National Council of the Pottery Industry
Second Report
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in regard to the appropriate education of persons occupied or interested in the pottery industry.

July, 1920.
SECOND REPORT
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Appropriate Education of persons occupied or interested in the Pottery Industry.

The First Report presented by the Research, Inventions and Designs Committee with regard to appropriate education for those engaged or likely to be engaged in the pottery industry, dealt with the education of the juvenile pottery worker so far as Elementary Schools and Compulsory Day Continuation Schools for young persons up to 16 years of age, were concerned. The present Report completes the survey of suitable education for “young persons” up to 18 years of age, and makes certain suggestions for further education. Your Committee have borne in mind the importance of preserving the position that education should develop the individual in all desirable directions: not aim merely at producing technical ability. They recognise clearly that whilst character is of fundamental importance to everybody in the industry, technical instruction though it may be of advantage, is not necessary for each individual.

The first question within the scope of this Report appeared to be:—Should the general education of the part time compulsory Day Continuation Schools for young persons up to 16 years of age be supplemented by voluntary education in the evening, and if so, what provision should be made for such supplementary education?

It was represented to the Committee that the recruit to an industry is likely to be led readily to take an intelligent interest in the industry: he or she is disposed to want to know about operations or processes which are or may be within the scope of his or her occupation. This is particularly the case where the recruit possesses ambition or initiative.

With the compulsory full time School age raised to 14 and general education continued to the age of 16 in the part time compulsory day school, it appeared that the voluntary education in the evening should for suitable persons be of a vocational type.

We recommend that compulsory part time education should be supplemented by provision for voluntary education of a reasonably vocational type in the evening.

1
The Voluntary Evening Continuation School.

If this School is to discharge its functions properly, it is essential that it should aim at being a centre of interest for the adolescent just beginning to earn wages, rather than merely a building where classes are held—it should be in the best sense of the word a "school". There should be opportunity for general reading and reasonable recreation; and the general tone of the school should be as attractive as may be found compatible with efficiency.

Premises.

It is clear that the premises of the Day Continuation School will be most suitable for the Evening Continuation School, and each School will require much the same type of teacher.

Until such time as premises specially designed and erected for Day Continuation Schools exist, the Evening work should be carried out in Technical Schools or Art Schools. It is possible that Central Elementary Schools will be used as a temporary measure; but the premises equipment and furniture of an ordinary Elementary School are unsuitable for young persons 14 to 16 years of age.

Curricula.

In the general case 2 evenings instruction—4 hours in all—together with an optional recreational evening will be sufficient. It is important to remember that the young persons in attendance are at a critical stage of physical development and have but recently left the comparatively easy time of the schoolroom for the relatively strenuous life of the workshop. If too great a demand is made on their evenings they will become wearied, not stimulated.

We suggest that Courses somewhat on the following lines would prove useful and attractive:

**Commercial Courses** including instruction in Theory and Practice of Commerce, Book-keeping, Shorthand and suitable provision for Typewriting—for those engaged in office or factory work. Whilst Book-keeping and Theory and Practice of Commerce should be soundly taught so far as general principles are concerned, every opportunity should be taken to make use of applications of principles to or illustrations taken from the usual transactions of the industry. Calculations based upon actual wages, piece rates, cost of material, carriage, discount and so on, particularly those in which short methods or other aids to calculation may be employed should receive attention.

Commercial practice should be illustrated by the actual use of forms and of equipment of modern type.

Typewriting should not be taught as a merely mechanical process, but in connection with Shorthand or some other suitable matter.

**Industrial Courses** (or Junior Technical Courses)—for those engaged or likely to be engaged on the production side of a works should include:

(a) Works Calculations and Drawings, illustrated so far as possible by reference to actual buildings, equipment, tools and processes.
(b) Science, including Chemistry, Mechanics and Heat. This instruction should not be academic in character: it should be based upon the study of potters' materials.

(c) Opportunities for instruction in suitable processes such as Throwing and Turning; Blocking and Casing; Modelling, Mould making and Engraving.

The provision under (c) appears to be rendered more necessary—rather than less necessary by the greater use of machinery and mechanical devices. In order that the standard of craftsmanship of the industry may be preserved it appears most important that opportunities to develop their powers should be provided for the younger employees, in addition to their usual works experience.

