中學體育師資準備課程內容之研究

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摘　要

本研究調查的目的在於確定哪些體育專業準備課程內容最能影響及幫助優秀中等學校體育老師成功教學。其次，這些教學成功的體育老師將明確地指出他們的技巧與知識是從哪些師資準備課程學到的（是從普通科目，專門科目，或者教育專業科目）。

此項研究所設計之問卷寄發至臺灣省隨機抽樣的一百五十所中等學校校長（或評鑑委員），由其推薦兩名優秀的中學體育老師填寫問卷。因此，本研究的樣本數爲三百個。

本研究採用 SPSS 統計軟體進行各項統計分析工作。首先，將問卷收集之數據資料以常態分配檢試優良體育老師認定師資準備課程內容之差異性。然後，採用 Chi-Square 測試優良體育老師對於問卷中課程內容之重要程度是否有差異性，並採用 ANOVA(Analysis of Varance) 和 Chi-Square 測試性別及區域不同的優良中等學校體育老師對於課程內容之重要程度是否造成顯著差異。

本研究結果說明優良老師認爲〝儘量能給予學生學習（練習）時間〞、〝重身教〞，〝參與專業進修〞，最能幫助老師成功的教學，另外結果顯示，優良老師亦認爲他們是從〝體育方法課程〞、〝體育（理論）課程〞和〝教育課程（教育學分）〞獲得最多助於教學之技巧與知識。

A Study of Components from a Professional Preparation Program for Physical Education Teachers

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Abstract

The purpose of this investigation was to determine which components from the professional preparation programs in physical education were perceived by successful teachers to most likely influence teaching success. More specifically, where in the professional preparation program did successful teachers gain the skills and knowledge that contributed to their success?

In this research, Physical Education Teacher Survey was designed and sent to random sampling one hundred and fifty secondary schools' principals (or evaluation committee) who chose two successful physical education teachers in their schools to fill the questionnaires, therefore, the sample size of the study was three hundred.

The SPSS statistic software was utilized for data analysis in this paper. After the data were collected, frequency distributions were conducted to examine for differences among the components identified by successful secondary physical education teachers on the Physical Education Teacher Survey. Chi-square analyses were conducted to examine for differences among the components in the degree of importance assigned by these components. Analysis of Variance and Chi-square were used to determine if teacher's rating of the degree of importance differed demographic variables.

The results indicated that successful teachers identified that maximize student learning time, presenting a good role model, and development of professional attitude were the three most highly rated components contributing to teaching success. Few differences were found in the ratings of components by successful teachers based on their experiences, gender, age, level of education and type of school. Successful teachers identified physical education methods, physical education courses, and education courses as where they learned about those components.

A Study of Components from a Professional Preparation Program for Physical Education Teacher

Introduction

Major changes in society and education during the past decade have specifically affected physical education programs. One area of considerable concern is the professional preparation of teachers. Recently a high priority for educators was the establishment of a school-reform movement by 37 college and university presidents for improving primary and secondary education. The purpose of this movement was to step up the involvement between colleges and public schools, creating more cooperation for the improvement of teacher training (Lederman, 1987).

The problem of making a prediction about a person becoming a good teacher would seem to be a manageable problem. In fact, almost any person being asked to name the characteristics of a successful teacher would probably respond with such generalities as : intelligence, understanding of children, interest in helping children learn how to make the most of their potential, ability to know when learning is taking place, skilled in motivating and guiding learning, good personality, and has an interest in working cooperatively with colleagues in improving the educational program (Ort, 1964).

Currently administrators are expressing the need for more training in curriculum development, supervision, evaluation, and strategies to help teachers improve instruction (Ratliffe, 1986). The existing research provides little reason to believe that agreements exist among researchers in identifying the characteristics of successful teachers. Recognition of the lack of and the need for adequate methods for the

evaluation of components from professional preparation programs in physical education in Taiwan, served as the motivating factor leading to the pursuit of the present study.

Statement of the Problem

The purpose of this investigation was to determine which components from the professional preparation programs in physical education, as perceived by successful teachers, were most likely to influence teaching success. More specifically, where in the professional preparation program do teachers gain the skills and knowledge that contribute to their success?

