EDUCATIONAL PROBLEMS FOR PSYCHOLOGICAL STUDY

BY

GOODWIN WATSON, Ph.D.

ASSOCIATE PROFESSOR OF EDUCATION
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

AND

RALPH B. SPENCE, Ph.D.

ASSISTANT PROFESSOR OF EDUCATION
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Rew York
THE MACMILLAN COMPANY
1931

COPYRIGHT, 1980, By THE MACMILLAN COMPANY.

All rights reserved, including the right of reproduction in whole or in part in any form.

Published January, 1930. Reprinted September, 1930. May, 1931.

EDUCATIONAL PROBLEMS FOR PSYCHOLOGICAL STUDY

PREFACE

Some word of explanation is surely appropriate for a text which differs so radically in content, organization and implicit method from the standard works in educational psychology. This syllabus is an endeavor to practice what educational psychology preaches. It applies in the educational psychology course the principle that material should be learned in the form in which it is to be used. It abandons the idea of teacher or text book setting forth a series of propositions somehow to be absorbed and some day to be applied. It calls upon the teacher to be a kind of learning engineer. The activity is in the learner. The teacher stimulates, guides, and enriches this active process. The learner is to feel a need, formulate the problem, seek answers, organize data, and test hypotheses. This is not merely the formula of the classroom. It is the mental activity which should continue throughout a lifetime of professional growth.

Not only the method but also the content of courses in educational psychology has received abundant and, perhaps deserved, criticism. It has been called too theoretical and abstract. It has been accused of following the interests of researchers rather than the needs of teachers. It has seemed to some to have become academic and systematized, a new scheme and logic rather than a professional service. Time and attention appeared to center, in some courses, upon the controversies which energize psychologists rather than upon insights which enlighten teachers.

A first attempt to provide a basic syllabus which would select the materials teachers most need; present them in cases sufficiently common, concrete, and complex, to resemble real teaching; organize them in categories teachers are accustomed to use; encourage original investigation but provide the basic

facts and viewpoints; and allow for the greatest flexibility in adjusting to individual differences, eventuated in the book, "Sketches In and Out of School." This the authors published in tentative form in 1927, hoping to give so novel an approach a baptism of fire. Experience with this first book seemed to show that the basic idea was sound, although the original presentation had numerous defects. In this revision of that first attempt, new chapters and new cases appear, questions have been altered to provide for more pointed discussion, bibliographies have been revised and rearranged, much more has been written on how to use the syllabus, and some new materials supplementing traditional text content have been created for the Appendix. A "Handbook of Evidence in Educational Psychology" is designed to accompany this syllabus, bringing to students in one publication the relevant empirical data now widely scattered through more than a score of periodicals.

To the graduate students of Teachers College who suggested cases, criticized references, raised questions and bore with the experiments of their teachers, greatest acknowledgment is due. Especial gratitude is expressed to Rosalind Blum and Laura Krieger for the care with which they have contributed to the bibliography. To many teachers of educational psychology who have aided in the adventure with "Sketches" and who have inspired the faith that underlies this volume, we are under lasting obligation.

