A METHODOLOGY OF COMPARATIVE PHYSICAL EDUCATION

Noboru ISHIKAWA
University of Tokyo, Tokyo


Abstract

This paper is based on the present investigator's individual study for M.S. Degree presented to the Faculty of the Department of Physical Education, University of California, Los Angeles in June, 1967. The purpose of this study was to systematically organize a theoretical framework of the methodology of comparative physical education. The bibliographical method was used and the source materials were mainly sought in the field of comparative education. In this paper the purposes of comparative physical education, categories and specific items to be compared, data collecting methods, and treatment of the results were discussed. Four purposes, five general categories and each respective specific items, five specific data collecting methods, and four stages of the treatment of data were presented. Comparative physical education is a cross-cultural, interdisciplinary, and holistic study of national systems of physical education; it has a great merit in itself; and to realize its whole potentiality it must be conducted co-operatively by individual investigators and national and international organizations.

Foreword

This paper is based on the present author's individual study entitled Methodology for the Comparative Study of Physical Education which was presented to the Faculty of the Department of Physical Education, University of California, Los Angeles, in partial fulfillment of the requirements for the Degree of Master of Science in Physical Education in June, 1967. For this study the author was greatly indebted to Dr. Ben W. Miller, the Sponsor of the study; to Dr. Donald T. Handy, the Chairman of the Department; and to Dr. Raymond A. Snyder, the Chairman of the Graduate Council in the Department and his Advisor.

Introduction

Although the term "comparative physical education" as a systematic comparative study of national systems of physical education in different countries has a relatively new origin, interests in foreign systems of physical education and efforts to take the essence of them into one's own system had been existing for a long time. In the study of comparative education there were sometimes found descriptions and explanations concerned with physical education or physical culture (1. and 2.). In the field of physical education, too, there have been made introductory remarks and objective studies on many different systems of physical education for more than forty years (3). However, true systematic and scientific efforts in the study of compre-
hensive comparative physical education have become to be paid in our profession since the end of the World War Second, or especially the last ten years.

Van Dalen and others edited A World History of Physical Education with comparative perspective in 1953, but it is only a historical juxtaposition of national systems of physical education. Bucher wrote a chapter on international physical education in the contemporary world in which he compared situations of physical education in several Asian countries in which he visited with those of America (5:313-328). His idea of international physical education is agreeable but his comparison is arbitrarily made. The International Council on Health, Physical Education, and Recreation has published three reports in 1963 in which the information collected by the questionnaire method was tabulated (21, 22, and 23). In 1966, Johnson had edited a monograph: Physical Education Around the World, which consists of ten papers on different national systems of physical education, and each of them was respectively prepared by a foreign major student studying in his Department. (10) It may also not be called a true comparative study, for it stays in the stage of mere juxtaposition. Anthony studied comparative physical education and sport and its methodology, but it is not published. Some national or international organizations have shown their interests in promoting the study of comparative physical education. In America, England, and some other European countries more than ten universities or colleges have courses of comparative physical education (2:73).

If there is a generally felt need that in order to begin and establish comparative physical education as an academic discipline in the study of physical education by calling for cooperative efforts of interested people in the profession, it is necessary to formulate its methodology as concretely as possible.

There are several comparative studies which have already been established in other scientific disciplines such as comparative anatomy, comparative sociology, comparative law, comparative education, and others. They have much experiences of study and have accumulated a great deal of information. Many of the methods used in these fields of study may easily and completely be applied to comparative study of physical education and sport (2:73). When trying to formulate a methodology for our own comparative study, it is naturally helpful to refer to those well-defined methods in other fields of comparative studies.

It was the purpose of this study to organize systematically a comprehensive and workable methodology for the comparative study of national systems of physical education in different countries or cultures. This was only a theoretical trial for the formulation of a framework of comparative methodology in our field and was not based on actual studies of comparative physical education. It was the present author's presupposition that, even though there are some critical controversies in the study of comparative education, it would be possible for comparative physical education to formulate its own methodology making reference to that of comparative education.

A bibliographical method was used in this study. Source materials were sought in textbooks written by several leading comparative educationists and in papers on comparative methodology published in the professional magazines. In the original report of this study all necessary components of comparative methodology such as purposes, significance, and nature of the study;
basic viewpoints, rules, and assumptions; categories or items to be compared; data collecting methods; treatment of the results; and types or patterns of study or approach were extensively discussed. But, in this paper, the discussion was limited only to the very basic elements of methodology such as purposes, categories, methods, and treatment of the results.

