachers' College and two had done none since their second year. The remaining man attempted an extra-mural unit in his third year of teaching. Six of the seven, by the end of 1958, had done all their teaching in country districts. The surprising feature in this section was the very great reluctance shown by a section of the group to admit that they had given up all hope of graduating. Though six of the seven gave no evidence, such as taking a city teaching position or enrolling as an extra-mural student, of their intention to complete a degree, they were still, in theory at least, contemplating further university work.

It is unlikely that any men in this group will graduate.

**Extra-mural study.** Only three of the twenty-nine men in the group with no credits attempted extra-mural study. One student failed Education I, one failed English I and one failed Geography I twice extra-murally after having failed it once previously while attending Teachers' College.
Present occupations of the men in the group.
Thirty-six of the whole forty-four "No Credits" group were still teaching in 1958. This gives a percentage of 82 still retained in the teaching service. All those still teaching were in primary schools. Of those no longer teaching, two were clerks, one was in the armed services, one was a carpenter, one a salesman, one a company director and the occupations of two were unknown.

SUMMARY AND DISCUSSION

Almost one-fifth of the 233 matriculated men had secured no university credits by the end of 1958. Three-quarters of this group of forty-four men enrolled for one or two units while attending Teachers' College and had not subsequently attempted any further university study. In almost half the units attempted the final examination was not taken.

With very few exceptions the students failed to persist with university study: the mean number of units attempted was 1.9, the mean age at which the most recent unit was attempted was twenty-one years and the length of time from matriculation until the attempting of this unit was two years. In spite of this obvious failure a number of men in the group still "intended" completing a degree.
No men in the group seem likely to graduate.

Eighty-two per cent of the forty-four men were still engaged in educational work, all in primary schools. This percentage was exceeded only by the graduates.

The men in this group did not perform well at university and they derived no apparent benefit from their university study. An estimated one-third (fifteen) of the men withdrew from their courses and sat no examinations. The sincerity of purpose of these fifteen men in attending university was open to doubt and if they were excluded from the calculations the percentage of the matriculated group who graduated would rise to 33.10

IV THE NON-MATRICULATED GROUP

Of the 230 men in the study 47 (17 per cent) did not matriculate before leaving Teachers' College. From this time until the end of the period under review (1958) only one of these forty-seven men matriculated. This man did so in 1958, being granted provisional matriculation and passing Education I. However, since 1958 two further students in the group matriculated: one did so in 1959 and in this year passed Education I and failed English I;

10 Parkyn, (Success and Failure at the University, p. 13) excluded from his sample group, students who enrolled but did not enter for examinations.
in 1960 he passed English I and failed Education II. Another student enrolled for two units in 1960. Both men expressed a firm intention of completing a degree. In the case of both of these men all teaching service prior to 1958 had been done in country schools. On the basis of such information it can be said that those who failed to matriculate while attending college were, with few exceptions, unlikely to do so at a later stage in their teaching career.

The questionnaire was returned by twenty-three (49 per cent) of the forty-seven men. Ten of these twenty-three men had not obtained the university entrance qualification while attending post-primary school. It was one of these ten who in 1958 was granted provisional matriculation.

The only three men who expressed a firm intention of completing a degree were those already referred to as having enrolled at a university.

On the basis of the questionnaire and Education Department records the present occupations of the forty-seven men in the group were determined. At the end of 1958 thirty-five (74 per cent) were still teaching in primary schools, seven had left teaching and the occupations of five, who were presumed to have left teaching, were not known. Among the seven who were known to have left teaching were two farmers, three salesmen and two men in the armed services.
CHAPTER VII

SUMMARY AND CONCLUSIONS

I. SUMMARY

Two hundred and eighty men entered Christchurch Teachers' College as Division "A" students in the years 1947 to 1950 inclusive. While attending the College and subsequently while teaching, 233 of them enrolled at university as part-time students. In the present study the performance of these men at university was investigated with a view to providing answers to specific questions asked in Chapter III. The answers to these questions can now be given.

University Achievements of the Whole Group.
What proportion of the whole group matriculated?
Of those who matriculated, what proportion graduated?

Eighty-seven per cent of the men matriculated, and of those who did so 31 per cent had graduated by the end of 1958.

How did this proportion of graduates compare with that reported in other studies of university students?
In most cases the comparison was made with groups of full-time students. Compared with such groups the men in the present study did not perform well. From the two large groups of students at English universities 85 and 92 per cent of graduates respectively were reported. A large-scale survey of Australian university students showed that 50 per cent of those commencing degree courses graduated.