R. B. S. G. W.

New York, N. Y. December, 1929

CONTENTS

INTRODUCTION				•					•			•	•	PAGE 1
I. STUDYING	ł .											•		18
1. Above		Pla	tea	.11										18
2. Skills			•					•				•		18
3. Tell M	e H	ωw												19
4. In Tra														20
5. Long I			oug	thts										21
6. Concer	ts										•			22
7. A Psyc	hole	ogica	al	Vent	ture	in	M	emo	riz	ing	Ch	ne	se	2 3
II. MEASURE	ME	NT												3 i
A. INTEL				ND A	Арт	ITU	DE '	Tes	TS					31
				Те				_						31
				Test			•	•	•					32
				Tes				am						3 3
B. Char											•			33
		elsio			•	•	•	•						33
				Mo	· ·ala		•	•	•	•	•		•	34
2	oio:	suri ntifi	ng . T	Bene	اميه	nee	•	•	•	•	•	•	•	35
				t Cl					•	•	•	•	•	35
				les		. 60	•	•	•	•		:		37
C. Stani		_				•		r _{mer}	TO:	•	•	-		38
									1.0	•	•	•	•	38
				eme					•	•	•	•	•	39
2.	Age	s an	d A	Ages	•	•	•	•	•	•	•	•	•	
D. TEAC	HER	s'E	XA:	MIN	ATI	ons		•	•	•	•	•	•	4 0
1.	Nev	v-Tv	pe	Exa	ami	nati	ions							40
				s.					•	•		٠.	•	41
E. MARK	S A	ND I	/[A]	RKIN	IG S	Sys:	тем	S					•	42
1.	An	Out	sid	ler										42
2.	Hov	v Te	eac	hers	M	ake	Up	Th	eir	Ma	arks			43
3.	Vale	edict	tor	ian							•	•	•	44
	A 00000			V	ii									

CONTENTS

III. GENERAL METHOD		_	_	56
1. Can School Be Interesting?	•	•	•	
2. Vanishing Teachers	•	•	•	56
ა. Beginnings	•	•	•	57
4. Project Approach	•	•	•	59
5. Application	•	•	•	60 61
6. What Is "Good"?	•	•	•	62
7. Assignments	•	•	•	64
8. Texts or References	•	•	•	65
9. Devices	•	•	•	67
10. A Cipher	•	•		69
11. Conferences	•	•	•	70
IV AMONG GURDEGET	•	•	•	,,
IV. AMONG CURRICULA	•	•	٠	76
1. Life and the Curriculum				76
2. What's the Use?				77
3. Now or Never?				80
4. Literaryism		•		81
5. Latin for Whom?	•			82
6. Analogies			•	83
7. Higher Education			•	85
8. Objectives	•	•	•	88
V. SPECIAL METHODS				93
A. Preschool and Kindergarten	•	•	•	
	•	•	•	93
1. Shall We Start a Nursery School?	•		•	93
2. Toward Independence		•	•	94
3. Instead of Kindergarten?	•	•	•	94
B. ELEMENTARY EDUCATION	•			95
1. Improvement in Reading				95
2. Story-Hour				96
3. Feeling Numbers				96
4. Diagnosis				97
5. Teaching the Second R.				98
6. Spelling .				99
7. The Arts		•		100
C. SECONDARY EDUCATION		•		100
1. Sophomores and Poetry				100
2. Appreciation				101
3. Mathematics				100