I. Purposes of Comparative Physical Education

The word 'comparative' means "making use of a method whereby likenesses or dissimilarities are determined by simultaneous examination of two or more items." (6: 461) 'study' is "a careful examination or analysis of a phenomenon, development, or question, usually within a limited area of investigation". (6: 2268) And 'physical education' may be defined all human physical activities related to the well-being of his life, whose core is centered in a school program of "art and science of human movement". (7: 36) Then the term 'comparative physical education' as a compound terminology of these three elements have certain characteristics, possibilities, and limitations. In the first category it has (a) phenomenality, (b) plurality, and (c) totality of its object; in the second it can (a) clarify time and space differences in a problem, (b) evaluate trends of development, and (c) enable comparative analysis as a tool of planning; and in the third it does not (a) have a standardizing power, (b) establish a norm, and (c) build up a philosophy (8). Then, what kind of purposes can be stated in an academic discipline like one having these features?

Followings are some of the representative statements of purpose made by individual investigators in the field of comparative education:

(1) The solution of the problems of a reformed and perfected education, (9: 40)
(2) to analyze and compare the forces that make for differences between national systems of education; (11: 8)
(3) the analytical study of these factors from historical perspective and the comparison of attempted solution of resultant problems; (12: 10)
(4) to make clear the problems and standpoints of others and to assess our own problems and plans in the light of world needs; (13: 13)
(5) to deduce from the achievements and mistakes of school systems other than their own lessons for their own schools, to appraise educational issues from a global rather than ethnocentric perspective, and to relax national pride to permit events and voices from abroad to count in the continued appraisal and reexamination of schools; (14: 6)
(6) to be used with more rigour and precision in the reform and planned development of education, contribution to a deeper understanding of the processes of education and to the planning of education, or to make clear the range of policy choices available and to propose more realistic solutions through refinements in the processes of analysis; (15: 3)
(7) to deal with complex systems of correlations among educational characteristics and between these and traits of social structure, with little reference to the individuality of the societies from which our data were derived, (16: 6-7)
(8) when implying that the school-society relationship is empirically demonstrable and it is lawful, to establish these lawful relationship (17: 94).

These purposes stated by the individual comparative educationists can be classified into four groups, which are (a) common purposes: (4) and (5); (b) practical purposes: (1) and (6); (c) academic purposes: (2) and (3); and (d) scientific purposes: (7) and (8).

Don Anthony stated what, he thinks, might be called major aims for students, teachers, and researchers in comparative physical education (2: 73). They are as follows:

(1) To establish reliable data on each country and system, separately and collectively;
(2) to search for regularities by analyses of differences and similarities with particular attention paid to the relation of theory to practice;
(3) to try to understand the past and to predict future trends: and to assist in the formulation of policy;
(4) to examine the need for the reform of one’s own methods and systems and to contribute to a universal improvement of standards and knowledge;
(5) to relate knowledge in the specific field of sport and physical education to that in all other relevant disciplines.

Some of the above statements are specific but others are rather general. It might be possible to formulate the purposes by taking into account the nature of a national system of physical education, possibilities of comparative study in physical education, and limitations of the study. The investigator would like to suggests following four purposes:

(1) To collect relevant data on each system of physical education, general education, and background factors which make for the development of physical education; and to make clear differences or similarities, to analyze and to interpret relations between system and its determining factors; and to find lawful relationships in the situation;

(2) to understand one’s own system and the process of physical education in light of a global perspective; and to help formulate a policy of reform and to intellectualize the prediction of the results;

(3) to contribute to the development of basic and practical theory of physical education as an academic discipline by gathering empirically knowledge of many aspects of actual systems of physical education;

(4) to be used as a basic source for structuring and directing international programs of physical education in schools and in societies in one country or internationally in order to contribute to the realization of a deeper international understanding, constructive cooperation, and enduring world peace.

II. Categories to be Compared in Comparative Physical Education

An object of comparative physical education is a national system of the subject organized and conducted in each different culture or country. Its ultimate aim is to make clear differences or similarities in systems in their wholenesses and to analyze and to find lawful relationships between the systems and their determining forces. Then, what should specifically be compared in the study?
Categories or items to be compared should be selected according to the stated purposes, basic viewpoints, and assumptions being used as criteria. They must be common, comparable, manageable, and measurable to some extent. As to the general categories, followings are described by some individual comparative educationists:

(1) Sadler (9: 21)
   (a) The thing outside the schools
   (b) The things inside the schools

(2) Kandel (18: Preface)
   (a) The forces that determine the character of education
   (b) The details of its organization and practice