In New Zealand less than half the total number of students who matriculate finally graduate. In two major New Zealand studies, one of arts and science students investigated by Beeby and Oram just prior to World War II, and the other of all the science students who matriculated in the period 1930 - 1947, (Dick and others) the proportions of the matriculated group who graduated were 35 per cent and 48 per cent respectively. In a small group of post-primary teacher bursars 75 per cent of the students had graduated four years after matriculating. It is likely that the percentage for the present group will ultimately be very similar to that reported in Beeby and Oram's study.

How many undergraduates are still likely to graduate?

A very conservative estimate of the number is eight-
een to twenty: 160 men in the study were still undergraduates in 1958 and in that year fifteen of them were enrolled for degree courses. A further twelve had undertaken university study within the last two years. Between 1958 and 1960 at least five of the undergraduates were known to have completed their degrees. If expected graduates are included, graduates could eventually make up 40 per cent of those who matriculated.

What proportion of the undergraduate group derived some benefit from university study?

There were 160 undergraduates. Of these 13 per cent had passed six or more units and would appear to have derived considerable benefit from attendance at university. Fifty-nine per cent of the undergraduates had passed from one to five units and the men in this group probably derived at least some benefit from university study. The remaining 28 per cent of the undergraduates derived no apparent benefit from their study at university.

What subjects were most frequently studied by the group?

Education and geography were studied by an almost equal number of students and these two subjects together
accounted for 33 per cent of all the units attempted by the 177 matriculated men who returned the questionnaire and for 39 per cent of all the units passed. The two subjects, English and history together made up 26 per cent of all the units attempted by the 177 men and 25 per cent of all the units passed. Science subjects comprised 14 per cent of the units attempted and 12 per cent of those passed. The concentration on the two subjects, geography and education, was particularly evident at the Stage III level: of all the Stage III units passed by the 233 matriculated men 36 per cent were in geography and 21 per cent were in education. History made up 14 per cent of the Stage III units passed and science subjects made up 10 per cent.

The Achievements of the Graduates

In what faculties were degrees obtained?

Seventy-three students in the study graduated, sixty-five obtaining arts degrees, seven science degrees and one a degree in commerce.

What proportion of the graduates obtained higher degrees and what was the quality of these higher degrees?

Almost a quarter (twenty) of the graduates obtained a master's degree, five securing First Class Honours and
three Second Class Honours and the remainder Pass degrees. Over half the science graduates took a master's degree, compared with a quarter of the arts graduates. A third of the master's degrees were taken in geography but only one of the twenty master's degrees was in education, the other major Stage III subject passed by the graduates. Two men had completed the degree of Doctor of Philosophy and four more had been accepted for doctoral studies. Seven men had taken master's papers but had yet to present a thesis.

The Status of the Students Attending University.

What proportion of the students did all their university work on a part-time basis?

In this group success at university was associated with a period of full-time study. Information from the 177 matriculated men who returned the questionnaire showed that the proportion of students who did all their university work as part-time students was: graduates, 42 per cent; undergraduates with six or more units, 60 per cent; undergraduates with one to five units, 92 per cent and undergraduates with no credits, 93 per cent. More than half the men who passed six or more units had at least one year of full-time study.
At what stage in the students' teaching career was full-time study undertaken?

Four-fifths of the students who undertook full-time study did so in the pre-Teachers' College period. Of this group 83 per cent subsequently graduated.

What was the status of the men who obtained a master's degree?

Fourteen of the twenty masterate students spent a period on full-time study while working for a bachelor's degree. The mean time spent by the fourteen men on such study was eighteen months. Eleven men did all their masterate studies as part-time students and the remaining nine each spent a year on full-time study.

**Length of Time Spent at University.**

What was the length of time taken by the graduates to complete a degree?

Two-thirds of the seventy-three graduates completed their bachelor's degree in six years or less and the mean time taken by the group was almost exactly six years. A quarter of the men graduated in their sixth year of degree studies and the longest time taken was fourteen years.
How persistent in their studies were the undergraduates?

Information given by the 115 undergraduates who returned the questionnaire showed a direct relationship between the number of units passed and the length of time spent at university: the mean time, from matriculation to the attempting of the most recent unit, taken by undergraduates with six or more units, one to five units, and no credits respectively was 8.8 years, 5.0 years and 1.97 years. The overall mean time for the 115 undergraduates was 4.7 years.

Was failure to graduate associated with a short time spent at university?

The mean age, at the time of attempting their most recent unit, of the fifteen undergraduates who had passed six or more units and returned the questionnaire was twenty-seven years. Most of the graduates had secured their degrees by the time they were twenty-three. The mean age at which the undergraduates with one to five units attempted their most recent unit was greater than the mean age at which the graduates secured a degree. The graduates spent a mean of six years on bachelor study, the undergraduates with six or more units spent eight years and those with one
to five units spent five years. These figures show that failure to graduate was not simply a case of undergraduates spending a short time on university study; many of them attended for a sufficient length of time to obtain a degree. Their performance at university, rather than the length of time they spent there, was much more closely associated with failure to graduate.

