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Selective Mechanisms for General Science Education

A History of the Development of General Science Education in New Zealand, 1900-1943.

A thesis presented in partial fulfilment of the requirements for the degree of Masters of Arts in History at Massey University.

Lynette. L. Nikoloff
2000
To My Mother
A remarkable woman.
Acknowledgements

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Chapter 1 - The Thomas Report

This chapter will outline events that led to the setting up of the Consultative Committee on Post-Primary Education in 1942, whose findings are referred to as the Thomas Report.

1.1 Introduction

Free education has been the right of every New Zealand citizen since 1877 when free secular education was established in all state primary schools. All children had to be given free education between the ages of five and fifteen, termed 'school age'. Compulsory schooling was required for all children between the ages of 7 and 13 years, this was increased to 14 from 1901. Eligible children had to attend primary school for six sessions per week (choosing either a morning or afternoon session). Teachers were required to deliver a prescribed curriculum consisting of: reading, writing, arithmetic, English Grammar and composition, geography, history, elementary science and drawing, object lessons, vocal music and for girls there was the additional subjects of: sewing, needlework and domestic economy. The curriculum was designed to prepare candidates for the proficiency examination, which was the entry examination into post-primary school. Students sat the proficiency examination at the end of standard VI or form 2. Failure in this examination meant students had to stay at primary school until reaching the official leaving age and most primary schools had a standard VII.

Within the context of this study, the various types of post-primary schools have very precise definitions which must not be confused with the contemporary use of the term 'secondary school' which denotes universal post-primary education. 'Secondary

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2 ibid., p. 102.
3 ibid., p.143.
4 ibid., p. 102. Object Lessons were common in the nineteenth century and were first employed by the Mayos, a Protestant clergy man and his sister. The lessons involved the children looking at some object e.g. The refining of silver ore. The teacher would lead the class through a series of statements about the object such as: the ore is melted and the silver skimmed and the teacher asks the children: 'Now what is it that separates the impure substances for the silver?' to which the children respond in unison: 'The heat of the fire.' Many of these lessons ended up relating to religious education. David Layton, Science for the People: The Origins of the School Science Curriculum in England, New York: Science History Publications, 1973, pp. 23-6.
School' describes a single sex academic school primarily delivering a curriculum
prescribed by external examiners, such as the University Senate. Some secondary
schools developed alternative programmes for less academic students but the main
focus of the school was on preparing students for external examinations. ‘Technical
High School’ describes a co-educational fully funded state school which had to
provide technical and manual instruction, and it is interesting to note that teachers
were paid less in this type of school. ‘Combined High School’ describes a secondary
school which offered a variety of academic and practical courses and was usually co-
educational. ‘District High School’ describes a co-educational school which was an
extension of a primary school, offering a practical curriculum based on the
agricultural sciences. Therefore, the term ‘post- primary school’ encompasses a
variety of schools, all of which catered for students beyond primary level and up to
the age of 18 years.

### 1.2 Thomas of Timaru

The turn of the new century had seen demands made for the provision of free State
post-primary education and the government provided funding for ‘free places’
provided certain conditions were met, namely the provision of technical and manual
subjects. This led to an increase in the development of State Secondary, Technical
and District High Schools. In 1913, William Thomas was appointed Rector of Timaru
Boys’ High School, a new State Secondary School. At the school’s official opening
Thomas announced that the school would provide a professional programme for those
boys intending to proceed to University and a commercial and agricultural course for
boys intending to stay only two years but wishing to pursue careers in the civil service
or farming.\(^5\) In New Zealand, State Secondary Schools, like Timaru Boys’ High
School, had been established to provide free single sex secondary education to all
students who met entry requirements. For the ‘professional’ boys and girls, the
curriculum was prescribed by external examinations such as the Public Service and
University Entrance examinations. Thomas was concerned that external examinations

constrained the school curriculum which he wanted to broaden with subjects such as: woodwork, art, elocution and music. He commented that:

Those who are interested in educational topics must know that England seems to be contemplating revolutionary changes in her system of education....Our present system is certainly full of defects.....But I am certain that we are too much cribbed and confined by the examination syllabus and that too much stress is placed on the written examination. We must more and more emphasize the fact that education aims at developing the emotional and spiritual side of a boy's life, and that the fruit of a wise education is seen in his inquiring attitude to life, his breadth of view, as well as in his store of knowledge.