(3) Hans (12: 16)
   (a) Natural factors: race, language, and environment
   (b) Religious factors: Catholicism, Anglicanism, and Puritanism
   (c) Secular factors: humanism, socialism, and nationalism

(4) Schneider (12: 6)
   (a) National character
   (b) Geographic space
   (c) Culture
   (d) Sciences
   (e) Philosophy
   (f) Economic life and politics
   (g) Religion
   (h) History
   (i) Foreign influences
   (j) The immanent development of pedagogies

(5) Jullien (9: 48)
   (a) Man-subject: the body, heart, and mind
   (b) Welfare-goal: health, morality or virtue, and instruction
   (c) Time-instrument: childhood, adolescence, and youth (elementary, primary, secondary, classical, higher and scientific, special ones, normal schools, education of girls, public schools)

(6) Holmes (15: 53)
   (a) Normative pattern
   (b) Institutional pattern
   (c) Physical conditions

(7) Anderson (16: 8)
   (a) Goals or potential products of education
   (b) The extent of their realization
   (c) The part played by schools in these “products”

(8) Rossello (19: 4)
   (a) A series of educational trends—whose relationship to each other and to more general
tendencies of a political, social, economic, or other nature

It is clearly seen that there are some disagreements in the viewpoints for the selection of categories to be compared; however, four basic concepts of categories might be derived from the above precedents. They are;

(1) The things outside
(2) The things inside
(3) The relationships between both
(4) The educational trends

In the field of physical education two examples were found in relation to this problem. Van Dalen and others set up following topics: (4: 2)

(1) A review of historical background
(2) Aims of education
(3) Aims of physical education
(4) Promotion of physical education
(5) Program of physical education
(6) Methods of physical education

Johnson listed followings: (10: ix)

(1) General background information
(2) History background of physical education
(3) Kindergarten-elementary physical education
(4) Secondary physical education
(5) College-university physical education
(6) Teacher education in physical education
(7) Special characteristics, such as, sports clubs, facilities, etc.

These two examples from physical education show at first sight clear contrast but, if looked closely, both of them cover almost identical contents. The difference is in their ways of setting up categories.

It may seem to be possible to set out following general-specific categories according to the examples listed above and to the theoretical framework of the areas of scientific study of physical education:

A. The things outside the system of physical education
   1. The natural or geographical factors
      a. Location, size, climate, terrain, natural resources, etc.
   2. The general historical factors
      a. Chronical features of the nation, critical changes, etc.
   3. The socio-cultural factors
      a. Population, customs, language, institutions, way of thinking, etc.
   4. The economic factors
      a. Industry, national income, working conditions, etc.
   5. The political factors
      a. National policy, political ideology, international relations, etc.
Ishikawa: A Methodology of Comparative Physical Education

B. The things integrated into the system of physical education
   1. The general educational administration
      a. Organization, policy, purposes, services, finance, legislative laws, etc.
   2. The general educational system
      a. Types of school, enrollment, schedule, curriculum, teachers, teaching methods, etc.
   3. The general educational environment
      a. Building, facilities, playground, pools, etc.

C. The things inside the system of physical education
   1. The administration
      a. Organization and service: central, district, local, school, etc.
      b. Legislation and policy: aims and purposes, laws and regulations, etc.
      c. Finance: sources, amount, distribution, etc.
      d. Special project or planning:
   2. The school system of physical education
      a. Schedule, enrollment, elementary, secondary, college, etc.
   3. The history of physical education
      a. Trends and changes, emphasis, foreign influences, etc.
   4. The philosophy of physical education
      a. Purposes: elementary, secondary, college, national ideal, etc.
      b. Popular belief in physical education
      c. Sources of information
   5. The activity program
      a. Elementary, secondary, college, etc.
      b. Extra-curricular program
   6. The method of teaching
      a. Process or procedure, technique, student-teacher relations, basic rules, etc.
   7. The environmental conditions
      a. Playground: size, arrangement, utility, etc.
      b. Gymnasium: size, fixed equipment, etc.
      c. Pools:
      d. Other facilities:
      e. Tools and equipment:
   8. The evaluation
      a. Tests and measurement
      b. Standard for achievement
   9. The teachers
      a. Preparation: institutions, courses, requirements, certificates, etc.
      b. Status: social, financial, etc.
   10. The professional organizations
       a. Structural organization: membership, divisions, academic status, etc.
b. Activities: academic, public relations, services, etc.