We regard provision for some reasonably recreative work of great importance. This recreation may be provided through Woodwork, Wood carving, Embroidery, Modelling, or Physical exercises and games, or Music and Singing, or suitable Folk Dances, or such games as chess and draughts.

There should be a library and reading room in each school or very close association between the School and the nearest Public Library.

The home conditions of many of the probable students make provision for out of School educational work very desirable; and this implies the provision of a room in the evening in the Continuation Schools or "homework" purposes.

**Industrial Art Courses** for pottery decorators and designers, pottery lithographic artists, paintresses, tile draughtsmen, engravers and modellers should provide suitable instruction in Drawing and Design, Brushwork and use of colour, with special application to the particular craft of the student. Reasonable attempt should be made to give appreciation of historic style and to preserve the better features of English tradition.

It appears necessary to emphasise the importance of proper training for designers. It is appreciated that the number of designers required for any particular works is probably small: on the other hand, it is not impossible to find pottery productions resulting from the application of a wall paper design to a model originally intended for execution by a silversmith. So long as practices of this order prevail, so long will pottery productions fall below a suitable standard of artistic merit, and the position of the designer be economically unattractive.

**Part time Voluntary Day Courses.**

Attendance at the ordinary Day Continuation School may be replaced by attendance at Part time Day Courses at a Technical School or School of Art or other Institution provided:

(a) The total number of hours attendance during a year is not less than the minimum required by the 1918 Act.

(b) The instruction provided is found efficient by either the Local Education Authority or the Board of Education.

In some towns Courses of a part time type for Apprentices and others have been established at the request of employers. The amount of time of attendance varies: in certain instances definitely vocational Courses in connection with Engineering, the Boot and Shoe trades and other trades were originally established containing little or no general education—after a relatively short trial it was found imperative
to introduce some instruction in Calculations and English: and in most cases the voluntary part time Courses have become approximately half general education and half vocational.

As these are voluntary Courses the division of time may be accepted as satisfactory: but we desire to lay stress on the importance of general education and of taking every opportunity to develop the habit of correct observation and full use of the reasoning faculties.

**Full time Education to the age of 16.**

The course of education so far considered is made up of—

(a) full time education up to the age of 14; (b) education for the equivalent of one day a week from 14 to 16 (c) with supplementary voluntary education in the evening up to 16.

So far as the provisions of the Education Act of 1918 are concerned, (a) and (b) which are a compulsory minimum may be replaced by full time education up to 16: and from the point of view of industry it may be convenient to note here the fact that any young person who remains at School full time up to the age of 16 will be exempt from further compulsory attendance after that age. It may be well to state also that certain employers in other industries have expressed their intention of not employing persons below this age. Provision for full time education to the age of 16 or beyond may be classified conveniently under the heads:

(a) Secondary Schools or similar institutions.

(b) Junior Technical Schools.

(c) Trade Schools or Commercial Schools.

(d) Full Time Junior Department of Schools of Art.

**Secondary Schools.**

It is obvious that full time education continued to 16 should produce a better product than education curtailed at 14 provided that the education is of a satisfactory general type calculated to develop the character and abilities of the individual.

Provision for Secondary Education including maintenance allowances where necessary, should therefore be ample, and in the interests of the nation, financial barriers should be removed from the path of every potential pupil anxious for such education.

The Secondary School should be alive to the economic possibilities of industry; there is some reason to feel that in the past, at any rate, the Secondary School has paid too much attention to the professions, and too little to industry.

In certain schools it appears to be the custom to attempt to interest the boys in industry by means of visits to works and museums and we think more might be done in this direction.

We are strongly of the opinion that Secondary School methods should be modified, so that the present generally excessive amount of evening work may be considerably curtailed. There was ample evidence of serious overstrain in this connection.

*(Providing full time courses of a nature planned to prepare children leaving Elementary Schools for the industry).*
On general grounds the Secondary School boy, who—amongst other things—has been through a good course in English, Mathematics and Science, and in certain cases Foreign Language, Manual work or Art, should be of considerable use in the industry.

A point of importance is that in his school life he is brought into contact with other boys intending to take some University examination, or possibly proceed to a University or place of further training, who do not look upon Secondary School life as an end in itself, but as a preparation for something further: and when a boy leaves school at 16 he does so with a knowledge that there is more to learn, whether he goes into a profession, commerce or industry. Perhaps in the light of information derived earlier in this enquiry, that the better type of Elementary School boy seldom entered the Pottery Industry, it was not a matter for surprise that the general impression was that very few Secondary boys did so. Statistics obtained from Secondary Schools in areas where the industry is of importance indicated that less than 5% of the boys leaving those Schools entered the Pottery Industry in any capacity.

