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DEMAND FOR VOCATIONAL EDUCATION IN THE COUNTRIES AT WAR

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, July 6, 1917.

SIR: The Bureau of Education is frequently asked for information as to current activities in regard to vocational education in the principal European countries engaged in the present war. To enable it to answer these questions to some extent, I recommend that the accompanying manuscript, summarizing current information on this subject, be printed as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

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DEMAND FOR VOCATIONAL EDUCATION IN THE COUNTRIES AT WAR.

The European war has roused England and France to a consciousness of deficiencies in their educational systems as compared with that of Germany. To quote an English authority:

> There is lying at the back of men's minds the conviction that the industrial, commercial, and military Germany is due in the main to the sedulous cultivation, through many generations, from the days of Humboldt downward, of the intellectual life of the nation.

A French writer notes that while the external commerce of France in the 33 years from 1880 to 1913 increased by 80 per cent, that of Germany increased by 276 per cent. Starting at the former date with populations about equal, France in 1913 had 39 million inhabitants; Germany had 70 millions. In the opinion of the writer, these comparisons show the need in France of "another order of education and intellectual ideals."

In the notable debate in the House of Lords in the summer of 1916, which was intended to arouse English legislators to the "necessity of preparing for the future," Viscount Haldane, on whose notice the debate was announced, declared that "a living national system of education" must be organized if the nation is to maintain its position. He enforced this opinion by contrasting the German system with that of England. In this contrast two features of the German system were emphasized: The effectiveness of its vocational schools; the thorough organization of its secondary schools.

The discussion thus started was continued by eminent members of the House of Lords, including Viscount Bryce, the Archbishop of Canterbury, and the Marquis of Crewe, president of the Privy Council. While many of the speakers took issue with Lord Haldane as to the general problem of English education, all were agreed that the continuation schools of the country must be recast as an integral factor in its industrial life. The lessons of the war and the waste of war have made the education and training of youth between the ages of 13 and 18 a paramount question in every nation engaged in the conflict. Therefore the existing provision for this purpose and its further development have excited an interest never before manifested.

The central powers of Europe have taken the lead in practical provision for vocational education, and in the German Empire this provision has been well organized under the laws of the several States, fortified by imperial labor laws. Italy has a graded system of technical education comprising three distinct classes of schools; the lowest class affords nuclei for the general diffusion of vocational education. Russia offers striking examples of vocational education under local control or that of different ministries; particularly noted are the schools of agriculture and the schools for railroad employees, which received new impulse from the Japanese war. In both Italy and Russia the means of increasing these facilities engaged serious attention during the decade preceding the present conflict, but forceful action in this direction was prevented by the more urgent need of an adequate supply of elementary schools.

As regards Russia, there are many indications that the education of the masses for intelligent citizenship and industrial efficiency will be the chief concern of local and central authorities as soon as normal conditions are restored. In this connection the fact is interesting that in the exercise of the temporary freedom resulting from the military events of 1915, the citizens of Warsaw, Poland, at once established 49 industrial continuation schools.

In the following statements the endeavor is made to summarize current information on this subject in the warring countries most fully aroused to its importance.

GERMANY.

In the debate above referred to, Lord Haldane, contrasting the schools of Germany and England, said:

> I do not think the system of elementary education in Germany is better than if it is as good as, ours here, but it has one advantage which ours has not. In the last year of the elementary course the boy—in his fourteenth year—is taken and given in the elementary school, if he is likely to go into an industrial profession, some kind of technical training in the workshop attached to the school, or in other ways. Then he is asked what his ideas of his future are, and if he has none he is encouraged and stimulated to choose a profession. Suppose he wants to become an electrical engineer. The authorities see to it that he has the means of being apprenticed to an electrical engineer, and the electrical engineer is bound to train him for four years. But that is not all. The system is a revival in modern form of the old apprenticeship system which had its value in this country, but is now dead. The employer is bound to send the boy to the special trade school of the engineering industry in the locality.
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> No workman gets his journeyman's certificate, without which he can not get on and obtain a place when he comes to the years at which he wishes to be independent and to marry, unless he has shown that he has gone through the course. A journeyman's certificate, which he can get at 18, makes him a fully trained workman, and if he likes to go on and take a further certificate in the