11. The scientific studies
   a. Institutions: colleges, universities, special laboratories, etc.
   b. Research fund: national, private, college, etc.
   c. Status of researchers: professor, research professor, research fellow, research assistant, etc.
   d. Research topics: physiology, psychology, sociology, etc.

12. Special physical education
   a. Adapted physical education
   b. Outdoor education
   c. Physical recreation

13. Sports and athletics
   a. Intramural
   b. Inter-scholastic
   c. National, regional, local, etc.

14. Commercialized sports and athletics
   a. Baseball
   b. Basketball
   c. Football
   d. Ice hockey
   e. Soccer
   f. etc.

D. Relationships
1. Between A. and C.
   a. A. 1. and C. 5.
   d. etc.

2. Between B. and C.
   b. B. 2. and C. 2.
   c. B. 2. and C. 12.
   d. etc.

3. Between categories in the system itself
   a. 4. and 5.
   b. 2. and 11.
   c. 5. and 11.
   d. etc.

E. Trends
b. etc.
   b. etc.
   b. etc.
4. Trends in each category itself
   b. Trend in C. 11.
   c. Trend in C. 12.

These categories and specific items are listed here only tentatively; therefore, each of them must be critically refined, and the relationships between certain categories must be clearly established through the intensive effort in actual studies.

III. Data Collecting Methods in Comparative Physical Education

The purposes of the study have been stated and the categories and items have been selected; then the next problem is how to collect the first-hand information necessary to solve predetermined objectives in the study.

Before starting with the discussion on specific methods of comparative physical education, it is necessary to mention briefly about general aspects of the methods utilized in the study.

Because of its cross-cultural, inter-disciplinary, and holistic characteristics, comparative physical education cannot completely be carried out by only one individual investigator. It needs to call for many individual investigators' cooperative efforts as well as cooperative works of national and international professional organizations and other related scientific disciplines. And each individual researcher should maintain an ability to use efficiently at least one or more foreign tongues and preferably avail opportunities to travel or to reside in foreign countries. He needs also to maintain a sort of "readiness" for comparative study and a never-ceasing watchfulness, too. These personal qualities and general working conditions might as well be thought of as prerequisite methods of comparative physical education. (14: 10-11).

A problem of patterns or types of study or approach must be discussed, too. Bereday classified two patterns of approach and two types of study; the former two are (a) the problem approach and (b) the total approach, and the latter two are (a) the area study and (b) the comparative study (14: x and 23). There are other classifications: the descriptive and the interpretive; histstoricil, philosophical, sociological, statistical, and the like; and the foreign, the comparative, and the international physical education. Bereday's two kinds of classification are helpful when considering how to approach to the foreign national systems of physical education. Using his criteria, comparative studies can distinctively be classified into four types, which are:

(a) the problem-area study

(b) the total-area study
(c) the problem-comparative study
(d) the total-comparative study

The last one can only be called a true comparative study.

As to the specific data collecting methods, in this study about five of them were briefly observed. Bereday suggests two major aspects of descriptive study: (1) the follow-up of printed sources and (2) school visitation (14: 11). For the former, he classified available literature into three groups: (a) primary sources, (b) secondary sources, and (c) auxiliary materials. In the primary sources, he included following materials: (14: 11-12)

(a) Official reports of ministries and the public agencies
(b) Transcripts of deliberations in legislatures and in learned conferences
(c) Leaflets and books expressing opinions of private citizens
(d) Daily newspapers, magazines, pamphlets, and brochures of all kinds that answer to the description of "direct information from the field"
(e) A pictorial impression of physical plant, equipment, and human relations within
(f) International handbooks and journals and minutes of international meetings

Of school visitation he suggested following four types of practice: (14: 12-13)

(a) The old method - completely at random or according to what the hosts are willing to show.
(b) Automatically to look for a school in any locality or district one may find himself.
(c) To plan a regular coverage of the schools of the country, e.g. one in each town, or one urban and one rural school in each district, and so on.
(d) To visit schools by type: one kindergarten, one primary, and so forth.

These two suggestions for the descriptive study are very helpful in comparative physical education.

An observation method may be used in comparative physical education. In this case the investigator should prepare a check-list in order not to miss any important items. He must be careful not to disturb natural situations.

As the International Council on Health, Physical Education, and Recreation (21, 22 and 23) used a questionnaire method world-wide, it is very useful for investigators to utilize a questionnaire method for collecting first-hand information with high reliability. However, in this case, the researcher has to make each question clear so that everybody can understand its meaning identically. But once a questionnaire was completely made, it would have an advantage to be used in many countries.