Failure of Units at University.

What was the incidence of failure involved in the university work of the whole group?

Table XXXI brings together information given in the separate sections concerning units passed and failed by the 177 matriculated men who returned the questionnaire. Of all the units attempted, 71 per cent were passed. The group with the highest pass rate was the graduate one in which 88 per cent of all the units attempted were passed. The undergraduates with six or more units followed with 71 per cent, then the one-to-five unit group with 53 per cent and lastly the no credits group with its 100 per cent fail-

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1 The pass rate for all Dunedin Teachers' College students in the years 1946 - 1948 inclusive was 71 per cent. (Report of the Consultative Committee on the Recruitment, Education and Training of Teachers, (Wellington, Department of Education, 1951), p. 31.)
TABLE XXXI

UNITS PASSED AND FAILED BY 177 MATRICULATED MEN
WHO RETURNED THE QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of Stud.</th>
<th>Units Att'd</th>
<th>Units Passed</th>
<th>Units Failed</th>
<th>Passed as % attempted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>62</td>
<td>610</td>
<td>555</td>
<td>75</td>
<td>87.7</td>
</tr>
<tr>
<td>U.G. 6+ units</td>
<td>15</td>
<td>144</td>
<td>102</td>
<td>42</td>
<td>70.8</td>
</tr>
<tr>
<td>U.G. 1-5 units</td>
<td>71</td>
<td>342</td>
<td>130</td>
<td>162</td>
<td>52.6</td>
</tr>
<tr>
<td>U.G. No credits</td>
<td>29</td>
<td>56</td>
<td>0</td>
<td>56</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177</strong></td>
<td><strong>1152</strong></td>
<td><strong>817</strong></td>
<td><strong>335</strong></td>
<td><strong>70.8</strong></td>
</tr>
</tbody>
</table>

These figures show that failure has been a major feature in the university work of all four groups. The table also shows that those who passed less than six units met with a relatively greater amount of failure than did those passing six or more units. Most men in the former group failed more units than they passed. These figures

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2 John E. Watson, "Entrance to the Teaching Profession," paper presented to Ninth Science Congress, Wellington, May 1960. Mimeo., 1960, p. 11. Found also that very few students in his study had no failures in university work.
reinforce the conclusion drawn in the answer to the question posed on page 191 that failure to graduate has been due not only to a failure on the part of non-graduates to take up more university study but also to the relatively large amount of failure experienced by these undergraduates in the course of their degree studies.

Did failure tend to be associated with the initial or advanced stages of the subjects studied?

The 177 matriculated men who returned the question-naire failed 31 per cent of the Stage I units they attempted and 24 per cent of the advanced units. Excluding the "No Credits" group, where of course failure was restricted to Stage I units, the one-to-five unit group was the only one in which there was an appreciable difference in the failure rate between advanced and Stage I units. In this small group 61 per cent of the advanced units were failed compared with 40 per cent of Stage I units.

Did students tend to encounter a relatively greater amount of failure in some subjects than in others?

In Figure 15 all the units passed in the subjects studied by the 177 matriculated men who returned the ques-tionnaire are expressed as a percentage of the units
Figure 15

Percentage of passes obtained in subjects attempted by the 177 matriculated men who returned the questionnaire.
attempted. (Subjects in which less than twenty units were attempted are excluded from the Figure and have not been included in this answer). The Figure shows a very great range in the success students achieved in the various subjects studied: 88 per cent of all the philosophy units attempted were passed compared with 37 per cent of the French units. The overall proportion of units passed by the group was 71 per cent. Of the four subjects most frequently attempted by the group the highest pass rate was in geography (76 per cent), followed by history (72 per cent), then education (71 per cent) and lastly English (67 per cent). It will be noted that, with the exception of music, the lowest pass rates were secured in science subjects.

**Future Degree Intentions.**

How many undergraduates still had the intention of completing a degree?

A total of fifty-two undergraduates expressed a firm intention of completing a degree. Of these fifty-two men, sixteen were current students in 1958. In the light of such evidence, the expressions of degree intentions of two-thirds of the fifty-two men should be viewed very cautiously.
What were the intentions of the graduates regarding future university work?

Twenty-five of the sixty-two graduates who returned the questionnaire expressed a firm intention of continuing university study. Included in the twenty-five were three men currently engaged on doctoral studies and eight on the completion of masters' theses.

Of the 200 men who returned the questionnaire 39 per cent indicated that they intended continuing degree studies in the future. Though this figure also should be interpreted cautiously it does show the existence of a commendable attitude amongst teachers towards academic qualifications.

