

**1960/108**

**THE TECHNICAL TEACHERS CERTIFICATE REGULATIONS  
1960**

---

COBHAM, Governor-General

**ORDER IN COUNCIL**

At the Government House at Wellington this 20th day of July 1960

Present:

**HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL**

PURSUANT to the Education Act 1914, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

---

**REGULATIONS**

1. (1) These regulations may be cited as the Technical Teachers Certificate Regulations 1960.

(2) Regulation 11 of these regulations shall come into force on the 1st day of January 1961; and the other provisions of these regulations shall come into force on the day after the date of the notification of these regulations in the *Gazette*.

2. In these regulations, unless the context otherwise requires,—

“The Act” means the Education Act 1914:

“Director” means the Director of Education:

“Inspector” means an Inspector of Schools appointed under the Act:

“Minister” means the Minister of Education.

**GENERAL CONDITIONS FOR AWARD OF CERTIFICATE**

3. The Director may issue a Technical Teachers Certificate in one or more crafts, including woodwork, metalwork, and such other crafts as he may approve from time to time to a candidate who has fulfilled the following requirements:

- (a) He has completed the requirements of the examination for the Technical Teachers Certificate as set out in these regulations, or has passed an examination which in the opinion of the Director is of equivalent or higher status:

Provided that where a candidate has passed an examination which in the opinion of the Director is partially equivalent or where he has, whether before or after the making of these regulations, passed subjects of the Handicraft Teachers Certificate Examination under regulations then in force, he shall be deemed to have fulfilled the requirements of this paragraph on completing such further examination as the Director may deem necessary:

- (b) He has taught for at least two years or, if he has completed a teachers' training course of not less than one year, for at least one year in a permanent teaching position under the control of an Education Board or the governing body of a secondary school, technical school, or combined school:

Provided that teaching service in other schools or classes may, with the approval of the Director and to such extent as he determines, be deemed to fulfil the requirements of this paragraph:

- (c) He has satisfied an Inspector that he shows such ability to teach as would warrant the issue of a certificate; or, instead thereof, he has produced a certificate granted by an authority outside New Zealand which, in the opinion of the Director, is sufficient evidence of such ability to teach:
- (d) He has produced evidence of good moral character.

#### RECOGNITION OF OVERSEAS CERTIFICATES

4. The Director may issue a Technical Teachers Certificate to an applicant holding a Handicraft Teachers Certificate granted by a recognised public authority outside New Zealand who has fulfilled, either or both, as the Director may require, of the following requirements:

- (a) He has passed such subjects of the examination for the Technical Teachers Certificate as set out in these regulations as the Director may consider necessary:
- (b) He has produced such certificates or other evidence as the Director may consider necessary of fulfilling the requirements of paragraphs (b), (c), and (d) of regulation 3 of these regulations.

#### FORM OF CERTIFICATE

5. Every certificate issued to an applicant shall be on a form approved by the Director, and may provide for endorsements showing the special qualifications of the holder.

#### CONDUCT OF EXAMINATION

6. (1) The examination for the Technical Teachers Certificate shall be held each year at such centres as may be recognised by the Director from year to year as suitable and necessary.

(2) Every candidate for the examination for the Technical Teachers Certificate in any year shall give notice, on the application form provided for the purpose, of his intention to sit the examination; and such application shall be addressed to the Director and sent so as to be delivered to the Department of Education not later than the last day of August in that year.

