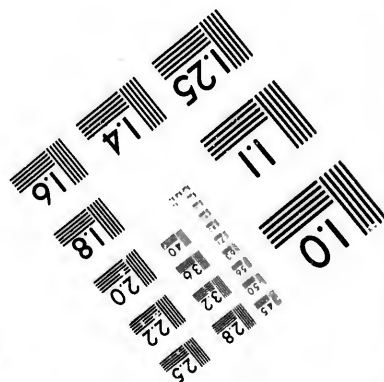
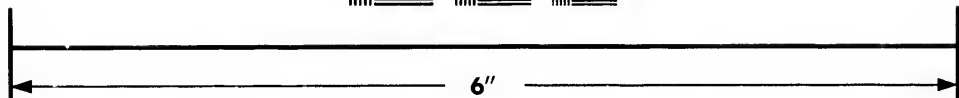
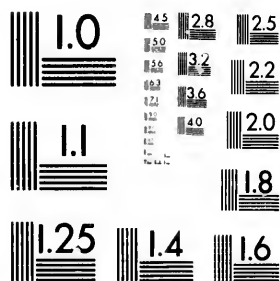


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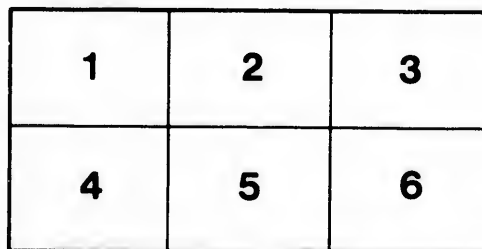
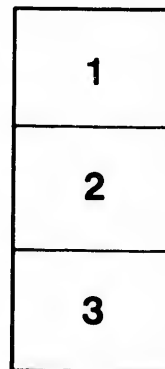
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THE
PRACTICAL VALUE
OF
PSYCHOLOGY TO THE TEACHER.

BY
JAMES GIBSON HUME, M.A., Ph. D.,
Professor of Philosophy, University of Toronto.

DELIVERED BEFORE THE ONTARIO TEACHERS' ASSOCIATION,
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THE PRACTICAL VALUE OF PSYCHOLOGY TO THE TEACHER.

JAMES GIBSON HUME, M.A., PH.D., TORONTO.

It would be an interesting task to trace the history of psychology from its earliest crude and haphazard beginnings to its present state of advancement with its wide range of enquiries and interests, its struggles to attain exact scientific results, its efforts to employ experimental methods, its laboratories, its failures, its achievements. I have not to speak, however, of what psychology has been or is; but assuming that to be sufficiently familiar to you, I must attempt briefly to point out some of its applications to the great and noble art of teaching.

We may consider the importance of psychology to the teacher in (1) the discovery of the inter-relations of different lines of study, (2) in organizing and systematizing his own mental life, (3) in guiding the process of bringing together the subject of study and the subject who studies, *i.e.*, in helping the teacher as (*a*), director; (*b*), student; (*c*), educator.

I.—THE TEACHER AS DIRECTOR.

The teacher must know something about the inter-relations of different studies. He has to arrange the time-table, and frequently to teach several of the subjects. Even where he is restricted to the teaching of some specialty he should know how his special subject is related to the others pursued by the pupils he is teaching. Does psychology occupy such a place as to make it specially valuable in seeing the inter-relations of various studies? Let us examine. Wundt divides studies into three great classes, (*a*), the natural sciences; (*b*), the mental sciences; (*c*), the philosophical enquiries. He claims that psychology is complementary to (*a*), the natural sciences, assisting in the treatment of problems otherwise inadequately solved; is the foundation of (*b*), the mental sciences, as dealing with the simple data and underlying principles of all mental sciences, and lastly it is the natural preparation for and introduction to (*c*), the philosophical enquiries.

That psychology is complementary to the natural sciences may be illustrated by a number of commonplace and well-known instances as the case of the "personal equation" in astronomy, where it becomes

necessary to take account of the apperception and reaction time of the observer, who is using the transit instrument, to prevent mistakes. Familiar examples illustrate that the abstracted, mathematical and physical properties of the observed phenomena do not alone explain the appearances, *e.g.*, the larger apparent size of the moon when near the horizon; the apparent motion of the sun. Other simple illustrations might be taken from the optical illusions arising when what is termed "pencils" of lines are drawn from a point between two parallel lines, cutting the parallel lines in various directions, make the parallel lines seem to curve outward; while lines drawn from points outside the parallel lines and terminating in an imaginary line midway between the parallel lines, make the parallel lines appear to curve inward, etc.

Cases of color contrast afford other illustrations. A continuous strip of gray on contiguous surfaces of black and white appears darker on the white and lighter on the black background; the same gray placed on backgrounds of red and of green appears greenish on the red and reddish on the green background.

The British Scientific Association places psychology among the natural sciences in its meetings by making it a sub-section of physiology. The American Scientific Association places it under the second group of mental sciences by making it a sub-section of anthropology. It belongs to both places.

