

SOME PROFESSIONAL PROBLEMS IN EDUCATION

RALPH F BERDIE
Student Life Studies
University of Minnesota

Some of the problems facing professions are outlined recruitment, selection, training, certification, specialization and job evaluation. Some of the principles provided by psychology which are relevant to a consideration of these problems are then considered. These principles pertain to individual differences in behaviour, the possibility of measuring these differences, the relationships between personality characteristics and occupational performance, the predictability of behaviour and its modifiability.

As an occupation evolves into a profession, it assumes new responsibilities and finds new problems. The social roles of occupations change over time—some occupations proliferate through a process of specialization, some combine and merge, some become increasingly complex and technical, some assume new social functions and forsake old ones, and some disappear altogether (15). The occupation of teacher is an old one, perhaps the world's second oldest.

Even as a profession, teaching has attained respectable age and maturity, at least compared with many of the new professions. Colleges, schools, and institutes of education are long established, professional and scientific associations have long and respectable histories, training standards are defined and relationships with basic sciences are reasonably clear.

Here I wish to look at some of the problems of the teaching profession from the point of view of a psychologist who is particularly interested in occupations and vocations. First I will list some of the problems which face professions, including teaching, about which psychologists should be expected to have something to say, and second, I will propose some general facts, findings, and principles, formulated by psychologists and which have relevance for the problems to be listed.

PROBLEMS FACING PROFESSIONS

One of the first problems involved in a profession is that of recruiting persons to the profession (11). How does a profession bring itself to the attention of people who will consider and eventually enter it? How do

you let people know that there is such a profession and what it is? How do you make people aware of its rewards and responsibilities? When should students first learn about a particular profession and what kind of information about it should they, their parents, counsellors, and teachers have? How are false stereotypes corrected? How are favourable attitudes established and unfavourable biases and prejudices reduced? How does a profession recruit its members?

After a profession has established in a number of young persons a desire to enter it, how does it select those it wants? Historically men were selected for occupations on the basis of their father's occupation. Today selection methods include tests, records, interviews, recommendations, and success on tryout and training experiences. Not only does an occupation have to be concerned with the means of selection used, but also with the timing of selection. Increasingly professions are realizing that selection is a continuing process that occurs over a long period of time, perhaps beginning even before high school graduation, and in some countries long before that, and continuing right through professional training and state certification or recognition.

A third problem facing professions concerns training (25). In many countries, professions do not have the sole responsibility for training, such responsibility being shared with universities and professional schools. However, professions themselves, and professional organizations play an important part in determining the decisions made by professional training institutions and the recommendations coming from professional organizations are carefully listened to by these schools. How long should a person be trained? What should be the content of his training? How general or specialized should such training be? How should liberal education and professional education be balanced? Who should participate in such training?

The interrelationships between these problems by now should be obvious. Recruiting cannot be considered apart from selection, and selection cannot be considered apart from training. The people selected will be determined in large part by the training provided and the people recruited will be determined in large part by selection standards. Perhaps no professional problem can be identified that is independent of other problems.

Following training, a profession must be concerned with the means it employs for granting social recognition to those who are trained and are ready to work. What method of certification or licensing can be used? How are specialized skills acknowledged (26)? A profession

must consider not only what kind of pellet, or immediate reward, it grants when a person completes training, but also how it informs the world in general that the individual has gone through the necessary steps required to enter the profession

Another and related problem centers around the classification of individuals. Within most professions a variety of sub-professions or specialities exist. When a prospective teacher enters training, how does he and how does his school make the decision as to whether he eventually will work as a science teacher or as an elementary teacher or as a head teacher or as a school counselor? How are decisions made as to the amount of managerial responsibility persons will have, the amount of research activity in which they will engage, the extent to which they will be working closely with other persons, or in isolation? Each profession has a problem of classifying and assigning specific jobs to persons in the profession.

Another problem that many professions tend to overlook can be called the induction problem. How are persons introduced into their profession once they have completed professional training? Few professional schools propose that they provide all the professional preparation a person will need once he starts on a job. Even within highly traditionalized professions work opportunities and situations differ from one another and each job requires some orientation of new persons.

We can continue to list other problems related to professions. For example, how are people promoted from one level to the next? This raises the question of how job performance is evaluated (10). How does one tell whether a person in a profession is doing a good job, whether he can do a good job at the next level, and whether he should be moved to that level? The problem of inservice training is closely related to many of these other problems (7). No profession is static. That is, in each profession new discoveries are made, new methods and techniques developed, and new opportunities and demands presented to persons in the profession. How are persons in a profession kept up to date? How do you rustproof a teacher? How do you define jobs in teaching and how do you group functions and activities and responsibilities that are reasonable and logical for a single person to do? Finally, how do you organize your occupation (22)? What is the role of professional and scientific associations? How do these associations keep up with the times? How do you bring together social changes, scientific developments and problems of professional associations?