Extra-Mural Study

Extra-mural studies cannot in any circumstance be rated as equivalent to intra-mural university education - they can at best be only regarded as "a make do" . . . 3

How much extra-mural study was attempted by the whole group?

Seven per cent of all the units attempted by the 177

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matriculated men who returned the questionnaire were studied extramurally, 48 of the men attempting this form of university study. A higher proportion of the undergraduates who had passed one or more units attempted university study (47 per cent of the six-or-more unit group and 38 per cent of the one-to-five unit group) than was the case with the graduate group (18 per cent), or the group with no credits (10 per cent). With almost one-third of the 177 men attempting extra-mural study, this means of working towards a degree must be considered an important factor in the university work of this teacher group.

What proportion of the extra-mural units attempted was passed?

How did this compare with the intra-mural proportion?

Of the eighty-five units attempted extramurally 42 per cent were passed. This proportion compares most unfavourably with the overall pass rate of 71 per cent obtained by the 177 matriculated men who returned the questionnaire. If extra-mural units are excluded from the performance of the 177 men, their percentage of passes to units attempted rises to 73. Of the advanced units attempted extramurally 30 per cent were passed compared with 50 per cent for extra-mural Stage I units.
What subjects were most frequently studied extra-murally?

The three subjects, education, English and history together accounted for over 60 per cent of the extra-mural units attempted. Education made up 32 per cent of the extra-mural units.

Was the proportion of passes to failures significantly higher in certain subjects?

Too few units were involved for a valid answer to this question to be obtained. In only three subjects, education, English and history, were ten or more units attempted extra-murally. Of the twenty-seven education units, 30 per cent were passed. The pass rate for the sixteen English units was 50 per cent, and for the ten history units 60 per cent. Six of the seven units in economics were passed. Apart from the very high overall failure rate experienced in extra-mural study, the most striking aspect of the extra-mural work was firstly the popularity of education as a subject to study extra-murally and secondly the very high failure rate encountered in this subject.

Present Occupations.

What proportion of the group was still teaching in 1958?
Approximately a decade after leaving Teachers' College 80 per cent of the 280 men in the study were still engaged in educational occupations, and of those so engaged 76 per cent were employed in public primary schools.

What was the relationship between university achievements and occupation?

In Table XXXII the relationship between university achievements and occupation can be seen: there was a tendency for those with higher academic qualifications to be employed in post-primary schools and in the various branches of higher education and for those with lower academic qualifications to be employed in primary schools. Of the graduates still teaching, 32 per cent were in primary schools whereas all the non-matriculated men who were still teaching were in the primary service. The table also shows that those with higher academic qualifications were more likely to be still engaged in teaching. If the undergraduates are treated as one group the respective proportions of the three groups - graduates, undergraduates and non-matriculated men - who were still teaching was 36 per cent, 78 per cent and 74 per cent.

What were the occupations of those who had left teaching?
### TABLE XXIII

**PRESENT OCCUPATIONS OF THE 280 MEN IN THE GROUP**

<table>
<thead>
<tr>
<th>Graduates</th>
<th>20</th>
<th>33</th>
<th>2</th>
<th>4</th>
<th>2</th>
<th>2</th>
<th>63</th>
<th>10</th>
<th>73</th>
<th>36.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.G. Six or more units</td>
<td>11</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>15</td>
<td>6</td>
<td>21</td>
<td>71.1</td>
</tr>
<tr>
<td>U.G. 1-5 Units</td>
<td>.68</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>74</td>
<td>21</td>
<td>95</td>
<td>77.9</td>
</tr>
<tr>
<td>U.G. No Credits</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>36</td>
<td>8</td>
<td>44</td>
<td>81.8</td>
</tr>
<tr>
<td>Non-Matric.</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35</td>
<td>12</td>
<td>47</td>
<td>74.4</td>
</tr>
<tr>
<td>Totals</td>
<td>170</td>
<td>41</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>223</td>
<td>57</td>
<td>280</td>
<td>79.6</td>
</tr>
</tbody>
</table>
In Table XXXIII the occupations of those who had left the education service are listed, the ranking of the occupations being based upon the scale produced by Congalton and Havighurst.\textsuperscript{4} The graduates and near-graduates tended to be employed in positions higher in the scale than did those with few or no university credits. With the occupations of twenty-one men shown as "Unknown", the table should be viewed with some caution: it is probable that those who had met with comparative occupational failure after leaving teaching would have been less inclined to return the questionnaire and make known their occupation than would those who had achieved a measure of success. Among those listed as "Unknown" there could be several men who were still teaching in private schools in New Zealand or in overseas schools.