EXAMINATION FEES

7. (1) Every candidate for the examination for the Technical Teachers Certificate in any year shall pay at some money-order office of the Post Office an examination fee in accordance with the scale set out in subclause (2) of this regulation, and shall enclose the receipt when forwarding his application form in accordance with subclause (2) of regulation 6 of these regulations.

|   |             |
|---|-------------|
| (2) The scale of fees shall be as follows:                        | Fee Payable |
|   | £ s. d.     |
| For any subject of a Section .....                                | 0 10 0      |
| For all subjects of a Section, if presented at the one time ..... | 1 10 0      |

SUBJECTS OF EXAMINATION

8. The following shall be the subjects of the examination:

*Section I*

There will be no separate examination for this Section of the Technical Teachers Certificate Examination, but candidates shall be required to pass the following subjects in the examination conducted under the Education (Post-primary Instruction) Regulations 1954\* for the School Certificate:

- (1) English:
- (2) Mathematics:
- (3) Technical Drawing:
- (4) } Two other subjects of the School Certificate Examination, one
- (5) } of which shall be a science subject.

The following provisions shall apply in respect of these subjects for the purpose of meeting the requirements of this Section of the Technical Teachers Certificate Examination:

- (a) The subjects may be taken one or more at a time:
- (b) The minimum mark for a pass in each subject shall be 50 per cent of the total possible marks in that subject:
- (c) A candidate who has been granted a School Certificate or a Certificate of Attainment under the Education (Post-primary Instruction) Regulations 1954\* shall be required to complete any of the said subjects in which he has not obtained 50 per cent of the total possible marks:
- (d) An exemption from the requirement of obtaining a pass in any of the said subjects shall be granted to a candidate who has obtained 50 per cent of the total possible marks in that subject in the School Certificate Examination or has passed the subject in any higher examination approved for the purpose by the Director:

- (e) Where the prescription for any of the said subjects for the School Certificate Examination provides for evidence of practical work, the examination in that subject shall comprise the theory papers only; and a mark of 50 per cent in those papers shall be required to obtain a pass for this purpose:
- (f) The Minister may from time to time, by notice in the *Education Gazette*, specify restrictions in the choice of subjects (4) and (5) of the said subjects which may be offered.

### *Section II*

- (1) Technical Science:
- (2) Technical Drawing:
- (3) Principles of Design:
- (4) English II.

The following provisions shall apply in respect of these subjects for the purpose of meeting the requirements of this section of the Technical Teachers Certificate Examination:

- (a) The subjects may be taken one or more at a time:
- (b) No candidate will be accepted for any subject of this Section until he has completed Section I:
- (c) Courses in any of these subjects will be offered by the Technical Correspondence School:
- (d) Examinations will be set in subjects (1) and (2) only, and to obtain a pass a candidate must satisfy the examiners in those subjects:
- (e) In the case of subjects (3) and (4), a certificate signed by the Principal of the Technical Correspondence School certifying that a student has satisfactorily completed the course for the subject shall be evidence of a pass in that subject.

### *Section III*

- (1) Education:
- (2) Principles and Practice of Teaching:
- (3) Technology (Woodwork or Metalwork or any other craft approved by the Director):
- (4) Two practical tests in wood or metal; or, in the case of a candidate for a certificate in a craft other than woodwork or metalwork, such other practical tests as the Director may approve instead thereof:
- (5) Special study or project design.

The following provisions shall apply in respect of these subjects for the purpose of meeting the requirements of this Section of the Technical Teachers Certificate Examination:

- (a) The subjects may be taken one or more at a time:
- (b) Candidates may take subjects (1) and (2) at any time after completing Section I, but no candidate will be accepted for subjects (3), (4), and (5) of this Section until he has completed Section II:
- (c) To obtain a pass in subjects of this Section, a candidate must satisfy the examiners in subjects (1), (2), (3), and (4), and complete subject (5) to the satisfaction of the Director of Education:

- (d) Any candidate for a certificate in some craft other than woodwork or metalwork who produces evidence that he has obtained a pass in a subject of some other examination which in the opinion of the Director is of a standard equivalent to or higher than a pass in subject (3) or subject (4) of this Section shall be deemed to have obtained a pass in subject (3) or subject (4), as the case may be:
- (e) Any candidate for subject (3) presenting Technology in any craft other than woodwork or metalwork shall give nine months' notice of his intention to sit that subject:
- (f) No candidate shall take subject (3) or subject (4) of this Section in more than one craft in any year.

