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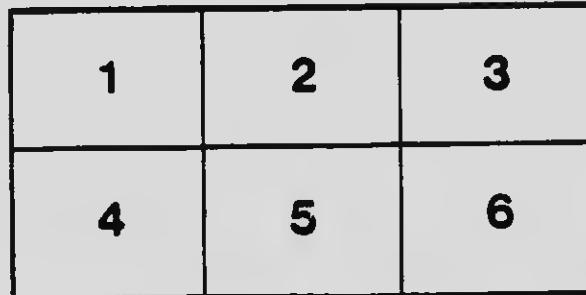
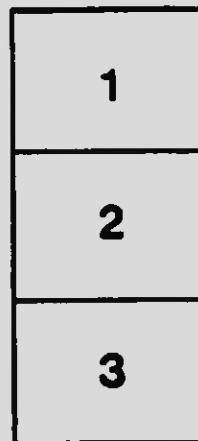
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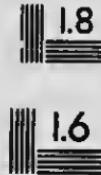
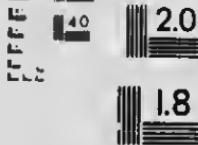
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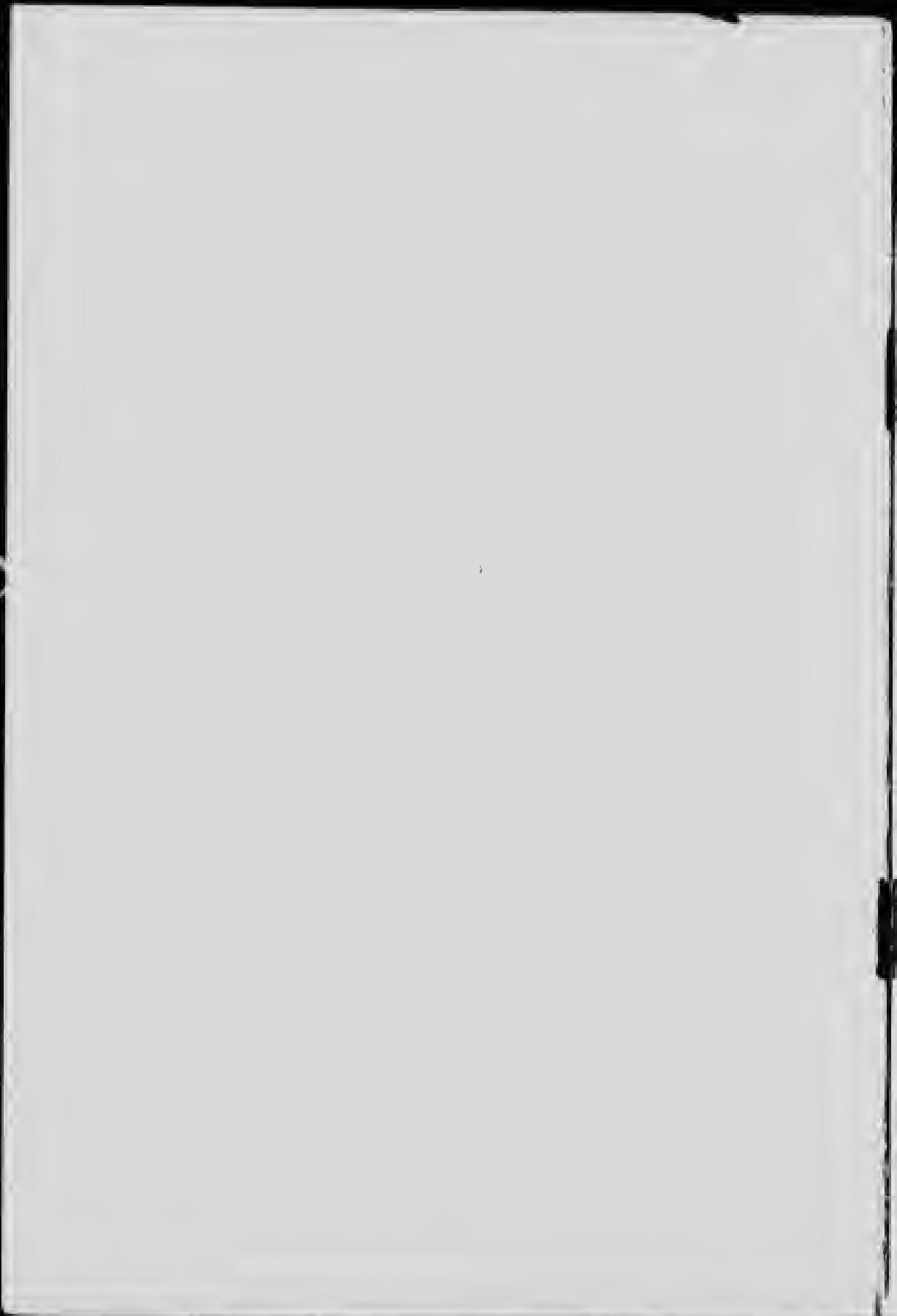
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The Ontario Examination Systems

BY

F. W. MERCHANT, M. A., D. PÆD.
NORMAL SCHOOL, LONDON.

¹⁹⁰³
THE LONDON PTG. & LITHO. CO.,
LONDON, ONT.