Tests and measurement are also very useful for collecting reliable first-hand material, if tools and equipment are available and the procedures are established. The International Committee for the Standardization of Physical Fitness Tests, which was established in the year of the Tokyo Olympics in 1964, has continuously been working on its methodology. This project, once completed, would yield a fruitful results for the progress of science of physical education.

Many of the articles so far written on the foreign systems of physical education have been
based on random visitations, observations, and impressions (3. 72). In order to establish this new area of scientific study of physical education -- comparative physical education, we must first do our best to organize and to refine the methodology for the study. To do this every professional students who are interested in this area of study should try to elaborate on this problem and to communicate with each other in one country and internationally, and should consciously and conscientiously try to contribute to the development of the scientific study of physical education and to the international understanding.

IV. Treatment of Results in Comparative Physical Education

The last problem of this study was to delineate how to treat the data in comparative physical education. Comparative educationists contend that it is not enough only to describe facts about the national systems of education in other countries. They put more emphasis on the interpretation of data in terms of the knowledge of the background forces which characterize the national systems of education rather than on the mere correct description of the facts.

There are several rules which guide the procedure of treating the results. Those are:

(a) The relevant facts collected should be described as accurately as possible.

(b) An important thing is to interpret the systems utilizing the knowledge of their determining forces.

(c) The investigator should not evaluate other national systems. There is no standard for scoring them.

(d) The investigator should always hold a sympathetic attitude, critical thinking, open-mindedness, and scientific honesty.

(e) The terminology must be defined as clearly as possible so that the findings may allow comparison with those of other studies.

Bereday describes four mechanics of analysis in comparative education, which are as follows: (14: x-xi)

(1) Description — collection of pedagogical facts.
(2) Interpretation — the analysis of facts by the methods of different social science.
(3) Juxtaposition — the preliminary comparison of facts.
(4) Comparison — the final fusion of the facts with similarly assembled data from other countries for the purpose of comparison.

These are arranged in a certain hierarchical order from the description to the comparison.

The first stage, the description, is a systematic collection of pedagogical data in one country. It tries to present an exact picture of a living system of physical education. Information must be described clearly so that the facts of the system and its background factors may be transmitted to other readers without any misproduction.

The second stage, the interpretation, is a step of explaining the educational facts according to the knowledge obtained from other sociological, political, historical, philosophical, and psychological disciplines. Education or physical education is an intentional and purposeful act in human society. Its phenomenal character is determined by the deep and wide living circumstances such as socio-cultural, economic, political, geographical, and historical factors.
Without utilizing these other sociological sciences, it is difficult for us to understand the real situation and meaning of the system of physical education.

The third stage, the juxtaposition, may be called a semi-comparison in which descriptive or explanatory information of several or many national systems of physical education is accumulated, arranged and put together independently in one place according to the prescribed hypotheses. This is not yet called a true comparative study, but a preparatory stage for the final comparison.

The fourth and the last stage is comparison, on which Bereday writes:

……the comparison entails a simultaneous treatment of several and all countries studied to prove the hypothesis derived from the juxtaposition. A comparison is in a first analysis an ordering process; it means not laying out but high-lighting educational materials previously processed (14: 22).

In his recent paper (20: 175) he divided this into two types, a 'balanced' and an 'illustrative' comparison. He emphasized the necessity at present of developing the former. According to him, it is a symmetric shuffling back and forth between the areas under study. The essence of this method is that every type of information from one country must be matched, 'balanced', by comparable information from other country (20: 177). In illustrative method, according to him, educational practices in different countries are drawn at random as illustrations of comparative points suggested by the data. In illustrative comparison no generalizations are possible, hence no laws can be arrived at or deducted (20: 178).

King and several other comparative educationists warn us by writing that "what looks like the same problem may have a totally different significance in two or more concepts. (13: 149)"

In conducting a total comparative analysis researchers must refrain from formulating overall generalizations (14: 3). The last analysis in comparative study must proceed very carefully and students should concentrate on presenting eyewitness point-by-point accounts which should be repeated as vital primary sources (14: 32).

**Selected Bibliography**

1) **Anthony, Don:** "Physical Education as an Aspect of Comparative Education", Gymnasion, 3: 2: 3～6, Summer, 1966.
2) **Anthony, Don:** "Comparative Physical Education", Physical Education, 58: 175: 70～73, November, 1966.
8) **Hilker, Franz:** Vergleichende Pädagogik, München: Max Hueber Verlag, 1962.

(Translated into Japanese)
Ishikawa: A Methodology of Comparative Physical Education


