such reports the Russell Sage Foundation not only helps the outside world to understand the experiments it describes, but gives those actually engaged in working out these experiments an invaluable opportunity of seeing themselves as others see them.

Apprentice Training in South Australia

The South Australian Education Department has recently published a paper by the Superintendent of Technical Education on the results of the Act for the compulsory technical education of apprentices. As the author points out, the question of the organisation of apprentice training is receiving considerable attention at present in the various Australian States.

The Technical Education of Apprentices Act of South Australia was passed in 1917, and the first classes under the Act were opened in June 1919. It is pointed out that the results achieved are of interest from several points of view, namely, (a) the application of compulsory part-time education to adolescents; (b) the character of the education given; (c) the close correlation of educational and industrial conditions; (d) the relation of this work to the general problem of apprenticeship.

At present every intending apprentice must first serve a probationary period, and during and after this period he must attend an approved technical class in a trade school. Every employer has to report once a term on the workshop training and progress of each apprentice. The school and workshop reports are filed for reference; quarterly reports are sent to parents, and a certificate is issued at the end of the course.

It is considered that the system of apprenticeship will benefit in various ways from the three years of compulsory technical training. The apprentice will benefit by receiving a complete and graded course of instruction, which should make him both a better craftsman and a citizen with a broader knowledge and wider interest than he would otherwise be. The employer will benefit in having the abilities of his apprentices developed in more directions than is possible in a single workshop. Lastly, the state as a whole will benefit from the production of an efficient body of craftsmen in the skilled trades, proud of their craft and up-to-date in their methods.

These benefits carry with them corresponding obligations. The apprentice has to give up one evening a week to attend the school. The employer must allow the apprentice one half-day a week with pay, during working hours, for school purposes. The state, lastly, is to provide and bear the costs of the best possible teachers, schools, and equipment.

The Act applies to all indentured apprentices or probationers in certain specified trades and districts. The list of trade groups comprises

¹ South Australia. Education Department; Apprentice Training. An experiment in compulsory specialised adolescent education, by Charles Fenner, Superintendent of Technical Education, South Australia. Bulletin No. 1. Adelaide, Rogers, Govt. Printer, 1924. 28 pp.

practically all the skilled trades, namely: iron working group (41 trades); lead and sheet metal group (12 trades); woodworking group (22 trades); printing group (16 trades); electrical group (12 trades); jewellery group (8 trades); painting and decorating group (11 trades); leather working group (8 trades); general group (17 trades). The districts covered include practically all those within a ten-mile radius of Adelaide Post Office, with a total population of about 280,000.

The correlation between the school and workshop work of apprentices is ensured by the Apprentices Advisory Board, trade committees, reports sent by and to employers, etc., and the visiting of workshops by a special officer.

The Apprentices Advisory Board consists of the Superintendent of Technical Education (chairman of the Board), two persons nominated by the Minister of Education, two representatives nominated by the United Trades and Labour Council of South Australia, one nominated by the South Australian Employers' Federation, and one by the South Australian Chamber of Manufactures. The functions of the Board, which was first appointed on 8 July 1918, are to send reports and recommendations to the Minister of Education on the training, education, and instruction of apprentices and related questions.

The trade committees, which are appointed by the Minister of Education on the nomination of employers and employed, consist as far as possible of persons skilled in one of the trades concerned. They meet quarterly at the appropriate school, and inspect the classes and the work done. They help to draw up and modify syllabuses, and sometimes give advice on the selection of instructors. Their visits of inspection are found to stimulate both staff and students, and help to keep the school work in touch with trade conditions.

The financial restrictions have led to certain difficulties. No class has yet had a permanent "home"; they are conducted in rented shops, in spare classrooms at the School of Mines, and in other temporary quarters. The question of equipment has therefore presented many difficulties, but the progress achieved in spite of these conditions is shown by the increase in the number of classes and of attendances.

The following instructions have been drawn up as a guide to the preparation of syllabuses:

- (1) All syllabuses or proposed courses shall be drawn up by the head master and the instructors concerned, and then submitted to the appropriate advisory trade committee; when approved they will beforwarded to the Department with recommendation.
- (2) Generally speaking, each trade subject shall be divided into three grades, each grade being the work of one year.
- (3) All trade and science subjects to comprise both (a) lecture and demonstration work, (b) practical work. In the setting out of theory work, the matter to be arranged in paragraphs, with side headings. The courses to be set out systematically, leading from the simpler to the more complex exercises.
- (4) Each practical example in the trade subject to be accompanied, where possible, by a blue print of the job, approved by the Trade Committee, and with a set time for its accomplishment.

(5) In each trade a full course of subjects will be arranged thus: the actual trade subject (theory and practice), with trade drawing, trade calculations, English, or such other subjects as may be recommended by the Trade Committee.

At present most of the time spent in the school is given to practical work. On the recommendation of the Apprentices Advisory Board, and with the approval of the employers' associations and the Trades and Labour Council, articles for sale are made in all the classes. This system has been found highly satisfactory in increasing the zeal and earnestness of the students and making it possible to provide an adequate supply of the proper materials.

The theoretical studies include one hour a week on "trade theory" and usually a course in drawing and mathematics, together with English for printers. These classes are held mainly in the evening. Most of the instructors are skilled and experienced tradesmen, except for the more theoretical subjects (mathematics, geometry, and science), which are usually taught by trained teachers with some trade experience.

The effects on attendances of the introduction of the principle of compulsion are stated to be very satisfactory. The following table is given showing the "percentage of attendance", i.e. the actual attendance as a percentage of the possible attendance:

PERCENTAGE OF ATTENDANCE AT TRADE CLASSES, 1919-1923

Year	Percentage of attendance					
	1st year	2nd year	3rd year	Total	Day	Evening
1919	81.0	_	_	81.0	90.0	72.9
1920	82.6	89.1	1 — 1	85.4	90.2	76.9
1921	83.5	84.9	84.6	85.2	91.1	78.8
1922	81.0	87.2	84.6	84.1	§ 91.0	77.2
1923	84.0	88.0	86.0	86.0	89.8	81.4

A further table shows the distribution of apprentices, adult workers, etc. in the general skilled trades.

Adult male workers, 1923	9,567			
Probationers' licences issued during 1923				
Indentures lodged during 1921, 1922, 1923				
Apprentices and probationers attending classes				
under T.E.A. Act	635			
Apprentices and probationers awaiting classes				
under T.E.A. Act	511			
Young workers not apprentices	1,756			

It is pointed out that every effort has been made to avoid hardand-fast rules and regulations, in order to leave the work free to grow and to develop, and to avoid the friction and resentment that might accompany more rigid methods.