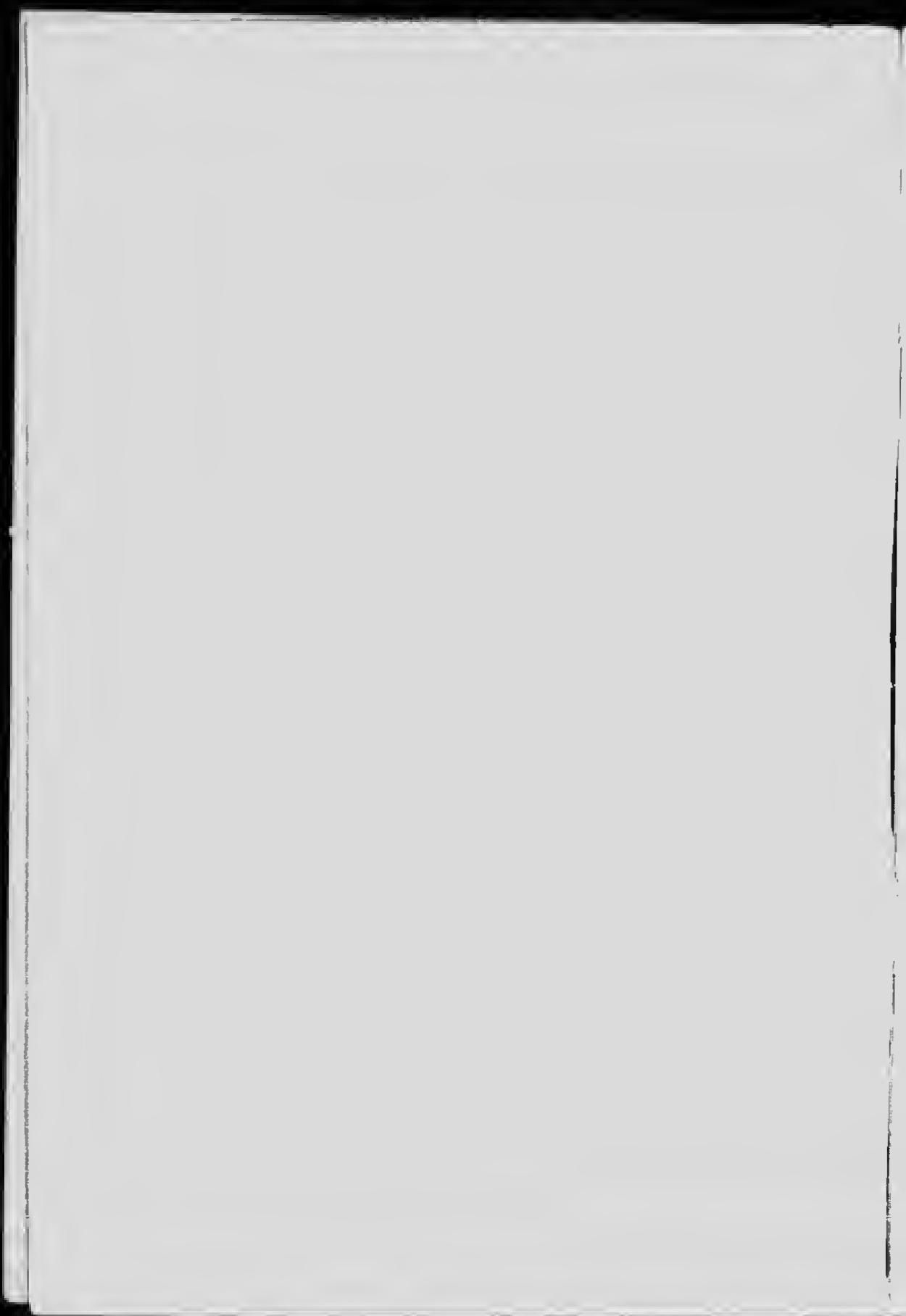
The Ontario Examination Systems

BY

F. W. MERCHANT, M. A., D. PÆD.
NORMAL SCHOOL, LONDON.

1903

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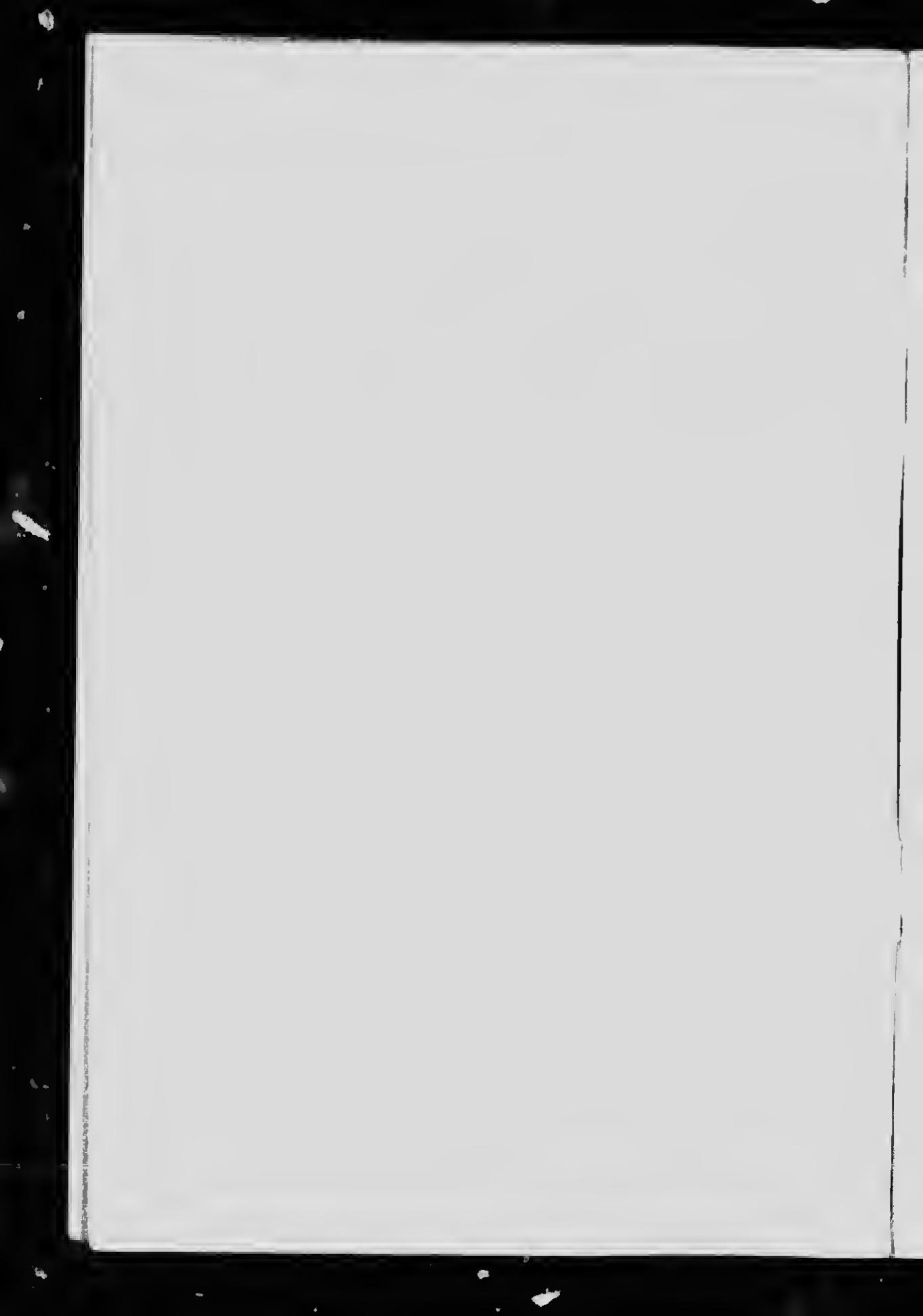


EXAMINERS' REPORT.

To the Registrar of the University of Toronto:

We are of the opinion that the thesis of Mr. F. W. Merchant, entitled "The Ontario Education Systems," and his excellent answer papers on Philosophy and EP¹, and on the Science and Art of Education, entitle him to the degree of Doctor of Pedagogy, with honors of the First Class.

JOHN WATSON,
J. A. MCKELLAN,



THE ONTARIO EXAMINATION SYSTEMS.

The ends of an educational system must be realized in external conditions. A system of school organization and administration adapted to the subject-matter and methods of instruction is necessarily called into existence by any form of education whose aims remain practically unchanged for a lengthened period of time. This machinery of management, though apparently externally bears directly on educational ideals; because whatever affects in any degree the vital relations of teacher to pupil, or pupil to pupil, assists directly in forming the distinctive character of the educational. As Dr. Dewey points out, "We think of the grouping of children in classes, the arrangement of grades, the machinery by which the course of study is made out and laid down, the method by which it is carried into effect, the system of selecting teachers and of assigning them to their work, of paying and promoting them, as, in a way, matters of mere practical convenience and expediency. We forget that it is precisely such things as these that really control the whole system, even on its distinctively educational side. No matter what is the adopted precept and theory, no matter what the legislation of the school board or the mandate of the school superintendent, the reality of education is found in the personal and face-to-face contact of teacher and child. The conditions that underlie and regulate this contact dominate the educational situation."

The study, therefore, of the conditions that determine this personal contact are necessary to apprehending the reality and estimating the efficiency of any educational system.

The investigation of these conditions from time to time is the more necessary because, as the history of education abundantly shows, the conditions tend to persist after the ends they are adapted to realize are no longer made prominent. They thus act as forces opposing advancement. Conflict has always been not so much between old and new ideals as between old conditions and new ends.

It is not the purpose of this paper to deal with the comprehensive question of the relation of the Ontario system of organization and administration to educational aims and processes, but rather to approach the problem by entering upon a discussion of one of its phases—the examination system.

It is commonly said the examination system is the distinctive feature of the Ontario system. Mr. Seath, Inspector of High Schools, comparing the Ontario system with that of some of the States of the American Union, says : "In Ontario, on the other hand, I hear more in our schools about examinations than I do about anything else. No part of our system can claim that it is free from its influence."

The object of the present investigation is (1) to determine to what extent examinations dominate the situation in Ontario, and incidentally to note forces and tendencies; (2) to enquire into the effect of the domination of examinations on educational aims, methods and courses of study.

In discussing the first point we shall enquire into (a) the extent to which students in the various grades of schools are directly affected by examinations as determined by the percentages of pupils in these schools working for examination; (b) the nature of the examinations, especially as they affect the relation of teacher to pupils in such matters as the fixing of the course of study, the setting of examination papers, reading of answer papers, determining results, etc.

PART I.—THE SITUATION.

I.—PUBLIC SCHOOL SITUATION.

The examinations taken by pupils of Public Schools are : (1) Uniform Promotion Examinations, (2) the High School Entrance Examination, and (3) the Public School Leaving Examination.

i. Uniform Promotion Examinations :

To determine the situation, in so far as it relates to uniform promotion examinations, in the Public Schools of the Province the following questions were submitted to Public School Inspectors:

- I. How many teachers are there in your inspectorate?
- II. What is the total number of pupils on the rolls?
- III. If you have a system of uniform promotion examinations :
 - 1. Who makes the question papers?
 - 2. By whom are the answer papers read?
 - 3. Who presides at the examinations?
 - 4. Which classes take the written examinations, and which ones are examined orally?
 - 5. Who bears the expense of the examinations?
 - 6. How often and when are the examinations held and promotions made?

¹ Report on the Manual Training Schools of the United States, with suggestions as to changes in the courses of study in the High Schools of Ontario. Report of the Minister of Education, 1906, p. 206.

7. How long has the system been in vogue?
 8. What means are adopted for promoting pupils, aside from these examinations?
 9. Has the system worked smoothly? If not, what are the chief causes of friction?
 10. Are the examinations taken by the village and town schools in your inspectorate?
 11. Have you made any changes in your system since it was introduced? If so, what are they?
 12. Is the High School Entrance Examination used as a promotion examination?
- IV. If you have not a system of uniform promotion examinations:
1. Are the promotions usually based on the result of written examinations?
 2. If so, are these tests made at stated periods, and how often?
 3. What means, other than written tests, are adopted for determining the standing of the pupils?
 4. Have you a uniform limit-table other than that printed on the register? Is it used as a basis for promotion?
 5. Was there ever a system of uniform promotion examinations in vogue in your county? If so, how long did it last, and why was it discontinued?

The answers to these questions indicate:

1. Uniform promotion examinations are held in 71 per cent. of the Public Schools of the Province.
2. The average number of schools combined in an examination division is 130, and the average number of pupils taking the same examination in a division is 6,240.
3. The question papers for the examinations are made as follows:
 - (a) A committee appointed by the teachers, in 22.22 per cent. of examination divisions.
 - (b) A committee appointed by the inspectors, in 25 per cent. of examination divisions.
 - (c) Inspector, in 50 per cent. of examination divisions.
 - (d) County Board of Examiners, in 2.78 per cent. of examination divisions.
4. The answer papers are read as follows:
 - By the teacher of the school, in 72.22 per cent. of examination divisions.
 - By a committee of teachers, selected by the Teachers'

- Association, in 13.88 per cent. of examination divisions.
 Exchange of teachers, as arranged by the Inspector, in 8.33 per cent. of examination divisions.
 A committee of teachers, whose work is revised by the Inspector, in 5.55 per cent. of examination divisions.
 5. In 72.22 per cent. of the examination divisions the examination is conducted by the teacher of the school, and in the remaining cases the presiding is arranged for by an exchange of teachers. In one examination division there is a regulation that a trustee, if possible, should be present with the teacher at the time of the examination.

6. In the inspectorat divisions in which examinations are held the following table gives the percentages of examination divisions which hold written examinations in the different grades :—

Book I., Part I.—None.
Book I., Part II. 33.33 per cent.
Book II. 94.44 per cent.
Book III. 100.00 per cent.
Book IV. 72.22 per cent.
Book V. —27.44 per cent.

7. The expenses of the examinations are met in the following different ways :—

- County Council, in 50.00 per cent. of examination divisions.
 County Council and Teachers' Association, in 13.88 per cent. of examination divisions.
 School Boards, in 11.11 per cent. of examination divisions.
 County Council and School Boards, in 8.33 per cent. of examination divisions.
 Council and entertainments given by teachers, in 2.78 per cent. of examination divisions.
 Pupils, in 2.78 per cent. of examination divisions.
 Teachers' Associations, in 5.56 per cent. of examination divisions.
 Teachers' Association and School Board, in 5.56 per cent. of examination divisions.