Efforts to reform the post-primary school curriculum had been blocked by the demands of the University Entrance Examination. This examination was administered by the University Senate and it served the task of selecting eligible students for entry to the university. But the examination had also become the hallmark of a completed education, demanded by employers and parents. Thus the subject requirements for the examination prescribed the secondary school curriculum. In 1924, Thomas recorded his objections to the domination of the UEE, demanding that it be awarded by accrediting so that schools could have more liberty in their choice of subjects. He was supported by the Secondary Schools Association (SSA), which represented the interests of its teachers and principals, and together with the Department of Education campaigned to remove control of the examination from the Senate, details of which will be discussed more fully in Chapter 3.

In 1925 Frank Tate, Director of Education in Victoria, had been invited to New Zealand by the Department of Education to look into aspects of post-primary education. Tate had made thirty-two recommendations. The key ones were: that

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6 ibid., p.58.
7 ibid., p.50, citing the Timaruvian, 1922.
8 ibid., p. 58 citing The Timaruvian 1925.
9 Frank Tate, Special reports on Educational Subjects No. 16, Investigation into Certain Aspects of Post-primary Education in New Zealand, Wellington: Govt. Printer, 1925. Similarly, The Reichel Tate Report recommended some of the following: that the matriculation examination be abolished and replaced with the Intermediate Examination (16 years) and the School Leaving Certificate (18 years); that areas of the curriculum not examinable to be inspected (e.g.
primary education end at standard 6; that there should be a continuous education from primary to secondary; that there be an arrangement for standard 5 and 6 classes separate from the primary sector; that a review of public examinations be undertaken; that two examinations be held after 3 and 6 years in the post-primary school; that inspection of practical and laboratory work be undertaken along with oral examinations in languages; that accrediting of certificates be considered; that there be better post-primary teacher training; that all post-primary inspectors work more closely; that there be better articulation between primary and post-primary courses; that in the smaller centres Technical High Schools be built as the preferred post-primary school; that there be better regional organisation of school boards; that technical examinations be developed; that technical work be accredited for degrees and diplomas; and that art and applied art courses should be developed in schools.\[10\]

While many of Tate’s recommendations were supported by the 1930 Parliamentary Recess Committee on Educational Reorganisation in New Zealand, often referred to as The Atmore Report (Peter Fraser was a member of the committee), the Department of Education made limited progress in reforming the post-primary school curriculum. Technical and manual training had become available in most post-primary schools but the academic focus of the secondary schools was well entrenched, who paid lip service to practical work. Despite a period of fiscal constraint, the Department of Education revamped the Junior Civil Service Examination into the School Certificate Examination and from 1934 the Department of Education hoped it would become the leaving certificate for students who did not intend going to university. In the following year Thomas retired from Timaru Boys’ High School marking an end to forty years in education.

In his retirement Thomas was invited by the newly formed New Zealand Council for Educational Research (NZCER) and the University Senate to look into aspects of Entrance to the University.\[11\] In 1935 the study was widened to include the ability of

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\[10\] Tate, pp. 74-76. The main recommendations have been summarized.

