National Council of the Pottery Industry
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of enquiries into and recommendations
made in connection with certain questions arising out of the Education Act, 1918, having special regard to appropriate education for Juvenile Pottery Workers.

July, 1919.
JULY, 1919.

National Council of the Pottery Industry.

**FIRST REPORT**

Of ENQUIRIES into, and RECOMMENDATIONS by the Research, Inventions and Designs Committee, in connection with certain questions arising out of the Education Act, 1918, having special regard to appropriate education for Juvenile Pottery Workers.

The Education Act, 1918, requires any Local Education Authority when preparing a comprehensive scheme of education for its area, to consider any "representations made to them by parents, or other persons or bodies of persons interested" Sect. 4 (2). As certain provisions of this Act are bound to have an influence on the Pottery Industry, in common with all other industries, it seemed desirable that your Research, Inventions and Designs Committee should draw up a report which might not only outline a suitable scheme of education for all persons occupied or interested in the industry but also serve as a vehicle for suggestions to suitable Local Education Authorities, so that in the preparation of their schemes due regard might be paid to the educational needs and general convenience of the industry.

Though it will be well for each member of the Council to read the Act as a whole, it may prove useful if certain of its more important provisions are epitomised here. After an "appointed day" not yet fixed, but probably not far distant, which need not be the same for all parts of the Act, nor all parts of England, the education of every young person must be continued until the age of 14 and after seven years from the "appointed day" the age will be raised to 18. The education must be full time until the age of 14 and continued after that age for at least 320 hours a year, unless the Local Education Authority by resolution fix it at 280 hours—but any such resolution will only hold good for seven years from the "appointed day."

The 320 (or 280) hours each year must be distributed as regards times and seasons as may best suit the circumstances of each locality.

Unless a young person is under suitable and efficient instruction for at least the number of hours in the year which this Act requires, the young person is bound to attend continuation school on such days at such times as the Local Education Authority may require.
The attendance of any young person may not be required on Sunday, nor during any holiday or half holiday to which by any enactment regulating his employment he is entitled, nor so far as practicable during any holiday or half holiday which in his employment he is accustomed to enjoy, nor between the hours of seven in the evening and eight in the morning.

The Local Education Authority may require that the employed young person's employment shall be suspended on any day when his attendance at school is required—not only during the period for which his attendance is required, but for such other part of the day (not exceeding two hours) as the Authority consider necessary, in order to secure that he may be in a fit mental and bodily condition to receive full benefit from attendance at the school.

The Local Education Authority may not, without the consent of a young person, require him to attend any continuation school held at or in connection with the place of his employment, and any such school must be open to inspection either by the Board of Education or by the Local Education Authority—and be efficient.

No child within the meaning of the Act (that is under 14 years of age) shall be employed in any factory or workshop to which the Factory and Workshop Acts 1901—1911, apply.

If any person employs a young person in such a manner as to prevent the young person attending a continuation school which he is required to attend under this Act, or employs a young person at a time when in pursuance of any requirement under this Act issued by a Local Education Authority, the employment of that young person must be suspended. He shall be deemed to have employed the young person in contravention of the Employment of Children Act, 1903.

The effect of Clause 10 of the Act—which compels the attendance of young persons at continuation schools to be gradual, so far as industry is concerned.

Every young person above the age of 14 on the "appointed day" will be exempt from compulsory attendance, hence nobody actually employed in the industry will necessarily be affected.

After the "appointed day" every recruit to the industry between the ages of 14 and 16 will have to attend some form of continuation school. In the first year after the "appointed day," few, and only those between 14 and 15 years of age will be affected; in the second and subsequent years "young persons" either 14 or 15 but not 16 years of age must continue their education. After a period of seven years from the "appointed day," during which time industry will have had some opportunity to adapt itself to the changed conditions, the clause will affect "young persons" 16 and then 17 years of age in a similar manner.

Before attempting the construction of a Scheme of Education for persons occupied in any capacity in the Pottery Industry steps were taken to determine on what probable foundation the Scheme might be laid—particularly in view of the new condition that no child will be allowed to leave school until the age of 14 has been reached.
With this object in view the Committee interviewed certain gentlemen possessing considerable experience of elementary schools, from both the teaching and administrative points of view, and collected information in other ways.

There were, perhaps naturally, certain discrepancies in the evidence received, but it appeared to be generally admitted that the product of the elementary school is less satisfactory than is desirable.