#### NOTIFICATION OF RESULTS

9. Candidates shall be informed individually in writing of their success or failure in the several subjects.

#### SCOPE OF EXAMINATION

10. The scope of the examination in the several subjects of Sections II and III for the Certificate shall be as follows:

##### *Section II*

(1) *Technical Science* (one three hour paper):

The objective in this subject will be to test the candidate's knowledge of elementary mathematics and science applied to technical subjects.

Stress will be laid on mathematical treatment of the subject but not involving any mathematical processes beyond that already attained by candidates who have completed Stage I.

Familiarity with the following processes will be expected:

Transformation and evaluation of all types of technical formulae; solution of simultaneous linear equations; the plotting of characteristic curves from given or derived data; the choice of scales and use of suppressed zero; and the derivation of the straight line law where applicable.

The examination paper will be in four parts. Part I is compulsory for all, but candidates may choose questions from any two of the other three parts.

##### *Technical Science, Part I: Fundamental Physics (Compulsory)*

The standard units of length and time.

Force and its units; force in tension, compression, and shear; natural resistances of gravitation, friction, and inertia; effects of force; moment; torque; principle of moments; the principles of work, power, and energy.

Work done by torque; transmission of power by belts and gears; transmission of motion by belts and gears; peripheral speeds for cutting tools, circular saws, grinders, drills, and lathes.

Simple machines; mechanical advantage, velocity ratio, and mechanical efficiency; the law of simple machines.

Heat as energy; transmission of heat; expansion of solids; temperature and its measurement; the British Thermal Unit; laws of Boyle and Charles, fundamental gas laws.

Electrical energy; understanding of potential difference, current, and resistance, sufficient for Ohm's law; resistance by ammeter and voltmeter method; heating effect of a current; power and energy; simple treatment of earthing; isolating transformers.

*Technical Science, Part II: Statics and Strength of Materials*

Vector and scalar quantities; composition and resolution of forces; the general laws of equilibrium for any system of co-planar forces. Triangle and polygon of forces; resultant and equilibrant; application to simple machines and frames; Bow's notation; stress diagrams for pinjointed frames, roofs, bridges, and cranes.

Parallel forces; resultant and equilibrant; centres of area and of gravity; centroids.

Elementary strength of materials in tension, compression, and shear; meaning and use of the following terms: stress, elastic limit, ultimate strength, factor of safety; strength in single and double shear.

Hooke's Law; stress and strain; Young's modulus.

Simply loaded beams; reactions, shearing forces, and bending moments diagrams.

*Technical Science, Part III: Hydrostatics and Hydraulics*

Mass and density; determination of density and relative density; specific gravity.

Flotation; principle of Archimedes.

Pressure in liquids; centre of pressure; total thrust.

Head and energy of water; force of a jet; Pelton wheel; lift and force pumps; calculation of horse power.

Transmission of pressure; applications.

*Technical Science, Part IV: Dynamics*

Friction; laws of friction; angle of friction; coefficient of friction; friction dynamometer; indicated and brake horse power; mechanical efficiency of prime movers.

Force, weight, and mass; velocity and speed; displacement, and change in velocity; momentum, and change in momentum; application of vectors to velocity, acceleration, and momentum; Newton's laws of motion; space-time and velocity-time graphs; relative velocity.

Potential energy and kinetic energy; conservation of energy; motion on an inclined plane; force and power required by vehicles on inclines.

Angular velocity and acceleration; kinetic energy of rotating bodies; transmission of power by gearing.

(2) *Technical Drawing II* (one three-hour paper)

NOTE—(a) In the examination, the code of the "Australian Standard Engineering Drawing Practice" will be adhered to until such time as a suitable code of New Zealand standards is adopted for schools. For drawings with projected views first angle projection or the combination of first and third angle projections as set out in the above standard may be used by candidates.