The parent of the boy possessing ability naturally looks for some occupation for his son where brains will be valued and opportunity for their use accorded. It has to be admitted that the salary or wage-earning possibilities of the industry in the past have compared badly with those of certain other industries: certain conditions and types of work have been and are unattractive; the selective effect has been that for some years recruits to the industry have been of moderate standard, and the industry has become so accustomed to this state of things that it is in some doubt whether it could use better human material if it got it.

A short questionnaire addressed to employers secured some very interesting and valuable replies and suggestions, which will be found in the Summary attached, and the Committee desire to express their thanks to those who went to a good deal of trouble to obtain information. Details of the replies are placed in the appendix, but one important fact demonstrated by the resulting figures is that less than 1% of those engaged in the industry have received education beyond that of the Elementary School: this taken into consideration with the evidence (First Report, page 4), "that the industry is being recruited to a seriously large extent from the 'sub average' child," calls for very careful consideration.

No industry in these days can afford to disregard ability; least of all the Pottery Industry which demands or ought to demand a very high standard of intelligence and skill. It is recognised that intelligence does not necessarily imply manipulative skill, but a combination of the two is clearly better than either alone—particularly for certain of the higher posts in the industry.

There was not much evidence that in the past encouragement had been given to men who had shewn themselves disposed to improve their knowledge of the industry or make suggestions which appeared likely to be of use. Indeed instances were not wanting where men known to be attending the Pottery School were discharged, or transferred from the Department of which they were trying to acquire special knowledge to some other Department for which they were not necessarily better fitted.

This unfortunate attitude was not confined to employers: it was clear that youths attending Pottery Classes were liable to arouse the hostility of certain foremen. It is satisfactory to record some improve-
ment in these respects now: certain employers do attempt to get a better type of employee and foreman and encourage attempts at self improvement.

There is some hope that with better educated Managers a better type of foreman may be selected—upon the foreman’s organising ability the smooth working of his Department and the wages of the operatives largely depend: hence he should not merely possess some ability as a workman and a knowledge of his department, but possess a sufficiently wide outlook and sympathy with the workers to ensure that the employee possessing ambition and intelligence may get a fair chance. Probably a reasonable number of pottery workers would take advantage of day instruction if employers made it possible to do so without loss of wages. This is by no means a novel suggestion: certain employers in this and other industries already adopt this plan and appear to find it satisfactory.

That the industry both at home and abroad can absorb brains of the right kind is shewn by the records of the Central School of Pottery at Stoke-on-Trent. About 40% of the students—mostly sons of employers—are of good educational standard when they enter the school; about 40% are sons of Managers, Foremen or others of responsible positions in the industry possessing something more than Elementary education. Perhaps 10% though of moderate education, possess such character that they triumph over the consequent difficulties. About 170 Students have passed through the Central School of Pottery since 1914, and during the whole life of the School there never has been any difficulty in finding posts for satisfactory students. The position to-day is that the demand for trained students of this School far exceeds the supply.

The students who have passed through the School, though distributed over a wide area are mostly in England, and the majority in Stoke-on-Trent.

Enquiries were made with a view to determining the best way of training a boy of good education for the industry. The consensus of opinion was that the best plan included part time occupation in a works and part time instruction at the School of Pottery. Suggestions in connection with the School of Pottery will be found on pages 9-10 so far as the part time occupation in a works was concerned opinions differed somewhat.

The difficulty of employing this type of boy on the productive side appeared to arise from the fact that the operations on that side—other than purely mechanical operations in which intelligence is of less value than dexterity—were highly specialised, and in the general case proficiency was the result of practice and experience.

One view put forward was that the boy might enter the industry with a view to being trained as an under Manager. He should pass through the various Departments without unnecessary delays, from sliphouse to "the road": for success it is essential that the individual in question should not only be allowed to take but encouraged to take an interest in the whole works. He should get an insight into making, throwing and turning, casting, pressing, etc., the glost and decorating departments; ultimately, he might be put in charge of the Department for which he has shewn most aptitude. He must acquire a knowledge of and the knack of managing men.
Other suggestions were that a Secondary School boy might go into the office or warehouse, change from one to the other and emerge as a traveller or salesman. Alternatively he might begin work under the Art Director or designer and with certain supplementary education in an Art School, obtain a responsible position on the decorative side.