Among the thirty-six men whose occupations were known were five clergymen and five instructors in the armed services. It is assumed that the education these men received at teachers' college and at university would be of direct benefit in their present occupations. Thus, when "educational occupation" is interpreted in a certain

<table>
<thead>
<tr>
<th>Occupation</th>
<th>U.G. Grade</th>
<th>U.G. Six + Units</th>
<th>U.G. 1-5 Units</th>
<th>U.G. No Credits</th>
<th>Matric.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clergy</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Scientist</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Co. Director</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Journalist</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Oil Co. Executive</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Public Relations Officer</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Engineer</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Farmer</td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Entertainment Promoter</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Armed Services</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Funeral Director</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Carpenter</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Salesman</td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Milkman</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Deceased</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>6</strong></td>
<td><strong>21</strong></td>
<td><strong>8</strong></td>
<td><strong>12</strong></td>
<td><strong>57</strong></td>
</tr>
</tbody>
</table>
broad sense, at least one-sixth of the men who were no longer teaching were in fact still engaged in a branch of education.

II. CONCLUSIONS

THE UNIVERSITY PERFORMANCE OF THE MEN IN THE GROUP WAS MUCH BETTER THAN MIGHT HAVE BEEN EXPECTED.

Widespread criticisms of the system of part-time university study have probably tended to mask the fine performance of a section of the teachers who undertake such work. A third of the matriculated men in the present study graduated, and a high proportion of the graduates obtained a master's degree. However, more than half the graduates had the benefit of at least one year of full-time study, in most cases with very limited bursary assistance. The demands made upon the graduates who had no period of full-time study were in most cases very exacting. If provision for full-time university study in the post-teachers' college period had been more readily available to them, or if they had been prepared to make financial sacrifices, it is very likely that they would have graduated in shorter time and gained more benefit from university study.

Recommendation. Better facilities for full-time university study should be made available to a section of
the Division "A" students in the post-teachers' college period.5

Watson6 has shown that a group of very able men continues to enter the Division "A" course. It is the opinion of the author that bursaries to enable such students to undertake full-time university study in the post-teachers' college period should be much more freely awarded than is the case at present. On the one hand very generous bursaries are awarded to Division "U" students and make possible periods of up to five years full-time study. (There is evidence that the proportion of these students who subsequently teach in post-primary schools is very low considering the expense involved in training them.)7 On the other hand very few full-time studentships are awarded to Division "A" students, in spite of the fact that a considerable number of them have already shown, in two years of part-time study, an ability to cope with university work. In fact, the pass rate of the limited number of Division "A" students who have been awarded Third Year

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5 An assumption made in this chapter is that the status quo regarding teachers' college and university courses will not change.

6 Watson, op. cit., p. 6.

7 Ibid., p. 12.
university studentships has frequently reached 100 per cent.\footnote{Submissions of the Christchurch Branch, New Zealand Teachers' Colleges Association to the Committee on New Zealand Universities, p. 4.}

Furthermore, in the light of the performance of the graduates in the present study, 86 per cent of whom were still teaching after ten years, the awarding of such studentships would appear to be a particularly effective way of increasing the number of graduate teachers. Additionally, it would provide teachers' college students with a powerful incentive to pursue university study. This line of thought is further developed in conclusion number four.

2 PART-TIME STUDY LEADS TO AN ILL-BALANCE IN THE PROPORTION OF SCIENCE TO ARTS GRADUATES IN THE TEACHING PROFESSION.

The proportion of science to arts graduates in the present study, although very low, was consistent with the proportion observed in other studies.\footnote{Watson, \textit{op. cit.}, also "Interim Report on Post-Primary Staffing and Recruitment," \textit{Commission on Education in New Zealand}, (Wellington: Government Printer, 1960). See also p. 57 above for a comment on the position in 1930.} It appears that certain difficulties encountered in pursuing a science course lead to this paucity of science graduates. These difficulties are encountered in three different institu-
tions. At teachers' college, though students may be permitted to enrol in science classes, they are expected to keep up to date with their various college lectures and assignments. At university, the demands of practical work are such that a part-time student can usually study only one science unit a year compared with the two units of the part-time arts' student. In the primary school service professional responsibilities are such that the studying of even one science unit a year is very seldom possible.

**Recommendation.** If a higher proportion of the primary service is to graduate in science, demands within the teachers' colleges on students studying science at university should be modified, provisions for full-time study in the post-teachers' college period should be increased and entrants to Division "A" should be encouraged to spend a year in the upper sixth form.

It is apparent that potential science graduates are entering the Division "A" course. It is equally apparent that the science potential of these entrants is not being realized.