\[11\] W. Thomas, C. E. Beeby and H. Oram, Entrance to the University, NZCER: Wellington, 1939.
the UEE to predict success at University. Thomas invited the Director of the NZCER, Dr. C.E.Beeby, and a mathematician, H. Oram to assist him. However he also intended pursuing a career in politics and in the 1935 general election, Thomas stood as a National Independent candidate urging that more attention be paid to: education for leisure; more music, art and handwork in the school curriculum; an extension of accrediting; and decentralisation of educational administration. Thomas promoted citizenship through self help groups such as: Workers Educational Association and Women’s Institutes. But most importantly Thomas wanted educational reform. He lost the election by 1,000 votes to Rev. Clyde Carr (Labour) but retained important connections with the Labour Party through his friendship with Professor Shelley, Canterbury University College of the University of New Zealand and ex President of the Christchurch Rotary Club (1923-24). Professor Shelley had been a regular visitor to Timaru Boys’ High School during the previous ten years and had introduced Thomas to the Rotary Movement leading to Thomas becoming the first president of Rotary in Timaru in 1927. Professor Shelley had been active in the Labour Party and he had helped write its education election manifesto for the 1935 election along with: Walter Nash, Henry E. Holland (died 1933), M.J. Savage, Clyde Carr, Terence H. McCombs, W.B. Sutch, Professor T.A. Hunter, P. Martin-Smith, C.E. Beeby, F.L. Combs and Arnold E. Campbell.

After his election defeat Thomas devoted his time to his research for the Senate, publishing the results in 1939 entitled Entrance to the University. The report recommended urgent reform: that the University Entrance Examination should be abolished and replaced with an accrediting system and that the School Certificate

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13 Guy, p. 87.
14 ibid., p. 86.
16 ibid., p. 58.
17 Cumming and Cumming, p. 254. Thomas Hunter was made Professor of Mental and Moral Philosophy in 1909 and in 1929 he was made Vice-Chancellor of the University of New Zealand, a position he held until 1947. Hunter was actively involved in the W.E.A and one of his early students was Peter Fraser. He was President of the NZCER from 1933 to 1953. Department of Internal Affairs, Dictionary of New Zealand Biography Volume 3, 1901-1920, ed. Claudia Orange, Auckland: Auckland University, 1996, pp.241-42.
examination be awarded by accrediting after a minimum of three years post-primary schooling. 18

1.3 Abolition of the Proficiency Examination

While the Senate and the Department of Education continued negotiations for the reform of the UEE, the primary school was similarly constrained by the proficiency examination. The Minister of Education, Peter Fraser, announced in 1936 that from 1938 the proficiency examination would be abolished. 19 This would enable every child to progress to the post-primary sector enabling a quality education to be available for every New Zealander. Fraser, expressing his party’s commitment to a more equitable New Zealand society reported in 1939 that:

The government’s objective, broadly expressed is that every person, whatever his level of academic ability, whether he be rich or poor, whether he live in town or country, has a right, as a citizen, to a free education of the kind for which he is best fitted, and to the fullest extent of his powers [sic]. So far is this from being a pious platitude that the full acceptance of the principle will involve the reorientation of the education system.

... The present Government was the first to recognize explicitly that continued education is no longer a special privilege for the well to do or the academically able, but a right to be acclaimed by all who want it to the fullest extent that the state can provide. Important consequences follow from the acceptance of this principle. Schools that are to cater for the whole population must offer courses as rich and varied as are the needs and abilities of the children who enter them....it means that the system of control must be such that the whole school system is a unit within which there is free movement. 20

The words ‘to the fullest extent of his powers’ denote equality of opportunity, not education. Fraser was not the author of his statement but the Assistant Director of

18 Thomas et al, 1939, pp. 151-56.
19 Peter Fraser (1881-1950) was considered a socialist and believed that education would play a key part in social reform. As Minister he restored funding to education and improved access to secondary education. Fraser had an authoritarian streak and dominated his government. Department of Internal Affairs, Dictionary of New Zealand Biography Volume 4, 1921-40, ed. Claudia Orange, Auckland: Auckland University, 1998, pp. 182-86.
Education, Beeby. 21 Beeby has commented that the above statement became his measure of all educational changes.