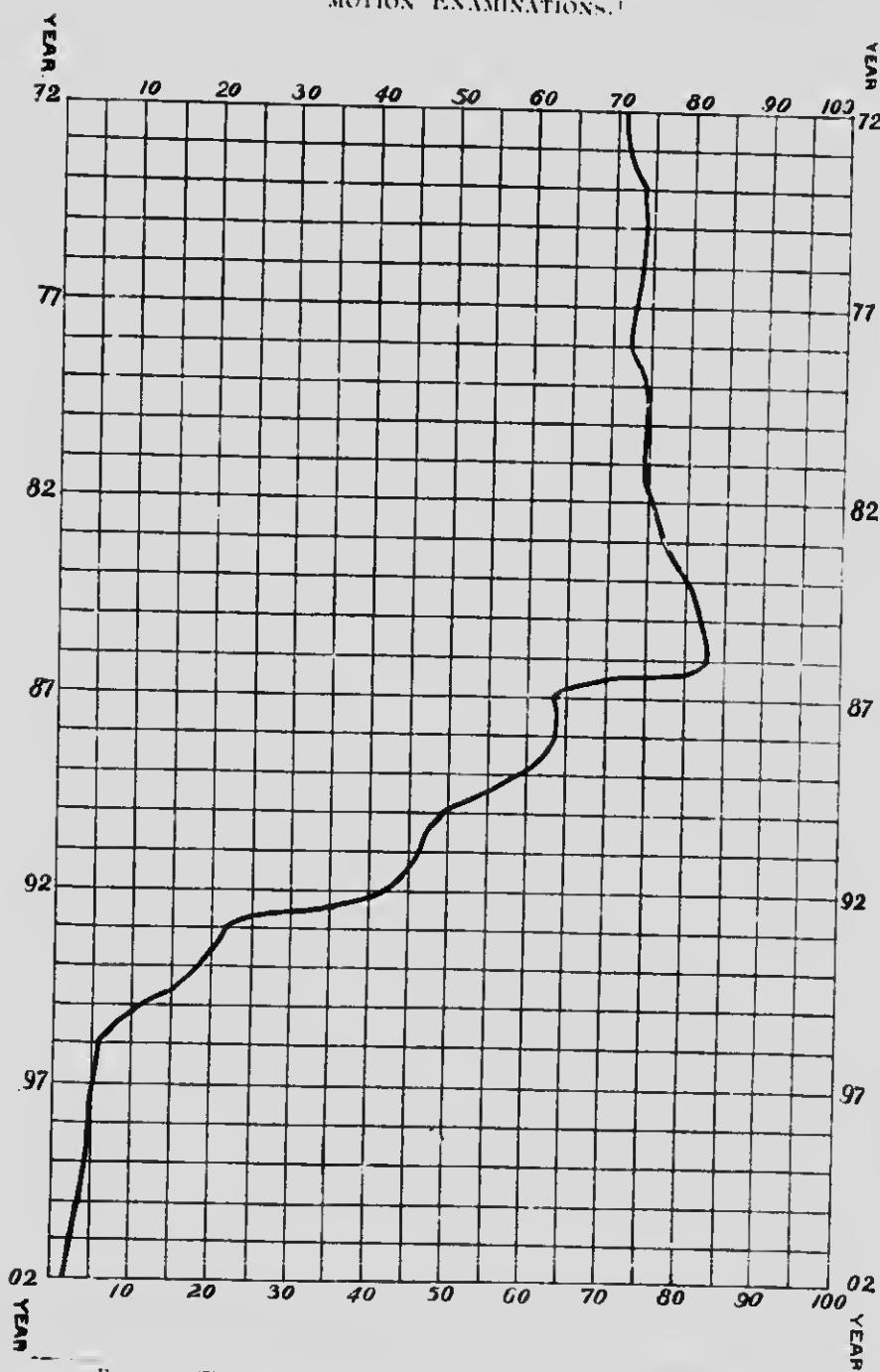
These results are valuable mainly from our point of view in that they show the popularity of the system of uniform promotion examinations both with the teachers and the public at large.

8. The examination for promotions are held once a year in 52.77 per cent. of the examination divisions, and twice a year in 47.23 per cent.

9. The following diagram gives a graphic representation of the percentages of inspectorat divisions holding uniform promotion examinations each year since the organization of the first examination in the year 1872. The present tendency is seen to be in the direction of a decrease in the number.

THE ONTARIO EXAMINATION SYSTEMS.

PERCENTAGE OF INSPECTORAL DIVISIONS HOLDING UNIFORM PROMOTION EXAMINATIONS.¹



1. *ERRATUM.* The order of the dates in this diagram is reversed.

10. In most of the examination divisions the examinations are not final, and liberty is given to the teacher, or to the teacher and inspector, to make promotions in exceptional cases. The following tables indicate the practice which prevails :—

Promotions are made by the Inspector on the recommendation of the teacher, in 33.33 per cent. of examination divisions.

The teacher is allowed to promote at his discretion, aside from the examinations, in 44.44 per cent. of examination divisions.

Examinations final, in 22.23 per cent. of examination divisions.

11. The answers indicate that the changes made in these examinations have all been in the direction of making them less rigid and of giving the teacher more power in the matter of promotions. The principal ones are as follows :—

The questions in an increasing number of them are being set by a committee of teachers, and the answers read by the teacher of the pupils, who presides at the examinations. There is a tendency in many of the examination divisions in determining the pupils' standing to take into account also the class work of the student during the year in connection with the examination results. Much more latitude is also being given to the teacher in the case of special promotions where students are found to be capable of taking up advanced work.

No case is instanced in which the present tendency is towards greater rigidity.

Several Inspectors indicate also that a change is taking place in the character of the examination papers. For example, one Inspector says, "The questions now ask less of definition and more of thought."

12. In inspectorial divisions where uniform promotion examinations are not held, the practice is in every case to base the promotions on the written examinations conducted by the teacher; but in all these schools the results of these tests are modified by the teacher's judgment, or by the record of the daily recitations. The tendency to base the results on a series of examinations held at frequent intervals is on the increase.

13. In submitting the questions to them, the inspectors were asked to give their personal opinions at length on the subject of uniform written examinations for promotion. These opinions are valuable, not alone because they indicate the preferences of practical men, but especially because they are to a great extent the measure of important forces at work in shaping our Public School system, which must be taken into account in estimating the direction in which forward movement is to take place. While the person in charge of the teaching staff in any inspectorial division is constantly changing, the Inspector retains his position for a long

period of years. He is usually a man of considerable force of character, and his settled policy shapes the educational practice in his constituency. While there are many Inspectors who declare directly against uniform examinations, the answers show that a large majority of them are in favor of these tests. Some of these opinions find expression as follows :

"Our system seems to work well. Even experienced teachers say that they would not like to do without it. Of course, the Inspectors have a veto power on all promotions, and look over the answer papers at their half-yearly inspection - more especially if they suspect that anything is wrong in examining the papers."

"There are very few causes of dissatisfaction. A few parents expect more than their children are able to do, but these are few."

"The system has worked well here. So far as I know there has been no fault found. Once or twice some of the papers were regarded as 'too stiff,' but that is rather to be commended than blamed."

"I cannot accept the doctrine that a teacher should make her own promotions, for, as Prof. Hadley, of Harvard, states in reference to the Matriculation Examination, the judgment of some teachers may be taken absolutely, of some others it is so near the line of cleavage that it cannot be accepted or rejected, while with the majority, from selfish interests and a thousand other considerations, it cannot be accepted at all. He says that in the Eastern States there is a general revulsion of feeling thought against the system of promotion on the teacher's recommendation. This accords with my experience in Public Schools."

"Our system has worked very satisfactorily. We would not like to have it discontinued."

"The system has never been discontinued since it was first introduced by me in about 1881, with the consent of the best and most experienced teachers in the County. All our teachers now say, and have said, that they could not get on without these uniform Promotion Examinations."

While many Inspectors express themselves in this way, others are decidedly opposed to these examinations, as is shown in the following extracts from some of the answers :

"We never had and do not intend to have any system of uniform promotion examination."

"There never was any such system in my Inspectorate, and I would not have one if it were proposed. I do all I possibly can to discourage preparation of candidates for entrance examination."

"We had uniform promotion examinations, but after trying them under every condition we could think of, we gave them up and have been glad ever since that we did so."

"We never had uniform promotion examinations in this County. The abuse of such examinations in the neighboring inspectorates (in many, if not all, they have been discontinued) gave us a wholesome lesson. We hold our teachers responsible, and if at any time these are improperly made the fact is put in the report to the Trustees, which generally costs the teacher his position. This I have seldom to do. Trust and assist your teachers, as I am satisfied no uniform system for the whole Province can be successfully managed."

"The results of a uniform written promotion examination led to cramming and was found to be faulty. The good results, if any, were no compensation for the labor and trouble caused by them to the teachers and inspector."

It is observed that while those in favor of the examinations are the more numerous, those against them are the more pronounced in their opinions.

2. The Entrance Examination :

The conditions prevailing before the organization of the present Entrance Examination were discussed from time to time by the Inspectors of High Schools in their reports to the Superintendent of Education. The following extracts from the reports of Rev. J. G. D. MacKenzie, M. A., and J. A. McLellan, Esq., M. L. B., outline briefly the substance of these reports :

"The examination and admission of pupils is elementary work, but it is a very important work. It virtually decides whether the Public School has done its part, and in what condition the High School ought to receive those who are to be the recipients of the higher instruction it has to communicate. The experience of years has taught on this head lessons of great value, which our educational authorities have not failed to turn to good account ; and so distinct and positive has this teaching been, that there is perhaps no feature of our school system in which we are more directly led to safe and sound conclusions. The utter inefficiency of the old Grammar School arrangements in this respect, with their low standard of attainment, and their very imperfect mode of examination, was so notorious, and the mischief done to both classes of schools so great, that every one was brought at last to feel that the evil was one that was eating the very life out of our schools. It was felt that the starting point had been fixed so deplorably low, that no goal of high attainment would be reached ; and that nothing short of a radical change in

conducting the examinations for admission would save the education of the country. Professor Young's strong sketches left no doubt as to the real state of things, and very suggestive were they of the sort of educational chaos into which the country was being brought : ' Boys and girls alike, with the merest smattering of English grammar every child supposed to have any chance of wriggling through the meshes of the Inspector's examining net driven like sheep into the Grammar School, and put into Latin in order to swell the roll of Grammar School pupils, and to entitle the school to a larger share of the Grammar School fund.' It is well that we should keep that picture before us, with all its associations of unworthy managing to combine the maximum of money with the minimum of education, both that we may better appreciate our deliverance from such a state of real degradation (for it was nothing else), and be led to watch the more anxiously any efforts - if, happily, such should be made - to check and turn back the upward movement which the new school law has so happily initiated. In connection with this low standard parsing a simple sentence in English being practically the only test we may mention one fact that shows, amongst many others, how terribly in the days of which we are speaking things were unhinged and out of course. As soon as the new School Act became law, the Inspector received instructions from the Department to apply with greater strictness the old method and standard, until they should be superseded by the new. Just one change was made, but that was found all-sufficient : the parsing, instead of being given orally, was exacted in writing. The effect was most remarkable. About one-half of the candidates presented to the Inspector as fit subjects for High School tuition were found, to a lamentable extent, incapable of spelling correctly in writing - whatever they may have been able to do orally words certainly not amongst the most difficult in the language, more particularly those very terms of grammar which were almost every day in their mouths. Much harm, unfortunately, had already been done, but how much more would have been done but for the salutary interposition of the Inspector between the High School, with its coveted legislative grant, and the pushing tendency of the local authorities ! At last came the system under which we have been working for a twelvemonth - the Board of Examiners attached to each school, whose admissions are made final on approval by the Inspector, who is 'to see that the regulations and programme of examination provided according to law are duly observed,' and, therefore, not vitiated by the admission of pupils who do not come up to the prescribed standard. It is plain enough that this is a vast improvement on the old plan, yet far from perfection ; for one thing it wants, and without that it will never command public

confidence uniformity. It is felt that, though it protects the High School from many an unfit pupil that would have crept in under the 'simple parsing' system, it nevertheless works unequally, and with all the care the Inspector can exercise, it must work unequally, so great is the disparity between the different sets of questions, as put by different Examining Boards. There is, it is true, the expedient of exacting a higher percentage where the questions are easier, and this has been resorted to in some cases, but the proceeding is viewed with so much distavor, and is so much regarded as an arbitrary act of the Inspector, that we have no high opinion of it as a remedy. There is but one course which can be considered fair to all, and that is, providing the examination for all, subject always, of course, to that indispensable safeguard, revision by the Inspectors. That course, we are glad to see, has been adopted by the Department, under whose instructions questions for the Entrance Examinations have been prepared by the High School Inspectors, to be submitted to all the schools. This will excite general satisfaction, as a most commendable move in the direction of uniformity, and, we hope, will quite dispel that feeling of uneasiness to which the absence of uniformity has given birth."

