HOW TO PREPARE FOR AN EXAMINATION.



HAT the great majority of students dread examinations is, perhaps, a fact that will be very generally allowed, as also that these very students possess, as a rule, ample ability and capacity for hard work; and, further than this, that they have studied all the subjects included in the dreaded examination carefully and conscientiously, sparing neither

time nor labour in preparation. And yet, if any such are asked the real cause of their fears, they will probably have some difficulty in finding a satisfactory answer. It is not that, after all, they feel their ignorance, and recognise beforehand the certainty of failure; if such were the case, their anxiety would vanish, for it could not co-exist with the knowledge of the impossibility of success. Their doubts are not so much of themselves, as of everything connected with the examination: they are ignorant as to the precise form the papers will take; they fear lest much of their labour may have been thrown away, whether they will not meet with new and unforeseen difficulties, and, after all, find that their knowledge is not of the right kind-is, in fact, just not what is required of them. Is it not an every-day occurrence to hear of clever and well-read men who fail at examinations-fail, when all their friends said they were certain to pass-fail ignominiously, while mediocrities-men infinitely below them in intellect, powers of application, and capacity for work-succeed? What is the cause of these failures? They are simply the result of mistaken method, wasted power, ignorance of system and forms. It is to such as these that the hints and suggestions-suggestions not for any examination in particular, nor for any special subject, but for all subjects and all examinations alike-foreshadowed in the title of this paper are addressed, in the hope that by their means much of that prevalent dread of examinations amongst laborious students may be overcome, much wasted labour and energy may be saved, and no small measure of self-confidence (a most valuable quality in every one preparing for an examination) may be aroused.

But it must not be fondly imagined by careless and indolent students that we intend to give a compendium of the "cramming" system-that we have it in our minds to enable students to shirk honest work, and to pass examinations with but the barest knowledge of the required subjects. These, if they care to read on, will soon find their mistake. The days of such preparation are over: no longer is it possible for a tutor or coach to say to his pupils, "Mr. - is certain to set some of these questions I now give you. Here are the answers: learn them by heart, and you will be ready to present yourself." Or again: "If Mr. A asks you so-and-so, say so-and-so; but if Mr. B asks you the same question, reply so-and-so." Such times are deservedly of the past; all we wish to do is to set work on its proper footing, to advocate good

methods and systems, to point out how labour may be honestly saved without injury to real knowledge.

In the first place, then, all study, to be effectual, must be systematic; it must not be carried on by fits and starts-there must be no ten-hours' work one day and utter neglect for the remainder of the week. Such work is not real and lasting; it can only end in disappointment. The truth of this statement is forcibly borne out by some statistics published in the Calendars of the University of London. At the Matriculation Examinations students of 16 and 17 years of age show by far the most favourable percentage in the Pass List, and this not because their powers of mind are greater than or even equal to those of from 19 to 30 years, but because they are fresh from systematic study; they have been specially prepared for the examination; their hours of work have been regular and fixed, while the older students, entering principally under the heading of "private study," have as a rule prepared themselves, ignorant of all method and system, regulating their own hours of work, neglecting study or not, just as they themselves thought fit. This is not as it should be: the mind expands and matures with years, and if the older student would but work more by method and system, and less by caprice, his success should far exceed that of his younger competitors.

If further proof of the correctness of this view be needed, it is afforded by another reference to the London Calendar. At the second B.A. Pass Examination, held in 1875, 68 per cent. of the candidates entering from colleges and schools were successful, and but 47 per cent. of the private students! And yet all of these had already passed two anything but easy examinations at the University!

All students, therefore, preparing for an examination, and who do not attend regular courses of study, should endeavour to set apart certain fixed hours for work, long or short, as the circumstances of the case may demand, or the time at their disposal may allow. The absolute necessity is, we repeat, for systematic study.

The next point to be considered is one often debated, and no incontestable rule can therefore be laid down. The question only arises in the case of examinations having a wide area and including many and diverse subjects. Should one or two subjects be mastered first, before the student passes to others? or should several be taken up simultaneously? In our own opinion, which has been tested by actual practice, the latter course is by far to be preferred, especially if the subjects have wide points of difference. The mind is taken away from one study, not before it has had time to grasp anything, but before it has begun to weary, and is directed to another of an absolutely different nature; the brain is relieved, and actually takes pleasure in the new work, settling down to it with renewed and even increased zest. We all know the benefit of change of scene and companionship when the body is weary and the brain harassed-how the eyes brighten as fresh views meet the sight; how, as it were, another nature is

aroused, differing entirely from that we lately possessed. So is it, in our opinion, with change of study. The tension on the brain—which seemed but just now to encircle the forehead with bands of iron—is relaxed, and though work goes on, we feel it as such no longer. Thus, with what relief we turn from hard study at Mathematics, and wander through the sunny fields of Poetry and Literature; and again, with what pleasure we pass on to the regions of Experimental Science—Physics or Chemistry!

