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Comparative study of Indiana coaches

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COMPARATIVE STUDY OF INDIANA COACHES

A Thesis

Presented to

the Faculty of the Department of

Physical Education

Indiana State Teachers College

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Physical Education

by

James L. Wittenauer

June 1960

THESIS APPROVAL SHEET

The thesis of James L. Wittenauer, Contribution of
the Graduate Division, Indiana State Teachers College, Series
I, Number 804, under the title -- Comparative Study of
Indiana Coaches

is hereby approved as counting toward the completion of the
Master's Degree in the amount of 6 hours' credit.

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CHAPTER I

THE PROBLEM AND LIMITATIONS OF THE STUDY

The opportunity to participate on a varsity athletic team is of much concern to young coaches graduating from college. Many coaches graduating from college today have not participated on a varsity athletic team. This the writer feels, may be a handicap in securing the initial coaching position. In addition, the writer feels, that if the coach lacks experience of playing the game that he is going to teach this may influence success or failure. On the other hand, it may be that the varsity letter winner with athletic talent lacks teaching potential relative to instilling this talent into others. Hence, if student coaches are greatly handicapped by non-varsity experience in college, additional theory courses perhaps could be offered them to compensate lack of participation.

I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to compare the relative success of college letter men with that of non-letter men in coaching in Indiana high schools; (2) to compare the success of Indiana State Teachers College graduates to men graduated from other colleges; (3) to determine the percentage of Indiana coaches supplied by

each Indiana college and out of state colleges; (4) to show the number and grade level that athletic coaches are employed in Indiana schools.

Importance of the study. Many books and articles have been written on the (1) psychology of coaching; (2) techniques and methods of coaching various sports; and (3) philosophy of great coaches. It is the opinion of the writer that many factors contribute to the success of a coach such as personality, enthusiasm, sense of fair play, superior teaching ability and willingness to put in the hours required to fulfill the obligations coherent to coaching athletic teams. However, the writer believes that many times a coach's success is determined by his won and loss record.

To the knowledge of the writer no specific research concerning the success of coaches based on varsity and non-varsity participation in college has been made. Mr. John L. Longfellow, Sr., Athletic Director, Indiana State Teachers College, was very interested in this study, and was of the opinion that this study would aid in evaluating and planning the training program for coaches at Indiana State Teachers College.

II. SOURCES OF DATA AND METHOD OF PROCEDURE

Data for the problem were obtained through the use of a questionnaire sent to 694 high school principals in Indiana.

The questionnaire endeavored to secure the information concerning the coaching staff, the college from which the coaches graduated, letters won in particular sports, years served as head coach and each coach's life record. The above information concerned the following sports: (1) basketball, (2) football, (3) baseball, and (4) track. The questionnaire, also, endeavored to secure the name of the coach, year and college from which he graduated and letters won in college for the following sports: (1) cross country, (2) golf, (3) swimming, (4) tennis, and (5) wrestling.

Names of the high schools were obtained from Bulletin No. 2 of the Indiana High School Athletic Association.¹ Addresses of the high schools were obtained from the 1957-58 Indiana School Directory.²

III. DELIMITATIONS AND LIMITATIONS

Delimitations. It must be pointed out that the questionnaire was sent only to Indiana High Schools. Also, the data obtained were relative to the current coaches in Indiana schools.

Limitations. It must be pointed out that the following

¹Indiana High School Athletic Association, Bulletin No. 2, Vol. 56, October, 1959, Indianapolis, Indiana.

²Wilbur Young, Indiana School Directory (Indianapolis: State Department of Public Instruction, 1957-58).

limitations influence the outcomes of the study:

1. Possibility of receiving a biased sample relative to questionnaire return.
2. The use of the questionnaire method of sampling as the procedure for collecting data.
3. Lack of knowledge of degree of competition on the individual teams schedule.
4. Possibility of individuals with poor records to give estimates rather than actual records.
5. The use of won and loss records being the chief evaluation of success.
6. Failure to include many coaches who have retired from the field.
7. Possibility that the record returned would be the total life record rather than the life record as a head coach.
8. Emphasis being on building rather than winning in relation to teams below the varsity level.
9. Number of respondents from some schools was so small that the data secured were not considered significant.

IV. ORGANIZATION OF REMAINDER OF THE THESIS

The remainder of this thesis is organized in such a way as to present related material in a logical manner. Chapter II is concerned with the review of related literature and research. Chapter III is the Presentation and Analysis

of Data. Chapter IV relates the Summary, Conclusions and Recommendations of this study.

Robert L. Brown, "The Role of the Teacher in the Development of the Child," *Journal of Educational Psychology*, 1931, 22, 1-10. (Reprinted in *Handbook of Educational Psychology*, 1931, 1-10.)

John C. Brown, "The Development of the Child," *Journal of Educational Psychology*, 1931, 22, 1-10. (Reprinted in *Handbook of Educational Psychology*, 1931, 1-10.)

Marion S. Brown, "The Development of the Child," *Journal of Educational Psychology*, 1931, 22, 1-10. (Reprinted in *Handbook of Educational Psychology*, 1931, 1-10.)

CHAPTER II

REVIEW OF LITERATURE

I. RESEARCH STUDIES

The purpose of this chapter is to review material related to this study. Reliable sources indicate that there has been no research directly related to this study.¹ Two studies indirectly related to this study are merely mentioned in this chapter. One study relates the experience of typical high school coaches.² The other study relates opinions of school administrators concerning desirable and essential qualities in ideal and successful coaches.³

II. RELATED LITERATURE

The coach has a very important task to perform. Besides

¹Thesis Abstract Series, University of Indiana, School of Education, 1956, Number 8; Master's Thesis in Education, Iowa State Teachers College, School of Education, 1951-59, Number 1-8; Master's Thesis of Indiana State Teachers College, Lists and Classifications from August, 1949-March, 1960.

²Byron B. Brown, "The Experience of Typical High School Coaches Throughout the State of Texas," (unpublished Master's thesis, Iowa State Teachers College, Cedar Falls, 1958).

³Marion U. Graham, "A Study of Opinions of School Administrators Concerning Desirable and Essential Qualities in Ideal and Successful Coaches," (unpublished Master's thesis, Indiana State Teachers College, Terre Haute, 1949).

being a good teacher he must build character and mold personalities of boys. The old objective of coaching, "To build huge muscles and brute strength,"⁴ has changed to one of developing skills.

Factors contributing to success. "At the present time a coach must win games or lose his job."⁵ There are three fields in which a coach should become more or less proficient: (1) he should be an athlete; (2) he should be a physiologist; (3) he should know something about psychology.⁶

The coach as an athlete. A coach should have at least tried to make the team. He will gain something of value if he has spent some time with the team. He will develop a sympathetic understanding of the tasks he will ask his own students to accomplish. ". . . book knowledge, knowledge of diagrams is one thing; and actually playing knowledge is another."⁷ In other words, "a prospective coach ought to have played his game before he tries to teach it."⁸

⁴Coleman R. Griffith, Psychology of Coaching (New York: Charles Scribner's Sons, 1928), p. 3.

⁵Ibid., p. 4.

⁶Ibid., p. 6.

⁷Ibid., p. 7.

⁸Ibid.