evening classes, he may become a master workman, and then he is very much sought after. That is a new and scientific system which has been set up in Germany especially for the purpose of providing the army of trained workmen who may overcome us in the neutral markets which we have dominated to so large an extent in the past; and I think it my duty to call prominent attention to this, because I feel that the gravity and dangers of the problem which confronts us are being very much overlooked, even at the present moment.

The system of continuation schools (fortbildungschulen) is common throughout the 26 States of the German Empire. In 14 of the States attendance upon the continuation school is compulsory. In 10 other States it may be compulsory according to local option, and the 4 remaining States are ready to adopt the principle.

The importance attached to the efficient operation of the system is shown by the repeated action of the Reichstag in the matter. Although educational affairs in Germany are exempt from imperial legislation, the Reichstag has promoted the cause of continuation schools by a series of measures pertaining to the industrial side of the question. The latest of these measures, reported officially, was adopted by the Reichstag in December, 1911, and went into effect in April, 1912. The obligation imposed upon employers by the imperial law of July 1, 1891, is reenforced by the law of 1912 as follows:

> Employers must, when necessary, grant regular leaves to those of their employees, under 18 years of age, who attend a continuation school recognized by the local authorities or by the State. The requisite hours of absence are determined by the competent authorities.

Sunday instruction is allowed, provided it does not interfere with religious services. The provisions of the law are also extended to include "institutions in which instruction is given in feminine occupations and domestic work."

The law further authorizes parishes and other communal units to establish obligatory continuation schools and to issue ordinances for the enforcement of the obligation, if no provision in that respect is made by the province.

A parish or a larger communal unit may be required by a higher administration board to provide an obligatory continuation system when such demand is made by representatives of local employers or workmen. Should a parish disregard the request of the higher administration board, the latter may introduce a compulsory system in the parish and issue the statutory regulations therefor.

The German system of continuation schools is instructive to all other nations by reason of three principles which have been worked out gradually but effectively: It is universally applied; attendance is compulsory for all boys after the completion of the elementary school and for a large proportion of the girls; employers are obliged to cooperate with the State in carrying out the provisions of the law.

The compulsory principle has been easily extended in Germany because of the system of supervision maintained over school children, and over all adults on account of the military service. This compulsion, however, is willingly submitted to because of the prevailing sense of the power and greatness and importance of the State. The industrial advantage of the continuation schools wins support from both employers and workmen. The system has, however, been criticized by Kerschensteiner and others as too narrowly industrial. Contrasting the German schools with the apprenticeship schools of Paris, such as the École Diderot and the École Estienne, Kerschensteiner says:

> In Germany, on the other hand, we should have great difficulty in finding any school with similar objects which shows in its organization the same insight into the necessity for civic education. On the contrary, the corresponding German schools have been established to divert attention from the community and to fix it on the egoistic trade interests, as is shown in the absolute want of every general formative discipline, like literature or history.
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> We believe it is sufficient to point out this weak spot of our German technical schools. The remedy is easy; in schools with all-day instruction the way is obvious when the will is exerted.
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> If we consider the monotechnical day schools, the matter becomes more difficult. Among the publicly provided schools they are the surest to foster civic education in the manufacturing population. But they have their disadvantages. They are the costliest of all schools. They make it easy for the pupil whose ambition is greater than his capacity to forsake a career in which he could succeed for one of greater distinction in which he is almost bound to fail. To regard them and to organize them simply as institutions for the encouragement of industrial efficiency is a great error.

Dr. Kerschensteiner's efforts in Munich were intended to correct this glaring evil. For this reason the work in which he unfolds the principle and operations of the Munich system is entitled "Education for Citizenship."

