THE EXAMINER AND THE CANDIDATE

Douglas O. Waugh, M.D., C.M., M.Sc., Ph.D. (McGill)¹

Halifax, N.S.

A recent poll of medical students included an assessment of student opinion on the subject of examinations. The poll revealed a rather surprising unanimity that examinations, however unpleasant they may be, are a necessary and desirable part of the educational process. Many students went so far as to suggest that they be subjected to more rather than fewer examinations. These students were mainly recent graduates of the Ontario secondary school system, and it was clear that whatever the views of the professional educator on examinations, medical students would rather be evaluated by this than by other methods.

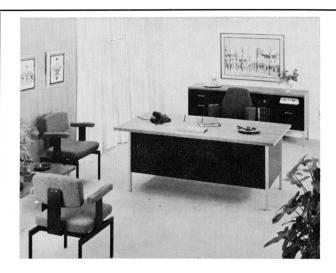
In medical schools three types of examination (written, oral and practical) are used, all designed to answer a single straightforward question: Is the candidate worthy of the particular distinction that the examination was intended to decide? The distinction may be that of passing to the succeeding year, or the winning of a prize or, at a more advanced level, the distinction of being designated a specialist. Whatever the honour at stake, the problem for the examiner is always the same: Is the candidate worthy? In medicine worthiness is usually equated with the ability to practise with safety and prudence. If this is the question at issue, the examiner's problem ought ordinarily to be an easy one and difficult decisions should be rare. The examiner need merely assure himself that his examination is of sufficient scope to allow the candidate a fair opportunity to display an adequate sample of his knowledge. The candidate's obligation is equally straightforward - he must display the knowledge he has to the best possible advantage within the time and space available to him.

If we proceed to explore, this basically simple relationship between examiner and candidate, the sources of some examination problems become apparent and certain remedies suggest themselves. Let us begin with the examiner, and after dissecting him, move on to the candidate and his problems.

The first problem of the examiner is that of choosing his methods of testing. In general he will select one or more methods that, in his view, provide the most reliable and unequivocal assessment of candidates. If the subiect is such that a large body of factual knowledge and relatively little judgment are required, a multiple choice test or a large series of brief questions may suffice. This type of examination has the advantage of easy marking and is generally considered to be "objective", i.e. since there is only one "right" answer for every question, the effects of examiner's prejudices and opinions are minimized. Prejudice is not eliminated in this type of examination since the examiner can always ride his hobby-horse by assigning extra marks to questions he wishes to emphasize, or, by question selection he can penalize students who missed a particular class. A more serious problem with the "objective" examination is that student performance cannot be anticipated. While this is true of all types of examination the objective test seems less predictable than others. The easiest way to anticipate student performance on an objective test is to give the examination to a large number of teachers - the more the better. If this is done, questions of doubtful value or whose meaning is ambiguous can be altered or eliminated. The major defect of the objective test is that it has a very limited capacity for evaluating the student's ability to use his knowledge, i.e., his judgment, so important in most branches of medicine.

In a practical science like medicine, judgment is at least as important as is knowledge of fact, and to evaluate both of these, essay examination, oral tests, and practical examinations are used. Each of these is a highly

¹Professor and Head of Department of Pathology, Dalhousie University.



YOU CAN LEASE

- FURNITURE
- DRAPES
- CARPETS

Similar to this Office For Less Than \$29.00 A MONTH

Office Furniture • Interior Design

BUSINESS MACHINES



You are invited to open a



All-Purpose Account

... the one account for all your family shopping needs that offers

- all the advantages of a monthly Charge Account
- all the convenience of a Charge-a-Plate shopping
- terms up to 24 months if you wish to pay the minimum amount shown on your monthly statement
- no down payment, no minimum purchase, no special arrangements of any kind, even on larger purchases

To open an account, visit or write Simpson's Credit Department, Mumford Level or PHONE 454-5111, Local 398

personal encounter between examiner and candidate, and each demands a high degree of integrity from the examiner. In spite of his most conscientious effort to judge the candidate impartially, the "judgment" examination cannot be entirely free of prejudice to the candidate. Some of the opinions expressed by students may constitute errors worthy of failure to one examiner and be considered only minor deficiencies to another. This difference between examiners shows up clearly in the examinations conducted by the Royal College of Physicians and Surgeons of Canada. In these examinations each answer of each candidate is marked independently by two examiners. In the majority of cases the examiners agree with one another within a range of $5^{1}\%$ or less. There are always a few cases, however, where two examiners will differ in marking the same answer by 20 or 30% or more. Such a difference is often enough to be the spread between A or B grade and a failure. In cases of this sort, the College arranges for a third or even fourth examiner and in this way the candidate's interest are usually protected. In cases where examiners differ so widely in their marking it is often found that one of them holds a particularly strong view of a single attitude or opinion, e.g. "Anyone who believes in treating a patient in this way should not pass this examination". He may be correct in this but it is sometimes clear that this particular opinion is not shared by other examiners. Because of this variation, even among the most conscientious of examiners, it would probably be best if all medical students could be evaluated in "judgment" examinations by multiple examiners as is done by the Royal College.