Although conditions during recent years have improved, the following among several contributory causes were suggested:—

I. The insufficient supply or the unsatisfactory nature of school buildings.

II. Shortcomings in number, quality and training of teachers.

III. Excessive size of classes:
Figures were submitted which shewed that conditions in this respect varied a good deal; the average number of pupils per class appeared at first sight satisfactory, but further investigation established the existence of classes of 60 or more which were balanced on the average by small classes.

IV. Grouping of higher standards in certain schools.
This undoubtedly led to inefficient use of time by the scholars and precluded the use of good educational methods by the teachers in some cases.

V. Lack of suitable buildings or rooms and necessary equipment for various forms of practical work.

VI. Lack of parental interest in the educational welfare or progress of children.
As evidence of the tendency of parents to remove children from school, figures were submitted shewing that in one school only 5% of the children remained after the first day on which they could legally leave school, without any regard to their educational condition or mental promise.

One head master stated that it was a very unusual thing for a parent to make any enquiries about the progress of a child or ask for what sort of occupation a child was best fitted; other witnesses thought this an overstatement of the general case.

It was admitted by the majority of the witnesses that far too great a proportion of the scholars left the elementary schools not only without a desire for any further education but fairly frequently with a definite distaste for it.

Attempts to find a reason for this met with little success; it was pointed out that the children with brains and ambition, fortunate in the possession of interested parents, passed from the elementary schools to the secondary schools so far as the free place system permitted, and that those leaving the elementary schools in the ordinary way represented all the worst and by no means all the best.
When every allowance was made for this selective effect, it did appear that there were conditions which prevented even the inspiring teacher from exercising to the full his powers over his pupil and in other cases strengthened a tendency to the use of uninspiring methods.

There were cases too where boys who had got to the top of the school were under rather depressing influence and found few opportunities for reasonable activity and self-expression. Probably they associated education with confinement of mind and body and looked forward to "leaving school" as an opportunity to regain liberty—a liberty they were indisposed to use in an educational direction.

It was agreed that in time the operation of the Education Act 1918, and the Teachers' Superannuation Act, 1918, should bring about a definite improvement in most respects.

Given a better supply of properly trained and well qualified teachers freer from economic anxieties, a sounder and more stimulating tone should be given to all teaching; and with improved premises and adequate equipment the better teacher should have a better chance to employ more enlightened methods. With their health and general conditions properly looked after, with meals or opportunities to take meals provided when necessary, with school libraries and reasonable recreative opportunities available, with an assured attendance at school until the age of 14 at least and with better and obvious openings for further education, the scholars should respond more freely to suitable instruction and natural rather than repressive discipline.

But parental interest will still remain a very important factor and if the greatest good is to be derived from improved conditions, there must be an awakening and reinforcement of intelligent parental interest.

Of considerable importance to the Pottery Industry was evidence to the effect that though the elementary school curriculum was good for those pupils who completed it—and that it was in fact completed by a good proportion of capable boys and girls by the age of 12—in one important area 40% of the pupils never got beyond Standard IV before they reached the school leaving age. Further enquiries shewed this to be a high figure; other areas indicated 20% or less.

It was shewn too that whilst few children from Standards VI and VII entered the industry, the great majority of entrants to the industry came from Standards IV. and V.; in other words the industry is being recruited to a seriously large extent from the "sub-average" child.

This provides at once an economic and an educational problem. This is not the place to discuss the economic problem; the educational problem simply stated, is, what could and should be done with the scholars who develop so slowly, or respond so unreadily to the normal type of rather literary education, that they never get more than half way through the elementary school programme?
If it were not a matter of fairly common knowledge, ample evidence exists that there is a type of child—and a by no means unintelligent type—that responds to and therefore develops more readily under the influence of practical work than of literary work; it expresses itself better through handwork than through its tongue or its pen. This type, discouraged by its apparent failure to make similar progress to other children, and depressed by repeated assurances that it is a dunce, sinks into a state of apathy; brain development is retarded, and initiative—small though it may have been—is lost, and the result is an individual of small productive capacity—an encumbrance rather than an asset to the State.

On the other hand there was evidence to show that when suitable practical work—together with a reasonable amount of literary work—was given to these scholars, the discovery "I can do something after all" acted as a definite stimulant, resulting in character change, increased self-expression and development of the individual.

After a careful consideration of the evidence, information and statistics placed before them, the Committee recommend the Council of the Pottery Industry to urge Education Authorities to make provision in their schemes so far as elementary education is concerned for due attention to the following important matters.

The Committee quite appreciate the difficulties in the way of provision of permanent buildings on any large scale at the present time and they are not unmindful of the paramount importance of the Housing problem, but they urge that due proportion should be observed and that where permanent buildings cannot for good reason be erected, temporary accommodation should be devised.