We recommend that efforts should be made by the Industry to attract and make the fullest use of boys who have received a satisfactory Secondary Education.

We suggest that one way of bringing about this result would be the provision of a suitable Scholarship with maintenance allowance where necessary, by the National Council, administered through this Committee: to enable a suitable boy to proceed from a Secondary or Junior Technical or Art School, or Day Continuation School to Part time Day time instruction at the Pottery School, or suitable Art School.

Junior Technical School.

This is a clearly defined type of School which provides a general education with a bias towards a particular industry.

The Course—generally speaking—is shorter than that of a Secondary School, though it should last for two or three years.

The curriculum includes English, interpreted in the most general sense—Mathematics of a practical type, Science, Workshop instruction and Drawing, roughly 5 hours a week for each of these Sections: the remaining time in the week may be devoted to Physical Exercises, Hygiene, or sundry other subjects. The underlying principles of an industry are taught, applications of principles to industrial processes studied, but works processes and repetitive work are not carried out.

One advantage of this type of School appeared to be that the students were likely to have a common interest, hence it should be relatively easy to get a right atmosphere and sense of the importance of the work in hand.

A danger appeared to be that comparatively young boys might be led into an industry for which they might prove unsuited.

A more serious practical consideration arises from the distribution of the Pottery Industry; there are spread throughout England a large number of Potteries, but as the following statistics show, outside the County Borough of Stoke-on-Trent, there is no collection of potteries likely to yield sufficient students for a special school of the type.

<table>
<thead>
<tr>
<th>Employees under 18 years of age.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derbyshire</td>
<td>470</td>
<td>380</td>
</tr>
<tr>
<td>Devonshire</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>Dorset</td>
<td>80</td>
<td>15</td>
</tr>
<tr>
<td>Lancashire</td>
<td>110</td>
<td>90</td>
</tr>
<tr>
<td>Leicestershire</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>London (Battersea, Lambeth, etc.)</td>
<td>300</td>
<td>40</td>
</tr>
<tr>
<td>Newcastle</td>
<td>30</td>
<td>120</td>
</tr>
<tr>
<td>Shropshire</td>
<td>150</td>
<td>60</td>
</tr>
<tr>
<td>Staffordshire</td>
<td>370</td>
<td>690</td>
</tr>
<tr>
<td>Stoke-on-Trent</td>
<td>3,000</td>
<td>5,500</td>
</tr>
<tr>
<td>Yorkshire Works</td>
<td>70</td>
<td>120</td>
</tr>
<tr>
<td>Worcester</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>
In addition there are a number of small potteries in other Counties. According to the last Census there were in the Industry:

<table>
<thead>
<tr>
<th>Aged 14 or 15</th>
<th>Male.</th>
<th>Female.</th>
</tr>
</thead>
<tbody>
<tr>
<td>, , 16 or 17</td>
<td>2,520</td>
<td>3,488</td>
</tr>
<tr>
<td></td>
<td>2,713</td>
<td>3,877</td>
</tr>
</tbody>
</table>


| 5,233         | 7,365  |

These figures are now probably far from accurate, but they strengthen the view that the only place where a Junior Technical School for potters might be started with anything like sufficient students available is Stoke County Borough.

After a careful discussion of the advantages and relationships of the various types of Day Education that may be provided, we are of opinion that the Stoke Education Committee should consider the provision of instruction for juvenile potential pottery workers through some suitable Junior Technical School—the age of entry to the School to be about 13. In the future we understand between the age of 11 and 12 suitable boys and girls will be drafted to either Secondary Schools or Central Elementary Schools. We consider the Junior Technical School would afford a second opportunity at a later age than 11, for a boy who at the age of 13 did not appear to respond to the normal type of Secondary School work: it would give him a chance to accept a Secondary Education of a “practical” type which might have better effect for him than education of a literary or commercial type.

A Trade School for the Industry appears undesirable because—
(a) It offers too little in the way of general education.
(b) There is so great a variety of trades in the Industry.

