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## The Effect of Guidance upon Academic Achievement<sup>1</sup>

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B. I. Bell (1) pointed out that, "Everything about American education is getting bigger all the time: the number of students enrolled, the size of the installations, the amount of dollars it spends, the vast volume of pedagogical gobbledeygook which extols its methods without bothering to define its ends. As it gets bigger and bigger more people are insistently asking: Is it any good?" This statement is apparently justified, for while great strides have supposedly been made in the elimination of illiteracy, the 1948 census discovered a new category was necessary; functional illiteracy. The old adage, "You can lead a horse to water but you can't make him drink" is obviously true in regard to education. While the facilities for increased education are the greatest they have been in the history of the United States, and the entire world for that matter, the number of people who apparently benefit from the facilities is no greater than 20 years ago.

The complaining voices are not those of a few isolated cranks, but a multitude of doubters skeptical of what is being produced in the public schools. Parents realize that their children are not receiving intellectual training and are being turned into rude, irresponsible individuals. Leaders of business and industry deplore the ignorance and laxness of the products

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that emerge from the schools at the end of each academic year. Military organizations—the Army, Navy and Marine Corps—have found that approximately 25 per cent of the graduating high school population who are drafted or who volunteer are unfit for technical training. Teachers themselves, voice the most embittered disillusion. They know that, individually, they are unable to teach the students the things that they should be taught if they are to function as adequate citizens in a democratic society.

Such dissatisfaction has found expression in the recent work of such authors as Bestor (2) and Woodring (4). These authors point out that education generally has become preoccupied with methods and techniques without bothering to question the underlying philosophy.

Such criticisms of education, while seemingly justified, instead of improving the conditions contribute to the states which are so extravagantly deplored. Faced with such widespread criticism and being offered suggestions on all sides pedagogues have, in many instances, turned to those other fields for programs which they are led to believe will ameliorate the difficulties and still the critics. In their haste to institute a procedure which is "modern" and "scientific" and which is currently popular among the more respectable arts and sciences, educators frequently buy a "pig in a poke", not bothering to discriminate between what is speculation and what has empirical support. Such is apparently true in regard to Guidance.

Undisturbed by empirical evidence which indicates the lack of applicability of psychoanalytic principles to institutional education, some individuals who call themselves counselors, guidance experts, and the like continue to translate these principles into the one, two, three, of educational methods. The result of these endeavors is a corpus of do's which if followed unqualifiedly will enable the educator to produce a whole school-room full of academic achievers with non-neurotic personalities. To succeed in such a program one must only accept the assumption that if an individual is allowed to express his biological instincts unhampered by society he will become a paragon of productivity. From this there follow such rhetorical expressions as "self realization", "development of the whole individual", and "integration of personality". All of these may be achieved if one is "permissive and accepting" in situations which are "individual-centered".

Not only will such a program prevent the individual from confronting new situations which will cause him to be inhibited and hence neurotic, but will provide a milieu in which the horrible forces of family and society, generally, may be eased if not completely removed. As the individual is liberated from these confines of tradition his academic performance should reach unexpected heights.

While it might ordinarily be expected that the establishment and operation of such a program would be in the hands of individuals who have had a great deal of training, such is obviously not the case. Anyone with a few courses in guidance may consider himself an expert. So simple is it in fact, that an official of one public school felt that teacher attendance in one extension course was all that was necessary for the successful formulation and consummation of a program.

As more and more educational institutions are turning to such packaged programs, investigation becomes increasingly pertinent. The present study was designed to determine the effect of such a guidance program upon academic achievement.

#### PROCEDURE

The subjects were Naval Aviation Trainees assigned to the Airman Preparatory School based at the Naval Air Technical Training Center, Norman, Oklahoma. These trainees received their assignment from three regional basic training areas centrally located within the United States. As a result they represent a geographical cross-section. As there was no

specific quota demanded by the Airman Preparatory School, the number of men who reported each week varied with the demands of the assignment center. As a consequence the classes varied in size from 125 to 350 students. Assignment to Guidance or Non-Guidance groups was arbitrarily determined, that is, after the Guidance program had been established, of four incoming classes two were assigned to the Guidance group and two to the Non-Guidance group. In this way, 296 Trainees constituted the Guidance group and 620 Trainees the Non-Guidance group.