FRANCE.

France led in the modern movement for the vocational education (enseignement professionnel) of the industrial classes. It was included in all the educational plans of the leaders of the Revolution and was an important feature of the school system organized in Paris by M. Gréard before the Republic was proclaimed. The manual training shops established by him in connection with the Paris schools were intended "to prevent the man from disappearing in the apprentice and the citizen in the workman." Of the work thus originated and still maintained in the French capital Dr. Kerschensteiner says: "All that we are laboriously striving to obtain in our compulsory and optional continuation schools finds without difficulty a place of nurture, and really occupies it, in many French manual training shops." The Republican Government endeavored from the first to

extend this system throughout the country; but, although the effort has met with great success in many localities, the larger purpose has never been achieved.

The statistics on this subject are startling: In normal times about 648,000 children in France annually reach the age of 13 years. Of this number not more than 48,000 continue under instruction. Recent estimates give 1,614,000 as the number of boys between the ages of 13 and 18 years. Of these it is stated only 150,000 were prepared for definite industries. For more than a decade this matter has been pressed upon public attention by statesmen and educators. The present minister of public instruction, M. Steeg, in a recent address to the Chamber of Deputies said:

> We must admit that in our society the adolescent youth is morally neglected. From the day he leaves the primary school until the moment when he enters the barracks (for his military service) no law obliges a boy of the laboring class, urban or rural, to continue and complete his elementary instruction.

The necessity of action in this matter has been recognized by the Government, and in 1901 a commission was appointed by the minister of commerce and industry to conduct an investigation of the entire industrial field and recommend measures for meeting the demand for a larger supply of competent workers. An exhaustive report was submitted by this commission in 1909, accompanied by a bill which embodied the prevailing opinions as to measures for improving the system of technical education. This bill emphasized the need of additional provision for the industrial education of the laboring classes.

Among the causes of the present crisis, the lack of compulsion in respect to vocational schools was dwelt upon. This was not regarded, however, as the sole or even the principal cause of the evil. In larger measure this is the result of industrial and social conditions peculiar to France. These conditions have prevented the adoption of measures which are easily applied under different circumstances.

The report of the commission excited a discussion which was continued through several sessions of the legislature and was in progress when war was declared. The struggle has thrown new light on the industrial situation and has given a spur to the cause of compulsory vocational training. All other considerations covered by the comprehensive bill of the commission have been set aside and the attention of the Government fastened on this one pressing necessity. In April of the current year a short bill dealing solely with compulsory continuation schools was submitted to the Chamber of Deputies. The bill was drawn under the direction of M. Viviani, at that time minister of public instruction, and carries the prestige of his name. In the preamble the minister asserts that all parties and

sects are convinced that "an extension of the years of compulsory education is essential for the development of good citizens, men and women, good soldiers, good workmen, and good mothers. In the Republic of the future there must be no idle hands."

The bill submitted to the French Chamber establishes the principle of compulsory education at public expense in continuation schools for all young people who have completed the required term of elementary education. It applies to boys who do not attend the secondary schools up to the age of 20 years and to girls up to the age of 18 years or until they are married. This education must be threefold—intellectual, vocational, and physical, the last leading up to military training for boys. Specific provision is made for the scope of the continued education, but with regard to details great freedom is left to local authorities. The main provisions of the bill are as follows:

The term of compulsory education for adolescents is divided into two periods. The first corresponds to the age of apprenticeship and extends for boys to the age of 17 years, inclusive, and for girls to 16 years. During this period the following subjects are obligatory:

1. Physical training.
2. Lessons in the French language, history, and geography.
3. Lessons in the sciences applied to agriculture, industry, commerce, navigation, or domestic economy, accompanied by practical exercises and manual work.

The minimum duration of these courses is 50 hours for general education, 150 hours for the technical training, and 100 hours for physical training. The instruction is given during the legal working day. The physical training may take place on Sunday.