**Full time Courses in Technical Schools, Commercial Schools or Schools of Art, for young persons up to 16 years of age.**

Such Courses might include English, Works Calculations and Drawing, Science including Chemistry and Physics, and suitable Manual instruction in such processes as Throwing and Turning, Modelling, etc., or suitable Art instruction or suitable Commercial Instruction. Whilst the Committee are of the opinion that such Courses might be useful, they feel some diffidence in recommending their establishment because of the impossibility of obtaining reliable information as to the probable number of students. It appears very likely that, except in the case of Commercial classes, and perhaps Full Time Junior Departments of Schools of Art, the response would be small.

It may be useful at this stage to indicate by what different courses a boy or girl may before the age of 16, receive such education as will be of the greatest value, should he or she enter the Pottery Industry.

A. Full time attendance at any Secondary School, which provides adequate courses in Mathematics and Science, together with Drawing and some form of practical work.

B. Full time attendance at an Elementary School, up to the age of 14; followed by (1) compulsory attendance for the equivalent of one day a week in the Day Continuation School, supplemented by voluntary
attendance in the evening at a suitable Evening Continuation School, or Art School or Technical School, or (2) attendance at suitable part time voluntary courses of a reasonable vocational type in a Technical School or Art School, or (3) attendance at a Junior Technical School or a Full Time Junior Department of a School of Art.

It would be an advantage if evening instruction could be entirely replaced by instruction in the day time: but it is recognised that for some time yet that will not be a practical proposition for various reasons. It is however, of importance, that whatever course of education a boy follows, his progress should be made financially possible by the adequate provision of free places, scholarships and maintenance allowances.

**Education beyond the age of 16.**

**Full Time Courses.**

In the exceptional case and for some special purposes there appears reason to think that a University Graduate in Science, with some supplementary training at the School of Pottery and sufficient works experience to give him an intelligent conception of the organisation and the possibilities and limitations of the processes of the Industry may be of great value, but in the general case the full time course seems unsuitable. There is great risk of transforming a potential skilled worker into a moderate student.

The ideal course seems to be a combination of—

(a) Suitable and natural works experience, so that the development of knowledge of manipulative processes may begin as soon as possible. The "young person" is in the right environment, processes and materials are not mere names, they are actualities; and selective agencies are at work helping the young potter to determine in what directions his abilities can best be exercised, and

(b) Part time instruction, preferably in Day Classes, at a properly equipped and staffed School of Pottery.

**Part Time Day Courses.**

For some years from the present date all education beyond the age of 16 will be undertaken voluntarily; ultimately, all young persons between 16 and 18 years of age, unless they have been under full time instruction to the age of 16, will be required to attend compulsory day classes for at least 320 hours in the year.

It is of some importance that the industry should prepare itself for the problems that will then arise, by giving encouragement and opportunity to certain selected persons between 16 and 18 years of age to attend voluntary day courses at the Pottery School or some suitable Art School.

The amount of time per week devoted to the purposes of instruction can only be indicated in general terms; much must depend on the abilities, tastes and opportunities of the individual, but probably some such time as 12 hours a week will suffice.

It appears unwise to attempt to set out rigid courses of instruction: it is appreciated that it is the Instructor's business to decide what is suitable for each student, but the following suggestions fairly represent the Committee's view.
For those engaged or likely to be engaged on the Production side of Works, a *Four years' course* constructed more or less on the following lines:—

**First Year.** General Physics, Chemistry, Mathematics.  
Pottery: Materials, Making and Shaping.

**Second Year.** Heat and Mechanics, Chemistry, Mathematics.  
Pottery: Bodies, Glazes and Colours.

**Third Year.** Engineering, including applications of Electricity, Chemistry, Pottery (including some study of Fuel).

**Fourth Year.** Pottery Engineering, Economics of the Industry, Works Calculations, Costing, etc., Pottery.  
For the Pottery Chemist, Chemistry should be continued into the Fourth Year and one of the other sections omitted.

The work in Pottery during the First and Second Year, would involve a general survey of the materials, processes, machinery, and products of the Industry. In the Third and Fourth Year, much the same ground would be covered, but with more attention to detail and special application to local conditions and demands.

The instruction in Engineering might be somewhat on the following lines:—

**Third Year.** Engineering should include a study of Motion, Force and Friction; Work and Power: Engine and Boiler: the slide valve: Engine testing: Use of Steam Table: Internal combustion engine. Pumps.  
The Electric circuit, Magnetic effects of current, Lighting, continuous current Motors, Power Distribution.