The coach as a physiologist. The coach need not be a qualified physician, but it is quite important that he understand certain basic information concerning functions and structure of the human body.

The coach as a psychologist. The coach should have certain basic understanding of mental ability, personality traits and human behavior patterns.

According to Griffith, in order to be successful, a coach must have a general knowledge of the following principles: (1) the fact of individual differences; (2) the original nature of man; (3) the meaning of law in psychology; (4) the natural insurgence and playfulness of youth.⁹

Undergraduate experience on an athletic squad is almost a prerequisite for the prospective coach. Actual varsity game experience is very valuable. In no other way can one gain a complete understanding of the athlete, his problems and works, essentials sacrifices to win, and the composite of characteristics that contribute to athletic success . . . squad experience teaches the techniques of getting along with the boys, and exposes one to the boys' real thoughts, ideas, and feelings as they go through the gruelling preparatory grind and culminating crisis of the important school game. . . . their strengths and weaknesses are much better remembered if one goes through the experience of trying to combat those weaknesses in interschool competition. The 'varsity letter' may have so much prestige in some communities that it becomes a factor in jobgetting. The 'letter-man' from the small school is sometimes given preference by school boards over the squad man from the larger university who did

Archives-Wall, (p. 1951), p. 7.

⁹ Ibid., p. 11.
The Archives-Wall, William Pauling, and James Vernon,
The Archives-Wall, William Pauling, and James Vernon,
The Archives-Wall, William Pauling, and James Vernon,
The Archives-Wall, William Pauling, and James Vernon,

not earn a letter.¹⁰

Qualifications of the athletic coach. Leadership in athletics is an important qualification. Sound character is equally significant because of the complexities and pressures of the game. Years ago an outstanding and successful coach wrote:

It seems to me that there are three fundamental questions that should be asked about a man before he is entrusted with the responsibility of coaching boys. The first question to be answered is WHAT MANNER OF MAN IS THIS? How does he speak and act? Is he sound and clean in mind so that his influence is inspiring and uplifting? Would he set a fine example--not by posing but by being--the type of man we want each of his boys to be? If these questions cannot be answered favorably, stop then and there. No other qualities can supplant the fundamental qualities of character. The next question is: JUST HOW WELL DOES HE KNOW WHAT HE WANTS TO TEACH? Is he thorough or superficial? Is he progressive or reactionary? Is he original or without imagination? In short, can he bring with him a thorough, solid knowledge, and will he keep that knowledge constantly abreast of changing conditions? And finally: CAN HE TEACH OTHERS WHAT HE KNOWS? Can he take knowledge, and expressiveness and impressiveness of speech and action, imbue with enthusiasm and give his students something that will not only be easy to grasp but also pleasant to master? Surely the athletic coach of today must measure up to rigid high standards in both education and essential manhood. Any profession so exacting and so demanding is being built upon the bed rock of education and must continue to grow and elevate itself to constantly higher places.¹¹

¹⁰ John D. Lawther, Psychology of Coaching (New Jersey: Prentice-Hall, Inc., 1951), p. 7.

¹¹ Clifford Brownell, William Feiring, and Elmon Vernier, The Administration of Health Education and Physical Education (Philadelphia: W. B. Saunders Company, 1958), pp. 224-225.

Evaluation of the coach. An evaluation of the coach, by his players or by his fellow teachers can be quite helpful to him in improving his individual qualities and abilities and discover his weaknesses. "Often, the tendency exists to evaluate the coach almost entirely on the won and lost record in his sport."¹² Below is an evaluation form for the purpose of permitting players to pass judgment on their coach.

Name of Coach:

Date:

Team or teams for which he
has coached you:

The items were classified into two types: (1) the coaches personal qualities; (2) coaching skills and techniques.

The items under the coaches qualities include:

(1) cheerfulness; (2) common sense; (3) co-operative-ness; (4) courage; (5) courteousness; (6) demanding of respect; (7) efficiency; (8) emotional control; (9) friendliness; (10) industriousness; (11) physical appearance; (12) judgment; (13) originality; (14) initiative; (15) pride in work; (16) reasonableness; (17) sense of humor; (18) self-confidence; (19) sympathy; (20) unselfishness; (21) voice.

The items listed under coaching skills include:

(1) ability to teach fundamentals; (2) ability to demonstrate skill for most effective learning; (3) ability to see and analyze players mistakes; (4) ability to correct mistakes; (5) ability to get the best out of players; (6) ability to work democratically with players; (7) ability to explain things to players; (8) ability to stimulate good sportsmanship; (9) ability to develop good team spirit; (10) ability

¹² John Friedrich, "Evaluating the Coach," Athletic Journal 33:42, January, 1953.

to develop leadership; (11) ability to make players feel they belong; (12) ability to make players feel important; (13) ability to provide and maintain equipment; (14) ability to instill self-confidence; (15) ability to instill determination; (16) ability to maintain discipline; (17) ability to keep players interested; (18) ability to evaluate different types of play; (19) tries to help players develop values and morals; (20) helps with personal attention; (21) accepts suggestions and constructive criticisms.¹³

For each item listed, three possible choices for the player to check were provided. Each choice was a statement relating to (a) excellent; (b) average; (c) very poor. The following scale was provided after each item with (a) appearing under 10, (b) appearing under 5, and (c) appearing under 0.

Scale:

10	9	8	7	6	5	4	3	2	1	0
Excellent		Good			Average		Poor			Very deficient

The players selected 1 number for each trait in relation to their choice of (a), (b), or (c).

To be significantly high, average, or low, a trait should be marked accordingly by at least half of the group. A numerical interpolation may be made by averaging the numbers checked for each item by the players making the rating. There were two or three other questions asking the opinion of the

¹³Ibid., p. 45.

boys in how the coach might improve in these two categories, personal qualities and coaching techniques of the coach.

Qualities of the coach. These four qualities are attributes that Harry Rice looks for in a coach:

1. He is first a teacher, then a coach.
2. He knows his coaching sport; his experience as a player and a coach is demonstrated by his leadership.
3. His personality pervades the sport he coaches and sustains an abiding interest by the staff, the students, and the community.
4. His character is subscribed to in both playing the sport he coaches and the faculty he is a part of by the students, both contestants and spectators.¹⁴

Rice also says that the philosophy of a good coach should be, "A game worth playing is worth winning fairly."¹⁵

¹⁴ Harry Rice, "Qualities of a Coach," The Bulletin of the National Association of Secondary-School Principals, Vol. XLIII, December, 1959, p. 154.

¹⁵ Ibid., p. 157.

CHAPTER III

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to relate the sources of data and to present and analyze the data.

I. SOURCES OF DATA

The questionnaire method of acquiring data was employed in making this study. The questionnaire was sent to 694 high schools in Indiana. The names of the schools were obtained from the Indiana High School Athletic Association full membership list.¹ Of the 694 questionnaires sent out, 351 were returned, a percentage of 50.6 questionnaires returned.

These data represent the number of coaches from each college, coaching football, basketball, baseball and track. Cross country, golf, swimming, tennis and wrestling are represented under miscellaneous as shown by the following table.

Table I indicates that the largest number of questionnaires were returned from coaches of the four state colleges: (1) Ball State Teachers College; (2) Indiana State Teachers College; (3) Indiana University; (4) Purdue. Also, the number of coaches failing to return actual records is higher among these same colleges. The number of coaches supplied by

¹Indiana High School Athletic Association, Bulletin No. 2, Vol. 56, October, 1959, Indianapolis, Indiana.