As a result of Fraser abolishing the proficiency examination, for the first time in New Zealand’s educational history children of all intellectual abilities had access to post-primary education. The post-primary schools had to provide programmes more suitable to the non-academic student. Thomas had warned the secondary schools that: ‘Changes in the organisation of Secondary schools are to come and there will also be big changes in the intellectual fare offered by the schools.’ 22 Thomas, like many of his colleagues, believed that the post-primary curriculum had to be relevant to the needs of all students. Thomas was particularly supportive of education for citizenship: ‘We take it that democracy is the right type of government but we don’t teach the children why it is.’ 23

Table 1.1 The Proportion of 12 to 18 year olds (excluding Maoris) attending Post-Primary Education in New Zealand in 1920 and 1939

<table>
<thead>
<tr>
<th>Year</th>
<th>1920</th>
<th>1939</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-primary Population age 12&gt;18</td>
<td>15,558</td>
<td>41,576</td>
</tr>
<tr>
<td>Total Population age 12&gt;18</td>
<td>138,803</td>
<td>161,564</td>
</tr>
<tr>
<td>% of Post-primary Popn. age 12&gt;18</td>
<td>11%</td>
<td>26%</td>
</tr>
</tbody>
</table>

By 1939, the post-primary school population had increased to 41,576 from 15,558 nearly twenty years before (refer Table 1.1). Thomas, along with many of his colleagues, deplored the paucity of subject choice for post-primary students and advocated better coordination between all sectors of post-primary education. 25 He had formed a strong belief in the value of technical education while at Timaru Boys’ High

22 E2 1951/7a, E 29/2/7a part 1- Miscellaneous Education Systems. Timaru Herald, 29 June, 1938 ‘Need for Better Curricula’.
23 ibid.
School and had introduced practical subjects into the school, such as: commercial and engineering courses. The Technical and District High Schools had developed to provide an education for the non-academic student by providing manual and technical subjects. By 1939 they had developed into a potent force in post-primary education (Refer Table 1.2). But they suffered, as did the secondary schools, from students being forced to attend post-primary school until attaining the official leaving age. For many this meant a stay of only two and a half years. Before relevant programmes could be developed for the non-academic student, the time they spent at post-primary school had to be increased. This was best achieved by raising the leaving age from 14 to fifteen years of age. Worldwide there had been demands made for increasing the school leaving age and in 1937 the UK had increased it to fifteen years. There was pressure on New Zealand to follow this trend.

Table 1.2 Percentage of Students enrolled in Post-primary Education in 1920 and 1939. 26

<table>
<thead>
<tr>
<th>Type of Post-primary School</th>
<th>Roll in 1920</th>
<th>Roll in 1939</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary School</td>
<td>9,196 (59%)</td>
<td>15,974 (38%)</td>
</tr>
<tr>
<td>District High School</td>
<td>2,157 (14%)</td>
<td>6,183 (15%)</td>
</tr>
<tr>
<td>Combined High School</td>
<td>-</td>
<td>3,126 (7.5%)</td>
</tr>
<tr>
<td>Technical High School</td>
<td>2,766 (18%)</td>
<td>10,282 (25%)</td>
</tr>
<tr>
<td>Private School</td>
<td>1,439 (9%)</td>
<td>6,011 (14.5%)</td>
</tr>
</tbody>
</table>

On April 4, 1940 Peter Fraser was elected as Prime Minister following the death of Michael Savage, H.G.R. Mason was appointed Minister of Education and Dr. C.E. Beeby became Director of Education. The previous year New Zealand had declared war on Germany and sworn its allegiance to Britain. 27 Mason intimated that the government intended increasing the leaving age but Beeby cautioned his Minister that raising the leaving age at this time was not possible due to the effects of the war on finances and staffing levels:

The proposal to extend the school age generally to 15 years was considered in detail in 1936 ... it then appeared that the annual cost of education would be increased by about £211,500 ... the cost of putting the scheme into operation at the present time would be very considerably more than that which was

26 AJHR, 1920, E-1, p.32 and AJHR, 1939, E-1, p.32.
27 Cumming and Cumming, p. 268.
calculated in 1936. A further consideration is the fact that war conditions have already taken a serious toll of the teaching staff... It would seem to be an inopportune time to raise the school leaving age above the present legal age. However, in 1942 Mason announced that the school leaving age would rise from 14 to 15 years from 1944. This move had the political support of the country, as Mason commented:

Owing to the war conditions there are an increasing number of young adolescents who are missing the discipline of a normal home, and it is essential that the school keeps its grip upon them during these very critical years.