The present entrance examination took form as a result of the recommendations made to the Superintendent of Education by J. A. McLellan, LL.D., Inspector of High Schools, in his exhaustive report in 1872 on the conditions and requirements of the Ontario High Schools. The following extracts from this report indicate fully the conditions which made the organization of this examination a necessity :

"The suspension of the regulations concerning the admission of pupils has proved very injurious to the interests of higher education. All experience has shown the necessity of a change, both in the standard of scholarship prescribed for entrance, and the mode of conducting the examination. Boys and girls possessing the merest smattering of the elements of a Public School education 'had been driven like sheep' into the High Schools to swell the number of pupils and increase the apportionment from the public funds. The consequence was, as all Inspectors have reported, and all independent testimony has proved, that the efficiency of the Public Schools was greatly impaired, and many of the High Schools, far from doing the work in higher English and commercial subjects, for which they were designed, and for which they were liberally paid out of the public treasury, might be said to possess a 'local habitation and a name,' but nothing more.

^{1.} Report and suggestions with respect to the High Schools and Collegiate Institutes of Ontario, for the year 1872, by the Rev. J. G. D. MacKenzie, M.A., and James A. McLellan, Esq., M.A., LL.B., Inspectors of High Schools. Report by the Chief Superintendent of Education, 1872. Appendix, p. 8-9.

"To do justice to the better schools, at whose expense many of the poorer ones dragged on a wretched existence to raise the latter from the position of low-grade elementary schools to a higher plane to increase still further the excellence of the really good schools to render the entire system thoroughly efficient for the accomplishment of the grand work for which it was established

it became absolutely necessary to institute a more rigid examination and to make it uniform for all the schools. Regulations to secure this end were passed, and the long-desired reform was about to be accomplished. Unfortunately, these regulations were set aside ; the operation of measures essential to the improvement of the High Schools was arrested ; not only were the so-called 'obnoxious checks'—'the iron barriers'—removed, but all checks, all barriers, all restrictions, were absolutely swept away.

"The result was, that the evil to be remedied, instead of being mitigated, was greatly augmented. The barriers were removed, the doors were thrown wide open, and swarms of ill-trained pupils passed from poor Public Schools to swell the numbers of poorer High Schools."

"We must have a respectable entrance examination, and this must be uniform and conducted by independent examiners. In consequence of laxity in the admission of pupils, all the High Schools have been doing too much elementary Public School work, and not a few of them have been doing such work exclusively. This anomalous condition of things should no longer be permitted to exist. The really good schools must be made still better ; the low-class schools must be improved in character ; the entire system must be made more efficient, and really capable of the great work for which it was designed. To this end a strict matriculation examination will contribute more powerfully than perhaps any other agency. Let uniform papers be prepared by a central committee of examiners ; let the Public School Inspector conduct the local examinations ; and let his decision be subject to the final approval of the Central Committee, or of the High School Inspectors. It has been objected to the appointment of the Public School Inspector as sole local examiner, that in some instances he may be inimical to the High School, and may employ his power adversely to its interests. But it is to be hoped that instances can rarely be found in which an Inspector is so false to the high claims of national education as to employ the power entrusted to his hands in order to promote those claims, in the vile attempt to injure one of the three great agencies in our national system.

^{1.} Report and suggestions with respect to the High Schools and Collegiate Institutes of Ontario, for the year 1872, by James A. McMillan, Esq., LL.D., Inspector of High Schools. Report of the Chief Superintendent of Education, 1872. Appendix, p. 7.

Besides, as under the proposed scheme the award of the Inspector is subject to revision by the Central Committee, he will be utterly powerless, even if disposed, to perpetrate any injustice upon the High Schools in the conduct of the entrance examinations. Let this important step be taken, and it will prove, I believe, the most powerful means perhaps available in improving and elevating the character of the High Schools—making them higher institutions of learning in reality as well as in name, and thoroughly efficient for the great part they are to play in the progress and development of the nation."²

This examination was conceived by him simply as a High School Matriculation Examination, and was not devised for the purpose of testing the completed work of the Public Schools or of making all Public Schools simply feeders to High Schools. His conception of the Public Schools is thus expressed in the report:

"The great object of the Public School is, not only to place within the reach of all a course of education sufficiently extensive and thorough for all the ordinary pursuits of life, but to create a national intelligence which shall be effective in national progress. Hence the Public School has a complete and well-defined end in view, a noble object of its own to accomplish. Those who look upon it as the insignificant beginner of an imperfect work, which is merely initiatory to that of a higher and more favored institution, fail to comprehend its true character and object. It is not a mere feeder to the High School; to provide the latter with pupils is surely not the sole, or even the primary, object of its existence. The High School, indeed, cannot exist without the Public School, but the Public School is independent of the High School. And thus, while the High School forms an important part in the complete system of State education, the Public School is absolutely essential to the advancement of the nation. Hence the necessity of keeping constantly in view the high aim of the Public School, and of making it eminently efficient for its great work in general education."³

Something of the limitations and results of the examination are shown by the reports of the High School Inspectors for the next year (1873).

"We are not without hope that, by adopting such judicious alterations as experience will suggest, these examinations will (comparing small things with great), in the course of time, hold to our Public Schools the relation which the famous Abiturienten-

² Page 66.

³ Page 13.

examen, or Leaving Examination, does to the German gymnasium. It may be so, if only the spirit of the instructions in regard to the German examinations be found to animate those who have the conduct of our own : To tempt candidates to no special preparation and effort, but to make the test such as 'a scholar of fair ability and proper diligence may, at the end of his school course, come to with a quiet mind and without a painful preparatory effort, tending to relaxation and torpor as soon as the effort is over.' The total cultivation of the candidate is the great matter, that the instruction in the highest class may not degenerate into a preparation for the examination, that a pupil may have the requisite time to come steadily, and without over-hurrying, to the full measure of his powers and character, that he may be securely and thoroughly formed, instead of bewildered and oppressed by a mass of information hastily heaped together.¹⁶ All hurried preparation, and all stimulation of vanity and emulation, is to be discouraged, and the examination, like the school, is to regard the 'substantial and enduring.' Wise words, which may, in the present critical condition of our Canadian schools, be pondered with advantage by teachers and examiners alike of every degree, from the Common School to the University."

The following extract shows that these Inspectors foresaw not only what the examinations would probably become, but also the evils which were likely to arise in connection with it :

"It is difficult to estimate aright, so soon after the practical recognition of the principle of a uniform entrance examination to the High Schools, the beneficial results that are likely to flow from it. The soundness of the principle had long been admitted, not only by the Council of Public Instruction, but also by the great majority of the Masters, many of whom had felt the inconvenience of the old system, under which they were frequently burdened with the sole charge of the admission of pupils, and subjected, not seldom, in consequence of their direct interest in the result, to a suspicious criticism. The conduct of the examination resting now in the hands of the Public School Inspector, as the responsible presiding officer, the Master is extricated from an inviolable position ; while the Public School Inspector, acting at a point where the High and Public Schools are in contact, is enabled to bring the schools of his District into a more harmonious relation with the higher department of the general school system ; and is also provided, in common with his colleagues throughout the Province, with a test of the comparative merits of the schools in which the candidates were prepared.

¹⁶ Report and suggestions with respect to the High Schools and Collegiate Institutes of Ontario, for the year 1873, by James A. McLellan, Esq., M.A., LL.D., J. M. Buchan, Esq., M.A., and S. Arthur Morling, Esq., M.A., Inspectors of High Schools. Report of the Chief Superintendent of Education, 1873, Appendix, p. 5.

"With over one hundred examining Boards, with every conceivable mode of training and no training that is to be found in the public and private preparatory schools, it is not to be supposed that those examinations ensure more, at present, than an approximation to uniformity. As a test of merit, a written examination—the best, may, the only one possible, in the circumstances—is, in its nature, to some extent, illusory; the judgments of many different examiners, reviewing the same question, are found widely different—while the revising Inspectors, however anxious to act impartially and never rejecting a candidate without the clearest evidence of non-qualification, have not always succeeded in excluding from the High Schools pupils who ought not to have been admitted. Notwithstanding defects, however, we are of the opinion that the uniform entrance examination to the High Schools will be regarded by the most judicious and experienced authorities as of vital importance to our educational system, and in anywise to be retained and developed; amended, also, with the experience which time will bring."

"It is important to keep in view the reflex influence of these examinations upon the Public Schools, which has already been alluded to. County Inspectors have not been slow to recognize their value. They have directed the attention of their teachers to the questions issued by the Department, used these questions in the examination of their schools; and while thus promoting the organic unification of the school system, have stimulated both pupils and teachers by pointing out to them a *terminus ad quem*, to which in the first instance their ambition may be directed. It is only by mutual co-operation among the administrators of the several departments of the Provincial education-work that the efficiency of this work can be secured. Where the machinery is so extensive, it is of the last consequence to avoid wasting several forces by misapplying them, or by employing them in mutually destructive directions."¹

The Inspectors in their reports for 1874 state:

"It is now comparatively rare to meet with any considerable body of pupils in the High Schools who have not been regularly admitted. The best masters, almost without exception, are glad to be supported by law in declining to receive young children whom pique, partiality, or excess of zeal on the part of parents might otherwise remove prematurely from the elementary schools. Only qualified pupils presenting themselves in the intervals of the

¹. Report and suggestions with respect to the High Schools and Collegiate Institutes of Ontario, for the year, 1874, by James A. McLellan, Esq., LL.D., J. M. Bradbury, Esq., M.A., and Arthur Marling, Esq., M.A., Inspectors of High Schools. Report of the Chief Superintendent of Education, 1874. Appendix 3, 3.

entrance examinations are permitted, with the Inspector's sanction and the approval of the Department, to join the High School classes on undertaking to appear at the next ensuing examination for admission."⁶

The following reference to the Entrance Examination appears in the report of the Inspectors for 1875:

"When the system of uniform entrance examinations was instituted in 1873, there were many fears expressed that if the standard then set up were maintained the High Schools would speedily be depleted. So rapidly, however, did the Public Schools, the private schools, and the preparatory classes, from which the High Schools receive their pupils, respond to the demand made upon them, that no serious diminution in the number of High School pupils took place. Under these circumstances we felt justified in taking another step in advance. During 1873 and 1874 a great many of the local boards provisionally admitted pupils who, though they had made 50 per cent. of the aggregate number of marks, were yet very deficient in particular branches. We dealt with the more striking cases of this kind in revising the results of the examinations; but as this course led to a good deal of unnecessary friction, and as it was perfectly evident that entrants could be properly prepared in every subject, we caused it to be announced for the guidance of the local boards that we would not consider any one competent to enter who failed to obtain one-third of the marks in any subject. This announcement met with general approbation, and the carrying of it into effect has resulted in improving the quality without diminishing the number of entrants, the Public Schools and other schools preparing pupils for the High Schools having again rapidly responded to the demand made upon them. In consequence, the fresh material placed in the hands of the High School Masters to mould in 1875 has been better than ever before."⁷

This is practically the last important reference in these reports to the workings of the Entrance Examination. These extracts show briefly and definitely its early history.