TABLE I
DISTRIBUTION OF COACHES RESPONDING TO THE QUESTIONNAIRE CLASSIFIED BY
COLLEGE, SPORT, AND TEAM LEVEL

College	Sport					No rec. ord	Reserve		Elementary		Total	Per cent
	Foot- ball	Basket- ball	Base- ball	Track	Misc.		Let- ter	Non- letter	Let- ter	Non- letter		
Anderson	1	3	1	1	2	5	3	1			12	.70
Ball State	13	44	45	24	36	66	31	66	5	41	305	17.01
Butler	8	28	16	10	12	30	11	12			97	5.40
Canterbury	1	12	11	4	3	13	3	6		2	42	2.34
DePauw	2	5	2	1	1	3	4	2		1	18	1.00
Earlham		3	2	2	4	7	2	4			17	.90
Evansville	6	5	7	5	6	17	5	11			45	2.5
Franklin	2	7	9	4		12	7	3	1	2	35	1.95
Hanover	2	19	12	14	7	17	3	7		1	65	3.6
Huntington		5	5	5	2	3	3	2		1	23	1.3
Indiana Central	2	12	17	7	8	15	18	11		1	76	4.2
Indiana State	14	59	43	39	34	69	16	50		10	265	14.8
Indiana University	9	31	20	19	19	52	7	30	1	5	141	7.9
Manchester	7	15	17	13	3	21	12	19		3	89	4.96
Oakland City		17	15	6	5	16	4	11		1	59	3.3
Notre Dame	2	2	2	1	5	7	1	3		2	18	1.00
Purdue	10	28	22	18	24	54	12	30		7	151	8.4
St. Joseph	2	5	6	5	1	9					19	1.05
Taylor		3	2	1	1	2	5	5		1	18	1.00
Valparaiso	1	6	5	2	5	5	5	2			26	1.5
Wabash	3	4	4	1	2	6	4	2		2	22	1.2
Out-of-State	18	43	47	30	30	72	41	32	1	8	250	13.9
Total	103	356	310	212	210	501	197	309	8	88	1793	99.9

out-of-state colleges is relatively high, comparatively speaking.

According to Table I, Ball State Teachers College has supplied 17 per cent of the 1793 Indiana coaches represented in this study. Indiana State Teachers College and out-of-state colleges have supplied 14.8 per cent and 13.9 per cent respectively. Indiana University and Purdue University have supplied 7.9 per cent and 8.4 per cent of the coaches respectively. Hence, coaches from the four state colleges and out-of-state colleges comprise 62 per cent of the Indiana coaches represented in this study.

Also, Table I indicates that the number of letter winners coaching the reserve or elementary teams is comparatively low in relation to the number of non-letter winners. It must be pointed out that the School City of Muncie returned complete data concerning their junior high and elementary coaches. Needless to say, Ball State Teachers College supplies a great majority of these coaches.

II. PRESENTATION OF DATA

These data pertain to the following sports: (1) football, (2) basketball, (3) baseball, and (4) track. The minor sports including (1) cross country, (2) golf, (3) swimming, (4) tennis, and (5) wrestling, are grouped together under miscellaneous.

In presenting these data, the writer utilized the classification by size of the Indiana High School Athletic Association. The following is the classification according to size:

<u>Classification</u>	<u>Enrollment</u>
Class I	1-75
Class II	76-120
Class III	121-250
Class IV	251-600
Class V	600-above

Football. Data pertaining to football are presented in Tables II and III. The Tables list the colleges and the number of coaches from each college in the various class size schools. In addition, the Tables show life records and winning percentages for the coaches in each class size school. Table II pertains to the coaches that were letter winners and Table III relates to the non-letter winners.

For the purpose of making the analysis, unless there were at least five returns from a respective college that provided records, the writer did not consider the data as significant.

Tables II and III indicate that the letter winners from Butler have a better winning percentage than the non-letter winners. Indiana State and Indiana University letter winners

TABLE II

NUMBER, RECORD AND WINNING PERCENTAGES OF LETTER WINNERS COACHING FOOTBALL
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec- ord	Record															Total		
	I	II	III	IV	V		I			II			III			IV			V			W	L	%
							W	L	%	W	L	%	W	L	%	W	L	%	W	L	%			
Anderson				1												9	9	50.0				9	9	50.0
Ball State				4	7	2										149	45	76.8	252	289	46.6	401	334	54.6
Butler				1	6											101	62	61.96	300	154	66.1	401	216	64.99
Canterbury				1		1																		
DePauw				1												5	11	31.3				5	11	31.3
Earlham																								
Evansville				2	3	1										37	24	60.7	41	24	63.1	78	48	61.9
Franklin	1			1		1													23	14	62.2	23	14	62.2
Hanover				2												5	12	29.4				5	12	29.4
Huntington																								
Indiana																								
Central				2												26	25	50.98				26	25	50.98
Indiana																								
State		3		1	3								21	17	55.3	46	16	74.2	120	100	54.5	167	133	55.7
Indiana																								
University					7	1													179	132	57.6	179	132	57.6
Manchester	1	1		4	1	1				10	8	55.6				73	62	54.1	25	10	71.4	108	80	57.4
Oakland																								
City																								
Notre Dame		1		1		1										58	30	65.9				58	30	65.9
Purdue				2	6	1										3	5	37.5	77	119	39.3	80	124	39.2
St. Joseph				1	1	1										35	14	71.4	1	7	12.5	36	21	63.2
Taylor																								
Valparaiso					1														0	10	0.0	0	10	0.0
Wabash		1		1									1	8	11.1	84	35	70.6	30	15	66.6	115	58	66.5
Out-of-																								
State		1		9	4	1							21	8	72.4	114	98	53.8	90	33	73.2	225	139	61.8
Total																						1916	1396	57.9

TABLE III

NUMBER, RECORD AND WINNING PERCENTAGES OF NON-LETTER WINNERS COACHING FOOTBALL
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec- ord	Record															Total		
							I			II			III			IV			V					
	I	II	III	IV	V		W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%
Anderson																								
Ball State					2	2																		
Butler	1								65	102	38.9										65	102	38.9	
Canterbury																								
DePauw				1											34	22	60.7				34	22	60.7	
Earlham																								
Evansville				1		1																		
Franklin																								
Hanover																								
Huntington																								
Indiana																								
Central																								
Indiana																								
State		2	2	3		1			2	10	16.7	6	22	21.4	83	63	56.8				91	95	48.9	
Indiana																								
University				2											14	18	43.8				14	18	43.8	
Manchester																								
Oakland																								
City																								
Notre Dame																								
Purdue				2		2																		
St. Joseph																								
Taylor																								
Valparaiso																								
Wabash																								
Out-of-																								
State	1		1	1	1	2	3	4	42.9				2	12	16.7						5	16	23.8	
Total																					209	253	45.2	

have a slight edge on the non-letter winners relative to the winning percentage. Also, the out-of-state letter winners have a better winning percentage than the non-letter winners.

On the other hand, the DePauw letter winners do not have as great a winning percentage as the non-letter winners.