				C	ľИC	E	VTS	3							ix
															PAGE
		4.	The I	Effec	t of	Scie	ence	Te	ac	hing		•	. •	•	103
		5.	Foreig The T	gn L	angu	age	s.	•	٠	•	•	•	•	•	105
		6.	The T	[eacl	ning	of 1	Hist	ory	•	•	•	•	٠	•	106
	\mathbf{D}	High	er Ei	DUCA'	TION										106
		1.	Orien	tatio	n C	ours	es	_	_	_	_				106
		2.	Orien Litera	cy .		•	•				•	•	•	·	107
VI	EX	ΓRA-C													118
,												•	•	•	
		On th		-	٠								•	•	118
	2. 2	Censor The V	rsnip Zelue		+hla		•	•	•	•	•	•		•	119
	٥. 1	Conto	aiue	OI A	ише	ucs	•	•	•	•	•	• :		•	121
	4.	Capta	ın suv	er .	•	•	•	•	•	•	•	•	٠	•	121
VII.	CHA	ARACT	ER 7	ΓRA	INI	NG									128
	1.	Makir	g Plan	ns .	_		_			20	_				128
	2.	Conco	mitant	ts .	Ţ.	Ī	Ī	Ī	Ĭ	Ť	i	•	•	•	131
	3.	Preacl	ning v	ersu	Pr	ecti	ce •	•	•	•	•	•	•	•	132
	4	New M	Anres	CIBU	3 11	acui	CC	•	•	•	•	•	•	•	133
	5	New I Immo: Our C	rol TEd		ion	•	•	•	•	•	•	•	•	•	134
	6.	Our C	lai 130	ahin	M	•		•	•	•	•	•	•	•	
	7	WTh.	Juzen T	sшp	wia o o	gaz	me	•	•	•	•	•	•	•	139
	1.	The	Law o	ı se	II-U	ontr	01	·	•	٠,	•	٠	•		139
	8.	How													
	•	Loy "Teacl	ralty .	•	•	٠,		٠.	•	•	•	•	•	•	141
	9.	Teac	ning S	ugge	stior	is fo	or C	rad	le _	IV"	•	•	•	•	142
	10.	Train	Up th	ie C	hild	in t	he	Way	y I	He S	Sho	uld	Go	•	145
VIII.	DEI	INQU	ENCY	AN	1D (CRI	ME	2		·					151
	1.	Natur	e or	Nur	lire										151
	2.	Honel	255	-,		•	•	•	•	•	•	•	•	•	152
	3	Hopele A Risi	ng De	lina	iene	, R	ota	•	•	•	•	•	•	•	153
	4.	Bad C	irl .		•	, I		•			•	•	:	•	154
IX.		BLEM													157
	1.	Progra	me												157
		Order	, citt	•	•	•	•	•	•	•	•		•	•	150
	2.	Order	· ·	•	•	•	•	•	•	•	•	•	•	•	150
	∂. 1	T W	ше.		•	•	•	•	•	•	•	•	•	•	159
	4.	I WOI	L DTA	y.	-1-	•	•	•	•	•	•	•	•	•	160
	Э. С	VIIOM	Our i	scno	ois	•	•	•	•	•	•	•	•	•	161
	6 .	Discip I Wor Know More	Mone	y A	gain	•	•	•	•	•	•	•	•	•	162
	7.	Propo	sals .		•						٠.				162

	_	0.11	PAGE
	8.	Subjects	163
	9.	Subjects	164
	10.	Names and Faces	165
X.		DBLEMS OF INTELLECTUAL ADJUSTMENT	170
	1.	"The Successful Failure"	170
	2.	A "Moron"	172
	3.	In Need of Promotion	176
	4.	A Reading Disability	177
	5.	A Reading Disability	178
	6.	A Troubled Father	179
	7.	A Troubled Father	180
	8.	Ability Grouping	181
	9.	Ability Grouping	182
¥	10	The School and the Individual	183
		and solder and the individual	100
T/T	7700	NAMIONAL DOMOTIOLOGY	101
AI.	VUC	CATIONAL PSYCHOLOGY	191
	1.	"The Door Stands Open"	191
	2.	Dissatisfied	
	3.	Dissatisfied	195
	4.	Vocational Interests	400
		, , , , , , , , , , , , , , , , , , , ,	100
XII.	CAU	USES OF INDIVIDUAL DIFFERENCES	199
	Α.	HEREDITY AND ENVIRONMENT	199
		1. Original Nature	199
		2. Born Afraid?	200
		2. Dom Amaid:	202
		3. Eugenics	202
		4. Musical Talent	
			203
	В.	Physiological Factors	204
		1. A Miraculous Cure	204
		2. Dan's Difficulties	205
		3. Bad or Sick	207
		4. Why Bruce Stuttered	208
			209
	C.	AND D. RACE AND SEX	210
		 Immigration School Ability 	210
		2. School Ability	912