The Education Department took charge of the examination in the year 1877. The following are some of the principal changes that have been made in the examinations since that time:

The personnel of the Board of Examiners has been increased and made more representative by the addition of Public and Separate School representatives.

The Boards have been given greater freedom of action.

⁶ Page 3.

⁷ Report of Chief Superintendent of Education, 1875, Appendix, p. 3.

The revision of the work by the High School Inspectors has been dropped.

The regulations for passing candidates failing on certain subjects have been made more elastic.

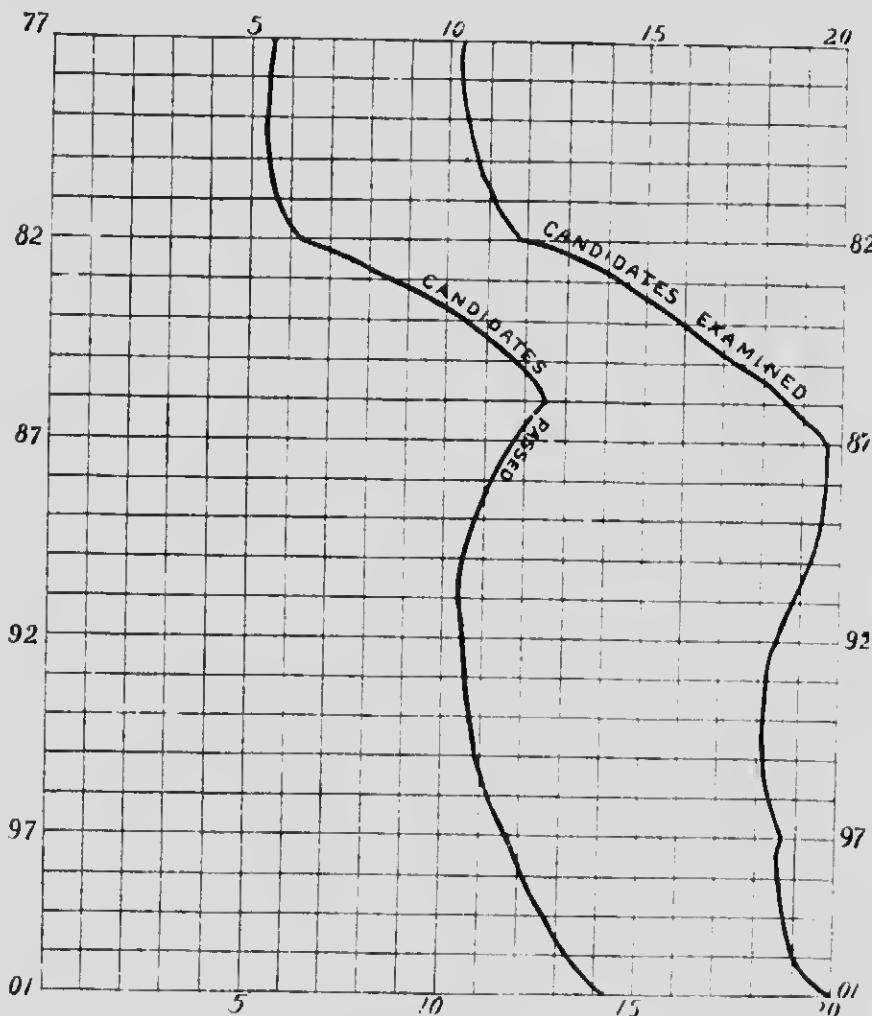
The papers themselves are now retained by the Boards, who are required to consider special cases and to hear special appeals.

The papers, which were at first set by the High School Inspectors, are now set by persons more directly connected with the Public School work, the examiners being usually Public School Inspectors.

The following table and diagram shows the relation of this examination to effort in the Fourth Form of the Public Schools:

YEAR.	No. of Pupils in Fourth Book.	No. of Candidates.	No. of Candidates who passed.
1877	72,871	7,383	3,836
1882	71,740	9,007	4,371
1887	81,084	10,248	6,304
1892	88,934	10,409	8,427
1897	89,314	10,384	10,502
1900	89,500	10,416	9,574
1901	84,507	17,140	12,220

PERCENTAGES OF PUPILS IN THE FOURTH BOOK WHO WERE EXAMINED
AND WHO PASSED THE ENTRANCE EXAMINATION :



3. The Public School Leaving Examination.¹

The Public School Leaving Examination was established in 1892 by a statute in these words: "There shall be an annual leaving examination in the Public Schools on such subjects and according to such regulations as may be prescribed by the Education Department."

¹ Since the above was written, the Public School Leaving Examination has been discontinued.

It was found that there was a tendency for pupils to drop out of the Public Schools on the passing of the entrance examination, and the original aim of the Public School Leaving Examination was to afford a proper completion of the Public School course. It soon became an alternative for the First Form examination or the Commercial examination of the High Schools, and is now amalgamated with Part I. of the High School Junior Leaving Examination.

The papers were first set by examiners appointed by the Education Department, and the answers read by the Entrance Boards; but they are now set by examiners and the answers read by associate examiners appointed by the Educational Council.

The following table shows the number of pupils in the Fifth Form of the Public Schools, and the number taking this examination every year since it was established:

YEAR.	No. of Pupils in Fifth Book.	No. of Candidates	
		No. examined.	No. who passed.
1862	13,370	4,321	1,051
1863	14,310	5,391	2,681
1864	15,648	2,021	1,000
1865	17,030	2,630	1,395
1866	16,014	3,230	1,826
1867	21,070	4,578	2,242
1868	16,303	5,280	1,080
1869	17,498	4,308	2,825

II. - THE HIGH SCHOOL SITUATION.

The first examination that was a distinctively High School examination was the Intermediate. It was established primarily for carrying into effect the new principle of distributing the Government grant among High Schools on the basis of "payment by results." Since the organization of the Intermediate the Education Department has continued to hold each year examinations in connection with the High Schools. An examination of the Statutes and Departmental Regulations shows a vast number of changes in these examinations in regard to curriculum, options, percentages, etc.; but with all these changes these features of the examinations have remained constant:

1. A detailed course of study prescribed by the Education Department.
2. A Board of Examiners, appointed by the Department, or by a Board or Council to whom the power has been delegated to prepare the answer papers.

3. A Board of Sub-Examiners or Associate Examiners, appointed as above, to read the answers of candidates and report the results.

The principal changes may be summarized as follows :

1. The principle of payment by results has been dropped.
2. The Intermediate has been incorporated with the Departmental Examinations for teachers' certificates, and these again in turn with that for University Matriculation. The combined examinations have been adopted as examinations for admission to most of the professions. They have been variously designated. They have been named after the different grades of teachers' certificates ; they have been styled Leaving Examinations, and are now known as Form Examinations.

3. Changes in the course of study have been determined mainly by changes in the requirements for University Matriculation. The only marked tendencies to break away from the University ideals are those shown in late years in the establishing of a Commercial Course, with an examination of its own, and also in the organizing during the last year of Manual Training departments in connection with certain schools. The most marked tendencies in University changes, as shown by the requirements for the last twenty years given below, are : (a) To increase the number of subjects ; (b) To lower the position of Greek, and to raise that of Modern Languages and Science.

REQUIREMENTS FOR MATRICULATION, 1880-1900.

1880. Latin, Greek, Mathematics, English and History, Moderns (optional).

1885. Latin, Greek (or French or German), English and History, Mathematics, Science (optional).

1890. Latin, English and History, Mathematics, and one of the following : (a) Greek, (b) French and German, (c) French and Science, (d) German and Science.

1895. Latin, English and History, Mathematics, one Modern Language, with (a) Greek, or (b) the other Modern Languages and Science.

1900. Latin, English and History, Mathematics, with two of the following : (a) Greek, (b) French, (c) German, (d) Science.

4. The changes more directly affecting the relation of teacher to pupil have been :

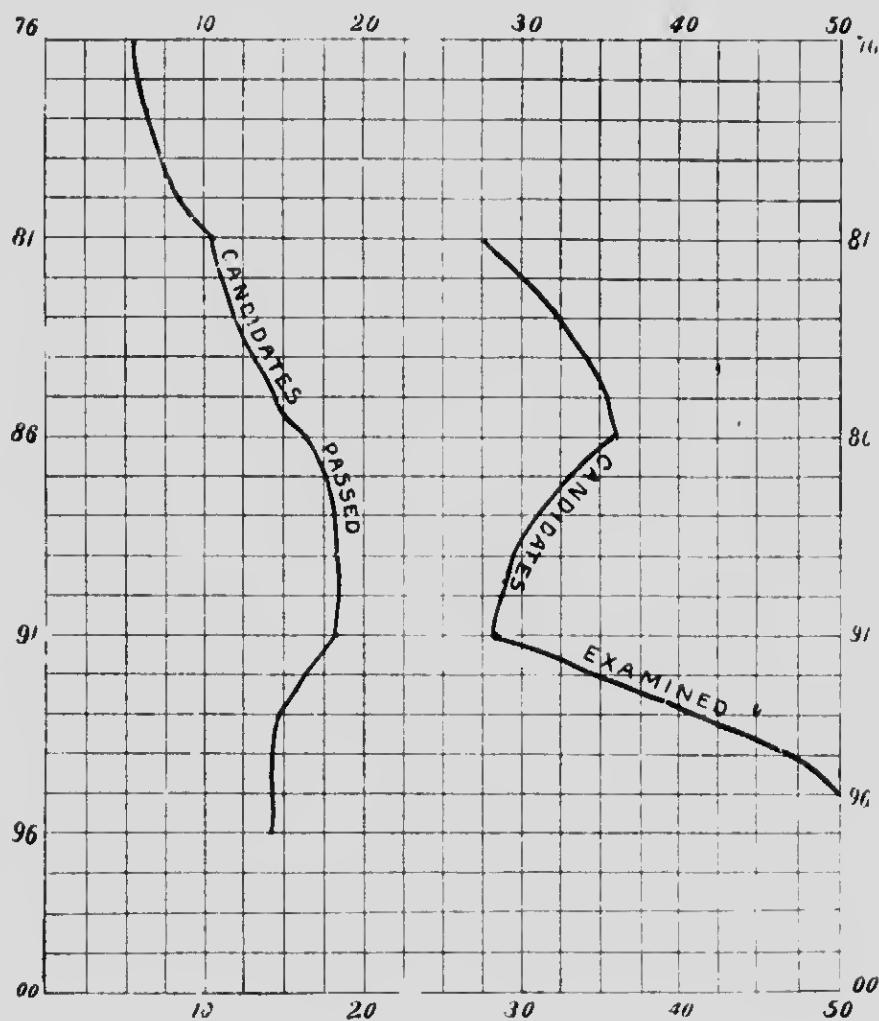
(a) The regulation requiring the appointment to the Board of Associate Examiners of men actually engaged in teaching the subject examined upon.