It must be pointed out that the most significant data relating to winning percentages are in favor of the letter winners in football. This may be a result of the fact that the largest percentage of returns were from letter winners.

Basketball. Data relating to basketball are presented in Tables IV and V. The Tables show the distribution of coaches from each respective college and the sport that they are coaching. Life records and winning percentages are shown. These data are sighted on the basis of class size of high school. Table IV relates to the letter winners and Table V pertains to the non-letter winners in basketball.

In comparing the letter winners with the non-letter winners of Ball State, Butler, Canterbury, Manchester, Oakland City and out-of-state colleges relative to winning percentages, the range is very narrow with the letter winners having the higher winning percentage.

On the other hand, the non-letter winners of Evansville, Franklin, Indiana and Valparaiso have a higher winning percentage than the letter winners of those colleges.

NUMBER, RECORD AND WINNING PERCENTAGES OF LETTER WINNERS COACHING BASKETBALL
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec-ord	Record																		Total		
							I			II			III			IV			V								
	I	II	III	IV	V		W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%			
Anderson	1					1									2	3	40.0				2	3	40.0				
Ball State	14	2	5	1	2	2	79	77	50.6	29	38	43.3	94	98	48.95	219	39	84.9	250	163	60.5	671	415	61.8			
Butler	2	2	4	5	7	7	8	15	34.8	269	382	43.8	243	93	72.3	435	211	67.3	324	196	62.0	1270	807	61.1			
Canterbury		3	1	2	1	1				199	74	72.1	280	165	71.55	420	250	62.7	300	111	73.0	1199	600	66.6			
DePauw			1	1	2								55	50	52.4	39	51	43.3	416	241	63.3	510	342	59.9			
Earlham			2	1		1							83	62	57.2	44	10	81.5				121	72	63.8			
Evansville	1	2	1			2	65	21	75.6	34	104	24.6									99	125	44.2				
Franklin	1		3	1	1	1	12	24	33.3				119	86	58.0	52	44	54.2	151	72	67.7	334	226	59.6			
Hanover		1	6	5	1	2				25	59	29.8	536	281	65.6	312	196	61.4				873	536	61.95			
Huntington	1	1	3				17	30	36.2	21	21	50.0	208	91	69.6							246	142	63.4			
Indiana																											
Central	8	1	3	1	3		1	3	25.0	53	49	51.96	7	15	31.8	430	120	78.2				491	187	72.4			
Indiana																											
State		2	9	9	5	3				106	101	51.2	804	648	55.4	1003	1258	44.4	732	362	66.9	2645	2369	52.8			
Indiana																											
University		3	2	4	5	3				52	45	53.6	68	69	49.6	187	111	62.75	597	284	67.8	2058	509	80.2			
Manchester		6	3		1					274	249	52.4	268	87	75.5				202	102	66.4	744	411	64.4			
Oakland																											
City		4	3	1	1	1				452	369	55.05	250	187	57.2	120	75	61.5				822	531	60.8			
Notre Dame	1																		260	104	71.4	260	104	71.4			
Purdue	2	3	3	2	2	2	24	4	85.7	12	10	54.5	67	34	66.3	241	38	86.4	305	196	60.9	649	282	69.7			
St. Joseph	1	1	1	1	1	1	30	35	46.15	13	7	65.0	71	38	65.1	87	50	63.5				201	130	60.7			
Taylor				1												12	12	50.0				12	12	50.0			
Valparaiso	2	1			2		81	88	47.9	11	10	52.4							117	108	52.8	209	206	50.4			
Wabash			1			1																					
Out-of-																											
State	3	4	13	9	9	7	87	55	61.3	189	137	58.0	879	498	63.8	610	218	73.7	451	317	58.7	2216	1225	64.4			
Total																						15632	9234	62.9			

TABLE V

NUMBER, RECORD AND WINNING PERCENTAGES OF NON-LETTER WINNERS COACHING BASKETBALL
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec-ord	Record															Total		
							I			II			III			IV			V					
	I	II	III	IV	V		W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%
Anderson			1									10	18	35.7							10	18	35.7	
Ball State	6	9	8	5	2	2	293	226	56.5	95	104	47.7	521	337	60.7	748	346	68.4	105	98	51.7	1762	1105	61.5
Butler		5			1	1				219	198	52.5	64	47	57.7				28	31	47.5	311	276	52.98
Canterbury	5					1				570	298	65.7									570	298	65.7	
DePauw					1													6	16	27.3	6	16	27.3	
Earlham																								
Evansville			1									60	51	54.1							60	51	54.1	
Franklin				1											137	81	62.8				137	81	62.8	
Hanover	1		3			1	5	0	100.0				139	145	48.9						144	145	49.8	
Huntington																								
Indiana																								
Central	1		3			1	2	1	66.6				105	73	55.9						107	74	59.1	
Indiana																								
State	9	12	5	6	2	4	144	222	39.3	532	302	63.8	254	195	56.6	439	277	61.3	303	153	66.4	1672	1149	59.3
Indiana																								
University	2	5	7	3		3	55	19	74.3	78	138	36.1	549	403	57.7	305	167	64.6				987	727	57.9
Manchester	1	1	2		1	3	156	72	68.4	2	22	8.3									158	94	62.7	
Oakland																								
City	3	4	1			2	23	10	69.7	56	30	65.1	6	23	20.7						85	63	57.4	
Notre Dame					1													14	10	58.3	14	10	58.3	
Purdue	5	6	2	2	1	7	16	13	55.2	270	166	61.9	11	16	40.7	8	17	32.0	47	92	33.8	352	304	53.7
St. Joseph																								
Taylor	1			1			16	23	41.0							73	57	56.2				89	80	52.7
Valparaiso	1						14	8	63.6												14	8	63.6	
Wabash		1		1	1	1				18	21	46.2				106	52	67.1				124	73	62.9
Out-of-																								
State	1	2		1	1	2	1	7	12.5							34	29	53.96	116	91	56.0	151	127	54.3
Total																						6753	4699	58.96

The most significant difference in terms of winning percentages in basketball is the letter winners of Indiana University, Notre Dame and Purdue having a higher percentage than the non-letter winners.

Again, unless five coaches from a respective college returned records the data were not considered significant.

Baseball. Baseball data are presented in Tables VI and VII. The number of coaches from the respective colleges are shown in terms of class size of high school where the respective coaches are coaching. Also, the records and winning percentages of the coaches of the various colleges are presented relative to class size of high school. The data of the letter winners are shown in Table VI and the non-letter winners are presented in Table VII.

In analyzing the baseball data, unless five coaches of each respective college returned records, the data were not considered significant.

Comparatively speaking the letter winners of Indiana State, Indiana University, Manchester, Purdue and out-of-state colleges have a slightly better winning percentage than the non-letter winners of the respective colleges.

Ball State, Butler, Indiana Central and Oakland City letter winners do not have as high a winning as the non-letter winners from those respective colleges.