**Fourth Year.** Engineering should include general lay out of works:  
Supply and distribution of power, belts, chains, ropes and gears shafting, grouping of machines.  
Supply and distribution of heat for warming and drying, Combustion, Firing of ovens and kilns by coal and gas, Regulation of temperature.  
Grinding, Transport of materials, Ventilation.

For those engaged on the Decorative side:—

Suitable Art Training, together with such technical instruction as will give them a knowledge of the possibilities and limitations of the materials employed in any usual process, more particularly glazes, colours and the firing thereof.

The Courses for Pottery Decorators, Modellers and Engravers, Paintresses and Designers, and Lithographic Artists will have a good deal in common, except that in the case of Modellers the work should be modelled where this method of expression is appropriate, and Draughtsmen and Designers should make some study of Architecture. Paintresses should include Drawing from Plants and Pottery painting in both years, together with Elementary Design in the first year and Design on Pottery in the subsequent year.
In connection with the study of design a clear recognition is needed of the fact that primarily wares are made to sell, and that applied Art may easily become too abstract and academic in character for successful application to Pottery. Practical acquaintance with manufacturing conditions indicates that a number of difficulties which arise in clay-working operations, arise from misuse of some manipulative detail.

Courses not exceeding 6 hours per week on the following lines may be found suitable:

- **A.** Elementary Design and Theory of Colour.
- Theory and Planning of Pattern.
- Drawing Historic Examples.
- Drawing Plant Form.
- Plant Form.
- Memory Drawing.
- History of Ornament.
- Style in Design.
- Execution in Material of Specimen of Pottery.
- Drawing from the Antique.
- Shading of Study of Ornament.
- Lecture on History of Ornament.
- Design.
- Memory Drawing.
- Life Drawing.
- Historic Ornament.
- Original Design, including Execution of example in Material.

The student would join the Course at that point which appeared most suitable to the condition of the particular student.

**For those engaged in the Office and Warehouse.**

In addition to the usual Courses in Theory and Practice of Commerce, Book-keeping and Shorthand, opportunity should be given in the later years for some study of Home and Foreign methods of business, Factory Organisation, Accountancy, French or Spanish, Civil Law, and study of the Factory Acts and legislation affecting suitable social and industrial interests.

**Evening Courses.**

It is probable, for some years at any rate, that voluntary education for those beyond the age of 16 will take place in the evening, hence suitable courses should be provided. The courses should not occupy more than three evenings a week, and may with advantage provide some such curriculum as:

**Productive Side:**

For the persons 16 years of age:

- 2 hours—General instruction in Pottery or some particular branch of Pottery work; the main object being to develop appreciation of the importance of each branch of work.
2 hours—Elementary Chemistry, enough to secure a clear conception of what is meant by oxide, acid, base, salt, oxidation, reduction, etc.

2 hours—Physics, including a study of heat.

or 1 hour—Tools and Appliances of the Industry.

and 1 hour—Mathematics and Works Calculations.

For those persons 17 years of age:

2 hours—General study of materials and processes of the Industry, or some branch of the Industry.

2 hours—Physics, including reference to Expansion, Colours Fusibility, Porosity.

2 hours—Chemistry—General study of oxides, silicates, etc., or
2 hours—Machines and Appliances of the Industry, Fuel, etc.

Decorative Side.

Such portion of the instruction indicated on Page 11 as time permits and the abilities and occupation or probable occupation of the student requires.

Office and Warehouse Occupations.

Suitable instruction in Theory and Practice of Commerce, French or Spanish—and some provision for the study of the Factory Acts and similar legislation, and such selection of subjects already outlined for Part time Day Courses as is found convenient and necessary.

It is very much to be desired that ample provision should be made for every student interested to have instruction in Personal and Factory Hygiene and some form of Physical Exercise.

Scholarships.

In order to secure that every young person capable of profiting by continued education beyond the age of 16 should have opportunity—particularly in the day time—for such education it is very important that arrangements should be made for the establishment or provision of Scholarships to Day or Evening Art, Technical or Commercial Courses. At least one Scholarship of the annual value of £40—£60 a year, tenable at some approved Art School and a similar Scholarship tenable at the School of Pottery or other approved institution, appears necessary—and in addition at least 10 Exhibitions for part time Day Work, tenable for three years at either the School of Pottery or one of the Art Schools. The selection of Scholarship holders should not be determined solely by formal examinations: the interested employer, the candidate's principal teacher and the Principal of the Pottery School or Art School concerned should have opportunity for the expression of opinion as to the suitability of the candidate.