(b) The regulation allowing the confidential report of the staff of a school to be considered where the result of the examination in the case of a particular candidate is in doubt.

The table which follows shows the relation of the number of pupils in High Schools directly working for examinations to the total number in attendance at periodical intervals since the organization of the Intermediate. The percentages of the pupils in attendance examined and passed are shown in the graphic representation.

Year.	No. of Pupils in High School.	No. of Candidates examined.	No. of Candidates Passed.					
			Form I, or P. S. Leaving.	Primary or Form II, Part I, Junior Matriculation.	Intermediate or Form III.	Form IV, or Sc. Leaving Honor Matriculation.	Commercial Diplomas.	Total.
1876	8,541	.....	.....	451	.....	.....	451	
1881	13,136	3,592	164	954	.....	.....	1,418	
1886	15,344	5,055	1,312	1,101	.....	.....	2,413	
1891	22,230	6,215	1,406	1,252	134	.....	3,882	
1896	24,507	13,220	1,251	1,725	312	349	3,637	
1901	.....	14,500	3,530	1,042	2,226	720	63	7,588

PERCENTAGES OF PUPILS IN ATTENDANCE AT HIGH SCHOOLS WHO
WERE EXAMINED AND WHO PASSED DEPARTMENTAL EXAMINA-
TIONS:



To determine the relation of Departmental examinations and other written examinations to the ordinary promotions in High Schools, the following questions were sent to Principals of High Schools :

1. Are your promotions based on the results of written examinations?
2. If so, are these tests made at stated periods, and how often?
3. What means, other than written tests, are adopted for determining the standing of the pupils?
4. Are the Departmental examinations used for promotion in the higher forms?

The answers to these questions show that while written examinations for promotion are held in all schools, in only 7.33 per cent. of the schools is promotion determined on the results of written tests only. In all other schools there are various schemes for taking into account the class work and the teacher's estimate in basing the promotions. The answers also indicate that only in 4.58 per cent. of the schools are these examinations held annually. The common practice is to hold a series of tests from time to time during the year, and to take these into account along with the class standing in making up the final results. The Departmental examination is made use of in 96.2 per cent. of the schools in making promotions in the higher forms, but in 79.64 per cent. of these the results of the Departmental examinations are modified by the examinations held in the school from time to time. The High School Masters were also asked to give their opinions in regard to the written examinations for promotion. The following are some of the various phases of opinions and practice:

"Departmental examinations are taken into account, but a student may pass a Departmental examination and yet, unless he is qualified in all subjects, he will not be promoted. We have now in Form II, students who have passed Second Form examinations."

"The Departmental examinations are not used as a basis for promotion. Experience has taught us that the poorest tools in a form are frequently successful at these tests, while comparatively good pupils may fail; so it is distinctly explained that the teachers, who are working with the classes from day to day, are better judges of a student's ability to take up advanced studies than is any man who has only the answers to a single set of questions. The basis of promotion here is not any single test, but as far as possible steady, even progress throughout the session. There is in consequence no *fixed mark* which may serve as a mere

minimum, and thus as an excuse for the bright, but idle, pupil to take shelter behind as means of neglecting his work. It is no uncommon thing at all for the student with the smaller average of examination results to be sent forward, while the one with the higher record is not successful. Intelligent application and industry should all be elements, I think, in considering promotions, but the examination does avail as tests to these."

"I may be behind the times in my views, but I have every faith in written examinations if rightly conducted. I find that it is the weak ones who suffer every time."

"Our estimate of the pupil usually comes first."

"The Departmental examinations, I regret to say, must be used for promotion, and in schools where it is impossible, owing to insufficient teachers, to have a form between Forms II. and III., it leads to wretched classification and considerable waste of time for the better pupils. This is a difficult problem for Principals of the smaller High Schools and Collegiate Institutes, and seems to have arisen with the advent of continuation classes."

"Our promotions are largely based on written examinations. There are two or three examinations in each subject during the school year. These examinations are distributed throughout the greater part of the year. When one paper or so a week is given there is opportunity for review, and there is little cause for that intense strain, which is the worst feature, perhaps, of written examinations. Then the effect of temporary indisposition, etc., is minimized and an average is reached."

"All promotions are conditional on pupils maintaining their positions in form to which promoted, and reduction to a lower form takes place when a pupil does not maintain his position in his form."

"We have found it expedient to make the Departmental examinations the only basis of promotion."

"We not infrequently promote pupils whose class record is good and who are known to have done good and conscientious work, even though they may have failed to attain the standard required at our examinations."

"We do not depend entirely upon written examinations. The Departmental examinations govern only in promoting from Form III. to Form IV., and our own judgment of the pupil decides how much of Form IV. work he is to take."

"Results are kept and term reports published, but no pupil is promoted who is not, in the opinion of the teachers, able to go on with the work of the next form. Departmental examinations are not used for promotion."

"I never allow the results of written examinations to work an injustice. Weekly examinations are held during the greater part of the year, and the results of these, together with examinations in June, are used in determining promotions."

"I reserve the right of using my own judgment. For instance, if a pupil gets up the Departmental work at the expense of other subjects I do not promote him."

"I think, in general results, the Friday afternoon examinations are the best tests, and they ensure attention to work from the very beginning of the year."

"We hold examinations for promotion, but we qualify results from our daily experience."

III.—THE UNIVERSITY SITUATION.

The Matriculation Examination of most of the Universities is, as we have seen, combined with the Departmental High School examination.

The University of Ottawa differs from others, in that students upon entering are examined by the Prefect of Studies, and placed in the class for which he is best fitted. It is worthy of note that some of the Universities in the Dominion outside of Ontario have adopted a system which is in vogue in the United States. For example, in Dalhousie persons may be admitted as undergraduates of the first year without examination, on presentation of certificates from the Principals of High Schools or Academies, approved for this purpose by the Faculty, stating that they have satisfactorily completed the work prescribed for the Junior Matriculation and passed satisfactory examinations therein.

For the examinations during the undergraduate years there is a great diversity of system.

The University of Toronto offers only one examination annually, although the Colleges have terminal examinations in the pass work. The finals, however, cover all deficiencies in terminal examinations.

Queen's University and McMaster University¹⁶ have final examinations only. Candidates for the degree of Bachelor of Arts at Trinity must "have kept nine terms (an academic year is divided into three terms) and passed three examinations—the primary, previous, and final." Students, however, will not be allowed to go up for these examinations unless they have passed the Christmas College examinations or the supplementals held at the end of Lent. Marks obtained here are reckoned in awarding scholarships.

¹⁶ Since the above was written, the examinations at McMaster have been divided into two parts, the first being held in January and the second in April.

The University of Ottawa holds three sessional examinations a year—a written before the Christmas holidays, an oral at Easter, and a written immediately before the close of the academic year. The general examination, together with the marks of the entire preceding session, determine whether the student shall be promoted or not; while a failure in two or more subjects at the sessional examinations involves the loss of the session. In special cases the student may recover himself by a supplementary.

During the first and second years in McGill College there are Christmas and sessional examinations obligatory on all the undergraduates, and in the third and fourth year at the option of the professors. The Christmas examinations count twenty-five per cent. in the final reckoning of the student's standing for the year, and a failure at Christmas involves the passing of an extra paper at the end of the session. In all cases in Arts two examinations are held, one just before the Christmas holidays, and the other after the close of the lectures in the spring. In addition, the students must have appeared at all examinations set by individual professors, and have written the required number of essays, theses or reports, which are all taken into consideration in the final marking.

There has been difficulty in ascertaining from the published records of these Universities, with any degree of completeness, whether the professors of the various Universities are the examiners. Students of the University of Toronto are not always examined by their professors, although usually if more than one name appears on the examination paper the professor or lecturer in the department is one of them. Among the list of Trinity University examiners are the lecturers and professors, but a number of outside names appear. The students of Queen's University and of Ottawa University are examined by their teachers.

The above is a brief description of the present practice. The records of these Universities for a number of years were examined for the purpose of discovering the tendencies of Universities regarding their examination systems. The following are the chief changes that are of interest in this discussion:

1. The tendency is towards making the University professors the examiners. For example, in Toronto University the professors, who were at one time debarred from examining their own students, now either examine or take a prominent part in directing the examinations of the students under their charge.

2. There is an increasing tendency also to take into account the daily work of the students in their final standing. This is seen especially in Toronto University in the prominence given to

practical work and researches in the various divisions of the Science Department, in Physics and in Experimental Psychology, and to essay writing in the Departments of English and Philosophy.

3. The tendency also seems to be in the direction of holding terminal instead of annual examinations.

IV. GENERAL SITUATION.

The results of this enquiry go to show :

1. That the system of written examinations holds sway in all departments of our educational system, from the second class in the Public School to the end of the University course.

2. That the tendency at every stage is to make these examinations less rigid, and to give the teacher more control both in the matter of conducting the examinations and in taking into account his estimate of the student's work from day to day.

3. That the tendency is also in the direction of basing the standing of the student not on one examination, but on a series of tests.

It is evident to any investigator that, under the conditions prevailing in the past history of education in the Province, examinations have been of great benefit in stimulating endeavor and in leading, to a certain extent, to concentration and uniformity of effort. In illustration of this we have given in some detail the early history of the entrance examination. Even the much-abused intermediate was of great service in improving the methods of teaching, especially in certain departments.