There were no significant differences between the groups as indicated by the General Classification Test, the Arithmetic Reasoning Test, and the Mechanical Aptitude Test administered by the induction station, or the Diagnostic Mathematics Test developed at the Norman Station. Nor were there any differences in education between the two groups.

Sixteen Chief Petty Officers who had received training as instructors were selected by the training officers on the basis of their consideration for an interest in the students and their desire to improve the quality of instruction. These men were given five hours of instruction a week for six weeks on the principles and practices of guidance as outlined in textbooks used in guidance courses at the University of Oklahoma.

After completing three weeks of instruction these CPO's were assigned students in a haphazard fashion from an incoming class designated as Guidance.

The first day of the training program was occupied by diagnostic testing and indoctrination. For the Guidance group indoctrination stressed individual attention and consideration. Indoctrination for the Non-Guidance group was the traditional authority-oriented one. The section advisors of the Guidance group met with their advisees on the second day. At this time any questions which the advisees might have were answered or referred to the proper source. Availability of CPO's, Training Officers, and Civilian Counselors to discuss any difficulties which the individual might have was stressed. Throughout the eight-week training the program of the Guidance group was oriented in a non-authoritarian manner.

A second informal group session was scheduled during the second week. Information on how to study, how to take notes, and how to take examinations was presented and discussed. Again, the availability of Training Personnel to discuss any problems was emphasized.

By the third week of school the student had advanced sufficiently in the course of instruction to enable the advisor to single out individuals who were having difficulties, academic or personal. He could then concentrate his efforts and give personal interviews and aid to those who definitely needed more help.

At the end of the sixth week of school, the student who had completed all of his assignment was ready for the personal interview with the civilian counselors whose aims were to assist the student in the selection of an area for future training in accordance with his past performance, experience, motivations, and, of course, needs of the naval service.

The Non-Guidance group received the regular authority oriented service program throughout the eight weeks of training.

Indices of academic achievement were scores on multiple choice tests prepared and administered by the Naval Testing Service as a regular feature of the training. Scores utilized for this study were from tests covering mathematics and physics (Table I). Scores on layout and handtools were also available, but since total average in these areas involved a more or less subjective feature it was felt that personal concern on the part of the instructors with the Guidance or Non-Guidance program might influence these data. Comments regarding the Guidance program were solicited from both the CPO's and the students in an effort to control, to some degree, the instructor and student error related to attitude toward the program.

TABLE I  
*Scores Made by Two Groups of Naval Aviation Trainees on Tests  
 Covering Mathematics and Physics*

GROUP	SUBJECT OF TEST	
	MATHEMATICS	PHYSICS
GUIDANCE	M 76.00	M 72.60
	SD 13.18	SD 12.35
NON-GUIDANCE	M 78.32	M 75.29
	SD 12.89	SD 12.17
	F 1.04	F 1.03
	t .115	t .102

Applying *F* and *t* tests we find homogeneity of variance and means. This indicates that there is no significant difference between the two groups, Guidance and Non-Guidance, when objective test scores on mathematics and physics are used as indices of academic achievement. It is of interest to note, however, that slight differences do occur between these two groups but in the reverse direction than might be expected, the Non-Guidance group made slightly better scores on both mathematics and physics than the Guidance group.

Examination of statements from CPO's and students of the Guidance group indicates that in no instance was there antagonism or dissatisfaction with the program. In every case the program was considered beneficial and worthwhile.

We must therefore conclude that in terms of this study Guidance as is usually formulated and practiced relative to institutional education does not improve academic achievement. We feel that this study demonstrates that psychology generally and current trends in psychology particularly, with their present limitations are subject to retaliatory criticism unless caution graces promises of usefulness. Rather than shoddy, glib answers, the psychologist should, in the words of the Harvard Commission (3), "refine" and improve his answers to those questions asked (by the educators), admitting always the limitations of his knowledge. He should be encouraged to do that which is precise in his research, but in the ultimate accounting to society he and his colleagues must collectively reply to, if not fully answer, the human questions being asked.

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