Raising the leaving age was only part of the overall plan and now a curriculum had to be developed to meet the needs of all New Zealand children. The content of the curriculum had to educate the child in becoming a good citizen and teaching the principles of democracy. Mason noted that the world crisis had created an urgency in this endeavour:

It is simpler to teach hatred and prejudice and half crazy pride of race than it is to create love for freedom and tolerance and the quiet, decent virtues of the democratic way of life.

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28 E 1952/1b, E8/3/26. Memo from Dr. C.E. Beeby to Minister of Education, 17 Dec., 1940. The war had taken its toll on the teaching staff with an estimated 39% of her male teachers in active service. This equated to 61 secondary teachers on service overseas and 104 on service in New Zealand. Report of the Chief Inspector of Secondary Schools (Caradus), AJHR, 1943, E-2, p. 3.

29 Evening Star, Wed. 24 March, 1943. ‘The desire of the Minister of Education (Mason) to bring down a Bill to raise the school leaving age revives a prospect that has been suspended for 23 years.’ E2 1952/1b, E8/3/26 - School Attendance. Letter dated 12 May 1941 from Mason, replying to a question about increasing the leaving age to 15 years from the NZWTA ‘You know the difficulty about that, but first it means the staffing and the building. These two problems stand in the way and must be overcome before we can raise the school age to 15. It is the government’s policy to raise it, but things have to be done in order. We cannot do anything immediately ... I cannot promise any result but realize the importance of the problem.’ E2 1946/27a, E29/47/3 part 1-Resolutions and Remits of NZWTA, 1922-46. Letter dated 8 April, 1942. Memo from: Renyard for Director of Education, to Mr. Hocking, Government Youth Centre Christchurch requesting the leaving age be increased to 15 years: ‘I regret therefore that it is not possible to put the regulation into force at the present time.’ E2 1952/1b, E 8/3/26.


After twenty years of protracted negotiations and discussion the University Senate agreed to the introduction of accrediting of the UEE by approved schools from 1944. The University was to sever its close relationship with the secondary schools and in effect the control of the post-primary curriculum will pass over from the University to the Department of Education and the change may well mark a turning point in post-primary education.32

The Department of Education hoped that now its own examination ...the School Certificate would take the place of the University Entrance Examination as the qualification ordinarily demanded by employers.33 The new School Certificate was to be awarded by external examination, after three years post-primary education and administered by the Department of Education. The possible examinable subjects were increased to include practical subjects such as woodwork and clothing.34 The Department of Education announced it was time to develop a curriculum to meet the needs of the ‘new strata of intellect’ and to ensure that it includes ‘...experiences that fit each citizen, whatever his status or his powers, for life in a complex and rapidly changing democratic community.’35 The Chamber of Commerce warned that it would be futile to increase the leaving age to 15 years if the student was not required to learn any more than they did at 13 or 14 years of age.36 The Otago Daily Times commented that:

We are about to extend compulsory education to the age of 15, and all intelligent teachers know what will happen - they will be faced with children who will be unable to reap any material advantage from the special curriculum devised for them ... The new vision proposes that our efforts should therefore be directed to giving these children, as well as all others, a broad basis of

32 E4/1/5. Memorandum from Beeby to Minister of Education, 23 October 1942. E4/1/5 is a Department of Education file. The National Archives have a record of receiving the file from the Department of Education but they can find no trace of its reclassification into their education series files. The transcripts of the documents from this file, referred to in this thesis, were obtained from Logan Moss, Waikato University, who had obtained photocopies of the file in 1989-90, prior to its transfer to the National Archives.
33 ibid., Press release, 5 November 1942 (first of two versions).
34 Thomas Report, p. 80.
culture and knowledge which will serve to illuminate the inner man whatever his calling in life.\textsuperscript{37}

Beeby noted:

She will find herself, in consequence, driven to provide more widely varied courses than ever before if she is to maintain standards in the academic subjects and at the same time give something of educational value to the new strata of intellect for which she will have to cater.\textsuperscript{38}

Mason commented: ‘Not the least of the problems to be faced will be the devising of courses of study fitted to the needs and interests of the non-academic type of [the] 14 year old[s].’\textsuperscript{39}

1.4 The Thomas Committee

In 1942, Beeby asked Mason to convene a consultative committee to look into aspects of post-primary education including the structure of the School Certificate examination.\textsuperscript{40} Beeby was determined that the changes to the post-primary curriculum would have to include a common core of subjects.\textsuperscript{41} The idea of a common core had been suggested in 1936 by Frank Milner, Rector of Waitaki Boys’ High School, at the annual meeting of the Secondary Schools Association. Milner’s ‘core’ had included: English, social studies, general science, health, handwork, art and arithmetic.\textsuperscript{42} Beeby suggested to the Thomas Committee that a common core as proposed by the SSA in 1936 might be useful for a common curriculum.\textsuperscript{43}

Beeby wanted the consultative committee to advise the Minister both on policy and to focus ‘...public attention on the problem.’\textsuperscript{44} Mason in a press release, probably prepared by Beeby, noted that: ‘Freed from the burden of a narrow and irrelevant examination the schools will be able to devise courses having more relation to the

\textsuperscript{38} E2 1943/3b, E29/2/75 part 1 - Miscellaneous Education Systems.
\textsuperscript{39} AJHR, 1943, E-1, pp. 2-3.
\textsuperscript{40} E4/1/5 Memorandum from Beeby to Minister of Education, 23 October 1942.
\textsuperscript{41} C.E.Beeby, \textit{The Intermediate Schools of New Zealand}, Wellington: NZCER, 1938, p. 236.
\textsuperscript{43} E4/1/5. Initial Memorandum to the Thomas Committee dated 12 November 1942.
\textsuperscript{44} ibid. Memorandum from Beeby to Minister of Education, 23 October 1942.
lives of the pupils and to the changing needs of the adult world." The Department of Education hoped to engage public support for its proposed changes by appealing to the universality and non-selective nature of the new School Certificate, thereby providing for the non-academic student such that "The emphasis of the examination will be very different and for the ordinary child without marked academic abilities the education given can be much more real." 

The consultative committee, commonly referred to as 'The Thomas Committee', excluded representatives from 'business, industry, and the professions...' because Beeby felt they would make '... the Committee very bulky: besides which most of the problems are very technical in nature.' Beeby briefed the overall committee by memorandum, asking that they focus on three main areas as follows: the first area to involve identifying the chief aim of post-primary schools, secondly identifying the choice of subjects to be available for School Certificate and finally identifying the compulsory or optional nature of the subject. With regards to the choice of subjects available for the School Certificate Examination, Beeby identified two options for the committee to consider: on the one hand the subject must prepare the student for further subject specialisation and on the other provide a common core of knowledge for 'intelligent participation in communal activities' and Beeby went on to suggest that the 'second seems to me, in the light of recent events, to be the more important.'

The appointment of the Thomas committee personnel had been made on the recommendation of Beeby. The committee was further divided into sub-committees, with the science sub-committee consisting of: H.C.D. Somerset (Joint Secretary), Dr. E. Gregory (Otago School of Home Science), E. Caradus (Chief Inspector of Secondary Schools, Convenor), F.C. Renyard (Superintendent of Technical education), G.R. Ridling (Principal, Wellington Technical School), and others were co-opted as required. The Thomas Committee first met on 25 November, 1942 and deliberated for the following eighteen months, meeting as a full committee on six occasions.