With untrained teachers in Public and High Schools, and with diverse and inadequate views of the real nature of education existing in the minds of both teachers and the public, men of foresight and judgment were able to improve the educational situation more immediately and directly by directing the teaching through examinations than they could have done in any other way. While this is true, it is also evident that evils have arisen in connection with examinations, especially in the tendency to make them an end in themselves. It is not the purpose of this paper to summarize and balance these advantages and evils. Conditions have changed, and a more fruitful subject of investigation will be to enquire what, in light of our present knowledge of their nature and in our experience of their effects, must be the action of examinations on educational aims, methods and courses of study. We shall then have a basis for determining how existing conditions should be further modified to attain more ideal results. To this subject the remaining part of this paper is devoted.

PART II. THE ACTION OF EXAMINATIONS.

1. ACTION OF EXAMINATIONS ON EDUCATIONAL AIM.

In the replies received, those who have looked favorably upon the system of uniform examinations give almost invariably as one of the reasons for its adoption that it makes for uniformity of aim and effort in education. There can be no question that, in the broad sense of the word, uniformity of aim is desirable, because the existence of an ideal to be realized is the condition of all progress.

At this point two questions arise:

1. Do *uniform* examinations in the end make for unity of aim?
2. What is the nature and the value of the ends realized through examinations?

The first question is probably the less important and the more easily answered. The aim, in so far as it is single, is to complete a prescribed course of study in such a way as to pass satisfactorily an examination conducted by one or more examiners. Two factors are, therefore, involved—the course of study and the examiners.

The unity within the limits of the course of study will depend upon the ideals of which it is the projection. This part of the subject will be discussed later under the action of examinations on subject matter.

Regarding the second, experience in Ontario has shown that the quality of the examination depends almost, if not quite, as much upon the individual characteristics of the examiners as upon the course of study. The question asked by both teachers and pupils is about as frequently "Who is the examiner?" as "What is the curriculum?" However carefully and fully the details may be mapped out and prescribed in a syllabus of the course of study, the personal leanings of the examiner are usually prominent in his paper, and many instances might be cited to show that changes with far-reaching consequences, many of which, it must be admitted, have been for good, have been initiated by men of pronounced opinions when acting in their capacities as examiners in connection with University or Departmental examinations. But with changes of examiners come frequently changes in ideals, and the history of the Ontario systems of examinations shows not only that a varying emphasis is placed from year to year on individual subjects within the whole, but also that the examination papers in any one subject mirror ideals which periodically change with changes in the personnel of the examining Board. Teachers and pupils in every department have thus

been subject to every changing ideals and conditions, to which they have had to make their theories and methods conform. It cannot, therefore, be said that our examinations have led, to any great extent at least, to continuity of aim.

2. The nature and value of the aim.

In seeking to enquire into the nature and to estimate the value of the educational aims set up by examinations, the feature which appears central is this: They are ideals, mainly intellectual, originating with one person to be prescribed for realization by another. They involve on the part of both teachers and pupils the effort to achieve ends which are almost exclusively intellectual and which are dictated by others. Two questions are, therefore, raised: (a) the value of external ends; (b) the effect of the realization in the conduct of the school of ends which are almost wholly intellectual.

A. - EXAMINATION AIDS - EXTERNAL.

The estimation of the value of an educational aim must depend on a rational view of education, which in turn must be based on a rational view of conscious life. We owe to Prof. Thomas H. Green and the School of Philosophers to which he belongs an adequate discussion of the theory of knowledge. They have made it clear that self-conscious life is a process exhibiting in experience a subjective and an objective phase, and that true self-activity (a term so frequently abused by writers on pedagogy) consists in the identification of the subject with the object. Perfect self-activity and absolute individuality would consist in absolute identification. In man this never takes place, and there is always an opposition between the actual self and that which exists only as ideal. In knowledge he is constantly seeking by his self-activity to overcome this opposition and to realize the ideal. Intellectual development, then, is a process of self-realization or self-determination.

"Whatever the object which we set ourselves to understand, the process begins with our attention being challenged by some fact as simply alien and external to us, as not otherwise related to us than is implied in being there to be known; and it ends, or rather is constantly approaching an end never reached, in mental approximation of the fact, through its being brought under definite relations with the cosmos of facts in which we are already at home."¹

This account of the growth of knowledge shows that the basis of all active attention, and hence all intellectual development, is some doubt or query, some question or unsolved problem

¹. *The Prolegomena to Ethics*, Chapter II., 132.

which is the individual's own, because it has grown out of his own experience and has significance for his practical or theoretical needs.

Since the ideal has its origin in the active powers of the individual, an end, such as the memorizing of answers for examination purposes, which is not the projection of these powers is necessarily empty, formal, and lacking in attractive power. When the aims and problems are determined by another, there is no personal selection or adaptation of means, because there is no interest in a consciously originated and defined end.

When the individual is thus isolated from the end to be attained, and when there is no active tendency from within to realize the aim, pressure is applied from without. The effect of external stimulus is not to give the individual the power and control which comes from the realization of intrinsic ends, but to leave him passive when the stimulus is withdrawn. These effects are observed by every experienced teacher in the formal study of any subject. Marked examples of them are furnished in a more general way in the history of Ontario examinations. It was found that pupils after being withdrawn from the stimulus applied to pass the examinations for entrance to the High School were apparently listless and aimless during the first two years at the High School, and it was one of the claims for the Intermediate examination that it would provide these students with an end for which to work. It was found also that most pupils who could not go to the High School after passing the entrance regarded their education as completed and did not return to the Public School. To attract more pupils to the Fifth Form of the Public School, and to furnish an aim for continued work, the Public School Leaving Examination was established. The history of the effects of these examinations was similar. Although the efforts of all parties concerned were in each case stimulated by a special Government grant, the results were not what were expected. To add dynamic qualities to each it was found necessary to give it a status as a qualifying examination for teachers' certificates.

Even where the examination is a qualifying one, it is, nevertheless, as an aim external, because there is no intrinsic connection between it and the further end to which it is a means.

When the relation is internal the end serves to give significance and value to the means because it becomes an integral part of a wider and more systematic whole. The true aim has its origin in the individual's experience, and is a projection of his own activity. Through its realization the power is acquired of conceiving and realizing higher and more complex ends. While thus in a sense it may be said that the child's knowledge grows

through his reconstructing, and in this way giving wider meaning to past experience; in a sense also, by objecting himself to himself, fulfilling the law of his being, he anticipates and creates experience.

6. EXAMINATIONAIMS, NARROW AND ONE-SIDED.

The examination as an external end in education, even from the standpoint of the knowledge gained, is narrow and one-sided. The universal experience of teachers goes to show that there is always a tendency on the part of students preparing for a set examination to confine their attention solely to the acquisition of such ready-made material as will be of assistance in answering possible or probable questions. So long as this tendency is marked, and the mind is kept fixed on the particular requirements of the examination, there is no cognizance of a world of manifold facts to be connected in "the unity of an intelligible order," and no felt restraint as these remain an unconnected whole. Hence there is no effort to establish ever higher and higher relations and to enter into the wideness of intellectual freedom.

That emphasis on the examinations is fatal to the development of many-sided interests, and is not operative in producing a broad and deep intellectual life, is confirmed by the observation of all experienced educators that when the artificial strain set up by the effort to pass the examination is removed the subjects of study, which share in the distaste awakened, are frequently forever discontinued.

The aims are narrow also, in the sense that they are purely intellectual.

We owe also to the philosophers, to whom reference has already been made, a conception of the involution of intellect and will. They have shown that the self is active not alone in the process of knowledge, that self-determination is exhibited in action as well as in knowledge, and that if the subject is to realize what in his ideal nature he is, his self-activity must be determined by the idea of a universal moral law as well as by the conception of a world of related facts.

The process by which he builds up the world of his knowledge is but one of the ways in which the child comes to self-consciousness. He must be regarded not only as determining facts for himself, but also as a self which realizes itself in objects, among which must be recognized other selves capable of a like realization.

As a social institution, the school must be concerned in the solution of the ethical problems arising out of these relations. It must provide not merely such material for organization as will

enable the child through his self-activity to create an intelligible world, but must present such a social environment, such forms embodied in literature and in the history of nation, individuals and institutions, as will give him opportunity to conceive and scope to realize, through the exercise of this same self-activity, ideals of life universal in their significance.

The tendency of the examinations is to abstract knowledge from activity and to regard the child's whole nature as capable of being expressed in devotion to knowledge. Thus, in restricting the work of the school mainly to the preparation of candidates for examination, we are unduly limiting the scope of its activity.

II. ACTION OF EXAMINATION ON METHODS OF INSTRUCTION.

It is not the purpose of this paper to enter upon a full discussion of the subject of methods of teaching. Methodology has received probably more than its full share of attention, especially along detailed and rigid lines, in contemporary educational discussions; but it is to indicate briefly, as has been attempted in the case of educational aims, what are its fundamental problems, and to enquire how examinations as specific ends in education complicate their solution.

According to the theory of knowledge adopted, the self as "determining" may be distinguished but cannot be separated from the self as "determinable." Correspondingly, method may be distinguished but cannot be separated from subject-matter. The view of method is subjective. It has special reference to the ways in which the thinking subject is active in the process of knowledge. Its problems are, therefore, primarily psychological problems. It follows that method must be based on a study of the conditions of mental growth in the child. This is necessary that the teacher may not "react in a gross wholesale way to the child's exhibitions in gross."

For our purpose it will be unnecessary to enter into a minute analysis of these conditions, psychological and physiological, but only to note that which is fundamental and necessary. This has already been stated to be the attitude of personal enquiry, based on the conception of an end to be realized. The fundamental aim of all method is to preserve and to direct this active enquiring attitude in the direction of leading the child instinctively to respond to the ends that are of most worth, rightly to judge and select those that are most valuable, and to develop practical power for their realization.

The ends for which the young child strives are practical rather than theoretical. When the child's conative tendencies become differentiated after the first diffusive movements of child-

hood, his impulses are directed mainly towards bodily movement and the satisfaction of practical needs. His first mental efforts are connected directly with his bodily activity. The development and co-ordination of motor tendencies is accompanied by the gradual growth in systematic complexity of mental tendencies. In the service of practical ends the child shows a tendency to co-ordinate sense-impression from different organs, and to give them significance by grouping and relating them. With the development of this tendency emerges the impulse to form imagery and to give motor expression to it, which is followed in turn by the tendency to project his imagery and to strive for remote ends. Thus theoretical conations arise out of the effort to bring distinctness and unity into the ever-increasing complexity of experience.

Looked at from the standpoint of the acquisition of knowledge, two types in the learning process may be recognized :

1. Practical Type. That in which in the pursuit of practical ends the child learns without any purpose or intention of learning.