(b) The examination paper may include questions on: interpretative drawing; plane and solid geometry; methods of teaching of topics in the syllabus; schemes of work at various levels; the post-primary drawing

room, its equipment, storage, and general layout; teaching aids for technical drawing; the application of any topic in the syllabus to practical problems.

Exercises on orthographic projection including freehand sketching from given pictorial views or other views supplied; drawing of pictorial views from given orthographic views; axonometric projection; the application of the principles of geometrical perspective; dimension reading exercises; use of line diagrams and simple exploded views.

The above to include any topics in the technical drawing syllabus for School Certificate; and, in addition, the use of sections, including full sections, half sections, and part sections.

Interpreting assembly drawings; taking off quantities (elementary); checking dimensions; locating missing lines; production of detailed dimensioned sketches of some part or parts of the assembly; use of title blocks.

Simple projected and pictorial drawings, either instrumental or free-hand, detailing simple parts used in the woodworking and metalworking trades.

Projection of lines, simple surveys, and locating points by offsets. The circle; properties, tangents, and normals; problems on circles. Joining curves; setting out complex curves and figures; Archimedean spiral; involute; the cycloid, epicycloid, and hypocycloid; loci and their application to mechanisms.

Area of irregular figures; the mid-ordinate rule; enlarging and diminishing plane figures proportionally.

Scales and representative fraction; diagonal scales; isometric scale and its application. Geometrical solids arranged in three views relative to three planes of projection; use of projectors; the auxiliary projection planes; vertical and inclined auxiliary planes; change of ground line; the oblique plane.

Development of cylinders, cones, pyramids, prisms, truncated cones, pipe elbows and bends.

Use of triangulation methods in square to square, round to round, and square to round. Interpenetrations of solids and intersections of their surfaces including two cylinders intersecting and intersection of cone by planes.

Oblique planes; lines of intersection of two planes; angles made by oblique planes with horizontal plane and vertical plane; dihedral angles.

Methods of assessing and marking drawings.

### (3) *Principles of Design*

A correspondence course will introduce the principles of good design through a series of assignments which will discuss the various aspects of design.

This subject does not set out to train industrial designers as such but it should lead to a better understanding, appreciation, and application of good design in the teaching of technical subjects.

The assignments will include carefully chosen examples and exercises. The syllabus will cover the following:

*Basic Design*—An introduction to the principles of design through—

(a) An exploration of the possibilities of line:

(b) The use of colour:

(c) Experiments with simple shapes or forms, and the use of surface textures and contrasting materials.

*Design Procedure*—The preparation of design sketches, arrangement drawings, models, detail drawings, prototypes, as influenced by:

- (a) Appearance:
- (b) Function:
- (c) The materials available:
- (d) The means of production.

#### (4) *English II*

The syllabus is as follows:

*Vocabulary*: Use and misuse of words, common errors.

*Style*: Clarity, conciseness, precision and effectiveness of written and oral expression, avoidance of jargon, logical development of ideas.

*Criticism*: Emotive and expository writing, recognition of relevancy.

*Notes*: Condensation of prose to precis or notes; note taking; transcription from verbatim notes to succinct prose.

*Reports*: Reports, memoranda, letters. Use of diagrams, tables, and graphs.

*Description*: Concise descriptions, without sketches, of simple articles and mechanisms.

*Committees*: Use and misuse of committees, conduct of meetings, duties of chairman, preparation of agenda and minutes.

*Speeches*: Preparation of speeches, typical short speeches such as a vote of thanks, report on an incident, expert evidence.

### *Section III*

#### (1) *Education* (one three-hour paper)

The general and specific aims of education in relation to the individual as a person and to the individual as a member of a social group. Characteristics found at different stages of child development; interests, tastes, abilities, and weaknesses. The organisation and aims of the different stages of education, including primary, post-primary, and further education. Cultural and vocational education.

Characteristics of a good school, the role of the teacher; the qualities of a good teacher.

