

# **Analyzing Purpose Concepts among Students and Teachers in an Existing Curriculum of Physical Education at Secondary Schools**

**Sinbok Kang**

*Department of Physical Education*

## **I. Introduction**

### *The Purpose of the Study*

The main purpose of the current physical education program is to promote a desirable attitude as well as to improve the good health of the students. Consequently, school programs are designed to help students develop this desirable attitude all throughout their lives, and to function as a mediating stages to obtain this goal. It is true that school programs have not fulfilled such social and educational functions and have thereby been criticized. The criticism is that physical education classes were degraded because of the irregular curriculum, the overemphasis of entrance examinations, the lack of facilities and equipment, the financial deficit, the insufficient quality of teachers, and the school administrators' biased view towards physical education.

The success of school programs is dependent upon the reasonable organization and effective operation of the curriculum (Sinbok Kang, 1985). With reference to this, Sinbok Kang (1985) points out the six emerging problems in organizing and operating the physical education curriculum of elementary and secondary schools.

These six problems are as follows:

(1) The question of the choice between the internal (intrinsic) and external (extrinsic) objectives should be accounted for.

(2) The confrontations and coordinations between explicit (stipulated) and implicit (latent) objectives in physical education curriculum purposes and contents.

(3) The relationship, especially inter-relationships, in organizing physical education learning contents.

(4) The problem of ascertaining whether physical education should be realized as "product" or as "process".

(5) The development and operation of attractive physical education programs for students.

(6) The uniformity of instruction and evaluation methods.

The solution of these problems is dependent upon the clarification of what the curriculum is, what its influence is and who determines it.

Of utmost importance is who determines the curriculum at which level. Goodlad (1979) has proposed a theoretical framework for curriculum composed of five domains: the formal (at the national level), the operational (at the observer's level), the experiential (at the students's level), the perceived (at the teacher's level), and the ideological curriculum domains. The formal curriculum is represented by documents developed by the Ministry of Education or related institutions. The operational curriculum is what actually occurs in learning situations. The experiential curriculum is what is felt and understood by students in educational activities. The perceived curriculum is the teachers' perceptions of what has been taught. Finally, the ideological curriculum reflects the values and beliefs of subject matter by experts not associated directly with the school system.

Though these curriculum domains may be classified by the curricular decision making level, they should not be mutually exclusive, but functionally related and even complementary. It is necessary to ascertain whether the current physical education curriculum domains are mutually exclusive or complementary, in order to assess the extent to which education purposes are realized and justified.

The purpose of the present study is to analyze purpose concepts of the existing physical education curriculum in high schools using the four curriculum domains (the formal, the operational, the experiential, and the perceived curriculum) classified by Goodlad (1979), and to provide basic directions and guidelines to develop a new physical education curriculum for secondary schools.

### *Limitations of the Study*

The present study has some limitations as revealed below:

(1) Among the curriculum domains classified by Goodlad, the ideological domain is excluded in this study.

(2) Purpose concepts of this study are based on 22 purpose concepts in the Purpose-Process Curriculum Framework (PPCF) developed by Jewett and Mullan (1977).

(3) The analysis of the formal curricular content of this study is limited only to such data sources as, the physical education curriculum guide of secondary schools, the authorized textbooks of secondary schools, and the physical education curriculum of the Ministry of Education.

(4) The variables that occurred by non-participant observation of the operational curriculum are not completely controlled.

(5) The subjects of non-participant observation are limited to the contents of three activities of physical education : ball games, track and field, and gymnastics.

### *Definition of Terminology*

#### (1) Formal Curriculum

The formal curriculum is a plan of the documented learning procedures, including the official curriculum developed by the Ministry of Education, curriculum guides, curriculum materials, and textbooks.

#### (2) Operational Curriculum

The operational curriculum is comprised of the operational phenomena which occur in actual learning situations as suggested by an outside observer.

#### (3) Experiential Curriculum

The experiential curriculum is comprised of the learning experiences of students in educational settings as really felt and understood by curricular or extracurricular programs and interschool matches.

#### (4) Perceived Curriculum

The perceived curriculum consists of educators' perceptions of what has been taught in educational settings.

## II. Review of Literature

The process of newly organizing or reorganizing an educational curriculum is complicated. The curriculum is drafted by many professional educators after full discussion, and adjusted through large or small public hearings, and then announced by the Ordinance of the Ministry of Education.