2. Theoretical Type. That in which in the course of his experience the child is brought into the consciousness of problems involving intellectual ends to be reached.

Now, these are the two phases of all normal learning ; and the problem of method—that is, of preserving and directing the enquiring attitude of the child—is the problem of determining how the latter phase is connected with and may be made to grow out of the former.

It is just at this point that the examination as an external end complicates the solution, because it tends to give rise to a third type of learning, which is a perversion or distortion of the second type, in which the child is conscious not of an end, either practical or theoretical, to be reached, but of the fact that he is learning something or that he is preparing a task.

This substitutes an end in the teacher's mind for a real end which the child is interested in and which he desires to realize. When the material is, in this way, made an end in itself, it becomes isolated and the child takes the absorbing and not the learning attitude. The learning process, as a process of self-realization, is the process of creating rather than of absorbing an experience. It begins with the conception of an end to be attained, and involves the transformation and reconstruction of past experiences with the view of adapting them to the building up of the desired experience.

The examination calls for such a presentation of subject-matter as will effect retention and insure reproduction, while rational method demands a presentation that will cause pupils to feel a

lack of fulfilment in realization, and that hence will have a tendency to keep them in the questioning attitude.

In seeking new ends growing out of old experience there is always the progressive specifications of what was previously a more or less indeterminate whole. The mind, in its movement, begins with an individual which is at first vague, because within it particular and general are as yet implicit. In the determination of this whole, movement takes place in two directions, towards the particular and towards the general. These movements, if normal, are not separated. The more an element is distinguished and specified, the more it is related and definitely placed within the whole ; and the more determined the whole itself becomes, the more it is related within a still wider whole. The individual and the general are made explicit by the same process. The tendency of examinations is to the adoption of methods which would attempt to hasten this natural process, which must always be slow and gradual. Analysis is divorced from synthesis. There is presented to the child, on the one hand, "ungeneralized particulars" — particulars as particulars in isolation — and, on the other, "underived generals," word description of relations which have not been derived by the natural process of reflection involving abstraction and generalization.

It is unnecessary to add that methods which thus cut across the lines of natural mental movement must have a tendency to be followed by results which are disastrous.

III.—ACTION OF EXAMINATIONS ON COURSE OF STUDY.

Method and subject-matter, as we have seen, cannot be separated. Since the child in the process of learning is but identifying himself with the thought of the world, his mental relations must have a unity corrective with the unity of the world he thinks. Any solution of the problem of correlation of studies must take into account the subjective phase, the objective phase and their unity.

The tendency of examinations is to overlook these relations and to regard the departments of the curriculum as so many separated and isolated subjects of study. In fact, in the formation of most courses of study for examination purposes, the problem of a scientific correlation of any kind is usually of necessity ignored. The examination itself is a specific test of definite results to be attained for some external end, as entrance to a college or admission to a profession. The requirements of the special institutions or professions determine the course of study. For example, in Ontario the Matriculation examination of the Universities gives character to the curriculum of the High Schools, the requirements

of the High Schools determine to a great extent the subjects for the Entrance Examination, and these in turn those for the lower classes of the Public School. With us no attempt has ever been made in forming our courses of study for the various examinations to state or solve the problem of correlation.

The curriculum for University Matriculation is the outcome of a conflict. The heads of departments in Universities very frequently look upon the requirements mainly from the standpoint of a preparation for their own specialties, which they have a tendency to overestimate, while they underestimate those of others. The result is that at every change in the curriculum there is a war among the giants. So fierce in late years have these conflicts become that societies of University and High School specialists have been organized with the express purpose of advancing the interests of individual departments. While educational values are estimated by an individualistic standard the solution of the problem of correlation is an impossibility.

The attempt to unify our examination systems by making the University Matriculation stand for other purposes than an entrance examination to the University, for example, as a qualifying examination for admission to law, medicine, theology, teaching profession, etc., has still further complicated matters. The one examination is thus made to touch either directly or indirectly the lives of all pupils in our schools. The course thus formed is of necessity a compromise, in which the unity of the world of facts and the corresponding unity and wholeness in the child's development are overlooked.

Nor can the difficulty be overcome by limiting the number of subjects for this general examination and allowing teachers and pupils freedom in other parts of the curriculum. Experience shows that when examinations are emphasized, subjects not required for the examination are undervalued and neglected. As evidence of this we have but to refer to the successful efforts to make Temperance and Hygiene an examination subject for the Entrance Examination, and to reinstate British History after it had, at the request of the Public School teachers, been dropped from the list of Entrance subjects.

Aside from the external requirements of institutions, the examination in itself has a tendency to emphasize unduly certain subjects of study. Attention is of necessity directed to those subjects and phases of subjects which lend themselves most readily to external assignment and quantitative measurement. The examination has thus profoundly affected the work undertaken in Ontario Public and High Schools, especially in such subjects as literature, history, drawing, and the biological and physical

sciences. It has magnified what is mechanical and technical in these subjects, to the exclusion of those characteristics and vital elements which give them significance in moral and intellectual life.

It is also excluding altogether certain subjects from the curriculum. When the introduction of those subjects which appeal to the constructive activities of the child, as manual training and domestic science, is proposed, the question almost invariably asked by teachers and trustees is, "What effect will it have on examinations and examination results?" and the answer has always a tendency to settle the fate of the innovation.

The examination, by thus setting up partial and external requirements, tends to keep the real scientific problem of correlation in the background. This problem is a definite problem. It involves an enquiry into the origin as well as the relations of studies. To understand how subjects are related and may be made to interact in the training of the individual for the highest ends, it is necessary to discover how they have taken form in being differentiated from the whole of experience. This is to discover their relations to the practical and theoretical needs of humanity. The problem of correlation is, on the subjective side, an investigation into the significant tendencies and capacities of the individual; and, on the objective side, a study of the typical necessities of social life. These are evidently but different phases of one and the same question.

IV.—THE ACTION OF EXAMINATIONS ON THE FREEDOM OF THE TEACHERS.

So far in this discussion we have been considering mainly the action of examinations in their more direct relations to the development of the pupil. In conclusion, we shall briefly note the relation of the teacher to this development, and enquire how examinations affect the freedom of his action.

If education is throughout a process of self-determination, what is the teacher's function in furthering this process?

Self-realization must take place in and through a social environment, and, as Dr. Dewey says, "The teacher's business is simply to determine, on the basis of larger experience and riper wisdom, how the discipline of life shall come to the child." His work is to take what is valuable in the complex and varied experiences of the race, and so organize and present it in accordance with known principles of the child's development that he will,

through the exercise of his own activity of specification and unification, build up for himself an orderly world of experience, both of knowledge and of practice.

The teacher's office, then, is to make such a selection of the material of experience and so present it as will, on the one hand, meet the direct needs of the child, and, on the other, lead to the conception of ideals more universal, which will be active principles in his life demanding realization.

This being the function of the teacher, it is evident that his relation to the child must be direct and personal, and that freedom must be an essential characteristic of his activity.

The effect of the examination is to come between the teacher and the pupil, and to set up external conditions and requirements which change his attitude and modify the freedom of his action. He tends to become simply an instrument for manipulating the mechanism of instruction with the view of assisting the child to acquire, in the easiest way and the shortest time, particular facts which he can reproduce in good form when testing day comes. The tendency is for the teacher thus situated to lose sight of the real relation of his work to the development of the child, and to settle down to carrying out in a more or less perfunctory way his definite part of a prescribed routine; but, if he does not rise in spirit above the work in which he is more immediately expected to be engaged, he must continually feel the restraint which a purely mechanical calling imposes.

Dr. McLellum, in his annual report to the Minister of Education for the year 1901, says: "The final examinations should be abolished altogether. We hold two formal examinations in the college each year; we examine the students in oral and written work day by day and week by week; we give them many a lesson and presentation lesson, testing every student's power of thinking and facility of expression; we study in every possible way to know as thoroughly as we can the personality of the student; we are able to report in a week after the final college examination the standing of the students, so that the successful ones are at once ready to make applications for vacancies that may occur. The final examination is called a Normal College examination; if it is retained, the name should be changed; it is not a Normal College examination at all; it does not test doctrinally or practically the actual work of the college. Men who have never taken the course cannot examine in the course, as could be abundantly shown by a criticism of the papers that have been set from time to time."¹ The Principal of the Ontario Normal College in thus making an appeal for greater freedom for

¹ Report of the Minister of Education, 1901, page 188.

his staff and students is giving expression to the sentiments of every teacher, high or low, who has so far come to consciousness of himself and his work as to take a comprehensive and intelligent view of his relation to other social activities and to the life of the child.

In discussing the action of examinations on aims, methods and courses of study, we have insisted that the pupil's questions and problems, his ends and ideals, should arise out of his own experience and be the construction of his own active powers, because individual facts become significant only by being united by his own activity in ever-increasing relations within an ever-widening whole, and particular desires become transformed only by being by himself subordinated to the realization of a more universal self. In the same sense, and for the same reason, freedom in originating and liberty in realizing ideals must be demanded for the teacher. The teacher who is restricted, as he must be if his work is mainly the preparation of candidates for examinations, to following the theories and carrying out literally the ideals of another, can never have the consciousness of their worth, or the vital interest in their realization which will give them living reality in fulfillment.

Critics of our examination system are usually asked to propose a substitute. What is asked for, and expected, is some external system, which, from the nature of the case, must be as artificial as that which it replaces. What has been endeavored to be demonstrated in this paper is that any systems of uniform tests imposed on the teacher and pupils from without the school are artificial and cannot be accepted as final. What is really practical and valuable in criticising present conditions is the indication of the direction in which effort should be directed in order that substantial progress may be made. While it is advocated that this effort must be in the direction of giving wider scope and greater power of control and freedom of action to the teacher, it is not the intention of this paper to insist on an immediate revolution, and to propose to give all teachers at once full liberty in all matters pertaining to organization and administration. It is evident, of course, to any practical educator that no such change could be made. Present forces cannot be destroyed, and they will continue to tend to produce motion along their own lines of action. But even if such a change were possible, it could not under present conditions but end in disaster.

The present conditions are traceable to a defective theory of education based on an inadequate theory of knowledge. So long as ideas were regarded as atomic entities, and learning as the process of their transference or interaction, education was of necessity regarded as a process of instruction and examination.

With a more adequate theory of knowledge comes the wider idea that the end of education is self-realization, and that at each stage it should proceed through the child's own efforts in the reconstruction of its own experience for definite ends. In a general way this is already recognized by the leaders of educational thought, but advances will be made slowly in general practice only as these views take a deeper hold on the minds of men, and their far-reaching consequences are felt as well as recognized. In other words, advances will be made only as the teacher and the public in general come to recognize and feel the responsibility of their relation to each other and to the child.