The second period covers the ages 17 to 20, inclusive, for boys, and 16 to 18 for girls. The obligatory subjects during this period are as follows:

For boys:

1. Lessons in the French language, history, geography, civics, common law, political economy.
2. Gymnastics, military exercises, and rifle firing.

For girls:

1. French language, history, geography, and domestic economy.
2. Manual work lessons and practical exercises in hygiene, care of the sick and of infants.

The minimum duration of the instruction in this period is 100 hours for each series. Exemptions are allowed after three years' instruction in the first period and two years in the second to those who pass the required examinations.

The continuation classes are installed in buildings of the higher primary schools, commercial schools, or, if necessary, in those of the elementary schools.

The instruction in general subjects must be given by teachers engaged in the public schools, who are required to give to this work at least 150 hours a year. This time is gained by shortening the daily session of the elementary schools by a half hour and increasing their vacations from one to two months. In case any teacher is obliged to give more than 200 hours' instruction in the continuation classes, he receives extra pay. The technical training is given in every case by experts in the various industries or in the physical exercises.

The private agencies already engaged in this work are recognized and encouraged by State subsidies, but they must submit to supervision by the local authorities and follow the programs prepared for their respective localities.

Notwithstanding the centralized control of education in France, the continuation classes are to be under the direction of communal (city or rural) committees. These committees include civic officers, professional men, representatives of chambers of commerce, of agricultural associations, of employers, and of tradesunions. The work of the local committees is subject to revision and coordination by departmental committees, and the entire system is under the supervision of a central committee. The minister of public instruction presides over the central committee, which must include representatives of other ministries, agriculture, commerce, etc., responsible for special forms of vocational training, together with appointed representatives of industrial enterprises and civil government.

The demand that has arisen in France for the application of the compulsory principle to continuation schools is impressive because of the large provision made by public and private agencies for extending the education and training of youths and adults. City authorities, chambers of commerce, trade syndicates, and innumerable private societies, give liberal support to technical schools and to evening and Sunday classes maintained in the interest of the working people, and offering either free tuition or requiring only small fees. No other country equals France in this respect. Experience shows, however, that this provision meets only the ambitious working people and even those not until the pressure of daily labor has aroused them to efforts for improving their condition. Only the robust and skillful are able to pursue the courses of instruction under these conditions.

ENGLAND.

In the schemes for social reconstruction which engage attention in England, notwithstanding the pressure of war, vocational education has a central place. The indifference on this subject, long maintained in face of earnest appeals, has passed. At this moment the Kingdom is alive to the danger of neglecting young people at the most critical period of their lives. The matter was pressed home

to the consciences of leading men of England in the speech by Lord Haldane before the House of Lords, already cited. Contrasting the condition of working boys in Germany with those who reach the end of elementary schools in English cities like London, he said:

> A large proportion of these boys go into what are called blind-alley occupations. At the age of 18, the boy not trained, like the German boy goes to look for employment, without skill and without training, and he lapses into the ranks of the unskilled and too often into the ranks of the unemployable, and it is in that way that we recruit our hooligans and wastrels.

All associations in England interested in education and social welfare or in labor problems are united in the call for educational reform. Prominent among these are the National Union of Teachers, the National Association of Education Officers, and the Workers' Educational Association. The schemes which these associations have drawn up differ widely in detail, but without exception they agree in the demand that the period of compulsory education shall be extended and that all continuation schools shall provide for vocational education.

The agitation of this subject was increased by the war, and in 1916 a Government committee was appointed to consider the needs of juvenile education when peace should be restored. In the midst of their labors the committee issued an interim report recommending that measures be taken at once to extend the system of juvenile employment bureaus and auxiliary committees throughout the Kingdom. This action was taken in view of the dangers arising from the large number of young people who had been turned upon the labor market without any guidance.