CONTENTS													
ΧIII.	EMO	OTIONAL CONDITIONING	•		222								
	1	A Show-Off			222								
		Likes and Dislikes			223								
		Dependence		•	224								
	1	About a Good Boy	-		224								
	T.	Wool-Gathering		•	228								
	0. R	Wool-Gathering	•	:	229								
	7		:	•	230								
		O TT 1		•	230								
			•	•	231								
	9. 10	Bluffer	•	:	000								
	10.	Plugs	•	•	233								
	11.	Blues	•	•	234								
	12.	Insight	•	٠	236								
	10.	Insight	•		237								
	15	Straws	:	:	000								
		Fear—Failure		•	239								
		Advice to Imaginary Failures		:									
		Examination		Ċ	241								
		Love 'Em and Leave 'Em Alone		•	242								
		Helping the Hypochondriac		i	244								
	21	Poor Mother		·	246								
	22	Pattern		·	247								
		Shocked		•	250								
		Crushes	•	•	251								
	ZT.	Olushos	•	•									
XIV.	ABN	NORMAL PSYCHOLOGY	•	•	256								
	1.	At the Hospital			256								
	2.	Day Dreams			257								
	3.	Cumulative Causes			261								
	4.	Skidding	•	٠.	263								
	5.	Persecuted	•	•	266								
XV.	ADI	ULT EDUCATION			272								
	1	A Fond Mother			272								
	2	Mother's Child at Fifty-four	•	•	277								
	3	Œdipus			278								
	4.				278								
	5.				279								
	6.				280								
	7.				281								

CONTENTS

XVI.	SOC	IAL AT	TITU	DE	S										286
	1.	What Pr	ice P	eace										Ĭ.	286
	2.	Prejudice											-	•	289
	3.	How We	Got	Tha	at V	Vay					•	•	•	•	289
	4.	The Eco	nomi	e M	an				•	•					290
XVII.	GRO	OUP ANI	o cc	MN	IU	NIT	Y	RE	LA	TI	ON	SH	IPS		295
	1.	Portrait	of C	om	mit	tee	Μe	mb	ers						295
	2,	When Yo	u Gi	ow	Up	•	•	•	٠	•		•	•	•	296
	3.	Religious	Edu	icat	ion	in	Sch	ool	•	•		•	•		297
	4.	Reformer A Leader	rs an	d th	ie i	Scho	ols	٠	•	•	•		•		298
	0.	A Leader	01 1	Leac	iers		•						•	•	299
	0.	A Tale of	Two	Cı	ties		•	•	•	•	•	•	•	•	300
XVIII.		LECTIO		AN:	D	M	EΑ	SU	RI	ΞM	E	11	0	F	
	Τ.	EACHER	S.	•	•	•	•	٠	•						304
1.0	1.		of T	each	iers	١.					_				304
	2.	What Ca	n a T	eac	her	Tea	ich	?					•	i	304
	3.	Teacher :	Impr	ove	mer	nt							-	•	305
	4.	Tools and	d Ĝo	als									-		306
	5.														307
	6.	Нарру Т	eache	ers											308
XIX	OTIT	ESTIONS	ΩE	~	דאים	מיד	A T	D	377	TT.	OT /	20.	-~ .	_	
21111.		TEREST		G.		ER)H	OTV	JG.	IÇA	L.	010
_			•	•	•	•	•	•	•	•	•	•	•	•	312
XX.	EVA	LUATIO	Ν.	•	•	•		•			•				324
	1.	In Retros	pect				•								324
	4 DD														
		ENDIX .	-	•	•	•	•	•	•	•	•	•	•	•	325
	Α.	THE ABO									OGY				325
	В.	PRINCIPL	ES O	r M	EN	TAL	Hy	GIE	NE		•				331
	C.	Suggesti	ONS	FOF	₹]	LEAD	IN	3]	Err	ECT	IVE	G	ROT	P	
		THINK													336
	D.	Some Su	GGES	MON	IS I	FOR	Сот	JNS	ELI	NG					339
	E.	Sample 0										СН	OLOG	Y	
	F.	Answer													352
												-	-	•	

EDUCATIONAL PROBLEMS FOR PSYCHOLOGICAL STUDY

INTRODUCTION FOR THE STUDENT AND THE TEACHER

SUGGESTIONS FOR USING THE SYLLABUS

Everyone who is successful in living is, whether he knows it or not, making use of good psychology. The solution for the complex problems met outside and inside of the school room may be very simply stated. Problems are solved by changes in human beings. The essential changes may take place in our desires or in the behavior of other persons. The learning may involve ways of reacting to other people or to things. Changes in things depend, for the most part, upon changes in persons. Viewed from this angle, the prerequisite for the solution of any problem is the ability to bring about changes in the responses made by one or more human beings.