How the established curriculum by the Ordinance of the Ministry of Education is introduced into school settings, and what kind of educational growth it will bring to the students rests entirely with the operational method of the curriculum (Hokwon Kim and others 1977). According to how and by whom it is developed, an education curriculum can be applied quite differently, in the same way as a dance performance could be either successful or unsuccessful according to the capabilities and sensibilities of choreographer and performers.

The curriculum of each course is unique, but its domains are differentiated according to who determines the curriculum at which level. Hokwon Kim and others (1977) have proposed the curriculum as the approved objective of the Ordinance of the Ministry of Education, the curriculum as a reflection of students' experiences in the classes, and the curriculum as a learning achievement. Jongsoe Kim (1989) has proposed the curriculum at the national and social level and the curriculum at the students's level. Goodlad (1979) has proposed the formal curriculum represented by documents developed by the Ministry of Education or related institutions, the operational curriculum that actually occurs in learning situations by school administrators or teachers, the experiential curriculum felt and understood by students in educational activities, the perceived curriculum perceived by teachers as what has been taught, and the ideological curriculum reflecting values and beliefs of subject matter developed by experts not associated directly with the school system.

Goodlad (1979) has proposed a theoretical framework for a curriculum composed of five domains and states that they should interact with each other. The formal curriculum is a plan of the documented learning procedures. including the

curriculum of the Ministry of Education, curriculum guides, curriculum materials, and textbooks. It includes public or private documented materials systematically selected and organized from a series of learning activities to be acquired by students. Consequently, the formal curriculum usually refers to the explicit aspect of learning plans.

The operational curriculum is comprised of the operational phenomena which occur in actual learning situations. It is easy to assess the operational conditions of the operational curriculum by observing the behavior of school administrators, teachers, and learners. Because the real operational aspect of the operational curriculum is emphasized, the main curricular concern is how the curriculum should be related and applied properly to teaching activities by school administrators and teachers.

The experiential curriculum is comprised of learning experiences really felt and understood by the students in educational settings. The primary concern of this curriculum is mainly how to deal with the internal and latent aspect of the learners. The problem of how the learners feel about, and understand the subject matter, teachers, and many curricular activities, is closely related to the problem of how students perceive the curriculum. Consequently, this curriculum domain should not be neglected in the school curriculum.

The perceived curriculum consists of teachers' perceptions of what has been taught in the classroom. It is influenced directly by teachers' values and experiences as well as their perceptions of the school environment.

The ideological curriculum reflects the values and beliefs of subject matter experts not associated directly with the school system. It includes the philosophy and explicit assumption of subject matter, and it is represented by selected textbooks in local areas or in curriculum packages (Ennis, 1985).

Traditionally, curriculum specialists have collected and analyzed data within only one of the curriculum domains, and only a few investigations of two or more curriculum domains have appeared (Ennis, 1985).

The previous investigations of only one curriculum domain are as follows: "Description of the hidden curriculum in secondary physical education" by Bain (1976), "An ethnography of a

physical education class", "An experiment in integrated living", by Wang (1977), "Gymnastics is a girl's thing: student participation patterns in a middle school gymnastics unit", by Giffin (1983), "Content analysis of physical education curriculum", by Jongson Kim (1980), and "The experience of movement in physical education: A phenomenology", by Kollen (1981).

The previous investigations of two or more curriculum domains are as follows: "A study on ranking of physical education objectives", by Hungwhan Koh, et al. (1982), and "Analyzing curriculum as participant perspectives", by Ennis (1990). While these investigations have not viewed this curriculum across all possible domains, they have contributed an important step in the development of methodologies with regard to the complexities of the educational environment.

### **III. Methods**

#### *Subjects*

For this study, 12 senior-high schools located in Seoul were randomly sampled. The subjects of each curriculum domain are shown in Table 1.

#### *Data Collection*

For the analysis of purpose concepts in the current physical education curriculum of high schools, the procedure of data collection is as follows: ① non-participant observation for the operational curriculum; ② questionnaires for the experiential and the perceived curriculum; and ③ content analysis for the formal curriculum. This sequencing of the data collection is intended to minimize observer biases throughout the observation of the operational curriculum and also to increase the objectivity of the questionnaire of experiential and perceived curriculum domains.