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45 ibid. Press release dated 5 November 1942 (first of two versions).
47 ibid. Memorandum from Beeby to Minister of Education, 23 October 1942.
48 ibid. Initial Memorandum to the Thomas Committee, 12 November 1942.
occasions. Its two joint secretaries, H.C.D. Somerset and Arthur Campbell, were responsible for writing the report. It is not clear the actual input Thomas had into the report’s writing, but correspondence between Somerset and Campbell gives some indication: ‘Had a yarn to Beeby about the final report: he warns us against leaving any of the final write up to W.T.’\textsuperscript{50} Campbell replies: ‘Beeby gave me a similar warning about Thomas and the writing of the report. I think he is being a bit hard on him.’\textsuperscript{51}

The Thomas committee also included the following: Edward Noel Hogben, Headmaster of Wellington College and President of the Secondary Schools Association, who had an interest in Social Studies; Emily Stephens Headmistress of Palmerston North Girls’ High School, who had an interest in Languages; Irene Wilson, Headmistress of Queen Margaret College, Wellington, who appeared to have no specialist area; Arthur Campbell, Director of NZCER, who had an interest in educational theory, Social Studies and comparative education; Richard Gross, President of the Auckland Society of Fine Arts; Thomas Hunter, Vice-Chancellor of University of New Zealand and Dr. Selwyn Morris.\textsuperscript{52} Gross and Morris were not on the original list of proposed members of the Thomas Committee. It would seem that their late inclusion was to ensure that there were representatives from Auckland on the committee.\textsuperscript{53}

Most of the science sub committee had backgrounds in specialist areas of science as follows: H.C.D. Somerset, M.A. Education; Dr. E. Gregory, Ph.D. (Chemistry and Nutrition); E. Caradus, B.Sc. (Chemistry); F.C. Renyard, B.Sc; G.R. Ridling, Diploma in Agriculture.\textsuperscript{54} Caradus had been an Inspector of Secondary Schools since 1937 and Director of Education for the RNZAF (1939-46), and he was Inspector of Post Primary Schools (1946-48).\textsuperscript{55} Dr Gregory had been a lecturer of Chemistry and

\textsuperscript{49} ibid.
\textsuperscript{50} AAVZ W3418, Box 17. Memo, 4 May, 1943.
\textsuperscript{51} ibid., 7 May, 1943.
\textsuperscript{52} E4/1/5. Memorandum to the Minister of Education from Beeby, 23 October, 1942.
\textsuperscript{53} ibid.
\textsuperscript{55} ibid., p. 101.
Nutrition at the University of Otago (1932-40), she was a member of the Social Science Research Bureau (1937-39), and a Professor of Home Science at the University of Otago from 1941. She had also assisted Somerset in his research on *Littledene*. Hugh Somerset had been a part time WEA lecturer for Oxford Publications (NZ) from 1924 to 1936. He wrote *Littledene* in 1938, which was a study of a rural community (Oxford), he studied community and adult education in England, Europe and America under a Carnegie Fellowship and from 1938 he was the Director of the Feilding Community Centre. Charles Renyard had been the Director of Masterton Technical College (1921-23) and was Technical Inspector of Technical Instruction. Randolph Ridling was Director of the Wellington Technical College, Inspector of Manual and Technical Branch (Agriculture) of the Department of Education and a member of the NZCER.

The Thomas Committee recommended that a compulsory core of subjects be taught to all post-primary students for the first three years. The core was to consist of: English language and literature, Social Studies, General Science, elementary Mathematics, Music, a craft or fine art, Physical Education. For girls Homecraft was regarded as a craft. The Committee recommended minimum time allocations per subject and for School Certificate, the student had to have completed three years of post-primary schooling after which they would be accredited in the core subjects. The School Certificate examination was to be sat by candidates in English and three other subjects of their choosing from the list provided. In science, students could sit the examination in general science, biology, chemistry, electricity and magnetism and finally heat, light and sound. This is the first time that a subject called general science had appeared in a New Zealand curriculum. Its core requirements consisted of aspects of physics, chemistry, biology and geology.