A further factor in essay, oral and practical examinations is that tests of these types do not ordinarily allow for a very broad sampling of the candidate's ability. In a written test only four or five subjects may be covered, and if one of these catches the candidate unprepared, his chances of passing are seriously hampered regardless of his general knowledge of the subject. The limited sampling allowed by this type of examination makes is especially important that questions be chosen with care to avoid undue emphasis on a particular area of knowledge. In some cases it is advisable to assess both breadth and depth of the candidate's knowledge by combining two or three essay questions with a large series of short questions.

There are almost as many different methods of marking essay or discussion answers as there are examiners and few would suggest that this be changed for a rigid single system. Some examiners make a list of items they believe essential to the perfect answer. They then grade their candidates by deducting a fixed number of marks for each item missing from the answer. Using this method it may be difficult to fairly compare an answer containing only eight essential points with one that rambles through sixteen minor items on the examiner's list, but omits the eight essential points.

Other examiners read (or listen to) an entire answer and attempt to judge it as a whole. This can work well so long as the examiner is wide awake, uninterrupted, and can remember the entire answer when he comes to make his judgment. There is always the risk, however, that an important omission (or inclusion) may be missed or ignored.

Another way in which examiners vary is the manner in which they distribute their marks. The conservative examiner may believe that a mark of 100% is beyond human grasp, and restricts himself to the lower 85 parts of what he still considers to be a "percentage" scale. The same examiner, being kindly disposed toward all students, may also refuse to fail a man on any single question by more than 10% hoping optimistically that the student will recover himself on other questions. This type of examiner may do all of his grading within a very narrow range, and all too often a large proportion of his marks fall in the doubtful zone close to the failure level.

The more mercurial examiner ranges widely over the percentage scale distributing his grades freely between zero and 100%. His marks may form a symmetrical histogram with a peak in the "C" zone, or his clear-cut opinions may be reflected in a bunching of marks in clusters high and low on the scale. Such an examiner finds students to be either good or bad and recognizes little shading in between. Another examiner may grade all pass answers at A or B levels, using the C (or "average") grade for the truly mediocre.

These examiners' habits are not necessarily constant, and a professor who is mercurial one day may be highly conservative the next. These day-to-day variations may reflect differences in the character of the exam-

Dec. 1965

Speed and Speed REAL ESTATE LTD.

ARTHUR SPEED, AACI

Halifax Office 1485 Brenton St. Telephone 423-6979 MARGARET SPEED, Sales Mrg.

Dartmouth Office 22 Main Street Tel. 466-7636

Residence Telephone 422-6974

Compliments of

Johnsons

1663 Barrington Street

JEWELLERS

Specializing in high grade Watches

Diamond Rings and Jewellery

STUDENT'S DISCOUNTS ALLOWED

THE HUGHES OWENS CO. LTD.

Suppliers to the

Architect - Artist - Engineer - Surveyor White and Blue Printing, Reproduction Supplies

1685-1687 HOLLIS ST.

Phone 422-9694

HALIFAX, N. S.



Lamplite Lodge

1467 South Park Street, Halifax, N. S. (Near Corner Spring Garden Road)

Proprietor — Margaret Speed Superior home like accommodations Double and Single Rooms—Private Baths, T.V.'s Continental Breakfast—On the House! Telephone 423-8078 ination questions as well as in the examiner himself.

While no attempt should be made to standardize examiners, it is important that variations between them be recognized and that these be not allowed to prejudice the candidate's chances. In a large department, examiner variation can often be dealt with by having each question graded by a different examiner, so that variations may cancel one another. Even better is the practice of having each question marked independently by two or more examiners. Whichever method is adopted, the fate of individual condidates must finally be decided by a chief examiner or department head.

Turning from the examiner to the candidate we find that his problem can also be stated in simple form:

The candidate must present his knowledge to the examiner in such a way that he will be given maximum marks. In theory, and in fact, however, candidates with identical knowledge often receive widely differing marks. The most important factor involved in such differences is the manner of presentation. (Presentation is the Madison Avenue word for salesmanship). Good presentation will allow many a poorly prepared candidate to pass and poor presentation has prevented many knowledgeable candidates from getting good grades. A few general rules of salesmanship can be suggested.

Assume that the examiner knows nothing about the subject but the language.

Failure to observe this rule is extremely common. If you assume that the examiner does not wish to be bothered with "obvious" or "generally known" information and you leave it out of your answer, he may conclude that you don't know it and mark you accordingly.

2. Organize your answer.

If possible follow an outline with numbered, underlined headings. Begin with the most important facts, state them clearly and with emphasis, putting the trimmings in later. The more trimmings the better but be sure to indicate that you recognize the difference between the important and the trivial.

3. Style

Avoid telegraphic style - have a verb in every sentence - economize by the liberal use of descriptive adjectives. If you do not know all the facts, state the ones you do know with emphasis as though they were the most important things to know. This may con the examiner into thinking you merely forgot what you really didn't know.