Of course, the problems do not vanish at this statement. Psychology offers no magic password for the mastery of the world. It does, however, in some degree make it possible, as Thorndike has suggested, for the ordinary person to learn how to do what some rare genius in human relationships might have done without study. It does offer a point of view and a method of approach. It insists upon searching for useful ways of dealing with personal and social problems. Faced with any problem, the suggested procedure is to study and analyze the difficulty, to examine proposed solutions, to measure the better solutions, to experiment in new situations, to refine and to integrate the results.

CHOOSING WHAT CASES TO DISCUSS

Educational psychology is not a systematic logic. It is a selection from the findings of psychology of those facts and

principles which prove helpful to educators. Educators are, or ought to be, busy in a very broad enterprise. Education goes on not only in classes but in athletics, vocational guidance, newspaper reading, gang activities, homes, churches, moving picture shows, strikes, wars and many other social activities. The professions of education are uncounted, but there are surely hundreds of different jobs carried on by persons who conceive of themselves as in some true sense educators. The particular phases of psychology that will be helpful will vary, therefore, with different training groups. Recent high school graduates preparing during only two years for an average period of service of about three years as an elementary school teacher with no further training, will of necessity choose the cases having a direct and immediate contribution to successful grade school teaching. Even in this situation, however, it should be remembered that teaching success and failure turn usually about matters of "teacher's personality," "good morale and discipline," "being well liked in the community," more than about true-false tests or method of teaching subtraction. If students are looking forward to service in supervisory or administrative positions, the significance of understanding the quirks of human likes and dislikes, and particularly the social forces which appear to control the way in which whole masses of adults react, is even greater.

The cases to be discussed will vary, then, from class to class. More cases are suggested here than can profitably be analyzed in a single course. It is suggested that at the beginning of the course, all the chapter headings be reviewed, the teacher giving the group some idea of the significance of each section. Discuss each section in the light of its importance for preventing failure and creating more successful professional careers. Then an approximate apportionment of time for each section can be laid out with the full coöperation of the students themselves. Turning next to an intensive study of the first chapter, choose for discussion those few cases which can well be covered within the available time. The following suggestions may prove useful in improving this choice of cases.

- a. Where possible, secure the judgment at the end of the term from classes of similar purpose, as to the cases they have found most and least fruitful.
- b. A case may be important in practice but dependent for solution mainly upon knowledge of administrative or historical or other subject matter. The aim in this course is to secure analysis of the psychological factors involved. Therefore, the cases which depend, at bottom, upon understanding human behavior are likely to be most worth study in this course.
- c. Whenever it is possible to substitute concrete living situations with which some members of the class are immediately concerned, this should be done. Sometimes this may be achieved by assigning each student to act as a big brother or big sister for a pupil in the training school. The first enterprise might be planning a party for these children. Then the questions of children's interests and activities for various ages and for each sex would be urgent. In similar, if somewhat less vivid fashion, the situations observed on playground, in homes, and in the training school may be utilized for discussion. A guide to reading and thinking may sometimes be found by connecting this real problem with one of the cases in this book, involving the same fundamental principles. Care should, of course, be taken to match the fundamental questions of human nature, not the superficial details of the situations.
- d. It is not necessary for all members of the class to work on the same case. Some without much previous preparation may take a simpler problem, while students with exceptional background and ability may be put at work upon more involved cases involving similar principles. Not only differences in ability but differences in interest may be met in this way. Small committees may work upon cases of special interest, reporting results for criticism to the entire class.
- e. The extent to which a particular case is cultivated can be

4 PROBLEMS FOR PSYCHOLOGICAL STUDY

- varied. One problem will often offer leads in a multitude of directions. The group will have to decide whether to bring them up in this connection or leave them to be brought up again in connection with other cases in some later chapter.
- f. One test of good teaching is the extent to which the set, readiness, urge, drive, understanding, will-to-know, of the pupils can be focussed at the beginning of the unit of learning. Whatever participation by them in the choice or creation of problems to be studied enhances this desire to learn is likely to be worth all of the time it consumes.