Only a slight examination is required to see that for the mental sciences psychology is just as fundamental and underlying as mathematics is for the natural sciences. Note any recent advance in these and you will find it resting on insight into and application of some psychological principle. Look at the new methods of teaching grammar, not *before*, but *through* the language to which it belongs. Look at the complete revolution in method in the manner of teaching and using *rules*, once first, now last in the process, once announced and memorized, now discovered and constructed by the pupil himself.

Look at the improvement in history in such works as Green's Short History of the English People; going beneath the events to the life of the people, their aims and passions, and the analysis of the character and motives of the chief actors. Look at the improvement in political economy by the introduction of psychological and ethical considerations. What may we expect in law when some of the time spent on procedure in criminal law is applied to the study of the *criminal* himself?

As to the value of psychology as an introduction to the philosophical enquiries, an objection might be raised that all of them, philosophy, æsthetics and theology, claiming to deal with the true, the beautiful and the good as ideals, are ultimately based on metaphysics, and the less we have to do with metaphysics the better.

Modern philosophy, however, should not be confounded with the much-misunderstood and much-maligned mediæval disputations any more than modern chemistry with alchemy, or modern biology and medical science with the views of Theophrastus Bombastus Paracelsus. And even the superseded past should be remembered with some gratitude and respect as the progenitor of the present. "Honor thy father and thy mother." Those who cry out most loudly against metaphysics, past or present, are in almost every case the unconscious victims of the shallowest and most erroneous forms of metaphysical speculation.

It is philosophical speculation carefully conducted which has done most to expose false principles and to amend crude and erroneous standpoints. If we mean by philosophy, reflection on the meaning of experience, reconsideration of the significance of the results gained in scientific investigations, then, instead of saying no one should have anything to do with philosophy, we should rather say everyone should have something to do with philosophy.

Everyone who reflects on the meaning of life and its experiences, who desires to pass beyond the mere appearances and discover their worth and importance for life, conduct and destiny, is to that extent a philosopher.

It is necessary to specialize in science to gain results. But every scientist in every field has not only the privilege but also the duty to give more than mere details connected with his specialty. He should endeavor to give hints concerning their ultimate meaning as this is revealed to him. At any rate, the teacher cannot be a mere pedant. He must be a man as well as a scholar, and he will give a respectful hearing to such investigations and cultivate an intelligent interest in them. For this, psychology is a useful introduction and preparation. May we not conclude that psychology stands in such a central position and in such intimate connection with every branch of enquiry that it is peculiarly fitted to assist in their co-ordination?

II.—THE TEACHER AS STUDENT.

It is scarcely necessary to say anything about the importance of continual study to the teacher. He must keep alive his interest in

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what he is teaching by continually enriching his mind by new enquiries and acquisitions.

Our studies should be organized. Each new discovery should be made to throw light upon everything we already know.

By reflectively, actively organizing in this way the mind gains strength and insight, keeps alive its old interests and creates new ones. Thus study is made delightful and fruitful, thought is trained to become consecutive and successful. The teacher should himself be a thinker of this type and he should have psychological insight to enable him to guide his pupils to attain such an intellectual culture.

III.—THE TEACHER AS EDUCATOR.

What the teacher acquires and gains in his own self-culture is, as teacher, a means; the end sought by him is the training of pupils. He must stimulate and awaken interest. He desires to make the subject of study a means to transform the whole character of the subject who studies. In order to accomplish this, the teacher must keep in mind the logical order of a correct presentation of the subject of study; the stage of development and powers of his pupil and the laws of his mental growth; that he may gain the result, the developed pupil. In order of presentation, he must proceed from the simpler to the more complex, and the simpler is not the most abstract but the most concrete, for he must also proceed from the known to the less known. He must arrange the presentation so that a puzzle or problem is proposed and suggested to the pupil, and his curiosity aroused to endeavor to solve it.

The teacher must sympathetically place himself at the pupil's standpoint, if he desires the pupil to advance to his point of view. In order to do this, he should endeavor to recall the stages and processes whereby he as pupil proceeded, when he was at the stage now occupied by his pupil. The ability to do this, probably accounts for the fact that, in many cases an English-speaking teacher will be more successful in teaching pupils the rudiments of a foreign language than a native. It may also account for the fact that so large a proportion of young and inexperienced teachers succeed as well as they do.

The most important service of psychology to the teacher, is that it leads him to consciously and systematically study his pupils, and thus awakens or intensifies his interest in them. Surely, if a doctor becomes interested in the discovery of new diseases and new remedies for them, a teacher should be interested in each new pupil and in each experiment for his improvement.

An individualized interest makes a teacher as careful of his pupils as a fond mother is of her children. He is on the alert to see that the physical well-being of the child is not neglected. Has the child bad habits of sitting, or studying, or walking, or breathing? He discovers the cause and endeavors to correct kindly, wisely, and at once. Proper physical habits conduce to health and morality.