Data collection in the operational curriculum domain consisted of non-participant observation. In this procedure, the frequency of the phenomena related to purpose concepts that occurred in educational settings was marked in a checklist. Data in the perceived and experiential curriculum domains were collected using questionnaire and interviews. In this procedure,

**Table 1.**  
Subjects of the Study by Curriculum Domains

Domains	Operational			Experiential			Perceived	Formal
	Class			Student				
Subjects							Teacher	Documents of Physical Education Curriculum
Gender	10th grade	11th grade	12th grade	10th grade	11th grade	12th grade		
Men (6 schools)	3	3	3	60	60	60	30	Physical Education Textbook
Women (6 schools)	3	3	3	60	60	60	30	Curriculum developed by Ministry of Education Curriculum Guide On Curriculum & Instruction
Total	18			360			60	

360 students and 60 teachers were asked to respond the questionnaire, The High School Movement Purposes Inventory (HSMPI), of purpose concepts by 9-point scale rating. The HSMPI consisted of 22 purpose items derived from the Purpose Process Curriculum Framework (Jewett and Mullan, 1977; Ennis, 1985). Sixty students and 10 teachers were interviewed and asked to identify certain instances where each of the purpose concepts were taught or experienced. Sixty students were selected from 360 students by physical education teachers; ten students were randomly selected from 60 students by the investigator.

### *Data Analysis*

Data analysis techniques of this study were specific to the method of data collection selected in each domain. Qualitative analysis strategies were used in all curriculum domains. Quantitative strategies were used in the perceived and the experiential curriculum domains.

#### (1) Qualitative Data Analysis

##### ① Operational Curriculum

Data collected by non-participant observation was recorded in Field Notes, and then were analyzed using Typological Analysis Strategy and Analytic Inductive Strategy.

##### ② Experiential and Perceived Curriculum

Data collected by indepth interviews was analyzed using Constant Comparative Strategy.

##### ③ Formal Curriculum

Data collected by content analysis strategy was analyzed using Constant Comparative Strategy.

#### (2) Quantitative Data Analysis

The mean (M) and standard deviation (SD) for purpose concept scores of the experiential and perceived curriculum were computed.

The questionnaire (HSMPI) was the focus of the quantitative data analysis. The purposes of the analysis were (1) to identify the meaningfulness of purpose concepts in the experiential domain and (2) to identify student variables within the experiential domain which may lead to unique perceptions of a purpose concept. The HSMPI was analyzed by purpose concept to maintain the independence of the concept and to be consistent with other strategies of data analysis used in the

study (Ennis, 1985).

#### **IV. Results**

The results of the analysis of purpose concepts in the current physical education curriculum of high schools are as follows:

##### **(1) Operational Curriculum**

By observing and analyzing 18 physical education classes of senior-high schools, 12 purpose concepts were identified. These purpose concepts were circulo-respiratory efficiency, leadership, object projection, joy of movement, teamwork, awareness, competition, neuromuscular efficiency, challenge, mechanical efficiency, movement appreciation, and object reception.

##### **(2) Experiential Curriculum**

Three hundred sixty high school students were asked to respond to the questionnaire (HSMPI for students) about personal experiences with regard to the 22 purpose concepts of the PPCF (Purpose-Process Curriculum Framework). By analyzing the responses to the questionnaires, 12 purpose concepts were identified. These purpose concepts were self-knowledge, participation, object projection, teamwork, joy of movement, maneuvering weight, competition, neuro-muscular efficiency, challenge, circulo-respiratory efficiency, object reception, and mechanical efficiency. Means for these purpose concepts by 9-point scale rating were above 7.00.

By analyzing the interview data of 60 high school students, 18 purpose concepts were identified with the exception of such purpose concepts as, cultural understanding, movement appreciation, relocation, and relationship.

##### **(3) Perceived Curriculum**

Sixty teachers were asked to respond the HSMPI questionnaire about personal recognition of the 22 purpose concepts of the PPCF. By analyzing the responses, 14 purpose concepts were identified with the exception of such purpose concepts as challenge, awareness, relationship, leadership, movement appreciation, cultural understanding, clarification, and simulation.

The interview data of 10 teachers was used to identify specific examples of purpose concepts in the perceived curriculum. The

analysis of the teachers' interview data validated most of the purpose concepts of the PPCF. Teachers identified some specific instances which they believed fulfilled the purpose concepts.

#### (4) Formal Curriculum

Through the content analysis of textbooks, the curriculum developed by the Ministry of Education and curriculum guides, 10 concepts were identified; self-knowledge, object reception, teamwork, joy of movement, neuro-muscular efficiency, challenge, circulo-respiratory efficiency, expression, maneuvering weight, and mechanical efficiency.