One point which arises out of this very consideration of change of study must not be passed over. Many examinations comprehend a variety of subjects which may be classed as permanent and non-permanent-that is to say, subjects which remain the same from year to year, and subjects which, remaining the same in name, yet, on account of their comprehensiveness, vary their ground as every examinational period comes round. As examples of these latter we may mention the Classics, with their vast library of authors, of which but a very small portion can be doled out annually; or the broad fields of Modern Literature, affording perhaps still wider scope for choice of subjects. Where time is of value, to the permanent subjects, it is scarcely perhaps necessary to say, prior attention should be directed; as, in the event of the student finding himself unable after all to compete at the time he intended, little labour, if any, will have been thrown away.

One of the first things for which a student preparing for any examination should strive, is to gain a thorough comprehension of what will be required at the examination, what is the scope of each subject, and over what ground his knowledge is supposed to extend. By these means he, without any appreciable effort of his own, appropriates to himself and forcibly impresses on his mind those special parts of a subject which he knows beforehand will be more particularly required, and when the day of examination arrives he feels a certain calm confidence in himself, born not of overweening conceit, but of knowledge of real and well-applied study, which is in itself most valuable.

To attain this end the student, in addition to paying close attention to any syllabus, directions, or regulations issued by the examining body, should study most carefully the examination papers for preceding years. In so doing any change of scope from year to year becomes at once perceptible, and a firm grasp of the kind of questions likely to be set is acquired.

Where the appointed examiners are the authors of books of repute in the subjects under their direction, the student should—other things being equal—use these books for his studies in preference to any others; the "bent" of the examiner's mind—and all men have their bent, their leaning towards this or that direction, their favourite branch of a subject—becomes, so to speak, part and parcel of their study.

In taking this course, too, the student should not be accused of striving to acquire merely sufficient knowledge to satisfy the examiner. As a matter of fact, in studying the examiner's book, instead of another man's, he merely gathers up the peculiarities of the

one, thereby acquiring really useful knowledge, in preference to pondering over the (in his case) useless eccentricities of the other.

Of course, where the student possesses the advantages of a private tutor who has himself gone through the examinations for which his pupil is preparing, and who is therefore personally acquainted with the work to be done, many of these suggestions may seem superfluous; but our remarks are not intended for students of this description so much as for those who are preparing themselves for an examination unaided, unless perhaps by an occasional lesson or lecture. For it must be remembered that, now-adays, when so many valuable books by competent writers in all branches of knowledge are published, there is no absolute necessity for a tutor or coach; a student with all his wits about him may prepare himself for almost any examination by the aid of books alone, provided he can insure, by some such methods as those we are now inculcating, that his studies are well-directed and to the point.

There is one thing that every student should be careful to provide himself with—a note-book for every subject of the examination. He should read and study with note-book ready to hand, in order that every matter of particular moment, everything out of the common, may be carefully noted. These note-books will be found most useful aids to memory just before the examination comes on, when it would be impossible to go through all the text-books again.

And now, before proceeding to one or two suggestions applying more particularly to special subjects, we would meet an objection that may be raised by many when they find us advocating the use in some instances of what are popularly termed "cribs." To answer them, we think we cannot do better than try to find a true definition of what is meant by that word so often used in the educational world, and so generally understood by all—i.e., "cramming."

By cramming, then, should be understood all methods of study by which merely superficial knowledge of a subject is acquired-knowledge which is retained only until the examination is over, when the whole of it evaporates as speedily as the beads of dew that sparkle in the fields at early morn disappear before the golden rays of the rising sun. Cramming depends upon the memory alone, and makes no appeal to the reason or intellect; cramming is, in short, a false system, which deserves to be held up to the scorn of all true-hearted students. But cramming should not be understood to include the use by a student of "cribs" and "keys," when they are looked at by him in the light of a tutor to correct his faults, to keep him in the right path, to save him from wasting weeks in worse than profitless study. We are not speaking to schoolboys who must get through their allotted tasks by an appointed time, and care not how they do it, provided the desired result be attained, but to young men and women who have objects in life beyond the examination, and to such all aid should be given, in the confidence that it will not be taken undue advantage of.