56 *ibid.*, p. 165.
57 *ibid.*, p. 318.
58 *ibid.*, p. 290.
59 *ibid.*, p. 293.
61 *ibid.*, p. 13.
63 *ibid.*, p. 36.
1.5 Reaction to the Thomas Report

The Thomas Report had been prepared amidst a period of world crisis, and New Zealand had been quite unique in continuing her educational reforms. The committee’s interim report had not been favourably received by the public, and Thomas prepared a press release demanding from the public a ‘... cessation of hostilities until the official report was published." When the official report was printed there were only limited copies available for reading and comment. Organisations such as the SSA were sent copies for comment but were asked to return them upon completion of their report. Teachers had difficulties gaining access to the report but Mason commented that:

"...We urge most strongly that the report be made available to teachers.... that everything be done to facilitate the holding of conferences .... that by the interchange of ideas, they may arrive at the best means of implementing the recommendations of the report of the consultative committee."  

In 1944 Mason convened a conference to discuss topical educational matters and the Thomas Report was on the agenda. Mason commented that: ‘... in general the strong balance of opinion indicated that the report of the committee could be accepted as a desirable basis for the new curriculum of post-primary school." However not all were happy with the Thomas Report, believing Beeby to be its architect, not the committee, and one letter to the Otago Daily Times commented that:

"I quite agree that academic pomposity and pedagogic arrogance, however backed by blatant self advertisement and juvenile tributes, are incapable of offering a sound defence of our so called “modern education”. Everyone concerned with the question knows that it is the Department of Education, under the guidance of the Director, Dr. Beeby, which is cracking the whip. A good servant does what his master tells him."  

Similarly the Private Schools were against the new mood in education with a representative commenting that:

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64 AAVZ W3418, Box 44, Memo dated 26 July, 1943.  
65 ibid., 18 November 1943.  
67 E2 1947/16a, E29/2/5 part 2, Otago Daily Times, 24 August 1944.

Selective Mechanisms for General Science Education, page no.15
It is a totalitarian doctrine that education is a state monopoly. Except in the Axis countries, there is no precedent for a Government imposing a uniform syllabus and a timetable on schools.68

They had also noted that the Department of Education had managed to gain control of the timetable in every school by dictating curriculum content and stating minimum time allocations, including an average of 2.7 hours per week for general science.69

There was a call for caution, and that the demise of languages might be too high a price to pay for scientific and mathematical literacy.70

While Thomas defended the report, he offered a conciliatory note that in the light of criticism he hoped it would be adjusted:

Our traditional academic education came from England and for many years we followed that traditional system here and we paid every attention to the reports on English education at the present moment.... but we decided that while some recommendations suited here others did not.71

The Thomas Report was to be constrained, as many reports of its type have been and continue to be, by social and economic considerations. Giving teachers greater freedom and flexibility increases the cost of education and without the necessary financial support, teachers will revert to maximizing the use of available resources by ‘chalk and talk’. They will also be constrained by the aspirations of their pupils and parents who have consistently selected external examinations as the measure of a successful education. Parents placed increasing demands on the schools to prepare their children for the School Certificate Examination, just as there had been calls for the UEE, thus only the compulsory core and examinable subjects were taught.

The success of Thomas was always dependent on a supply of teachers who were both well educated and trained, and sympathetic to the new educational philosophy.72 In the case of social studies and general science, sixty years later there is still no tertiary

68 E W2536, Box 4, Statement of the general case against the Report of the Consultative Committee with special reference to the position of the private schools.
69 Thomas Report, p. 12.
71 E W2536, Box 4, Statement by Thomas, 1944.
precedents for these subjects. The content of these two subjects has been open to manipulation by educationalists. The failure of the Thomas Report to be anything more than a limited success was due to factors beyond its control: the public sense of education for ‘getting on’ was as strong sixty years ago as it is today.\textsuperscript{73}

The Thomas Committee had recommended a compulsory core of subjects for all post-primary students, and the core included ‘general science’. The committee had been established by the government to develop a curriculum to better meet the needs of the non-academic student but its members were all educationalists, with the majority showing a commitment to the educational philosophies of the New Education Fellowship. As will be shown, this adherence to the philosophies of the NEF had guided the educational reforms brought about by the Thomas Committee, introducing to post-primary schools a compulsory core curriculum.


\textsuperscript{73} ibid., p. 62.