TABLE VI

NUMBER, RECORD AND WINNING PERCENTAGES OF LETTER WINNERS COACHING BASEBALL
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec- ord	Record															Total			
	I	II	III	IV	V		I			II			III			IV			V						
							W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	
Anderson				1		1																			
Ball State	1	5	3	1	2	3	10	10	50.0	22	27	44.9	15	11	57.7							47	48	55.3	
Butler	1	2		2	3	1	3	8	27.3	76	119	38.97				152	49	75.6	305	117	72.3	536	354	60.2	
Canterbury		4	1		2	2				137	66	67.5	151	29	83.9				99	35	73.9	387	130	75.8	
DePauw																									
Earlham				2												27	13	67.5				27	13	67.5	
Evansville		1	1		2	2							7	6	53.8				13	14	48.1	20	20	50.0	
Franklin			3	3	1	5							66	41	61.7							66	41	61.7	
Hanover	1		5	1		2	6	1	85.7				54	29	65.1	17	8	68.0				77	38	66.95	
Huntington	1	1	3				40	16	71.4	11	13	45.8	217	44	83.1							268	69	79.5	
Indiana																									
Central		1	4	2	1	1				6	0	100.0	46	29	61.3	338	253	57.5	15	5	75.0	405	287	58.5	
Indiana																									
State		1	3	3	3	3							38	28	57.6	227	118	65.8	402	88	82.0	667	334	66.6	
Indiana																									
University		1	2	2	3	4				17	8	68.0	0	2	0.0	46	14	92.0	191	110	63.5	254	134	65.5	
Manchester		5	3	2		1				230	94	70.95	98	32	75.4	60	47	56.1				388	173	69.2	
Oakland																									
City		3	3	2		2				40	28	58.8	27	17	61.4	153	119	56.3				220	164	57.3	
Notre Dame																									
Purdue	1	2		5	1	3	17	14	80.95	39	25	60.9				71	17	80.7	216	17	92.7	343	59	85.3	
St. Joseph	1				1		15	18	45.5										46	28	62.2	61	46	57.0	
Taylor			1										71	31	69.6							71	31	69.6	
Valparaiso	2						22	18	55.0													22	18	55.0	
Wabash				2		1													145	61	70.4	145	61	70.4	
Out-of-																									
State	1	3	8	4	6	7	29	18	61.7	2	6	25.0	222	125	72.9	76	44	63.3	135	112	54.5	459	261	63.8	
Total																						4463	2281	66.2	

TABLE VII

NUMBER, RECORD AND WINNING PERCENTAGES OF NON-LETTER WINNERS COACHING BASEBALL
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec- ord	Record															Total		
							I			II			III			IV			V					
	I	II	III	IV	V		W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%
Anderson																								
Ball State	6	7	8	8	4	5	121	92	56.8	94	72	56.6	17	44	69.8	116	63	64.8	162	160	50.3	664	461	59.3
Butler	1	2	3	1	1	4	9	1	90.0				31	35	49.96				25	3	89.3	65	39	62.5
Canterbury		3	1			2				85	59	59.0										85	59	59.0
DePauw				2		1										15	3	83.3				15	3	83.3
Earlham																								
Evansville	1	1	1			1	7	7	50.0	16	14	53.3										23	21	52.3
Franklin			2			2																		
Hanover			5			1							67	56	54.5							67	56	54.5
Huntington																								
Indiana																								
Central	3	1	1	3	1	1	24	20	54.5				26	8	76.5	80	56	58.8	22	19	53.7	152	103	59.6
Indiana																								
State	6	11	7	6	3	6	70	55	56.0	361	140	42.5	128	66	65.97	150	86	63.6	71	61	53.8	780	408	65.7
Indiana																								
University	1	5	5		1	3				36	26	58.1	120	48	71.4				44	44	50.0	200	118	62.9
Manchester	2	3	2			2	14	11	56.0	21	32	39.6	64	23	73.6							99	66	60.0
Oakland																								
City	3	2	1	1		1	16	10	61.5	33	15	68.8	2	0	100.0							51	25	67.1
Notre Dame					2														167	95	63.7	167	95	63.7
Purdue	4	3	4	1	1	5				76	52	59.4	49	23	68.1	69	28	71.1	48	15	76.2	242	118	67.2
St. Joseph	2		1		1	3				23	18	60.5	17	16	51.5							40	34	54.1
Taylor	1						8	4	66.6													8	4	66.6
Valparaiso	1	1			1		10	5	66.6	10	7	58.8							26	35	42.6	46	47	49.5
Wabash		1			1					19	11	63.3							129	88	59.4	148	99	59.91
Out-of-																								
State	3	2	3	7	4	6	5	31	13.9				71	29	71.0	97	91	51.6	206	114	64.4	378	265	58.8
Total																						3230	2021	61.9

Purdue and Manchester have the most significant difference in winning percentages relative to letter winners and non-letter winners with letter winners having the higher percentage.

Track. Data relating to track are presented in Tables VIII and IX. The Tables list the colleges and number of coaches by class size of high school. The record and winning percentage is likewise presented according to class size of high school. Table VIII pertains to the letter winners and Table IX relates to non-letter winners.

In analyzing Tables VIII and IX the out-of-state letter winners have a much higher winning percentage than the non-letter winners.

The greatest number of returns were received from the non-letter winners, however, neither the letter winners nor the non-letter winners returned actual records to the extent that they were considered significant. This is especially applicable to the letter winners of the Indiana Colleges.

Miscellaneous. Table X presents data pertaining to (1) cross country, (2) golf, (3) swimming, (4) tennis, and (5) wrestling.

The number of coaches from the Indiana Colleges and out-of-state colleges is shown relative to letter winners and non-letter winners. Also, the number of coaches, letter and

TABLE VIII

NUMBER, RECORD AND WINNING PERCENTAGES OF LETTER WINNERS COACHING TRACK
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec-ord	Record															Total		
							I			II			III			IV			V					
	I	II	III	IV	V		W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%
Anderson																								
Ball State	1	1	1	2	4							48	22	68.6							48	22	68.6	
Butler				2	1	2												9	8	52.94	9	8	52.94	
Canterbury	2			1	2													140	20	87.5	140	20	87.5	
DePauw				1	1																			
Earlham		1		1	1													24	4	85.7	24	4	85.7	
Evansville				1	1	2																		
Franklin				2	1													36	4	90.0	36	4	90.0	
Hanover		2		3	1							20	24	45.5	16	14	53.3				36	38	48.6	
Huntington																								
Indiana																								
Central	1			2	1	2				4	9	30.8						5	1	83.3	9	10	47.4	
Indiana																								
State	1			2	3	3									20	16	55.6	121	36	77.1	141	52	71.1	
Indiana																								
University	1			1	2																			
Manchester	3	1			2					40	21	65.6									40	21	65.6	
Notre Dame				1	1																			
Oakland																								
City																								
Purdue	1			2	3	4				10	12	45.5				95	41	69.9				105	53	66.5
St. Joseph																								
Taylor																								
Valparaiso																								
Wabash					1													14	3	23.5	14	3	23.5	
Out-of-																								
State	3	3		4	6	9				146	30	82.95	60	40	60.0	133	69	65.5	48	16	75.0	387	155	71.4
Total																					980	390	71.5	

TABLE IX

NUMBER, RECORD AND WINNING PERCENTAGES OF NON-LETTER WINNERS COACHING TRACK
IN INDIANA CLASSIFIED BY COLLEGE AND SCHOOL SIZE