Significance of the Study

This investigation was important since the literature has failed to identify which components from the professional preparation program led to teaching success. The existing research also provides little reason to believe that agreements exist among researchers in identifying the characteristics of successful teachers. Therefore, the motivating influence behind the development of this investigation came from the literature; which has not to date identified which parts from the professional preparation programs were most influential in determining whether or not one is a successful teacher. More importantly, the literature suggested the need for more valid measuring devices to assist in the development of improved curricula, and to predict the future success of teachers. Therefore, this investigation first involved creating a measuring device specifically for evaluating those components from professional preparation programs contributing to teaching success. Then, utilizing this measuring device, this investigation sought to determine which components needed to be improved, to determine differences. The investigation also try to identify where in

the professional preparation program do successful teachers gain the skills and knowledge that contribute to their success?

Limitations

There were some general limitations of mailed survey research such as a low response rate, selective response bias, and inaccurate or dishonest answers to questions. In addition, the educational backgrounds of those successful secondary physical education teachers and the professional preparation programs they attended may have been different.

Definition of Terms

In order for the reader to better understand the contents of this investigation, the following definition of terms as identified by this investigator have been included:

1. Component - any part of the required professional preparation program leading to certification for a prospective teacher.
2. PEIS - Physical Education Inventory Survey
3. Professional Preparation Program - the successful completion of courses and field experiences at the college or university level prior to becoming a teacher.
4. Successful Physical Education Teachers - those who create an atmosphere which maximizes the opportunity for students to achieve program goals.

Basic Assumptions

The following assumptions were made in this investigation:

1. An important function of the professional preparation program is to promote teaching success.
2. Successful secondary physical education teachers could accurately

identify those components from a professional preparation program leading to teaching success.

3. Those successful secondary physical education teachers identified by their directors of school were truly successful teachers.

Literature Review

The literature reviewed indicated that valid evaluation methods which might be utilized by administrators or university supervisors to provide appropriate evidence on the components of professional preparation programs which contribute to teaching success were generally lacking. In addition, research pertaining to the teacher's perspective about their own success has been ignored. Therefore, this study was designed to determine which components from the professional preparation programs in physical education as perceived by successful teachers were most likely to influence teaching success.

Findings by Ullman in 1930 found that success in practice teaching was the best one measure of teaching success. Other factors that appeared predictive were: socio-economic status, academic and professional marks, social intelligence, general intelligence, interest in teaching and knowledge of the principles of teaching. From his findings Kritner (1931) concluded that scholarship and student leadership in organized extracurricular programs of the secondary schools were worthwhile possibilities for predicting teaching success.

The University of California Rating Scale for practice teaching was used by administrators to obtain a success rating. Personality test scores and personal qualities were the only factors significantly related to teaching in the field. Jones (1956) attempted to determine whether a group of good teachers could be differentiated from a group of average teachers in terms of certain measures of pre-service

achievement, temperament, and personality. Forty-six teachers were divided into two groups according to a composite criterion of student teaching grade, placement bureau rating, and principal's rating. Results of the study showed a significant difference between the group of good teachers and the group of average teachers. The variables on which the group differed the most were: professional grade point average, major teaching field grade point average, flexibility in numerical abilities, disposition rigidity, and personality traits. Six of the seven measures of teacher characteristics employed in the correlation were significantly related to the composite criterion. From the findings, Jones concluded that a pattern of measures of pre-service achievement, temperament, and personality will differentiate good teachers from average teachers as defined by the composite used in the study.

The project of the American Council on Education, The Teacher Characteristics Study, represented one of the most extensive research programs that was directed at the objective study of teachers. The Teacher Characteristics Study was conducted with the idea that two possible uses might be made of the findings: first, school systems might use the data as an aid in the identification of teachers who had characteristics similar to those characteristics deemed important and desirable; and second, teacher-education institutions might use the information as an aid for better understanding teacher characteristics and associated conditions, which would contribute to improved procedures for selecting teaching candidates and the improvement of professional courses and curricula (Ryans, 1960). The purposes of the study were: (1)to identify, analyze, and describe the classroom behaviors, attitudes, viewpoints, and intellectual and emotional qualities of teachers: (2)to develop suitable paper and pencil instruments for use in

evaluating and predicting important teacher characteristics; and (3)to compare the characteristics of various groups of teachers (Ryans, 1960). From this extensive study three classroom behavior patterns were readily identified and found statistically significant. Teachers who were responsible, businesslike, and systematic attained success in teaching. Finally, teachers who were stimulating, imaginative, and clever were identified as successful teachers (Ryans, 1960). Numerous factors were found related to success in teaching. Some of the variables were: scholastic achievement, selection of teaching as a professional career, the ability to express an idea, emotional stability, and favorable opinions of adults and children (Ryans, 1960).