Outline of the structure of the educational system in New Zealand with special reference to the functions and internal organisation of the post-primary schools. Organisation of courses in the post-primary schools, with special reference to technical courses for both full-time day students and for day and evening further education classes. The purpose of technical education and its place in the educational and industrial structure of the country.

The development of the Technical School in New Zealand from 1850 to the present day; the influence of examining bodies on the development of vocational courses for further education.

A knowledge of the functions of the New Zealand Council for Technical Education. The Technicians Certification Act 1958, the Technicians Certification Authority and its Executive Committees.

Functions of the New Zealand Trades Certification Board and other National Boards conducting examinations, e.g., the Plumbers' Board of New Zealand.



The Apprenticeship Commission 1944 and the effect of its findings on the apprenticeship system in New Zealand. The functions of the New Zealand and Local Apprenticeship Committees and the part played by employer and employee associations in the development of technical classes. Aims of vocational training.

The functions of the Technical Correspondence School, the Central Technical College, and Regional Technical Colleges.

The integration of technical courses in post-primary schools with other subjects in the curricula, and the allocation of time for the various subjects.

(2) *Principles and Practice of Teaching* (one three-hour paper)

General principles underlying modern educational practice. The significance of meaning and purposeful learning; students' need of opportunities for the exercise of initiative and responsibility, and of learning to work together.

Individual differences: the slow learner, the naturally gifted pupil, and others who present special problems in the teaching of craft work.

School, classroom, and workshop organisation for learning and teaching: grouping in classes and grouping within a class; the place and purposes of the class lesson; group work, individual work, and the technique of each; supervision, control, and safety in the classroom and workshop; the use of colour; class organisation in the workshop; assignment of duties; special requirements for workshop planning; storage of equipment, tools, and materials; issue and recall of equipment and materials; maintenance; the keeping of records.

The uses and preparation where applicable of teaching aids, including textbooks, class and school libraries, illustrative materials, bulletin boards, displays, chalkboard, models, audiovisual aids, slides, film strips, job cards, instruction sheets; the value of excursions.

Preparation of schemes of work for technical and craft courses at various stages; the influence of environment and regional characteristics; coordination of stages and with other subjects; selection and arrangement of subject-matter; provision for class, group, and individual teaching, and for the encouragement of originality in the pupils.

Principles for the preparation and presentation of a lesson plan, selection of relevant subject-matter and teaching aids; aims and development of logical sequence; mode of introduction of new materials, processes, and skills.

Principles and purpose of teaching, including practical tests, kinds of tests, qualities of a test; oral questioning and discussion; written questions, setting, marking, and follow up; devising and marking practical tests; recording of individual progress.

The place of written work and home work in craft teaching. Use and purpose of elective work in the workshops. Craftsmanship as an ideal in the school shop and the cultivation of pride in work.

(3) *Technology (Woodwork or Metalwork)* (one three-hour paper)

(A) *Woodwork*

NOTES—(a) Candidates will be expected to make full use of hand sketches to illustrate their written answers and to be able to use this method of illustration freely and effectively.

(b) Questions set on any section of the work may include reference to lesson planning and teaching.

*Tools:* The description and classification of woodworking tools; reasons for the selection of certain tools for school woodwork rooms in preference to others; care, sharpening, and maintenance; including safe methods of handling and proper methods of manipulation; mechanical principles underlying their construction and use; historical development of tools; points to be observed in the examination of tools to ensure the selection of those of satisfactory quality.

The importance of sequence in the introduction of tools in a course; the organisation of tool placement and the use of shadow-boards, peg-boards, and racks in the school woodwork room.

*Machine Tools:* The use of machine tools and their accessories in woodwork rooms; principles of siting machines; safety in relation to machines and electrical equipment; a knowledge of the Woodworking Machinery Regulations 1956\*; the care and maintenance of the following machines and their accessories: the circular saw, surface planer, thicknesser, bandsaw, lathe, horizontal boring machine, drill press, sandstones and grinders.