Results of the triangulation of data across all four domains identified the extent to which purpose concepts were present in the curriculum domains. As shown in Table 2, 18 of the 22 purpose concepts were present in the existing curriculum. Six purpose concepts were present in all four curriculum domains. These purpose concepts were circulo-respiratory efficiency, mechanical efficiency, neuro-muscular efficiency, joy of movement, object reception, and teamwork.

Five purpose concepts were present in three curriculum domains. These purpose concepts were self-knowledge, challenge, maneuvering weight, object projection, and competition. Two purpose concepts were present in two domains. These purpose concepts were expression and participation. Five purpose concepts were present in one domain. These purpose concepts were catharsis, awareness, relocation, leadership, and movement appreciation. Finally, four purpose concepts were not present in the curriculum domains in the school system under investigation. These purpose concepts were relationship, clarification, simulation, and cultural understanding.

## **V. Conclusions**

The results of the study suggest that the existing physical education curriculum should be described through an analysis of purpose concepts in four curriculum domains.

Qualitative data analysis of the study can be used to identify specific properties of purpose concepts in the operational, the experiential, and the perceived curriculum domains. Purpose

**Table 2.**  
Purposes Present in the Curriculum Domains

Purpose Domains	Operational	Experiential	Perceived	Formal
1. Circulo-Respiratory Efficiency	○	○	○	○
2. Mechanical Efficiency	○	○	○	○
3. Neuro-Muscular Efficiency	○	○	○	○
4. Joy of Movement	○	○	○	○
5. Self-Knowledge		○	○	○
6. Catharsis			○	
7. Challenge	○	○		○
8. Awareness	○			
9. Relocation			○	
10. Relationship				
11. Maneuvering Weight		○	○	○
12. Object Projection	○	○	○	
13. Object Reception	○	○	○	○
14. Expression			○	○
15. Clarification				
16. Simulation				
17. Teamwork	○	○	○	○
18. Competition	○	○	○	
19. Leadership	○			
20. Participation		○	○	
21. Movement Appreciation	○			
22. Cultural Understanding				

concept data in the perceived curriculum domain can be analyzed further to identify explicit and implicit purpose concepts.

Quantitative and qualitative methodologies of this study can be very useful in the identification and validation of purpose concepts across four curriculum domains. The combination of the two methodologies can facilitate the basic inquiry in the educational environment. In fact, it is a complex undertaking to clearly design and conduct the study of a physical education curriculum. The use of multiple data collection and analysis strategies can provide the recognition and solutions of problems which might occur in developing physical education curriculum within the school settings.

### References

- Kang, Sinbok. (1985). "New Directions for Development of Physical Education Curriculum," *4th Seminar of Korean Society of Physical Education*.
- Kim, Jong-seo. (1989). *Modern Education and Curriculum*, Seoul: Bakyongsa.
- Kim, Hokwon et al. (1977). *Education Curriculum*, Seoul: Education Pub. Co.
- Bain, L.L. (1976). "Description of the Hidden Curriculum in Secondary Physical Education," *Research Quarterly*, 47(2), 154-160.
- Ennis, C.D. (1985). "Purpose Concepts in an Existing Physical Education Curriculum," *Research Quarterly for Exercise and Sport*, 56 (4), 323-333.
- \_\_\_\_\_ (1990). "Analyzing curriculum as participant perspectives," *Journal of Teaching Physical Education*.
- Goodlad, J. (1983). *Curriculum Inquiry*, New York: McGraw-Hill.
- Griffin, P.S. (1983). "Gymnastics in a Girl's Thing: Student Participation Patterns in a Middle School Gymnastics Unit" In T.J. Templin & J.K. Olson (eds.). *Teaching in Physical Education*, Reading, MA: Addison-Wesley.
- Jewett, A.E. and L.L., Bain. (1985). *The Curriculum Process in Physical Education*, Dubuque, Iowa: Wm.C. Brown Publishers.
- Jewett, A. and Mullen, M. (1977). *Curriculum Design: Purposes and Processes in Physical Education Teaching-Learning*, AAHPERD.

- Kollen, P. (1981). *The Experience of Movement in Physical Education: A Phenomenology*, Unpublished doctoral dissertation, Univ. of Michigan.
- Steinhardt, M.A. (1988). "An Analysis of the Purposes for Engaging in Physical Activity Scale (PEPAS) as an Instrument for Curriculum Research," *Research Quarterly for Exercise and Sport*, 59(4), 39-350
- Wang, B.N. (1977). *An Ethnography of a Physical Education Class: An Experiment in Integrated Living*, Unpublished doctoral dissertation, Univ. of North Carolina at Greensboro.