3. **PART-TIME STUDY LIMITS THE RANGE OF SUBJECTS STUDENTS CAN STUDY AND LEADS, ESPECIALLY IN THE PRIMARY SERVICE, TO A VERY NARROW RANGE OF ACADEMIC QUALIFICATIONS.**

Almost three-quarters of the seventy-three graduates
in the present study held degrees with either education or geography as a Stage III unit. Furthermore, these two subjects accounted for a third of all the units attempted by the 177 matriculated men who returned the questionnaire. It can be concluded from this, either that these two subjects are particularly well-suited to the professional needs of primary teachers, or that they can be more conveniently studied by part-time students than can other subjects.

If primary teachers studied subjects suited to their needs, one would expect that English and history would rank at least equal with geography, yet such is not the case. The author concludes, after long association with a wide range of teachers who have undertaken part-time university study, that education and geography, at least at the University of Canterbury, in addition to being subjects suited to the needs of primary teachers, attract part-time students because they provide a suitable timetable. In addition, lecturers in these subjects have a reputation for being sympathetic towards the needs of part-time students.

It seems desirable that a wide range of subjects, particularly at advanced stages, should be studied by teachers in the primary service. This branch of the teaching service, no less than any other, needs within its ranks teachers whose degree qualifications range widely over the
academic field. If one accepts university conditions as they are, this can only be achieved by granting better facilities for full-time study. If part-time students in the primary service knew with certainty that they would be able to undertake the advanced stages of their degree as full-time students, it is very likely that diversification at the Stage II and III levels would take place.

4 DIVISION "A" STUDENTS EXERCISE A FREE CHOICE WHEN THEY ELECT EITHER TO UNDERTAKE UNIVERSITY STUDY OR NOT TO DO SO. BUT THIS CHOICE IS INFLUENCED BY A VARIETY OF FACTORS EXISTING WITHIN THE TEACHERS' COLLEGE.

Since the men in the present study entered teachers' college a decreasing proportion of the Division "A" students has been undertaking university study. On the other hand, however, there is evidence that a considerable number who do not do so are capable of such work. In a profession in which the demand for staff with high academic qualifications is growing, this is a matter of considerable concern. The question arises: "Why are Division "A" students less willing to undertake part-time study now, than was the case some years ago?"

The author was himself a Division "A" student in the

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immediate post-war period and undertook university study as a part-time student. Subsequently, as a teachers' college lecturer, he had ample opportunity, particularly in counseling groups of students undertaking university study, to observe student attitudes to university work. As a result of this experience and also as a result of undertaking this investigation, certain conclusions are presented which seem to have an important bearing on this question.

Within an institution such as a teachers' college, there exists a cultural climate which influences the value judgements students are called upon to make. This climate, although contributed to by the attitudes of staff members, is strongly influenced by student attitudes, particularly those of older, more mature male students. In the immediate post-war years a high proportion of the men entering Division "A" had some experience of university study; an appreciable number of graduates and near-graduates could usually be found in annual Division "A" intakes. Since the inception of the Division "U" and Division "C" courses, the proportion of the Division "A" entrants with university experience has diminished. It is the belief of the author that there has been a corresponding diminution in the value which Division "A" students attach to university study. Lacking the example of older students, who enter Teachers' College
and almost as a matter of course continue university study, more recent teachers' college students tend to look on such study as a demanding extra in which the fruits of success, as measured by graduation, go to the few rather than the many.

Another probable reason for student reluctance to commence concurrent studies is the not-ill-founded belief that part-time students are not completely acceptable at university and that even under favourable conditions the securing of a degree is a relatively long and difficult process. The apparent ease with which Division "U" students are enabled to obtain a degree probably serves to emphasise this difficulty.

In the middle fifties the entrance qualifications of Division "A" students reached their lowest point. Since that time the proportion of students with the university entrance qualification has been rising. At Christchurch Teachers' College there are indications that the proportion of men undertaking university study is also tending to rise. At this College the recent very commendable policy of drafting all students taking university work into separate College groups and making available to them special study facilities, has had the effect of demonstrating in a practical way the importance the College attaches to university study.
5 CONCESSIONS GRANTED TO TEACHERS TO ENABLE THEM TO UNDERTAKE FURTHER UNIVERSITY STUDY ARE LIKELY TO RESULT IN VERY WORTHWHILE BENEFITS TO THE TEACHING SERVICE.

From the fact that 36 per cent of the graduates in the present study were still engaged in some avenue of education and were, in general, occupying positions of considerable responsibility, it is concluded that policies which encourage degree studies by Division "A" students and primary teachers are sound and should be developed to the full. The fact that a considerable proportion of graduates do not remain in the primary service is no valid argument against encouraging graduate study. Possibly the very fact that a teacher who meets with success in university study and gains a sense of satisfaction from this work would, of itself, be a factor influencing him to remain in teaching.

6 A LESSER UNIVERSITY QUALIFICATION THAN A DEGREE WOULD PROVIDE A VERY USEFUL GOAL FOR TEACHERS UNABLE TO COMPLETE THE DEGREE COURSE.