When teachers are selected for positions, their prospective employers have assumed that candidates who successfully completed a teacher education program will be "acceptable teachers" (Hall, 1964). Therefore, the employer should be able to expect that those who were most successful in the education program, should become the most successful teachers.

The use of principal or superintendent assessment as a measure of success in teaching has been under considerable attack for years. Educators have not had consensus concerning what qualities and competencies are essential to successful teaching (Biddle and Ellena, 1964). As a result continuous attention has been paid to the establishment of valid and reliable criteria for the measurement and prediction of teaching success.

The use of student achievement as a measure of teacher competence rests on the assumption that an important function of teaching is enhancement of student learning (McGreal, 1983 and Millman, 1981). The ultimate criterion for effective teaching, for many teachers and researchers, is the product of student achievement. Feldvebel

also supported this view stating, "since we cannot prove that any one method, style, or process is superior, all that we can do is go by results" (Feldvebel, 1980).

Successful teachers who are effective classroom managers arrange their classroom space to accommodate different types of learning activities, make sure that all students are visible and can be reached for independent help, and minimize traffic flow problems and congested areas (Emmer, Evertson and Anderson, 1980). Transitions between activities were accomplished with a minimum of wasted time (Arline, 1979). Preplanning the use of physical space could maximize student access to and use of materials and participation in activities (Nash, 1981). The organization of the space and its use is even more essential in classrooms with many students engaged in different tasks.

For many years researchers have examined effective and successful teaching. For many teachers and researchers effective teaching is the product of student achievement. This simply means that the teacher should be judged and is responsible for bringing about changes in how much a student learns. Researchers have defined successful teaching as performing appropriately or for producing student learning gains. For the most part the teacher's perspective about their own success has been given little attention. Few researchers have questioned how teachers define success in their daily lives. Some myths abound, for example, secondary teachers perceived everything, including success, in terms of content; elementary teachers, in terms of skills or the child's development. Researchers have concentrated on variables that describe the teacher, including their self-concepts (Seaton, 1978), and their success orientations (Keislar, 1979). Dunkin and Biddle (1974) have attempted to link such variables to teacher behaviors in the classroom (process) and to gains in

student learning (product). Therefore, teachers have been defined as successful for performing appropriately or for producing student learning gains.

Earls (1981) conducted a study of distinctive physical education teachers. A distinctive teacher was defined for this study as a teacher who stands out from the majority of colleagues with respect to (1) sincere interest and enthusiasm in teaching; (2)genuine concern for pupils; and (3)self-study and continued striving to improve as a teacher.

A survey of 183 elementary, middle and secondary physical education teachers (Arrighi, 1984) via an open-ended questionnaire, which posed the question "what makes you feel successful as a teacher?", revealed that teachers looked at success in terms of how student rewarded them rather than strictly in terms of how much students achieved.

Corbin, Laurie, Granger and Smiley (1984) determined if vicarious success experiences in the form of slide-tape presentations would result in a pattern of responses associated with increased self-confidence, greater commitment to physical activity and increased physical activity involvement. Results indicated a significant difference between treatment and control groups on a profile of improved confidence/attitude/activity involvement, with the treatment group showing a more positive profile. Vicarious experiences enhanced self-confidence, and there was a trend toward greater persistence in activity among those experiencing vicarious success through audiovisual presentation.

Methodology

This study was designed to obtain the required information neces-

sary to determine which components from the professional preparation programs in physical education in Taiwan as perceived by successful teachers were most likely to influence teaching success.

Since no instrument currently existed in the literature for the purpose of measuring components from a professional preparation program which contributed to teaching success in Taiwan, one had to be developed. This developmental procedure involved obtaining curriculum guides from several colleges and universities within Taiwan, R.O.C.. The purpose for obtaining these curriculum guides was to obtain a consensus regarding those components from professional preparation programs which were most generally accepted.

