

Curriculum Orientation of Pre-Service Physical Education Teachers

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Abstract: A curriculum orientation refers to the common belief system that is related to elements of curricula. A person's curriculum orientation is important because it reflects his/her point of view, values and knowledge. It shows how educators perceive curriculum and put theoretic perspectives into practice. This study was conducted to evaluate ideas of final year pre-service physical education and sports teachers on curriculum developing orientations using a descriptive method. The study population consisted of 165 pre-service physical education and sports teachers in the final year of their education within the 2012-2013 academic period. Data was collected through the Curriculum Orientation Inventory developed by Cheung and Wong (2002). The study found that most of participants adopted a humanistic approach. Other adopted approaches were cognitive, technologic/system, academic and reconstructivist, respectively. It was found that there was no difference in curriculum orientation according to gender and academic success, and there was a strong correlation between humanist and technologic/system approaches.

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1. Introduction

Curriculum orientation is defined as a common belief system about curriculum elements such as objective, content, education and evaluation (Cheung and Wong, 2002). According to Ornstein and Hunkins (1988), a person's curriculum orientation is important because it reflects his/her point of view, values and knowledge. The educational design that an educator chooses to give is in line with their curriculum orientation and can also be explained by their philosophical world view. In this manner, curriculum orientation shows how educators perceive curriculum and put theoretic information into practice (Bay et al., 2012).

Curriculum orientation is defined by many researchers with similar classifications (Eisner and Vallance 1974; Ornstein and Hunkins, 1988; Mc Neil, 1996; Cheung and Wong, 2002).

Cheung and Wong (2002) classified curriculum orientation as an academic, cognitive, reconstructivist, humanistic and system (technologic) orientation. This current study uses this classification. Approaches and features of this classification can be summarized as follows:

Academic orientation is defined as a traditional, encyclopedic or information-based orientation (Ornstein and Hunkins, 1988; as cited by: Bay et al., 2012). The academic curriculum orientation argues that the priority of a curriculum should be to improve the intellectual, logical thinking ability and research skills of learners in a certain field

(Cheung and Wong, 2002). According to Tanner and Tanner (1995), this orientation attaches importance to traditional academic studies rather than to the needs of students or modern social problems.

Cognitive processes orientation focuses on the learning process rather than curriculum content and considers the objective of curriculum as the development of thinking skills and abilities of students. This orientation aims to develop learners' problem solving skills that are encountered during cognitive processes. Supporters of this orientation argue that transferable, high level cognitive skills are more important than information, especially with regard to student learning methods. Although information can be lost, high level cognitive skills are permanent (Cheung and Wong, 2002; Jenkins, 2009).

Social reconstructivist orientation considers school curriculum as an instrument to ease social transition. According to this orientation, the objective of a general education is to lay ground for change and to encourage social transition in order to improve social conditions. For this reason, students should be allowed to analyze humanity's social problems in a critical way (Cheung and Wong, 2002; Jenkins, 2009). The curriculum should be suitable for both the individual and society. In this orientation, school curricula should include a variety of practices that contribute to the solution of social problems (Bay et al., 2012).

Technologic (system) orientation is influenced by the behavioral approach and, especially, Skinner's operant conditioning theory (Eisner and Vallance, 1974; Joyce et al., 2000; McNeil, 1996; Schubert, 1986). This orientation is based on the idea that school curricula should be prepared in line with predetermined learning targets. In other words, systematic curriculum planning and educational effectiveness are very important to this orientation. The objective of the curriculum is to obtain monitorable and measurable reactions at the end of the learning-teaching process (Good and Brophy, 1995; Good and Berger, 1998; Hashim and Chan, 1997; Jenkins, 2009).

Humanistic curriculum orientation is based on humanistic psychology and child-centered education (Bybee and Welch, 1972). This orientation gained importance in the 1940s and 1950s with the development of humanistic psychology (values, ego, identity, psychological health, and the freedom to learn) (Ornstein and Hunkins, 1988). Supporters of this orientation argue that other curriculum orientations are technocratic and neglect the social aspects of the curriculum while dealing with science and reason; thus, they rarely provide opportunities for students to realize themselves. As a result, those orientations overlook socio-psychological dynamics of the classroom and school. Supporters of this orientation argue that learners should be the center of school curricula. The aim of education is to encourage students to become unique individuals. (Jenkins, 2009). According to this orientation, significant experiences and emotional development should be focused on in order to enable students to realize themselves and develop healthy selfhood (Ng and Cheung, 2002).