Psychological research, theory, and experience have provided some

principles relevant for the consideration of the problems listed here. Each profession must decide how to apply them as it seeks to solve its problems.

SOME PSYCHOLOGICAL PRINCIPLES

People differ from one another. It doesn't take a psychologist to observe this; nevertheless, it is one of the principles, assumptions, or facts on which almost all of applied psychology is based. People differ from one another in a variety of ways and the range of differences is tremendous. Customarily we think that people are built pretty much the same way. Even physically they are not (29, 30). The location of the liver, for example, and of other internal organs, varies considerably from person to person. Likewise the sizes of organs within the body vary. Psychological differences are also great. The most intelligent person is so different from the least intelligent person that we well might almost consider them to be different kinds of organisms.

Next, psychological differences among individuals are measurable (8). Much time and effort have been spent by psychologists for almost one hundred years in identifying and measuring psychological characteristics. Psychologists first started by measuring and observing individual differences in reaction time (5). If you take ten persons and seat them at a table and have each person place his finger on an electrically charged grill, then send a current through the grill and measure how long it takes each person to withdraw his finger, you will find some interesting differences in response time. More than sixty years ago, psychologists first began to measure the characteristics that we now call general intelligence (2). The measurement techniques and concepts used by psychologists differ in several ways from those used by physicists or engineers, but personality differences are measurable and are being measured.

Next, these differences in personality are occupationally relevant (28) and have meaning for many of the professional problems listed earlier. The differences among persons in height have great relevance for the occupation of professional basketball player. The differences in the characteristics of mathematical aptitude have relevance for occupations such as engineering and science. Differences in vocational interests related to working with people have relevance for the profession of teaching (27). Recognizing and dealing with the ways in which individuals differ from one another can help professions in approaching their problems (1).

We must recognize that several concepts or dimensions can be used in describing personality and in finding how people differ from one another. Vocational psychologists tend to group personality characteristics within a limited number of categories. First, we tend to think of the category of *ability* (3). This includes such things as intelligence, aptitude, academic potential, and so on. Another psychological dimension is called *achievement* or information or competency (16). What does a person know, what can he do? How fast can he read? How quickly can he assemble an electric motor that someone has taken apart? How far can he drive a golf ball? Another concept psychologists use is called *interest* (27). What does a person like to do? What will he turn to when given a choice among several alternatives? What activity will hold him for long periods of time? With what will he persist? Yet another dimension is called *character* (12). This refers to a person's dependability, reliability and honesty. Another dimension has been called *temperament*. This can refer to a person's emotional stability, also how friendly and outgoing, or introverted and self-sufficient he is.

Another psychological principle that we must recognize is that behaviour is to some extent generalizable. That is, there is a tendency for people to behave somewhat in the same manner in different situations. We all know some people who are almost always late, no matter where they are going, and other people who are always early or on time. We know some people who almost always can be counted on doing a neat and efficient job, others who are messy and slovenly. At the same time we must recognize that generalizability of behaviour is rather limited. We can also think of people who are neat in some situations and untidy in others.

Another principle we should be aware of is that behaviour is predictable. This does not mean that all behaviour is predictable nor that any behaviour is highly predictable, but it does mean that in general, much of behaviour can be predicted. By understanding what a person has done in the past, we can make predictions as to what he will do in the future. Predictions tend to be more accurate and better if methods of prediction are quantified (20), that is, if information about groups of persons is gathered systematically and treated statistically, better predictions about the behaviour of individuals can be made than if the original data simply were observed rather informally and treated intuitively in making predictions about what people will do. Psychologists who work with factories to help them select employees, or with schools and colleges in the selection of students, or in the military in the selec-

tion of specialists, are using their skills as psychological predictors. The base line in such prediction is sheer chance. The goal of course is ideal predictions, prediction without error. At present our efficiency is closer to the base line than it is to the ideal but the usefulness of such prediction was perhaps most impressively demonstrated during World War II when it was shown that psychological tests that had relatively low efficiency of prediction were able to save the United States millions of dollars and thousands of American lives (9).