Communication was conducted by letter to the supervisors requesting their assistance in a pilot study for establishing content validity. Each supervisor was sent a copy of the PEIS to determine which components from the professional preparation programs in physical education as perceived by successful teachers were most likely to influence teaching success? Each supervisor, after reviewing the questionnaire, was instructed to complete the attached evaluation check sheet and return to the investigator in the self-addressed stamped envelope.

Results from the pilot study included responses from 15 of 20 supervisors representing a 75 percent return. Included in these results were two important findings: (1)75 percent of the respondents indicated that such a study should be done and would be beneficial to our profession (2)48 percent of the respondents indicated that the questionnaire needed to be modified, and included suggestions for improving the PEIS.

A follow-up procedure was conducted involving those supervisors who earlier indicated that corrections and modifications were neces-

sary. The purpose for the follow-up was to have the supervisors review the modified questionnaire to see if all questions and concerns had been addressed. All of the participants responded in the follow-up which reflected a 100 percent return and indicated that the questionnaire was now adequate for gathering desired data.

The purpose of the Physical Education Inventory Survey (PEIS) was to determine which components from the professional preparation programs in physical education as perceived by successful teachers were most likely to influence teaching success? Specifically, where in the professional preparation program did successful teachers gain the skills and knowledge that contributed to their success?

The PEIS was mailed to random sampling one hundred and fifty secondary schools' principals who were requested to choose two successful physical education teachers in their school filling the questionnaires and gave a total of two hundred and fifteen respondents for a 70 percent return.

The data analyses was performed using the Statistical Package for the Social Science (SPSS). Several methods of statistical analyses were employed including: descriptive statistics, i.e., frequencies and percentages; Chi-square; and Analyses of Variance.

Data Analysis

Frequencies and percentages were utilized to examine the differences among the components in the degree of importance assigned by successful teachers; results are presented in Table 1. More than half of the items (18 of 32) were rated "Very Important" by 40 percent or more of the successful teachers.

A chi-square "Goodness of Fit" test was conducted to further examine for differences among the components in the degree of

importance assigned by successful secondary physical education teachers. The purpose for conducting a chi-square "Goodness of Fit" test was to determine if the ratings of the degree of importance differed from an even distribution. Specifically, was the distribution of responses to each rating option ("Very Important", "Important", "Undecided", "Little Importance", and "No Importance") by the successful teachers different from what might be expected by chance? The findings provided few difference among the items in terms of their degree of importance.

To further discriminate the degree of importance among the components as perceived by successful teachers, a second "Goodness of Fit" test was conducted by combining response options "Very Important" and "Important" into one category, the other two of three response options ("Little Importance" and "No Importance") into a second category. Expected frequencies equal to 50 percent of the successful teachers being in each of the two categories were then used in the chi-square test against the observed frequencies. The results were that only three components from the PEIS (#25: Experiences with special children; #29: Multi-cultural experiences; #24: Writing skills in working with others) were found not to be different from the even distribution.

A single category was created with the rating of "Very Important", while the other responses of "Important", "Little Importance", and "No Importance", were placed in the other category. The chi-square "Goodness of Fit" test was conducted again, using expected proportions of 50 percent in each category. This test provided more discrimination among the components' degree of importance than the previous test; results are presented in Table 2. Four components were found to have a "Very Important" response from a significantly

greater proportion of teachers than the expected 50 percent, while 16 items were found to have a "Very Important" response from a significantly lower proportion of teachers than the expected 50 percent.

Among the four components that were identified as "Very Important", "Maximize Student Learning Time", "Presenting a Good Role Model", and "Development of Professional Attitude" were clearly the highest rated. These three components had a higher proportion of "Very Important" rating when compared with every other component; these results are presented in Table 3.

Frequencies and percentages were conducted first to test for differences and to identify specifically where in the professional preparation program successful teachers gained the skills and knowledge that contributed to their success. More successful teachers identified Physical methods, Education courses and Physical education courses as where they learned about those components, data indicated in Table 4.

Conclusions and Recommendations

The purpose of the present investigation was to determine which components from the professional preparation programs in physical education as perceived by successful teachers were most likely to influence teaching success. More specifically, where in the professional program did successful teachers gain the skills and knowledge that contributed to their success?