College	Number by class size					No rec- ord	Record															Total		
							I			II			III			IV			V					
	I	II	III	IV	V		W	L	%	W	L	%	W	L	%	W	L	%	W	L	%	W	L	%
Anderson				1		1																		
Ball State	4	7	5	2	1	10	27	14	65.9	17	18	48.6	30	30	50.0	4	3	57.1	2	5	28.6	80	70	53.3
Butler		3	2	1	1	3				23	10	69.7	64	14	82.1				66	4	94.3	153	28	84.5
Canterbury				1		1																		
DePauw																								
Earlham																								
Evansville				2	1	2												3	12	20.0	3	12	20.0	
Franklin			1	1		2																		
Hanover	1		4	3	1	4							53	28	65.1	25	25	50.0	15	2	88.2	93	55	62.8
Huntington	1	1	3			1	10	4	71.4				77	20	79.4							87	24	78.4
Indiana																								
Central	1		1	1		2										27	66	29.0				27	66	29.0
Indiana																								
State	5	9	8	8	3	15	41	33	55.4	93	42	68.9	21	17	55.3	76	53	58.9	70	16	81.4	301	161	65.2
Indiana																								
University		3	4	3	7	3				11	22	33.3	48	10	82.8	80	80	50.0	364	111	76.6	503	223	69.3
Manchester	1	1	5	1	1	3	28	10	75.7	2	3	40.0	94	64	59.5	72	40	64.3				196	117	62.6
Oakland																								
City	2		4			5							8	11	42.1							8	11	42.1
Notre Dame																								
Purdue	4	2	3	2	1	6	4	4	50.0				26	26	50.0	14	7	66.6	6	7	46.2	50	44	53.2
St. Joseph	2			2	1	4	3	19	13.6													3	19	13.6
Taylor				1		1																		
Valparaiso	1			1			30	12	71.4										20	4	83.3	50	16	75.8
Wabash				1		1																		
Out-of-																								
State		2	6	4	2	8							6	33	15.4	40	32	55.6	16	7	69.6	62	72	46.3
Total																						1616	918	63.7

TABLE X

NUMBER OF LETTER WINNERS AND NON-LETTER WINNERS COACHING MINOR SPORTS
IN INDIANA CLASSIFIED BY COLLEGES

College	Letter Winners					Non-Letter Winners					
	Cross country	Golf	Swim- ming	Tennis	Wres- tling	Cross country	Golf	Swim- ming	Tennis	Wres- tling	To- tal
Anderson	1	1									2
Ball State	1	1		1		17	4	4	5	3	36
Butler		1			1	4	1		2	3	12
Canterbury							3				3
DePauw						1					1
Earlham	1					2	1				4
Evansville	1						3			2	6
Franklin									1		1
Hanover	3					2	1			1	7
Huntington							1		1		2
Indiana Central	2				1	1	2		1	1	8
Indiana State	5	1				13	4		8	3	34
Indiana University			1		2	6	2		4	2	17
Manchester	1					1			1		3
Oakland City	2					2			1		5
Notre Dame			1				1	1	2	1	6
Purdue					4	8	4	1	2	5	24
St. Joseph							1				1
Taylor								1			1
Valparaiso						3	2				5
Wabash	1						1				2
Out-of-State		2	2	2	5	17	6	1	5	3	33
Total	17	7	4	4	12	67	37	8	33	24	213

non-letter winners, is distributed into the respective sports.

It must be pointed out that unless a college has five coaches distributed among these sports the data were not considered significant.

According to Table X, Ball State, Butler, Indiana State, Indiana University, Purdue and out-of-state colleges, perhaps, have the most coaches coaching these five sports. It is also significant to note that the majority of these coaches are non-letter winners in the sport that they are coaching.

The remaining colleges, likewise, have more non-letter winners than letter winners coaching these sports, according to Table X.

It is interesting to note that cross country is the only sport that has coaches distributed among all classifications of high schools. Golf, swimming, tennis and wrestling coaches are distributed among high schools classified II through V. Classification IV and V, perhaps, have the larger percentage of these coaches.

III. SUMMARY

In this chapter, the writer has related the sources of and presented the data found in making this study.

It was mentioned that the questionnaire method of sampling was employed in making this study. The percentage of returns was 50.6. Of the 694 questionnaires sent out 351

were returned.

The writer has presented these data in tabular form with a brief description preceding the table and an analysis following each table.

The tables list the colleges and show the distribution of coaches from these colleges according to the class size of the high school where the coaches are coaching. In classifying the high schools, the Indiana High School Athletic Association classification of school by size was used. Data in this chapter pertained to the following sports: (1) football; (2) basketball; (3) baseball; (4) track; (5) cross country; (6) golf; (7) swimming; (8) tennis; (9) wrestling.

The major findings indicated that the coaches from the four state colleges; (1) Ball State Teachers College, (2) Indiana State Teachers College, (3) Indiana University, (4) Purdue University; and the out-of-state colleges returned the largest numbers of questionnaires. The total number of coaches represented in this study were 1793.

In relation to the total winning percentages in the four major sports, it was found that the letter winners in football have a winning percentage of 57.9 as compared to a 45.2 winning percentage of the non-letter winners.

The basketball coaches who were letter winners have a winning percentage of 62.9 as compared to the non-letter winners winning percentage of 58.96.

The baseball coaches who were letter winners have a winning percentage of 66.2 and the non-letter winners have a winning percentage of 61.9.

In relation to the track coaches winning percentages, the letter winners have a 71.5 winning percentage as compared to a 63.7 winning percentage of the non-letter winners.

The total number of coaches, coaching minor sports, represented in this study are 213. The four state colleges and out-of-state colleges supply the majority of these coaches.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary. It was the purpose of this study (1) to compare the relative success of college letter men with that of non-letter men in coaching in Indiana High Schools; (2) to compare the success of Indiana State Teachers College graduates to men graduated from other colleges; (3) to determine the percentage of Indiana coaches supplied by each Indiana College and out-of-state colleges; and (4) to show the number and grade level that athletic coaches are employed in Indiana schools.

The questionnaire method of sampling was employed to obtain data for the problem. The questionnaire, endeavoring to secure information concerning the coaching staff relative to factors affecting success, was sent to 694 high school principals in Indiana. The percentage of returns was 50.6. The following sports were included in the study: (1) football, (2) basketball, (3) baseball, (4) track, (5) cross country, (6) golf, (7) swimming, (8) tennis, and (9) wrestling.

It was found that there has been no research directly related to this study. Studies indirectly related and other related literature were referred to in making this study.

The writer presented the data for each sport in tabular form with a brief description preceding the table and an

analysis following each table. The tables list the colleges and show the distribution of coaches according to the class size of high school. The Indiana High School Athletic Association classification of school by size was utilized in classifying the high schools. The tables showed the life record and winning percentage of the high school coaches represented in this study. Also, the distribution of coaches at the reserve and elementary teams is comparatively low in relation to the number of non-letter winners.

To summarize the major findings, this study represents 1793 coaches in Indiana schools. Of the 1191 high school coaches represented, 501 did not return a record. Of the other 602 coaches, 506 were varsity reserve and freshmen coaches and 96 were elementary coaches.