True enough is it that examinations are not the ends of study; they are but intended as tests to ascertain what positive knowledge has been acquired, to discover to what a pitch the mind, as an instrument of acquisition, has attained. Now, looking at either of these ends, surely that method of study is the best which is the easiest and quickest. From whichever point of view we look at the question, laborious processes are unnecessary—nay, more—to be avoided.

In studying foreign authors, whether of classical or modern times, but more particularly in the former case, the student should endeavour to obtain a good annotated edition of the original text, and a good English translation is almost an essential. We say good, for a bad translation is worse than useless; it is absolutely harm-Without a translation, the poor student may go on for hours puzzling his brain with idiomatic phrases and sentences, after all finding himself as much in the dark as ever; or, what is tenfold worse, finding, as he supposes, the true solution of his difficulty, rejoicing in it, and impressing it on his mind as a pearl of inestimable value, only to discover, when too late, that he has been off the scent altogether-that in his ingenuity he has overstepped the mark-that his precious pearl is but a sham after all. As a proof of these remarks, let an ordinary student of Latin take up the Annals of Tacitus -well provided with dictionary and grammar, if he will-and see where, if unaided by tutor or "crib," he will find himself. Undoubtedly it is true that a difficulty puzzled out is at once impressed upon the memory as it never will be if explained as soon as discovered; yet this is not the fault of the key, but of the method. The student should only refer to the translation when his own efforts fail, to save too great a waste of valuable time, or as he would refer to the answer to an arithmetical problem to check himself, to prevent the impression on his memory of an absolute error or absurdity.

In the case of historical papers, the acquisition of dates must become more or less an effort of memory. Several systems have been invented as aids to memory, depending more or less on the usual processes through which the human brain passes in endeavouring to fix anything upon the mental retina; and some of these systems have their advantages, especially where the acquisition of dates or numbers is desired. Into these systems it is, however, impossible for us to enter; their modus operandi may easily be ascertained by any one who feels the want of some adventitious aid to memory.

Of mathematics more, perhaps, than of any other study or science, it is especially true that "there is no royal road to learning;" the "drudgery" must be passed through; no single step in the fabric may be shirked, without endangering the total destruction of the whole edifice. We would therefore especially warn mathematical students on no account to hurry forward to fresh fields, until they are quite sure of their intimate knowledge and comprehension of what has gone before. We have purposely used the word "comprehension;" the student must not only know how to carry out certain processes, he must thoroughly understand why

he acts as he does—he must see clearly the raison d'être of his work. How foolish would it be for a man to sit down to study the third book of Euclid before the first, for instance! And yet almost as great absurdities are constantly attempted by so-called mathematical students. These remarks, it may be stated, though more especially true of mathematics, hold good equally in almost all branches of study.

But we must pass on to the few weeks preceding the day of examination. The student should now subject himself to rigorous self-tests; he should systematically work out past examination papers, carefully noting all points in which he fails, and afterwards endeavouring to overcome any difficulties he may have met with. The memory should be refreshed in all matters of dates, facts, and figures, and the essential principles of every subject should be kept diligently before the eye.

During the day or two immediately preceding the commencement of the examination, the mind should enjoy comparative rest, the body should be indulged with healthy exercise, and work should be limited, if possible, to running through the various note-books, and to refreshing the memory in the matter of dates, &c., as mentioned above.

And now a word or two as to the management of the paper on the day of the examination. The candidate should endeavour to remain as cool and calm as possible: coolness, and calm confidence, are perhaps as valuable qualities here as they are on the field of battle, or in posts of imminent danger. Nervousness and flurry discompose the mind, disorder the train of thought, and diminish to no small extent the chances of success. Once let the mind get confused, and answers are imperfectly given, questions are altogether misunderstood, and others, which the candidate is quite capable of answering well and ably, are hurriedly passed over. The candidate should commence work by a careful and deliberate perusal of the paper set, and unless he feels confident that he can answer the whole, he should begin with those questions which can be at once and correctly answered, and which will occupy but a short time. Having disposed of these, he may proceed to questions of greater difficulty or of less certainty. All the papers, it is perhaps needless to say, should be legibly and neatly written, and the answer to each question should be carefully numbered.

In the case of vivû voce examinations, coolness and self-confidence are the more to be insisted on. The candidate is asked but few questions, and if through nervousness he fail to answer these, he is condemned as ignorant, and his chance of success is lost.

There are many other minor points in the way of preparation for examinations which deserve some notice, but it is impossible for us to linger longer over the subject. What we have set forth will, we trust, be of service to many students, inducing in them method, order, and system in study, saving for them much time and labour which might otherwise have been spent to no purpose, and at the same time producing in them coolness, deliberation, and calm self-confidence when the day of trial arrives.

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