The conclusions based on the findings that directly relate to the statement of the problem and sub-problems are presented as follows:

1. Maximize Student Learning Time, Presenting a Good Role Model, and Development of Professional Attitude were the three components identified by successful secondary physical education teach-

ers which were most influential in contributing to teaching success.

2. Physical education methods, Education courses and Physical education courses were the three places in the professional preparation program where successful teachers learned more components.
3. Successful teachers were homogeneous in their ratings of the components by the demographic variables.

The investigator offers the following recommendations for future research on the identification of those components from the professional preparation programs contributing to teaching success.

1. To conduct a study similar to the present investigation utilizing cooperating teachers, successful teachers and university supervisors in order to compare their results in the identification of components contributing to teaching success.
2. To conduct a study of professional preparation programs utilizing more focus on maximize student learning time, presenting a good role model and development of professional attitude for the development of successful teachers.

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Table 1.

Rating of the Degree of Important for Professional Preparation Program Components (Data Expressed as Percentages)

Items	Very Important (VI)	Important (I)	Combined Groups (VI & I)	Undecided	Little Importance (LI)	No Importance (NI)	Cobined Group (LI & NI)
11	68.2	28.5	96.7	2.6	0.7	0.0	0.7
33	66.2	29.2	95.4	2.6	2.0	0.0	2.0
32	65.6	27.2	92.8	6.6	0.7	0.0	0.7
21	57.6	29.1	86.7	11.9	1.3	0.0	1.3
13	55.6	34.4	90.0	9.9	0.0	0.0	0.0
12	51.7	39.1	90.8	7.2	2.0	0.0	2.0
14	51.0	39.7	90.7	8.6	0.7	0.0	0.7
15	48.3	37.1	85.4	12.6	2.0	0.0	2.0
39	46.4	36.4	82.8	13.2	3.3	0.7	4.0
18	45.7	37.1	82.8	15.2	2.0	0.0	2.0
36	44.4	41.7	86.1	9.9	4.0	0.0	4.0
38	43.7	47.0	90.7	7.3	2.0	0.0	2.0
41	43.7	42.4	86.1	12.6	1.3	0.0	1.3
20	43.0	40.4	83.4	13.9	2.6	0.0	2.6
17	43.0	39.7	82.7	15.9	1.3	0.0	1.3
26	43.0	37.1	80.1	15.9	3.3	0.7	4.0
16	42.4	44.4	86.8	11.2	2.0	0.0	2.0
37	41.1	42.4	83.5	15.2	1.3	0.0	1.3
35	39.1	47.7	86.8	11.9	1.2	0.0	1.2
40	38.4	41.7	80.1	17.2	2.6	0.0	2.6
19	37.1	47.7	84.8	13.9	1.3	0.0	1.3
27	36.4	40.4	76.8	17.2	6.0	0.0	6.0
34	33.8	42.4	76.2	17.9	6.0	0.0	6.0
23	29.8	47.7	77.5	19.9	2.0	0.7	2.7
28	27.8	34.4	62.2	28.5	6.6	2.6	9.2
31	24.5	39.7	64.2	22.5	11.3	2.0	13.3
30	24.5	33.1	57.6	33.8	7.2	1.3	8.5
22	21.9	35.8	57.7	31.1	11.3	0.0	11.3
42	18.5	33.1	51.6	32.5	13.2	2.6	15.8
24	10.6	43.0	53.6	35.8	9.9	0.7	10.6
29	9.2	25.2	34.4	45.0	13.9	6.6	20.5
25	5.3	21.9	27.2	38.4	24.5	9.9	34.4

Table 2.