The final report of the Government committee insists upon the need of continuation schools, and with regard to them makes the following recommendations:

> That a uniform elementary school-leaving age of 14 be established by statute for all districts, urban and rural, and that all exemptions, total or partial, from compulsory attendance below that age be abolished.
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> That it be an obligation on the local education authority in each area to provide suitable continuation classes for young persons between the ages of 14 and 18, and to submit to the board of education a plan for the organization of such a system, together with proposals for putting it into effect.
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> That it be an obligation upon all young persons between 14 and 18 years of age to attend such day continuation classes as may be prescribed for them by the local education authority, during a number of hours to be fixed by statute, which should be not less than 8 hours a week for 40 weeks in the year. [From this obligation young people pursuing their education in secondary schools or higher institutions were exempted.]
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> That all classes at which attendance is compulsory be held between the hours of 8 a. m. and 7 p. m.
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> That it be an obligation on all employers of young persons under 18 to give them the necessary facilities for attendance at the statutory continuation classes prescribed for them by the local education authority.

The recommendations also provided for the punishment of those who should violate the law, and for modification of labor laws interfering with its requirements. Details as to the curriculum of the continuation classes were left for further instruction, excepting the recommendation that in every case the program should comprise general, practical, and technical instruction, with provision for continuous physical training, medical inspection, and clinical treatment when necessary.

The attitude of the present Government on this important problem is plainly indicated by the utterances of the president of the board of education. In his speech before the House of Commons, on submitting the education estimates for 1917–18, Dr. Fisher said:

> I have still to touch on a grave deficiency in our educational arrangements, and I allude to the inadequate provision for the intellectual, moral, and physical discipline of young persons during the period of adolescence. We turn children out into the world at the ages of 12, 13, and 14, just at the moment when their powers of intelligent and independent receptivity are first aroused and their schooling should be beginning to bear fruit. The results obtained by the evening schools are well worth having, but the number benefited is comparatively small, the attendance is spasmodic and irregular, and all experience tends to show that after a hard day's work young people are too fatigued to receive the full measure of benefit of evening classes. There are the Boy Scouts, Church Lads' Brigades, and girls' and boys' clubs, all attempting to cope with this problem. In certain of our great industrial centers schools have been established by the intelligence and benevolence of individual employers. These agencies are all valuable, and in my eyes they are the more valuable because they are voluntary. But their operation is partial, and they are not sufficient to secure the best result of elementary training for the great mass of the people.
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> I submit that the country does not get the full value out of its elementary system of education, because so much of the training and instruction is subsequently lost, and that it does not get the full value out of its higher technical colleges because those who attend their courses have learned little and forgotten much. It is clear that the country must do something to remedy this glaring defect in its system of national education. I do not conceal from myself that any scheme of continued education will be exposed to cross currents of criticism. It will not be easy to establish a scheme at once sufficiently comprehensive and elastic to give the young people the continued education they should have without an undue dislocation of our industrial system. Yet this is what must be done if the State is to reap the full measure of advantage from its system of public education. * * * Though we are an extremely clever nation when we choose to use our brains, we are only beginning to realize that the capital of the country lies not in cash and goods, but in the brains and bodies of the people.
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> We are told to economize in our expenditure and foodstuffs. I suggest that we should economize in the human capital of the country, our most precious possession, which we have too long neglected.
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> I should not recommend any measure which would have the effect of disturbing the labor market during the war, but I hope that Parliament may see its way to assent to a measure which will give effect to the general principles

which I have endeavored to describe, so that the foundation may be laid for a patriotic and social education worthy of the genius of our people and a fitting monument to the great impulse which is animating the whole nation during the war.

Taking advantage of the interest awakened by the events of the war, the board of education has issued a draft of revised regulations for continuation, technical, and art courses; that is, for the various forms of continued education which fall outside the sphere of the secondary school and the university. These activities are declared to be—

of the first importance for the welfare of the Nation, both from the point of view of training for good citizenship, which is the chief problem of adolescence, and from the point of view of specific training in the scientific and other studies that bear directly upon the successful conduct of industry and commerce.