They recommend that

I. Steps should be taken to establish, train, and maintain an efficient teaching service.

The uncertificated teacher of general subjects should ultimately be eliminated, and the teacher of practical subjects have some suitable training and qualifications.

II. The supply of schools should be so increased that there is room for each child who needs it; the floor space for each child increased so that it more nearly approaches the provision commonly accepted as necessary in secondary schools; and the accommodation be so balanced that promotion from one department to another, or from one standard to another can proceed without hindrance.

III. The relation between available teachers, school accommodation and pupils should be so determined, that except for some temporary and strong reason, no class in general subjects should exceed 40, and in practical subjects, 20, even though this should require the re-modelling of certain existing schools.

IV. Provision of advanced instruction for older and more intelligent children by means of central schools should be regarded as a more or less temporary expedient; these schools should in course of time be replaced by or develop into real secondary schools.
V. Very great importance should be attached to the provision of facilities for practical instruction suitable to the ages, abilities and requirements of the children. This should be regarded as a very urgent matter.

For smaller schools it appears necessary that the instruction in wood and metal work and in domestic subjects should be given in well-equipped special Handicraft Centres, but it is clearly to be desired that whenever and wherever possible, each school should be a self-contained fully equipped institution, so that the practical work may be as natural a part of the work of the school as English; not a special and rather alien subject dealt with by a teacher not on the school staff in a building not part of the school. Every child should have some practical instruction; not merely for part of its school life—but through the whole of it; and the practical work should be graded in nature and difficulty in a suitable manner.

There should be an adequate supply of equipment and apparatus.

VI. Arrangements should be made for observing and dealing with dull, backward, abnormal or defective children.

VII. The provision for playgrounds, baths and school libraries should be liberal; physical training, including swimming and children's games should be properly organised; evening play centres, holiday and school camps encouraged.

VIII. There should be suitable arrangement for provision of meals for children attending the school.

IX. A school medical service should be properly developed, due regard being paid to the wording of the Education Act, Section 18 (1) which refers to making provision for "the medical inspection and treatment of children."

X. The law relating to the employment of school children should be rigidly enforced and powers under the Choice of Employment Act (1910) should be taken and used.

XI. Arrangements should be made by scholarships or otherwise so that the spirit of that part of the Act which requires that the scheme must make "adequate provision to secure that children . . . shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting by reason of inability to pay fees."
Proposed Scheme of Education
for persons occupied or interested
in the Pottery Industry.

The Educational Scheme of the future will be a comprehensive matter and may be divided conveniently into two portions:—

I. A part dealing with compulsory education.

Arrangements to meet the requirement that every child must attend school full time until the end of the school term in which the child reaches the age of 14; between the ages of 14 and 16 must attend some efficient school for at least 320 (or 280) hours a year; after 7 years from the "appointed day" this requirement will also apply to young persons under 18 years of age.

II. A part dealing with voluntary education.

The compulsory part will be supplemented by provision for

(a) Full time attendance at Elementary School or Secondary School, beyond the age of 14, Junior Technical Schools or other suitable Institutions and Universities.

(b) Part time attendance in the day time at Art Schools, Technical Schools or Local Colleges, or at other institutions able to offer classes or courses in the subjects necessary for a liberal education.

(c) Part time attendance in the evening at suitable Evening, Art and Technical Schools or Local Colleges.

(d) Part time attendance at University Extension Lectures, Tutorial Classes under the supervision of a University or University College; or other courses or classes established by organisations interested in the promotion of liberal studies.

The Committee have so far been able to consider only the compulsory part as it affects young persons from 14 to 16 years of age.

At the outset there were certain fundamental questions to determine.

1. Should the work done in the compulsory continuation school be entirely non-vocational, partly vocational or entirely vocational?

The aim of education should be to develop the character, conscience and all the useful physical and mental powers of the individual, so that he may be of the greatest value
to the community. He should not merely be given knowledge whether of fact, principle or process; he should be led to have an appreciation of the value of knowledge, the desire and ability to acquire it, and the judgment to use it. The primary aim should be to produce in all senses a better individual: the logical consequences a better employer and a better workman.

We recommend therefore, that the work should be non-vocational, though in suitable ways illustrations of the application of general principles to processes of industry should be given and references made to the materials employed, but no definite trade teaching should be allowed.

II. Should the minimum of 320 hours per year, or the alternative of 280 hours per year for seven years be accepted?

We recommend that 320 hours per year be accepted and regarded as a minimum, to be supplemented so far as may be convenient to districts, industries and persons by voluntary day or evening instruction, which may be of a vocational type.