Components Whose "Very Important" Ratings Were Greater Than Expected

Item	*Component*	*N*	X^2
11	Maximize student learning time	215	22.18
33	Presenting a good role model	213	15.95
32	Development of professional attitude	213	14.61
21	Class management and control	214	5.2

Components Whose "Very Important" Ratings Were Less Than Expected

Item	*Component*	*N*	X^2
17	Communicate high expectations for student performance	210	4.16
37	Organization	212	6.00
35	Teacher's management time	213	8.06
19	Reward student performance	215	8.47
27	Evaluation procedures	214	9.14
40	Creativity	214	10.05
34	Nutrition and weight control	215	13.41
23	Speaking skills in working with others	215	23.72
28	Exposure to computer science	213	30.37
30	Parental interactions	214	38.00
31	Drug Education	215	42.05
22	Use of audiovisual aids	215	50.78
42	Professional affiliation	215	60.65
24	Writing skills in working with others	213	97.86
29	Multi-cultural experiences	214	100.3
25	Experiences with special children	215	124.49

Components Whose "Very Important" Ratings Were No Different From Expected

Item	*Component*	*N*	X^2
13	Structuring the physical space	215	3.79
12	Manage and organize the learning environment	214	0.66
14	Planning lessons	215	0.23
15	Grouping	214	0.06
39	Micro-teaching	215	0.80
18	Communicate active student participation in physical fitness activities	215	0.96
38	Flexibility of instruction	214	1.48
20	Development of observation skills	213	2.16
41	Warmth/Supportiveness	215	2.40
16	Utilize interactive teaching strategies	215	2.65
26	Managing teaching stress and burnout	215	2.65
36	Awareness of skill levels	213	2.92

Table 3.

Inter-Item Comparison Among Highest Rated Components
(Results Expresses as Values of χ^2)

	Item 33 (66.2%)	Item 32 (65.6%)	Item 21 (59.9%) Class Management and Control
Item 11 (69.1%) Maximize Student Learning Time	0.29	0.42	3.24
Item 33 (66.2%) Presenting a Good Role Model		0.07	1.85
Item 32 (65.6%) Development of Professional Attitude			1.19

Table 4.

Specific parts of the Professional Preparation Program Where Teachers Learned about Each Component (data Expressed in Percentage)

Item	General Education	Education Courses	Skill Courses	P.E. Courses	P.E. Methods	Student Teaching	Other Experience
	1	2	3	4	5	6	7
11	4.6	13.9	25.8	11.3	28.5	13.9	2.0
12	7.9	19.9	11.3	19.2	16.6	20.5	4.6
13	5.3	5.3	7.9	25.2	27.8	23.2	5.3
14	9.3	17.3	10.0	24.0	30.3	8.0	1.3
15	3.4	8.1	10.1	22.1	34.9	20.1	1.3
16	8.0	18.7	10.7	13.3	22.0	25.3	2.0
17	3.4	22.3	13.5	21.6	17.6	14.9	6.8
18	6.0	10.7	16.8	18.1	23.5	17.4	7.4
19	8.2	22.4	11.6	19.0	15.0	15.0	8.8
20	4.1	16.4	13.7	18.5	20.5	13.0	13.7
21	9.4	37.6	4.7	12.8	11.4	14.1	10.1
22	12.2	20.4	9.5	19.7	15.0	10.9	12.2
23	11.4	12.8	10.1	10.1	10.1	26.2	19.5
24	19.2	16.4	8.2	18.5	5.5	8.2	24.0
25	10.3	19.2	15.1	5.5	8.9	10.3	30.8
26	6.8	21.6	6.8	14.42	14.2	6.8	29.7
27	13.3	21.3	7.3	22.0	26.0	8.0	2.0
28	26.4	9.5	9.5	8.1	6.1	4.7	35.8
29	11.5	8.8	6.8	9.5	6.8	7.4	49.3
30	10.0	24.7	7.3	6.7	7.3	8.7	35.3
31	18.1	8.1	7.4	20.8	6.0	6.0	33.6
32	8.8	16.2	13.5	21.6	13.5	8.8	17.6
33	12.7	30.7	3.3	10.7	7.3	16.0	19.3
34	16.9	8.1	8.1	35.1	14.9	3.4	13.6
35	9.5	12.8	8.8	15.5	27.0	13.5	12.8
36	6.8	2.7	48.6	12.2	18.9	8.1	2.7
37	8.8	18.9	9.5	17.6	25.7	10.8	8.8
38	8.7	20.1	6.7	15.4	22.8	17.4	8.7
39	5.5	10.3	14.4	11.0	29.5	25.3	4.1
40	4.8	16.3	8.8	13.6	29.3	14.3	12.9
41	9.5	29.3	2.7	11.6	10.9	19.0	17.0
42	4.8	2.0	19.0	13.6	9.5	4.1	46.9