In regard to the data presented in this study Ball State Teachers College has supplied 17 per cent of the coaches. Indiana State Teachers College has supplied 14.8 per cent and the out-of-state colleges account for 13.9 per cent of the coaches represented in this study. Purdue University and Indiana University have supplied 8.4 per cent and 7.9 per cent, respectively. In relation to the smaller colleges in Indiana, Butler, Manchester and Indiana Central have supplied 5.4 per cent, 4.96 per cent, and 4.2 per cent of the coaches represented in this study, respectively. Anderson, Canterbury, DePauw, Earlham, Evansville, Franklin, Hanover, Huntington,

Oakland City, Notre Dame, St. Joseph, Taylor, Valparaiso and Wabash account for the other 23.3 per cent of the coaches represented in this study.

For the purpose of analyzing the data, unless there were at least 5 returns from a respective college that provided records, the writer did not consider the data significant.

In relation to football, the most significant data collected were in relation to letter winners. However, the Butler, Indiana State, Indiana University and out-of-state letter winners have a better winning percentage than the non-letter winners from those colleges. With regard to the total winning percentages in football, the letter winners have a 57.9 winning percentage as compared to a 45.2 winning percentage of the non-letter winners.

Data pertaining to basketball is more extensive than football. It was found that the letter winners of Ball State, Butler, Canterbury, Indiana, Manchester, Notre Dame, Oakland City and Purdue have a higher winning percentage than the non-letter winners.

Non-letter winners of Franklin, Indiana State and Valparaiso have a higher winning percentage than the letter winners from those colleges.

The basketball coaches who were letter winners, have a winning percentage of 62.9 as compared to the non-letter

winners winning percentage of 58.96.

The quantity of data considered significant in baseball is not as great as in basketball due to small quantity of record returned. However, comparatively speaking, the letter winners of Indiana State, Indiana University, Manchester, Purdue and out-of-state colleges have a better winning percentage than the non-letter winners.

The non-letter winners in baseball have a higher winning percentage than the letter winners from Ball State, Butler, Indiana Central and Oakland City.

The baseball coaches who were letter winners have a winning percentage of 66.2 and the non-letter winners have a winning percentage of 61.9.

In relation to track, the coaches who were non-letter winners from Indiana colleges have the advantage in number of returns, but, neither the letter winners nor the non-letter winners returned actual records to the extent that they could be considered significant in this study.

However, the letter winners from out-of-state colleges have a higher winning percentage than the non-letter winners who are coaching track in Indiana high schools.

With regard to the records that were returned, in track, the letter winners have a total winning percentage of 71.5 as compared to a winning percentage of 63.7 of the non-letter winners.

Finally, the data relative to the minor sports were presented. The four state colleges and out-of-state colleges have supplied the majority of these coaches. It should be pointed out that the majority of these coaches were non-letter winners in college.

Also, the other Indiana colleges have more non-letter winners than letter winners coaching the minor sports.

Cross country is the only sport that has coaches distributed among all classifications of high school. Golf, swimming, tennis and wrestling coaches are distributed among high schools classified II through V. The largest percentage of these coaches are coaching in high schools classified IV and V.

Conclusions. The following conclusions were based on 351 returns out of possible 694:

1. In football, the letter winners having a winning percentage of 57.9 are more successful in coaching football than non-letter winners who have a winning percentage of 45.2.

2. In basketball, the letter winners have a winning percentage of 62.9 as compared to a 58.96 winning percentage of non-letter winners coaching basketball. Therefore, the letter winners are more successful.

3. The letter winners in baseball with a winning percentage of 66.2 are more successful in coaching baseball in

high school than non-letter winners who have a winning percentage of 61.9.

4. Likewise in track, the letters with a winning percentage of 71.5 are more successful in coaching track in high school than non-letter winners who have a winning percentage of 63.7.

5. Letter winners graduated from Indiana State are more successful in coaching football in Indiana high schools than letter winners from Anderson, Ball State, DePauw, Hanover, Indiana Central, Purdue and Valparaiso.

6. Letter winners graduated from Butler, Evansville, Franklin, Indiana University, Manchester, Notre Dame, St. Joseph, Wabash and out-of-state colleges are more successful in coaching football in Indiana high schools than letter winners graduated from Indiana State.

7. Non-letter winners graduated from Indiana State are more successful in coaching football in Indiana high schools than non-letter winners graduated from Butler, Indiana University, and out-of-state colleges.

8. DePauw graduates who are non-letter winners are more successful in coaching football in Indiana high schools than non-letter graduates from Indiana State.

9. Indiana State letter winners are more successful in coaching basketball in Indiana high schools than letter winners graduated from Anderson, Evansville, Taylor and

Valparaiso.

10. Letter winners graduated from Ball State, Butler, Canterbury, DePauw, Earlham, Franklin, Hanover, Huntington, Indiana Central, Indiana University, Manchester, Oakland City, Notre Dame, Purdue, St. Joseph and out-of-state colleges are more successful in coaching basketball in Indiana high schools than letter winners graduated from Indiana State.

11. Non-letter winners graduated from Indiana State are more successful in coaching basketball in Indiana high schools than non-letter winners graduated from Anderson, Butler, DePauw, Evansville, Hanover, Indiana Central, Indiana University, Oakland City, Notre Dame, Purdue, Taylor and out-of-state colleges.

12. Non-letter winners graduated from Ball State, Canterbury, Franklin, Manchester, Valparaiso and Wabash are more successful in coaching basketball in Indiana high schools than non-letter winners graduated from Indiana State.

13. Indiana State graduates who were letter winners are more successful in coaching baseball in Indiana high schools than letter winners who graduated from Ball State, Butler, Evansville, Franklin, Indiana Central, Indiana University, Oakland City, St. Joseph, Valparaiso and out-of-state.

14. Letter winners graduated from Canterbury, Earlham, Hanover, Huntington, Manchester, Purdue, Taylor, and Wabash

are more successful in coaching baseball in Indiana high schools than letter winners graduated from Indiana State.

15. Non-letter winners graduated from Indiana State are more successful in coaching baseball in Indiana high schools than non-letter winners graduated from Ball State, Butler, Canterbury, Evansville, Hanover, Indiana Central, Indiana University, Manchester, Notre Dame, St. Joseph, Wabash and out-of-state colleges.

16. Non-letter winners graduated from DePauw, Oakland City, Purdue and Taylor are more successful in coaching baseball than non-letter winners graduated from Indiana State.

17. Indiana State graduates who were letter winners are more successful in coaching track than letter winners graduated from Ball State, Butler, Hanover, Indiana Central, Manchester, Purdue and Wabash.

18. Letter winners graduated from Canterbury, Earlham, Franklin and out-of-state colleges are more successful than letter winners graduated from Indiana State.

19. Indiana State graduates who were non-letter winners are more successful in coaching track in Indiana high schools than non-letter winner graduates from Ball State, Evansville, Hanover, Indiana Central, Manchester, Oakland City, Purdue, St. Joseph, and out-of-state colleges.

20. Non-letter winners graduated from Butler, Huntington, Indiana University and Valparaiso are more successful in

coaching track in Indiana high schools than non-letter winner graduates from Indiana State.