III. How should the 320 hours be distributed through the year?

The Act gives the fullest elasticity in this matter: it says "distributed as regards times and seasons as may best suit the circumstances of each locality."

There are many possibilities: full time education for say 12 weeks a year—half time for 24 weeks—the often mentioned "8 hours a week for 40 weeks"—one day or two half days or short periods on more than two days each week are all within the meaning of the Act.

This is clearly a matter in which Local Education Authorities must consult the reasonable convenience of industry; and individual industries may have to consider the claims of industries which may or may not have similar interests.

After careful consideration of the question from the educational and industrial points of view we recommend that for young persons engaged in this industry, the best arrangement will be for instruction to be given for 46 weeks in the year, for 7 hours in one day.

This does not mean that all young persons in the industry in any educational area shall attend on the same day of the week, but that each young person shall attend one fixed day in each week, the actual day to be chosen so far as may reasonably be done, to suit the convenience of the employer and the young person interested. It should be understood that the right to fix the day when the attendance of any young person is required, is definitely assigned by the Act to the Local Education Authority.

IV. In what premises should the instruction be given?

So soon as conditions render it possible, special buildings should be provided: for a time temporary accommodation must be accepted in the general case, but we recommend that elementary school buildings in use for elementary
school purposes should not be accepted as satisfactory for temporary use for continuation work.

Arrangements for this instruction in works or parts of works should only be accepted with the strongest safeguards, and even then provided only that definite premises are assigned or erected for the special purposes of a school—suitably staffed and equipped—and that the curriculum is at least as efficient as that provided by the Local Education Authority.

Premises—whether temporary or permanent—should embrace among other things proper accommodation for the teaching of science and practical work of a suitable type, and for physical instruction.

The Final Report of the Departmental Committee on Juvenile Education draws attention to the need for developing corporate life in the continuation school. It is pointed out that the school should become a centre for the self-directed activities of its students, and that its buildings should serve as a home for clubs, debates, study circles and other forms of social life.

By reason of the home life conditions of young persons of the industrial classes it is very desirable that those who attend continuation schools should be able to use some part of the building for such voluntary study or homework as may arise from their desires or their instruction. Provision should be made for this and also for voluntary evening classes supplementary to the day time instruction.

As the whole question of continuation school buildings is the subject of a report issued by a committee appointed by the President of the Board of Education, it did not appear that we could pursue this matter further with advantage.

The Teachers.

It is self-evident that the measure of success secured by continuation schools, will depend more upon the extent to which the right type of teacher is secured and trained than upon any other factor: they can make or mar the scheme. The successful teacher must be a person of high ideals and wide outlook—must possess a sympathy with and an understanding of the adolescent—should have a knowledge of the conditions in which the continuation scholars live and work, and should be able to present the subjects dealt with in a simple and attractive form; should be a teacher rather than a lecturer—a respected friend.

It is most important that the responsible bodies should set about attracting suitable men and women and devise schemes for their training.

It is understood that a special committee has been considering the question of training continuation school teachers, and that, we feel to be a matter for experts, not for this Committee.
Size of Classes.

In the general case the number of pupils in a class should not exceed 30: for practical subjects a class in charge of one teacher should not exceed 20—a smaller number, say sixteen, is preferable. It is recognised that in certain subjects—for example, singing—some amalgamation of classes may prove convenient and efficient.

Curriculum.

Whilst the selection of the actual subjects to be taught, the methods of teaching to be employed and the arrangement of the time table must in practice be the business of the Local Education Authority, the School and the Teachers concerned, certain general considerations demand attention.

No very recent statistics are available—if figures for present conditions could be obtained they would be valuable— but according to the census of 1911, there were in the Earthenware, China, and Porcelain industries—

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1361</td>
<td>1654</td>
<td>2075</td>
</tr>
<tr>
<td>1492</td>
<td>1873</td>
<td>3365</td>
</tr>
<tr>
<td>1504</td>
<td>2072</td>
<td>3576</td>
</tr>
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The great majority of these young persons are employed in some work connected with the actual manufacture of goods; relatively few are engaged in office work.

Practically all the boys are initially employed as handle-makers, cup bailers, mould runners, warehouse lads and "straw boys"; in course of time they pass on to plate making, hollow ware jiggering, turning, mould making, saggar bottom knocking and packing.

At the age of about 15 some boys may become saggar house lads, later on becoming dippers or placers; dippers' helps may become dippers; other boys employed on the kilns may become firemen or setters.