Of the 233 matriculated men in the study, 160 failed to graduate and by conventional university standards would be said to have failed, in spite of the fact that many of them appeared to have gained considerable benefit from such study. Forty-six had passed four or more units and twenty-one of these could be described as near-graduates.
Yet, in spite of these achievements, no official recognition is given by the university for what amounts to at least one year of successful full-time university study. The Department of Education grants a "B" certificate which is a sub-degree qualification but outside the ranks of teachers this qualification has little meaning.

The author's observations lead him to believe that a considerable section of the undergraduates in this study found the full degree course too difficult under conditions of part-time study but gained academic success that merited a lesser qualification.

**Recommendation.** A university qualification, at the sub-degree level, should be provided for teachers unable to complete the full degree.

The awarding of such a qualification would have the effect of turning failure into a more limited form of success and in this way might provide an incentive for teachers to improve their academic qualifications. The form that such a qualification could take was suggested in 1951 in the *Report of the Consultative Committee on Recruitment, Education and Training of Teachers* 11 where a Diploma of Education qualification was outlined. The intention of

this Committee was that Division "A" students would embark on the diploma course in their first teachers' college year, with a reasonable chance of completing it early in their teaching career.

The existing Diploma in Education has not provided the "attainable goal for many students for whom a degree is more or less out of the question."\textsuperscript{12} Before enrolling for this diploma an undergraduate must first pass five units including English I and Education I; he must then pass three special papers in education and either carry out an original investigation or pass three further papers. In all, the existing Diploma in Education is a lengthy course which is not far short of a degree in the demands it makes.

\textbf{7 UNDER CONDITIONS WHICH EXISTED PRIOR TO 1960, THE PASS RATE IN MOST SUBJECTS STUDIED EXTRA-MURALLY WAS VERY LOW AND THE CONTRIBUTION OF THIS FORM OF STUDY TO DEGREE COMPLETIONS WAS OPEN TO SERIOUS DOUBTS.}

The performance of the forty-eight men in the study who attempted extra-mural work leads the author to conclude that unless provisions for extra-mural study are considerably better in the future than they have been in the past, this form of university study should, with few excep-

\textsuperscript{12} \textit{Ibid.}, p. 37.
tions, be considered an unsatisfactory avenue by which primary teachers can work towards a degree. It seems likely that, for most of the men in the present study, the sense of failure engendered by unsuccessful extra-mural study may have done more to hinder part-time students than the very low proportion of passes they obtained did to help them. However, recent evidence shows very clearly that at the Palmerston North University College the pass rate for extra-mural students was much higher than that obtained by the men in the present study.\(^{13}\).

**CONCLUDING STATEMENT**

Considering the conditions under which they worked, the university performance of the men in this study was very good indeed. Their university record confirms Watson's\(^ {14}\) finding that a section of the entrants to the teachers' college Division "A" course is capable of a very high standard of academic work. It also shows that part-time study has been a major factor in raising the academic qualifications of teachers.

Assuming that conditions within the teachers' colleges and the university do not undergo marked changes in the future, it can be expected that part-time study will continue

\(^{13}\) Private communication from R.J. Tye, Palmerston North University College, Dec. 23, 1960.

\(^{14}\) Watson, "Entrance to the Teaching Profession," *op. cit.*, p. 6
to make an appreciable contribution to the proportion of graduates in the teaching service. It can also be expected that within the primary service, an ill-balance in the proportion of arts to science graduates and in the range of subjects taken to advanced stages, will also continue.

To counter this ill-balance and to encourage university study by primary teachers, it is recommended that provisions for full-time study by primary teachers be extended.
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APPENDIX. The questionnaire Form

THE UNIVERSITY WORK OF TEACHERS

Surname: __________________________ Address: __________________________

Christian names: __________________________

Year of Birth: ______

Number of years spent at secondary school: __________

Highest form reached: ________________

- Accredit

Year of gaining University Entrance: ______ How gained - Exam

- Provisional

- Matric

(Underline the one which applies) -

Degree held (if any): __________________________

Year of completion of degree: __________

If left teaching service: (a) Year in which you left teaching: ______

(b) Present occupation: __________________________

Please complete all those sections below which are relevant in your particular case. Draw a line through any sections which are not applicable.

Part I Teaching Service:

For ease of filling in I have drawn up a table for this section. Two sample years are filled in. Show "Position" column as: probationary assistant (P.A.), sole teacher, primary assistant, secondary assistant etc. Show "Time spent in position" in years and months. Even brief relieving periods should be shown.