21. Ball State supplies 305 or 17 per cent of the 1793 Indiana coaches represented in this study.

22. Of the 1793 Indiana coaches represented in this study, 265 or 14.8 per cent are supplied by Indiana State.

23. Out-of-state colleges supply 250 or 13.9 per cent.

24. The four state colleges supply 862 or 48.1 per cent of the Indiana coaches represented in this study.

25. Of the 1793 coaches represented in this study, 506 or 28.2 per cent are coaching reserve or freshmen teams.

26. Ninety-seven or 5.3 per cent of these coaches are coaching the elementary level.

27. The majority of the coaches coaching minor sports were non-letter winners in college.

28. Eighty-four or 29.4 per cent of the 213 coaches coaching minor sports are cross country coaches.

29. The four state colleges supply the majority of the coaches coaching minor sports.

30. The majority of the football coaches represented in this study were from IV and V class size schools.

31. Winning a football letter in college is a major factor in employing varsity football coaches in high school.

32. The large high schools, probably, have a tendency to employ college letter winners as varsity high school coaches.

33. Unless a coach has been successful statistically, he probably does not remain in the profession for any length of time.

34. To really evaluate the relationship of participation and coaching, information concerning the coaches high school sports participation, as well as college participation, would be valuable.

Recommendations. The writer recognizes this study essentially as a survey and he relates the following recommendations as a follow up to this study:

1. The Indiana colleges might present service certificates to all graduates with twenty years or more in the coaching field; head, reserve, elementary or any combination of the same.

2. Twenty year certificate winners, who did not win a letter as an undergraduate may be made an honorary member of the Alumni Letter Men's Association.

3. Sport century clubs and half century clubs may be formed and certificates be awarded head coaches who qualify with the sufficient number of wins.

4. Century certificates could be given basketball.

5. Half century certificates could be awarded in all other sports beginning with fifty.

6. It might be well if this plan was progressive and coaches be awarded additional certificates as they qualified

for them.

7. The colleges might offer courses in each sport to compensate for the coaches who do not participate in varsity sports in college.

8. Finally, then, the present study indicates the need for further research relative to other factors contributing to success. The writer, recognizes this study as the beginning, and hopes that further study be directed toward the relative success of coaching high school athletes.

BIBLIOGRAPHY

- Indiana State Department of Education. *Report of the State Department of Education for the year 1916-17.* Indianapolis, 1917.
- Young, Helen. *Report of the State Department of Education for the year 1916-17.* Indianapolis, 1917.
- Brown, Eppa W. "The Experience of Teachers in the State of Texas." *Report of the State Department of Education for the year 1916-17.* Indianapolis, 1917.
- Graham, Marie W. "A Study of the Effect of School Administration on the Quality of Teaching." *Report of the State Department of Education for the year 1916-17.* Indianapolis, 1917.

BIBLIOGRAPHY

A. BOOKS

Brownell, Clifford, William Fiering, and Elmon Vernier. The Administration of Health Education and Physical Education. Philadelphia: W. B. Saunders Company, 1958.

Griffith, Coleman R. Psychology of Coaching. New York: Charles Scribner's Sons, 1928.

Lawther, John D. Psychology of Coaching. New Jersey: Prentice-Hall, Inc., 1951.

B. PERIODICALS

Friedrich, John. "Evaluating the Coach," Athletic Journal, 33:42-45, January, 1953.

Rice, Harry. "Qualities of a Coach." The Bulletin of the National Association of Secondary School Principals, XLIII (December, 1959), 154-157.

C. PUBLICATIONS

Indiana High School Athletic Association. Bulletin No. 2, Vol. 56, October, 1959. Indianapolis, Indiana.

Young, Wilbur. Indiana School Directory. Indianapolis: State Department of Public Instruction, 1957-58.

D. UNPUBLISHED MATERIALS

Brown, Byron B. "The Experience of Typical High School Coaches Throughout the State of Texas." Unpublished Master's thesis, Iowa State Teachers College, Cedar Falls, 1958.

Graham, Marion U. "A Study of Opinions of School Administrators Concerning Desirable and Essential Qualities in Ideal and Successful Coaches." Unpublished Master's thesis, Indiana State Teachers College, Terre Haute, 1949.

Master's Thesis in Education. Iowa State Teachers College,
School of Education, Number 1-8, 1951-59.

Master's Thesis of Indiana State Teachers College. Lists and
Classifications from August 1949-March 1960.

Thesis Abstract Series. University of Indiana, School of
Education, Number 8, 1956.

APPENDIX

INDIANA STATE TEACHERS COLLEGE

TERRE HAUTE, INDIANA

Dear Sir:

Each year at Indiana State we graduate approximately sixty men who have qualified for teaching and coaching.

Many of these men do not have sufficient athletic ability to maintain a position on an athletic squad and to earn a letter. The enclosed questionnaire is an attempt to evaluate the comparative success in coaching. The results will be used in planning our coaching courses at Indiana State.

We hope that you will feel our project is worthy of the imposition on your valuable time and will greatly appreciate you having the questionnaire completed and returned to us.

Sincerely yours,

John L. Longfellow
Athletic Director

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Your enclosed
Enclosure

B A S K E T B A L L

Head Basketball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record: Won ____ Lost ____

Second Team Basketball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:

Won ____ Lost ____

Freshman Basketball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:

Won ____ Lost ____

Junior High Basketball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:

Won ____ Lost ____

Grade school basketball coaches: No. lettering in sport ____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

F O O T B A L L

Head Football Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record: Won ____ Lost ____

Second Team Football Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:
Won ____ Lost ____

Freshman Football Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:
Won ____ Lost ____

Junior High Football Coach _____

College _____

Year Graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:
Won ____ Lost ____

Grade school football coaches: Number lettering in sport ____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

B A S E B A L L

Head Baseball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record: Won ____ Lost ____

Second Team Baseball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:
Won ____ Lost ____

Freshman Baseball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:
Won ____ Lost ____

Junior High Baseball Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:
Won ____ Lost ____

Grade school baseball coaches: Number lettering in sport ____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

T R A C K

Head Track Coach _____

College _____

Year graduated _____ Letter won in sport _____

Years as head coach _____ Life record: Won ____ Lost ____

Second Team Track Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:

Won ____ Lost ____

Freshman Track Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:

Won ____ Lost ____

Junior High School Track Coach _____

College _____

Year graduated _____ Letters won in sport _____

Years as head coach _____ Life record as head coach:

Won ____ Lost ____

Grade school track coaches: Number lettering in sport ____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

_____ College _____

Head Wrestling Coach _____

	Year	Letters won
College _____	Graduated _____	in sport _____

Head Swimming Coach _____

	Year	Letters won
College _____	Graduated _____	in sport _____

Head Tennis Coach _____

	Year	Letters won
College _____	Graduated _____	in sport _____

Head Golf Coach

	Year	Letters won
College _____	Graduated _____	in sport _____

Head Cross Country Coach

	Year	Letters won
College _____	Graduated	in sport

Questionnaire completed by

Title

School

Figure 1 consists of 16 small plots arranged in a 4x4 grid. The plots are arranged in two rows of eight. The top row shows a transition from a regular grid (left) to a random distribution (right). The bottom row shows a transition from a regular grid (left) to a random distribution (right). The plots are labeled 1 through 16. The first four plots (1-4) show a regular grid of points. The next four plots (5-8) show a random distribution of points. The last four plots (9-12) show a regular grid of points. The final four plots (13-16) show a random distribution of points. The plots are arranged in a 4x4 grid.