*Timber:* The timber tree, its growth, classification, geographical distributions; felling and converting; preparation into market forms; grading and measurement of timber in accordance with New Zealand standard specification No. 169; identification of timber from indigenous and exotic trees and imported timber commonly used in New Zealand with special reference to the suitability of such timbers for school projects and for decoration; knowledge of the cellular structure of timber trees as shown by a microscopic examination; the difference between hardwoods and softwoods; the common methods of seasoning, both natural and artificial (as used in New Zealand); shrinkage; the influence of dimensional stability and characteristics on the construction methods; defects, timber pests, preservation of timber, processes (Ref. Timber Preservation in New Zealand—Timber Preservation Authority); storage of timbers in the school.

*Materials and Construction:* Characteristics and uses of the materials used in the school woodwork room, including plywood, coreboard, blockboard, chipboard, hardboard, veneers, and plastics; costing of projects.

Forms of construction; common woodwork joints and more advanced joints including mitred bridle joint, mitred mortise and tenon, lapped and secret dovetail, haunched and double-shouldered mortise and tenon joints (set back, forward, or sloped).

Suitable sequences of work including the application of processes and joints on projects of good design at particular stages of a student's course.

The preparation and uses of the various kinds of glue; abrasives and their uses; details of sizes and uses of nails, screws, and simple fittings, and their proper application. The preparation, cutting, and laying of veneers. Suitable finishes for timber projects.

#### (B) *Metalwork*

NOTES—(a) Candidates will be expected to make full use of hand sketches to illustrate their answers, and to be able to use this method of illustration freely and effectively.

(b) Questions set on any section of the work may include reference to lesson planning and teaching.

The common tools and methods of procedure employed in simple bench metalwork; principles of construction and materials used in the manufacture of such tools; their care and maintenance, including safe methods of handling.

Characteristics, uses, and commercial forms of materials such as metals, alloys, plastics, solders, fluxes, abrasives, oils, and acids, commonly used in metalwork; simple tests for identification and quality of such materials for the various uses to which each may be put in a school workshop; costing of projects.

The processes commonly employed in simple metalwork, including raising, hollowing, and elementary decorative work. A thorough knowledge of fundamental operations in simple forging, moulding, casting and heat treatment; soldering, brazing, riveting, oxy-acetylene welding, simple electro-plating and anodizing. Safety precautions.

Engineering measurements; standards of length; the rule, straight edge, surface plate, vernier, micrometer, dial indicator, and spirit level.

Metal cutting tools, including the built-up edge and tipped-tools; principles of metal cutting; speed and feed; cutting fluids; materials for cutting tools, tool angles and shapes; form tools; tool grinding and the choice of wheel.

The lathe; types of lathe for school shops; constructional details; lathe accessories; types of lathe work, speeds, feeds, and depth of cut; screw cutting; taper turning, lathe alignments; care of machine tools. Safety precautions.

The drilling machine; drills, reamers, countersinks, and counterbores; portable drilling machines; sensitive, pillar, and radial drilling machines. Safety precautions.

The shaping machine; details of the shaping machine; principle of quick-return mechanism; types of work; cutting speeds. Safety precautions.

The bench grinder; abrasive wheels, abrasives, bond, grade, grit, British standard markings, mounting of wheel. Safety precautions.

The equipment of metalwork shops for simple metalwork, including the storage and racking of tools and accessories; the application of electric motors for driving machine tools; speeds required for different machines; the installation and maintenance of equipment in a school shop; purchase and storage of materials; storage of work in progress.

#### (4) *Practical Tests*

##### (A) *Woodwork* (two tests each of four hours)

Tests may be set to include any of the materials and constructions set down in Technology (woodwork) Section III, part (4), including decorative processes within the range of students up to and including Form V, together with inlaying, and the making of mouldings with either small moulding planes or with the scratch stock.