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>School</th>
<th>Grade</th>
<th>Time spent in Position</th>
<th>Distance of school from nearest University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>P.A.</td>
<td>Fendalton</td>
<td>VI</td>
<td>1 year</td>
<td>3 miles</td>
</tr>
<tr>
<td>1950</td>
<td>Relieving assistant</td>
<td>Runanga</td>
<td>V</td>
<td>6 months</td>
<td>160 miles</td>
</tr>
</tbody>
</table>
PART II  FUTURE UNIVERSITY WORK:

Yes:
1. Have you a firm intention of continuing degree studies? No;
   (Underline the answer which applies)
   Uncertain:

2. If you have no degree at present have you a firm
   intention of gaining one in the future? Yes:
   No:

3. If you are uncertain about continuing degree studies list the
   main factors which will influence your actions.
   (a) 
   (b) ___________________________________________________________
   (c) ___________________________________________________________

4. If you are doing university work in the future what units do you
   propose doing?
   ___________________________________________________________
   ___________________________________________________________

5. Will you do this work as a part-time, full-time or extra-mural
   student?
   ___________________________________________________________

PART III  FAMILY RESPONSIBILITY:

Obviously this must be a major
factor, especially with older students at the university. Any
investigation of this sort should take account of this. If you are
married would you kindly fill out the following:

Year of marriage: ___________

Years of birth of Children: ___________

PART IV  DEGREE STRUCTURE: (Complete if you have attempted a
Stage III unit)

The units which are taken to an advanced stage are significant
in this investigation. Several factors probably influenced your
choice of a Stage III subject. Rank the factors given below in the
order in which you think they influenced you most strongly. You do
not need to rank them all. Rank the strongest factor as (1) and so
on down.

( ) I did well in the earlier stages of the subject.

( ) I considered it a good unit to equip me for teaching.

( ) Provisions in this subject suit part time students.

( ) I considered I could pass this subject.

( ) I did well in the subject at secondary school.
### PART V UNIVERSITY WORK TO DATE

On the table below you should be able to show fairly quickly all the units you have attempted (whether pass, did not sit, or fail). Start off with the first units you enrolled for and work through to the present. You will probably be able to show marks for units prior to 1951. Show these as the average for the papers in each unit. From 1951 onward you will probably be able to show a grade (A, B, C, D, E). Three sample entries are done to show the correct method of recording.

<table>
<thead>
<tr>
<th>Year</th>
<th>Subject</th>
<th>Stage</th>
<th>Degree</th>
<th>Part-time</th>
<th>Full-time</th>
<th>Extra-Mural</th>
<th>Did not sit</th>
<th>Pass</th>
<th>Fail</th>
<th>Mark or Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>Education</td>
<td>I</td>
<td>B/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>1953</td>
<td>English</td>
<td>I</td>
<td>B/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>1957</td>
<td>Education</td>
<td>II</td>
<td>B/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Teachers' College,
Peterborough Street,
CHRISTCHURCH.

4th November, 1959.

Dear Mr ,

I am working on a thesis which is concerned with the extent and type of University work undertaken by male students who attended Christchurch Teachers' College in the years 1947 - 50 inclusive.

I am enclosing a questionnaire which requires of you a certain amount of personal and confidential information. I can assure you that any information you are able to give will be treated with the greatest confidence and any final published material will deal only with group tendencies and of course make no mention of individuals in particular cases.

With your co-operation it will be possible to discover how many of the 260 men concerned have completed degrees, the types of degree structure, the conditions under which the work was done and, as a side issue, the present occupations of the members of the group. It is my intention to detail the above information separately for each of the four years concerned. In order that you will at least know the results of your efforts on my behalf, I will prepare a precis of the findings and post them to you, probably early in 1961.

If you are no longer in the teaching service the information you can give will be none-the-less valuable. In fact, it will be essential if this enquiry is to result in a reasonably complete picture of the situation.

A major difficulty in work such as this is to secure a 100% return of the questionnaire. While realising that I am asking a lot of you I would be most grateful if you could return the information to me as soon as possible. In addition, if you are able to persuade College contemporaries to return their information promptly I would be doubly grateful.

Yours faithfully,

D.B. McSweeney
(Ch. Ch. Teachers' College, 1949-51)
Teachers' College,
Peterborough Street,
CHRISTCHURCH.

22nd February, 1960.

Dear [Name],

Early in November, 1959, I posted to you a questionnaire, a copy of which is enclosed with this letter.

I hesitate to trouble you further, especially at this time of the year, but if my work is to be at all valid I will need a return of more questionnaires than I have at present. To date 270 of the 280 men in the group have been traced and of these two-thirds have so far returned the questionnaire.

If you are hesitant about filling in some of the more confidential sections please miss them out. If you are able to return the form simply showing the type of teaching or other work you have been doing since leaving Teachers' College the information will be most valuable.

Thank you for any help you are able to give.

Yours faithfully,

(D.B. McSweeney)