The girls start as handle makers, cup gummers, cup bailers, mould-runners, ware brushes, or carriers in the biscuit warehouse, ware cleaners and paperers in the glost warehouse, gilders, enamellers or printers' cutters.

Although a large proportion of those who stay in the Industry will ultimately be engaged in some skilled or semi-skilled work, their work on entering the industry is in the main of an unskilled type. Taking these facts into consideration with the evidence that a large proportion of the young persons entering the industry are of low educational standard, it appears desirable that attempts should be made to develop reliability and a sense of responsibility, carefulness and accuracy, and to stimulate a reasonable interest in and a wider outlook upon life.
Suggested Courses. On the assumption that attendance will be for 1 day of 7 hours per week.

For the majority of the boys a General Course consisting of:
- English 2 hours.
- Physical Exercises 1 hour.
- Hygiene ½-hour.
- Arithmetic and Calculations 1 hour.

should prove valuable.

For those boys whose educational condition is suitable an Industrial Course, consisting of:
- English 1 ½ hours.
- Physical Exercises 1 hour.
- Hygiene ½-hour.

For girls, two courses should be arranged.

Course A.
- English 1 ½ hours.
- Physical Exercises 1 hour.

Course B.
- English 1 ½ hours.
- Physical Exercises 1 hour.
- Singing ½-hour.

For girls engaged, or likely to be engaged in decorative work, Course "A" is recommended.

Young persons engaged in office work, likely to continue in that work, would attend any suitable Commercial Course, which might be constituted as follows:
- English 2 hours.
- Physical Exercises 1 hour.

Hygiene might be introduced by allowing 1 ½ hours for English.

The instruction implied by the word English in the above Courses should

(1) be devised to give the student the ability to understand or express ideas, purposes or directions clearly; to develop the power to acquire ideas from books; to give an appreciation of the value of reading and a love of good literature, and an understanding of the English language.

There should be opportunity for oral discussion, and great care should be exercised in the choice of subjects for composition. Instruction in formal Grammar should arise naturally out of the student's own composition or from some book selected for general reading.

Home reading and the use of libraries should be encouraged.

(2) Include some suitable treatment of general geographical and historical matters, likely to lead to a clear conception of the present conditions of life and industry: how those conditions have arisen and how they may be improved.
Young students require a series of vivid pictures rather than a closely connected list of events and dates.

Stimulating treatments of discoveries and inventions with the life stories of the men who made them: descriptions of great trade routes or popular movements—not only in England—are capable of inspiring the students and giving them a foundation upon which more systematic study may be based.

The arithmetic, calculations or mathematics, should be practical and amongst other things deal with problems likely to arise in the everyday life of the students.

Complicated fractions, long decimals, and impracticable quantities and prices and wearisome methods should be avoided. Quickness of reasoning, shortness of method, neatness and accuracy should be encouraged. Every reasonable use should be made of measurements made by or information acquired by the students themselves.

Algebra and Geometry should not, at any rate at first, be taught as specialised subjects; they should arise quite naturally from the general consideration of constructions and problems.

Enough drawing should be done to lead to the understanding of a simple plan and elevation.

The Science should deal with the simpler principles of Physics and Chemistry, but it is undesirable that these subjects should be divided off from one another. So far as possible each piece of work should lead up to its successor. The method should be experimental and observational and it is essential that the students should do the utmost for themselves. Lectures are of small value; young persons require teaching not lecturing. A careful study of air and water, some knowledge of heat and mechanics, and a consideration of the properties of some of the commoner materials used in the industry will afford a suitable introduction to the more formal Physics and Chemistry of later courses.

Manual work in wood and iron should aim in the first place at training hand and eye, should develop accuracy, dexterity and resource.

There should be no attempt at trade teaching; if a series of exercises end naturally in a constructive piece of work so much the better, but teaching and training effects should not be sacrificed to a desire “to make something.” On the other hand there should be reasonable elasticity and care taken to provide opportunity for self expression. It is assumed that the importance of drawing in connection with manual work will be universally recognised.

Hygiene should be regarded as of first importance and the instruction should be designed to develop a sense of the great importance of the application of hygienic principles to personal, home and factory life, and the observation of all rules and directions likely to guard or improve the general health of the community.

The general education of the compulsory courses should be supplemented, or in suitable cases replaced by voluntary attendance at day or evening courses or classes, wherein suitable scientific, technical or art instruction may be obtained by those students who by educational condition and personal inclination are fitted to receive it.

S. CLOWES. Chairman of the National Council.

J. BURTON, Chairman of the Research, Inventions and Designs Committee.

FRED. H. HAND, Secretary.