Another principle that psychologists accept, and again it is one that doesn't take a psychologist to recognize, is that people learn. Behaviour can be changed and people can be taught how to change their behaviour. Not only can people change, but means are available for effectively changing behaviour and some methods are more efficient than others (19). We all recognize that how we will teach a person depends on what the person has to learn. More often we fail to recognize that people differ from one another in terms of how they respond to different teaching or training methods. For example, several years ago Professor Bond, of the University of Minnesota, discovered that some children learn to read better if they are taught with the emphasis on visual methods and other children learn to read better if the emphasis is placed on oral training methods (4). Most of our schools still fail to operate on this principle and we tend to search for the best method of teaching, rather than to search for a method which is best for each individual.

Related to this principle of learning is the one that modifiability of behaviour is limited. Again, we all are aware that not everybody can be taught to do everything. Some things can be learned by or taught to an individual but the time, effort, and cost for that person may be so great that it simply is not worth it. Using the time and effort required to teach one thing a person may learn several other things that will ultimately have more value for him. We must recognize again that not everybody can or should learn everything and that a surprising number of persons can get along well without knowing what most people are expected to know.

Let's look at another principle. Persons have needs (17, 18, 21). When a person does something we can say here he is doing it because he has a need to do it. When a child shows off, we can say he does it because he has a need for attention. Sometimes when a student fails in school, we say that he does it because he has a need for failure. Here we are using another kind of language, another set of concepts, and

these have usefulness professionally. For example, people do things because they have a need for achievement, that is, they have a need to accomplish something. A whole occupational psychology has been developed based on the concept of needs (24). Jobs satisfy needs. Not only do some people work for money, and we all have a need for money, but some people work for status, some for activity, some for socialization, and some for respectability. We can think of the reasons why people work in terms of personal needs and the extent to which jobs satisfy these needs.

Another interesting fact we know is that occupations tend to be stable over time. Research done at the University of Minnesota on a number of occupations has demonstrated that the people in an occupation thirty years ago resembled to a great extent the people in the same occupation today (6). People who were in banking jobs thirty years ago have a remarkable similarity to other people in those same jobs in the same banks today. The buildings and organizations of professions may change, but many elements in an occupation do remain stable over time. At the same time, occupations can and do change. For example, the occupation of psychologist was found to have changed considerably over the years (14). At one time, most psychologists were college and university professors who worked in laboratories on experimental problems. Today, large numbers of psychologists are clinical and counseling psychologists who work in service agencies providing services to individuals.

Occupational adjustment is a life-long and continuous process. When we are in school we must make tentative choices regarding our occupational futures. Later on in school we must make increasingly definite choices, although we usually have leeway for change. When we enter professional training, we make further commitments, and finally when we complete our training, we must make other decisions. Once we are on a job we must make decisions concerning remaining on the job or changing jobs. What kind of specializations shall we undertake? Where shall we work? For whom should we work? What should we do? As we approach retirement we must make further decisions. Truly, the process of job adjustment never ends.

We have impressive evidence that also suggests that vocational decisions, and particular vocational choices, are only partly systematic and to a large extent are also fortuitous (23). We may think that our lives are carefully planned, and perhaps for some people, this is true, but for most people, chance plays a surprisingly large part in the

decisions made. When you ask people how they happened to enter an occupation, it may be that they know a person who influenced them, by chance they talked to a person who had something interesting to say, or a particular opportunity arose at a certain time. As psychologists or social engineers attempt to change and influence occupational decisions, particularly occupational choices, they must recognize that they can do relatively little, but this does not mean they can do nothing. The effort is still well worthwhile.

Finally, we must recognize that frequently training and job requirements are not always in complete agreement. Many professional schools require students to learn things, to acquire competencies, that the job does not require. A recent United States Commissioner of Education commented at length on the inefficiency of many of our certification requirements (13). Professions have not been particularly alert at reviewing their job and training requirements to see that they coincide. Training requirements sometimes are influenced by status needs on the part of the profession, sometimes by vested interests. Less often they are influenced by analyses of what people do in the profession, and reassessments of how people are trained.

The comments presented here raise several questions for the profession of teaching. Most of these questions, to be adequately answered, must be subjected to research, and the first question well might be: how does a profession induce people to do the research needed for systematic planning, professional development, and programme evaluation? Some professional associations maintain their own research units. Others employ consultants on a continuing basis or to study specific topics. Some relevant research can be done by graduate students and interested faculty members in universities but much research of concern to professions must be broader than this approach usually allows.