Compulsory Day Continuation Courses for Young Persons 16—18 years of age.

When such Courses are established, their constitution might follow the general lines indicated for Voluntary Day Classes: some part of the time being devoted to Physical Exercises and Hygiene.
Adult Education.

The instruction and training so far outlined is intended for those who require technical or artistic training for purposes of their occupation, and requires to be supplemented in the case of these persons by suitable courses of specialised lectures: in the case of others by education intended to develop and widen their outlook on life and make them as useful as possible to the State, their fellow beings and themselves.

Before dealing with the provision of Adult Education it is necessary to consider the relation thereto of Industrial conditions, and in this direction the following extract from the Interim Report of the Committee on Adult Education will be helpful:—

"The Effects of the Industrial Background.

"The rising standard of life, the spread of knowledge, the developing aspirations of labour, and the increasing sense of responsibility among employers, will most certainly involve a re-organisation of the industrial system. The age of mechanical development, with its necessary accompaniment of the growth of large firms as units and of a centrally controlled administration, has effectively degraded the worker until as the common saying is, he has become 'a mere cog in the machine.' There can be no doubt that the degradation of human beings to the position of mere 'hands', and the treatment of labour as a commodity to be bought and sold, has created a revolt in the minds of a large section of the community. Industrial conditions have often tended to deprive the worker of the education which he previously derived from the intrinsic interest offered by his work; that fact makes it doubly important, we suggest, to supplement their deficiencies by a humane and generous educational policy. Many workpeople are realising the need for education, and are now meeting together for this purpose under the auspices of various organisations. Evidence was brought before the Committee showing that certain employers, who have themselves enjoyed the benefits of a wide education, have approached the question of non-vocational education in a highly commendable spirit, and have provided for their workpeople facilities for humanistic studies. It is to be hoped that the immediate future will witness a growth of this spirit among employers generally. Adult education and, indeed good citizenship depend in no small degree, therefore, upon a new orientation of our industrial outlook and activities. Improved conditions and the diffusion of responsibility for the proper conduct of industry will strengthen the need for educational opportunities. In so far as that need is fulfilled, industry will gain by a more effective, 'industrial citizenship,' and will itself become more truly educative. Thus increased opportunities for adult education and the stimulus of a freer and finer industrial environment are correlative, and help to develop each other. Education is to be measured essentially in terms of intellectual accomplishment, power of aesthetic appreciation and moral character, and these have little or no opportunity for realisation except through a harmonious environment. Nor is the environment likely to be substantially modified except in response to the higher ideals of social life stimulated by a more prolonged and widely diffused education."

It is obvious from the above extracts that good industrial conditions must exist if any real progress is to be made in adult education.
Non-vocational education is at present provided by means of (1) University Extension Lectures (2) Tutorial Classes (3) W.E.A. Classes (Adult Schools) (4) First Aid Classes—and in addition valuable work is done by certain voluntary educational associations.

An extension of these different activities and greater appreciation of the value of their efforts should meet the reasonable requirements of workers in the Industry for some time to come.

The Central School of Science and Technology, at Stoke, should be brought up to the standard of a University College: it would then be able to play a valuable part in the non-vocational education of the locality.

It is suggested elsewhere, and we desire to emphasise the point again here, that the day technical classes at this institution should be brought more freely within the reach of the working man student by the co-operation of employers and the provision of suitable Scholarships and Exhibitions by the various Administrative Bodies and Industrial Associations interested in the School. For those persons who have more or less completed the usual course of Technical Training or had long association with the Industry, or have reasons connected with the posts they occupy, Courses of Lectures dealing with important matters concerning the Industry might from time to time be arranged. In order to secure the greatest measure of success for these Courses, close co-operation through a Joint Committee or otherwise, between the Governing Body of the School, the Employers' Federation and the Pottery Operatives' Associations will be necessary.

The Lectures might deal with some of the following subjects:—

1. History of Pottery (Ancient and Modern).
2. Formation of Felspar, China Stone and Clay.
5. Pottery Processes.
6. Pottery Costing.
7. Methods of Transport.
8. The Factory Acts and legislation affecting the conditions of the Industry and welfare of the worker.

Art Galleries.