Is the child untidy or unmannerly? The teacher leads him by example and considerate advice. The child is respected and is taught to respect himself. Is the child dull and stupid? The teacher endeavors to find out if ill-health, or poor food, or ill-usage at home, is the cause; he encourages the child to play, and soon it will turn out that the teacher is found visiting the home and endeavoring to arouse parental solicitude and gain parental co-operation. This teacher will not neglect lighting, heating, or ventilation; he will be careful not to unduly fatigue his pupils, and will be found supervising their plays without officious interference. He will even be found guarding the out-houses and walls from the desecration of perverted vandalism. He will be the guide, counsellor and confidential friend of the adolescent pupils; guarding them with solicitude and watchfulness in this critical period of unstable equilibrium, when the nature is plastic and responsive to the promptings of the highest ideals, and when, on the other hand, the danger is so great of the beginnings of perverted habits and criminal tendencies arising, if the pupils are neglected, and allowed simply to "grow up" like Topsy or Ruth Bonnython.

Let us now recall some examples of assistance from psychology, in arrangement of time table and presentation of the subject of study.

The thoughtful teacher will distinguish between the more severely logical and mathematical subjects, and the historical and literary. For the former, more concentrated attention is required, and therefore, these should be placed in the early part of the programme. When it comes to reviewing, it will turn out that the second class of studies requires more repetition and reviewing. Pupils should, however, be taught to recall directly what they have previously read and studied, without using the book to assist them. The memory should be trained in self-reliance. Perhaps it is in connection with memory that most people would think of the assistance of psychology to the student.

Kant says memory may be mechanical, ingenious, or judicious. I think it must be confessed that the earliest attempts to apply psychology in assisting and directing memory training, were chiefly of the

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"ingenious" kind, discovering curious and arbitrary connections in accordance with the law of the association of ideas, through similarity, contrast and contiguity.

Many text-books seem to be constructed with the view of employing the "mechanical" memory. It is supposed that the briefer the summary, the easier it will be to learn and remember. The student is supposed to con over the tables and learn them by sheer repetition.

A deeper insight will indicate more "judicious" methods. The great rule for memory is "take care of the knowing and the recollecting will take care of itself." Let the subject be taught and studied logically, systematically, thoroughly, and woven as widely as possible into the warp and woof of the mental interests and thoughts of the pupil. In this way the time spent in one subject is not taken from all others, but is contributing to all others. It is a popular fallacy to suppose that all the time spent in one subject is subtracted from every other.

The trained and experienced teacher educates all the powers of his pupils, and utilizes every subject for this purpose. He keeps clearly before his view the result to be attained, carefully selects the most efficient means, and with solicitude and interest observes and directs the process. He desires the full and harmonious development of *all* the powers and capabilities of the pupil, physical, mental, social, moral and religious. He is aware that he is co-operating with the pupil in the formation of character. Is there anything of higher value? This thought makes the teacher reverent, it impresses him with a sense of his responsibility; it also enables him to respect his profession and see in it one of the noblest efforts of human endeavor. Although our Public Schools are sometimes accused of giving a merely intellectual drill, no teacher worthy of the name is limiting his efforts to this. He is bending every energy to attain discipline and training of character, by means of the intellectual and the disciplinary; he strives to inculcate ideals and form habits of faithfulness, honesty, uprightness, industry, truthfulness, obedience, reverence.

Mark, he is not teaching *definitions* of these, that would be a "merely intellectual drill." He is moulding the character into these moral habits. It is just because the Public Schools are so efficient that Sunday School and home continually desire to relegate more and more to the Public Schools. The careful and reverent study of the child is destined to react upon home, Sunday School and Church. If child-nature had been studied should we find the text "Except ye

become as little children, ye cannot enter the Kingdom of Heaven," so continually misinterpreted to mean that there should be passive admission of truth without questioning or enquiry? Is that the way the child learns or acts? Should not our religious life exhibit the same fearless confidence in asking questions and the same readiness in putting into practice the answers that the active child displays?

It would be a wide field to follow the pernicious effects of un-psychological methods of parents and teachers in the suppressing of questions, and stifling the religious cravings of children. We have too often "offended these little ones."

Sooner or later truer psychological methods, as exemplified in the Kindergarten, will permeate the whole school system and overflow into the Sunday School, the Church and the home. Let me add to the teacher interested in the study of psychology and its applications to his profession:—Remember that the Science of Psychology, with all its intrinsic importance and immediate usefulness, is simply the portal and propaedeutic to the higher reflective problems of the ultimate significance of life, and art, moral conduct, and religious aspiration. As in your teaching you desire the intellectual to be the means to lift up the pupil to higher ground, prepare him for the reception of the highest truths, so let these lofty themes be in your own life constant topics of interest, perennial sources of new insight, continual fountains of noblest inspiration.

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