How is the profession seen by other persons? What are current and anticipated job demands? How many persons are being recruited to the professions at present, and what is anticipated in the future? How many beginning students actually complete their professional preparation and enter the occupation? What predictors are effective in identifying persons likely to succeed and persist in the profession? How has the occupation changed during the recent past, and what changes are anticipated in the future?

All of these questions have relevance for the profession of teaching. The extent to which the profession is able to assemble valid answers will determine to a large extent its role in our future society.

REFERENCES

- 1 BERDIE, R F, LAYTON, W L, SWANSON, E O, and HAGENAH, T *Testing in guidance and counseling* New York McGraw-Hill, 1963
- 2 BINET, A, and SIMON T Méthodes nouvelles pour le diagnostic du niveau intellectuel des anormaux *Annee Psychologique*, 1905, 11, 191-244
- 3 BINGHAM W V *Aptitudes and aptitude testing* New York Harper, 1942
- 4 BOND, G *The auditory and speech characteristics of poor readers* Columbia University Teachers College Contributions to Education, No 657 New York Bureau of Publications Teachers College, Columbia University, 1935
- 5 BORING, E G *History of experimental psychology* (2nd ed) New York Appleton-Century Crofts, 1950
- 6 CAMPBELL, D P The stability of vocational interests within occupations over long time spans *Personnel and Guidance Journal* 1966, 44, 1012-1019
- 7 CHILDRESS, J R In service education of teachers In Ebel, R L (Ed), *Encyclopedia of educational research* (4th ed) Toronto Macmillan, 1969 Pp 645 654
- 8 CRONBACH, L. J *Essentials of psychological testing* (2nd ed) New York Harper, 1960
- 9 FLANAGAN, J C The aviation psychology program in the AAF AAF Aviation Psychology Report, No 1 Washington Government Printing Office, 1947
- 10 FLANDERS, N, and SIMON, A Teacher effectiveness In Ebel, R L (Ed), *Encyclopedia of educational research* (4th ed) Toronto Macmillan, 1969 1423 1437
- 11 HANSON, J W Education in developing nations In Ebel, R L (Ed), *Encyclopedia of educational research* (4th ed), Toronto Macmillan, 1969 Pp 342 360
- 12 HARTSHORNE H, and MAY H *Studies in deceit* New York Macmillan, 1928
- 13 HOWE H Why we need a change in the peering order *College Board Review* Winter 1967-68, number 66, 29-32
- 14 KRIEDT, P Vocational interests of psychologists *Journal of Applied Psychology*, 1949, 33 482-488
- 15 LASKI H J The decline of the professions *Harpers* November, 1935, 171, 675 685
- 16 LINDQUIST, E F (Ed) *Educational measurement* Washington American Council on Education, 1951
- 17 MASLOW, A H *Motivation and personality* New York Harper and Row, 1954
- 18 MASLOW, A H Further notes on the psychology of being *Journal of Humanistic Psychology*, 1964, 4, 45 58

- 19 MCGEOCH J A, and IRION A L *The psychology of human learning* (2nd ed) New York McKay, 1952
- 20 MEEHL, P E *Clinical vs statistical prediction* Minneapolis University of Minnesota Press, 1954
- 21 MURRAY, H A, *et al Explorations in personality A clinical and experimental study of fifty men of college age* New York Oxford University Press, 1938
- 22 PROVUS, M Collective action by teachers In Ebel, R L (Ed), *Encyclopedia of educational research* (4th ed) Toronto Macmillan, 1969 Pp 154 160
- 23 ROE, A, and BARUCH, R *Factors influencing occupational decisions A pilot study* Harvard Studies in Career Development No 32 Cambridge, Mass Harvard University Graduate School of Education Center for Research in Careers, 1964
- 24 ROE, A, and SIEGELMAN, M *The origin of interests* Washington, D C American Personnel and Guidance Association, 1964
- 25 STILES, L J Teacher education programs In Ebel, R L (Ed) *Encyclopedia of educational research* (4th ed) Toronto Macmillan, 1969 Pp 1414 1423
- 26 STINNETT, T M Teacher certification In Ebel, R L (Ed), *Encyclopedia of educational research* (4th ed) Toronto Macmillan, 1969 Pp 1410 1414
- 27 STRONG E K *Vocational interests of men and women* Stanford Stanford University Press, 1943
- 28 SUPER D E, and CRITES J O *Appraising vocational fitness* (Rev ed) New York Harper, 1962
- 29 WECHSLER, D *The range of human capacities* (2nd ed) Baltimore, Md Williams and Wilkins, 1952
- 30 WILLIAMS R V *Biochemical individuality* New York Wiley, 1956