Candidates will be expected to know proportions of constructional joints as this information may be omitted from the examination paper.

The tests may be set in hard or soft wood and the pieces of wood must be provided by the candidate to a specification furnished by the Department.

A list of the tools which may be used by the candidate will be furnished by the Department and no others will be permitted. These tools must be brought by the candidate to the examination, unless he has assured himself that they will be supplied by the school controlling the examination centre and will be available for his use.

NOTE—No machine tool operated by foot or mechanical power may be used in the examination.

(B) *Metalwork* (two tests each of four hours)

Tests may be set to include the use of any of the hand and machine tools usually found in a post-primary school metalwork shop.

Shop processes commonly employed in metalwork projects within the range of students up to and including Form V, including seaming, wiring, raising, hollowing, embossing and elementary decorative work; fundamental operations in simple forging, heat treatment, bending, soldering, brazing, riveting, and oxy-acetylene welding.

A list of the tools which may be used by the candidate will be furnished by the Department and no others will be permitted. These tools must be brought by the candidate to the examination room unless he has assured himself that they will be supplied by the school controlling the examination centre and will be available for his use.

NOTE—The lathe and drilling machines may be used only where specified.

(5) *Either*

(A) *Special Study*

(a) The candidate shall submit the title and an outline of his special study to the Director of Education for approval.

(b) The special study should be designed to make some contribution to craft teaching in an intermediate school, in a post-primary school, or in technical classes.

(c) Candidates may use sketches, illustrations, and graphs.

(d) The study, which must be original, should be forwarded in type-script to the Director of Education, Wellington, at any time after completing the other Section III subjects.

or (B) *Project Design*

The object of this is to design and draw a project suitable for construction by day school pupils up to and including Form V.

(a) The candidate shall submit a brief description of the project to the Director of Education for approval.

(b) The project should be designed in either wood or metal or both, or a combination of wood or metal with any other material used in the school workshops.

(c) In planning the project, special attention should be paid to the fundamentals of good design and the fitness for the purpose for which it is designed.

(d) The design, which must be original, should be forwarded to the Director of Education at any time after completing the other Section III subjects.

- (e) The project design must include the following:
- (i) Such scaled orthographic drawings as are necessary for the construction of the project.
  - (ii) Such further drawings in the form of freehand sketches as are necessary to show all details of construction.
  - (iii) All drawings must be fully dimensioned and lettered.
  - (iv) In the case of woodwork projects, a perspective drawing, and for metalwork projects, a pictorial sketch.
  - (v) Written instructions must accompany the drawing and should be such that a student who has previously been taught the processes involved could make the project without further help from the teacher. Instructions should be brief, in sequence, and in tabulated form.
  - (vi) A schedule of quantities required to make the project.

#### REVOCATIONS

11. (1) The Handicraft Teachers Certificate Examination Regulations 1939\* are hereby revoked.

(2) Without limiting the provisions of the Acts Interpretation Act 1924, it is hereby declared that the revocation of any provision by these regulations shall not affect any document made or any thing whatsoever done under the provision so revoked or under any corresponding former provision, and every such document or thing, so far as it is subsisting or in force at the time of the revocation and could have been made or done under these regulations, shall continue and have effect as if it had been made or done under the corresponding provision of these regulations and as if that provision had been in force when the document was made or the thing was done.

T. J. SHERRARD,  
Clerk of the Executive Council.

\*S.R. 1939/172

---

#### EXPLANATORY NOTE

*This note is not part of the regulations, but is intended to indicate their general effect.*

These regulations provide for the issue of Technical Teachers Certificates in woodwork, metalwork, and other crafts. The regulations prescribe the examinations for the Certificates, and the scope of the examination in the various subjects. The regulations take the place of the Handicraft Teachers Certificate Examination Regulations 1939.

---

Issued under the authority of the Regulations Act 1936.

Date of notification in *Gazette*: 21 July 1960.

These regulations are administered in the Department of Education.