SUGGESTIONS FOR STUDENT PREPARATION

The aim in discussing each problem should not be to use it merely as an excuse for setting forth many facts. Rather attention should be directed to the development of skill in (1) analyzing the problem to get at the real difficulty; (2) suggesting reasonable explanations and solutions; (3) choosing facts which have a real bearing on the problem: (4) utilizing principles which are sound and relevant; (5) selecting the best of the proposed explanations and solutions: (6) generalizing the results so as to apply to the widest possible range of cases, at the same time recognizing the limits of the general statement. No answers will be found in the back of the book. The best answer is that which takes account of all the evidence, and in the last analysis, when put into operation, works. One great advantage of the use of problems, discovered in the training school or in the experience of the group, is that the solutions can actually be put into operation and tested. Often, however, this is not immediately practicable. For some of the suggested problems the tests will take generations. But where final solutions are impossible, tentative solutions must serve as a basis for action. Using such knowledge as is available, the class and instructor together should search for a new basis of understanding, more accurate and more inclusive of all of the elements of the problem than that with which any person began the discussion.

5

The effective use of such a process as is described above would seem to include:

- a. The analysis of the problem to see at what points information is needed.
- b. The gathering of as much information as possible.
- c. The application of these data to the problems.

The first and third parts of the process will be described in the section on "Class Discussion," which follows later. Suggestions for gathering of information will be discussed here.

WHERE TO LOOK FOR INFORMATION:

a. General References: Any of the textbooks listed in this introduction may be used in connection with almost every case. They will be most helpful in describing generalizations about original nature, individual differences, and learning. A summary of such generalizations will be found in the Appendix (ABC of Educational Psychology).

The task in connection with these generalization is to see the implications for the problem at hand. How does the law of effect operate in this situation? What does it mean for this problem to know that individuals differ from one another in a certain manner? etc.

- b. Special References: The bibliography at the end of each chapter and bibliographies of related chapters contain references which deal more specifically with the problems under a particular topic. Many of these are reports of experiments, obviously of varying worth. Some points to keep in mind in evaluating evidence are:
- (a) Degree of Subjectivity: Other things being equal, the more objective the measures used, the more valuable the references. Opinions unsupported by further evidence may be valuable but must be used with caution. Be especially suspicious of strong emotional feeling. Its presence often indicates dearth of real evidence.
- (b) Adequacy of control: Experimental results in which the group has not been matched with a control group must be

6 PROBLEMS FOR PSYCHOLOGICAL STUDY

handled with caution. It does not help much to know that 80% of delinquents come from homes in which discipline is defective, unless we know the incidence of this factor for a similar non-delinquent group. Selection of cases may alter results. Students taking Latin in high school may do better than those who do not, but this may be because they are a superior group at the start.

- (c) Number of cases: Results tend to increase in value when based on larger numbers. Statistical measures of variability (standard deviation and probable error) help on this point, but often are difficult to interpret. Do not be deceived by false appearances of accuracy. Coefficients of correlation are sometimes given in four decimal places which are not reliable beyond the first figure.
- (d) Validity of terminology: Has the author stated what he means by his various terms? If he is reporting results on honesty, for example, does he state clearly in terms of verifiable behavior what it is he designates by the term honesty?
- (e) Relation of conclusions to data: It is possible to have unimpeachable data and still have conclusions which are unsound. In general make more use of author's data and less of his conclusions. The tables may give their message more accurately than the general summary.
- (f) Degree of relatedness to problem under consideration: Results on sections in a third grade are not directly applicable to problem of having sections in high school. Results from rats may or may not be applicable to situations involving humans.

Some plan of dividing up references is desirable. If the matter is left to chance, there is a tendency for students to concentrate on a few references attractive in title or easy to obtain. References may be assigned to committees or individuals. One method for use with individuals is to ask each student to be responsible for one of the references which begins