4. Never guess

If you are uncertain of a fact, leave it out. Most examiners will severely penalize a single glaring blooper in an otherwise good answer. Sometimes you can fool the examiner into thinking you know when you don't - e.g., you know that factor X is involved in disease Y, but can't remember whether its effect is beneficial or harmful. Rather than omit any reference to X, you can say "The important effect of factor X on disease Y has recently been noted and its diagnostic importance must be taken into account". The examiner may mark you down a little for being vague, but he cannot be sure that you are ignorant.

5. Be sure to answer the question exactly as it was asked.

Even if you know a better way to arrange the material, it is foolish to insult the examiner by letting him know this. Read the question carefully and be sure that you understand it. If you find it ambiguous, state your interpretation before you begin to answer. If your version is reasonable the examiner may accept it even if it was not what he had in mind. You may also draw his attention to an ambiguity of which he was previously unaware. Be sure that you understand the operative words in the question, e.g. Discuss - "examine by debate". It implies the existence of more than one point of view and requires that you evaluate conflicting opinions. Describe mean just what it says and does not imply the existence of controversy. Be careful about including data from a field other than that of the examination as, for example, the inclusion of clinical or X-ray finding in a pathology examination. The examiner is likely to consider himself incompetent in these fields and probably will ignore that part of your answer, unless you say something he knows to be wrong - then you lose!

6. Wherever possible give definitions. These impress most examiners and also help you in mapping out your answer.

7. Be precise

Try to make every word count and avoid sloppy English. The examiner is going to mark you on what you say, not on what you intended to say.

8. Never leave out an entire question.

Even though you believe you know noth-

ing about the subject you should write something. This can be done by purposely misinterpreting the question such as by describing anatomical and physiological phenomena when pathological features were asked for. If you write nothing, the highest mark you can get is zero. If you can fill a page, even with nonsense, there is a very good chance that the examiner will be sufficiently impressed by your efforts to give you 30 or 40 percent. If you can get this much you can probably manage to pass on the strength of your other answers.

9. Handwriting

If every third sentence contains one illegible word, a third of what you have written may go ungraded.

10. No examination is too long.

It is your job to give the best answer possible in the time available. Examinations test your ability to select the most important facts under pressure, and this is an important ability in medicine.

For oral examinations it is not possible to prescribe any specific rules of conduct since there is great variation of subject matter as well as of examiners. In the oral, one can at least ask the examiner to clarify the ambiguous question. This may be a useful play even when the question is not ambiguous. It gives you a lead while he is "clarifying". It is better to say "I'm not quite sure I understand the question" or "I wonder if you could put that another way", i.e. don't reveal the cause of your confusion. If you say "Do you mean A or B?" you may give the examiner question ideas that had not occurred to him earlier.

An important point to remember during orals is that after a few hours of examining, the examiner may find himself running out of questions. When this happens he is likely to pursue at random any of the subjects you include in an answer. All you can do about this is to be careful what you bring up.

An examiner sometimes gets into a series of questions in a single area of which the candidate is relatively ignorant. When this happens there is a risk that your examination may be quite one-sided unless you can somehow "steer" it onto firmer ground. Sometimes this can be done by simply saying that you find yourself ill-prepared on this subject but believe you could do better on another. Another more subtle method is to include some extraneous, but familiar, material in

your answer in the hope that the examiner will seize on it as a subject for further questioning.

You are certain to be asked some questions to which you do not know the answer. It is easy for the examiner to do this because he doesn't need to know the answer himself. First - don't panic. Never assume at any stage in the examination that you have failed and that further effort is useless. Second. don't waste too much time staring off into space waiting for a telepathic message that isn't going to come. The more time you waste, the less there is left for subjects you do know something about. There are two possible sources of action. If the subject is obviously a trivial one, e.g. "What are the parathyroid changes in caisson disease?") get rid of it with a quick "I don't know." this kind of question doesn't count for much anyway. If the question deals with a more important subject, e.g. "Why don't children get pulmonary embolism?" - and you don't have a pat text-book answer - say so, and then, warning the examiner that you are going to do so, speculate freely on all the possibilities you can think of. Most examiners respect a candidate who tries to reason from first principles.

Sometimes the examiner will tip you to a bad answer, e.g., "If what you have just said is correct, how do you explain so and so?" or he may ask a series of minor questions and then say "In the light of this would you like to modify your earlier answer?" I have no specific advice for these situations except to note their existence.

It is not possible to present a summary and conclusions on this subject. Perhaps two statements of the responsibilities involved in examinations is all that can be done.

It is the examiner's responsibility to ensure that the examination be fairly and honestly presented to the candidate.

It is the candidate's responsibility to ensure that he answer an examination in such a way as to get himself the highest mark that can be justified by his knowledge of the subject.

Reprinted

From: CAMSI Journal, Vol. 21: pp. 17-23, Dec., 1962.