The educational value of an Art Gallery in an industrial community cannot be overstated. It occupies a definite place in the field of stimulating and uplifting influences which nothing else can fill, and in our large industrial centres where the conditions of manufacture almost invariably tend to produce an environment which is drab and uninspiring, an Art Gallery should be considered as absolutely essential to the general welfare of the community.

In the Pottery Industry, which depends so largely upon the direct application of Art, the worker should be brought under all the influences which tend towards a truer appreciation of what is beautiful and fitting in form, colour and design, and nothing is of greater value to this end than the contemplation of fine examples of painting, sculpture, modelling, etching and engraving such as an Art Gallery contains.
Immediate steps should be taken by the Council of the County Borough of Stoke-on-Trent or by one of the Art Societies of the district to form the nucleus of a Permanent Collection of Works of Art. Temporary provision might be made to house such a Collection in one of the Town Halls, until such time as a suitable Art Gallery can be erected in the district.

**Libraries.**

The suggestion has already been made on page 3, that each School should have its Library: but clearly from the point of view of the Industry some Central Library is essential.

It appears that as an important collection of works on Pottery is already assembled at the Central School of Pottery, every effort should be made to make the Library as commodious, complete and accessible as possible. It is a matter for some regret that this valuable Library does not at present meet with the appreciation and use it deserves.

**Museums.**

The part played by Museums ought to be of great importance and the Committee have considered with care the relative merits of one central well arranged Museum, and separate Museums in the several Schools and Institutions.

There are of course, outstanding examples of quite valuable School Museums, but in the general case not only are the resources limited, but very often the arrangement and classification and selection of specimens is so haphazard that the Museum is of small educational value. On the whole the Committee recommend the establishment of an efficiently organised and arranged Museum, to which excursions and visits can be made by groups of students or interested individuals. This need not preclude each School, or such Schools as find such a step possible, from gradually building up collections in which the School may have a special interest: but a fairly severe censorship should be exercised and the desire for a large number of specimens should not be allowed to lead to the acceptance of any specimen offered, without regard to its merit.

In Stoke-on-Trent a Museum of Industrial Art and Craft, devoted primarily to products of Ceramic art and skill, of various historic styles and from suitable countries, would prove a source of inspiration and encouragement to those engaged in producing pottery. It would also have educational value for the general public and tend to develop a taste for and correct appreciation of really artistic examples of the potter’s work.

**Advisory Committee.**

The Board of Education in the Circular dealing with Draft Suggestions for Schemes under the Education Act, 1918, page 23, 1 (e) clearly indicate that “arrangements for enlisting the co-operation and interest of employers and workpeople in connection with Courses related to the needs of particular occupations” are desirable. We suggest that the Stoke Local Education Authority should consider the formation of an Advisory Committee representing the Pottery Industry: and we consider that any such Committee should include Representatives of the
National Council of the Pottery Industry, the Principal of the Pottery School and the Art Director for Stoke, in addition to representative employers and employees.

Welfare Work.

The National Council has on more than one occasion given evidence of its interest in the development of this modern movement. Educational work is really a phase of Welfare work, and it is obvious that if the Scheme of Education put forward for the consideration of the Council by the Research, Inventions and Designs Committee is to produce "the greatest good for the greatest number" the co-operation and assistance of every Welfare Supervisor will prove of the very greatest importance.

Your Committee have endeavoured to produce a Report essentially practical without entirely losing sight of the ideal. They beg to commend it to the careful consideration not only of the Council, but of each employer and each operative, confident that development of character and individuality together with the acquisition and the right use of knowledge will produce benefit not only to the Pottery Industry, but to the community at large.

FRANK H. WEDGWOOD, Chairman of the National Council.
J. BURTON, Chairman of the Research, Inventions and Designs Committee.
FRED. H. HAND, Secretary.
APPRECIATIVE EDUCATION OF JUVENILE POTTERY WORKERS.

EDUCATION OF JUVENILE POTTERY WORKERS. Education of juvenile pottery workers should be balanced and comprehensive. It is not sufficient to teach them only the technical aspects of pottery. They should be prepared for a variety of careers and their education should include a broad range of subjects such as science, math, and history. Additionally, they should be encouraged to develop their creative skills and express their individuality through art and design. In short, the education of juvenile pottery workers should aim to foster their intellectual and creative growth, as well as their social and emotional development.