These proposals foreshadow a more liberal policy on the part of the board in respect to the various forms of continued education, and also the expectation of larger support from local taxes. They are published in draft form in order to secure advice and helpful criticisms to guide in their final presentation.

The draft is based upon the existing system of voluntary attendance of continuation schools, but with slight modifications would apply if the recommendations for an obligatory system should be embodied in law.

AGREEMENT AS TO ESSENTIALS.

From the survey of recent activities it appears that France and England have reached the same stage in their progress toward a national system of continued education. In both countries voluntary agencies have been very active in this respect, but they can not meet the national need. The demand is imperative for a compulsory law, applicable to the entire population and enforced by national authority. In France this demand has taken definite form in a legislative bill. In England, while legislation is deferred the central board of education is already moving to promote local action by extra grants for schools and classes for adolescents, provided they conform to official requirements in regard to vocational training. These endeavors depend for their success upon the increased appropriations from the public treasury.

France and England both emphasize the need of broad scope in the extended education of the working people. The proposed law for France places stress upon vocational training in the first division of the continuation period, and upon instruction in civic duties and responsibilities in the second division. The latter covers the ages 17 to 20, the time when it is customary to call the attention of youths

to their approaching military training and the political obligation upon which they will soon enter.

The draft regulations for continuation schools in England leave the details of their programs to local authorities, but require in every case provision "for disinterested studies making for wise living and good citizenship."

In Germany employers are forced by imperial law to bear their part in securing the continued education of juvenile workers; the schemes proposed for England include the same provision; complaint is made that the French measure is faulty in this respect, but its amendment at this point is earnestly demanded.

The outlook on this subject, its complex relations, and the new forces which the war itself will bring to bear upon the problem are summed up in a striking passage from the address of the Lord Archbishop of Canterbury to the House of Lords. In this connection he said:

> Education is not a subject which stands in isolation by itself. It is colored by the Nation's social, economic, and religious traditions and aims. The returning soldier—that means, after all, the men of England practically to-day—will not be satisfied with some of the old conditions. Ought he to be satisfied with the old conditions as regards housing and as regards, in some departments of life, wages and the rest, into which I do not enter? But he will not be. The housing question in town and country, intense as is its difficulty, obvious as are the barriers that go across the roads of progress, will have to be met and dealt with at the same time as we are trying to deal with education and other kinds of progress. The wages question can not be separated from the housing question and will be necessarily before us in all intensity before many years pass. The diminishing birth rate and the rest is a question with which we shall have to deal. The fighting of disease on different lines from those on which it has been fought before is ahead of us. These things are astir, not only in the minds of us who are trying from central places to look at them on a large scale, but they are in the minds of the returning soldiers and sailors. I speak from personal knowledge. I have been in touch often and often in the last few months with men with whom I have discussed this subject, and I have found that undoubtedly there will be discontent with existing conditions accompanied by—and this is very important—a readiness which has not been known before to see and to understand the other side and the difficulties which belong to these problems. The way in which men have learned to discuss with others than their ordinary friends and companions in peace time, men of different antecedents, training, and sympathies, the way in which they have taken advantage of the opportunity to discuss these matters day by day and constantly during the last two years has, I believe, prepared the soil in a different kind of way for dealing with, in a new and reasonable manner, almost all these questions when they arise. At all events, whether we like it or not, the things are astir in the minds of men who are coming back with a wider horizon and with new thoughts in their minds.

As this matter is received from press a cablegram announces that the bill promised by the president of the board of education was presented to the House of Commons, on the eve of its adjournment in

August. It is expected that the bill will be taken up in October immediately after Parliament resumes its session. The measure embodies the broadest conception of popular education ever presented for the approval of Parliament, and it is supported by a force of public opinion greater than that commanded by any previous educational measure in England. If the bill becomes law, school attendance will be compulsory for all children up to the age of 14 years, and provide for their continued education with vocational facilities to the age of 16 or 17. The conditions prescribed agree with recommendations of the Government committee on continuation schools already cited.