As mentioned, the academic curriculum orientation argues that the transfer of information should be focused on the intellectual development of learners; cognitive processes orientation argues that cognitive processes such as analysis and synthesis, are more important than direct teaching of information; social reconstructivist orientation argues that the resolution of social problems should be the basis of curricula; humanistic orientation argues that curricula should allow people to realize themselves and technologic orientation argues that curricula should be target oriented.

This study aimed to determine the ideas of pre-service physical education teachers regarding these orientations. The determination of orientations adopted by pre-service/ physical education teachers can provide data on how to apply physical education and sports curriculum. For example, if a teacher adopts an academic curriculum orientation, s/he can attach more importance to academic content and

activities within the curriculum. From this viewpoint, it is important to determine the curriculum orientations of pre-service teachers and take necessary precautions to fulfill the aims of the curriculum.

There is no study that determines the curriculum orientations of pre-service physical education teachers in the literature. This study is important, especially in Turkey, because it contributes to the literature about this issue and reveals the curriculum orientation of pre-service physical education and sports teachers.

Aim of the Study, this study was conducted to evaluate ideas of final year pre-service physical education and sports teachers on curriculum developing orientations using a descriptive method. In this scope, the following questions were asked:

1. What is the level of ideas of pre-service physical education teachers on curriculum orientation?
2. Is there a significant difference between the ideas of pre-service physical education teachers on curriculum orientations according to gender and academic status?
3. Is there a correlation between the curriculum orientations of pre-service physical education teachers?

2. Material and Methods

This is a descriptive study conducted in scope of a screening model. According to the screening model, the incident, person or object to be researched is defined within its own conditions (Karasar, 2002). In line with this method, the existing circumstances of pre-service teachers' curriculum orientation were investigated.

Study Sampling

The study population consisted of 165 final year pre-service physical education teachers in the Physical Education and Sports Teaching Department in a High School of Physical Education and Sports. Frequency and percent values of sampling are presented in Table 1.

Table 1. Frequency and Percent Values of Sampling

		Frequency	Percentage
<i>Gender</i>	Female	84	50.9
	Male	81	49.1
<i>Age</i>	21	42	25.5
	22	66	40.0
	23	57	34.5
<i>Grade Point Average</i>	Between 1.0 and 2.5	117	70.9
	Between 2.6 and 4.0	48	29.1

Data Collection Instrument

In this study, data was collected through the Curriculum Orientation Inventory developed by Cheung and Wong (2002). This collection instrument was adapted into Turkish by Eren (2010) after confirmative factor analysis. Being obtained from confirmative factor analysis, which was conducted by Bay et al. (2012), fit indexes of the model were investigated. It was found that Chi-square value ($\chi^2=627.36$, $sd=359$, $p=0.00$) was significant. Fit indexes were found as RMSEA= .050, RMR= .04 NFI= .93, CFI= .97, IFI= .97 ve RFI= .92.

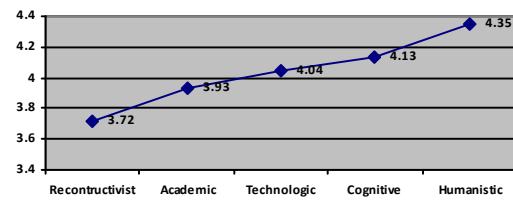
Analyses conducted by Eren (2010) and Bay et al. (2012) found that the reliability coefficient of the assessment instrument was sufficient. In this study, the Cronbach Alpha reliability coefficient of the assessment instrument was calculated as 0.90. Correlation values of items in the assessment instrument with a total score that varies between 0.261 and 0.807 and $p<.01$ refers to significancy level.

This assessment instrument consists of academic, cognitive processes, social-reconstructivist, humanistic and system (technology) factors. There are six items to determine teacher orientations in each sub factor. The scores to be taken from each factor vary between 6-30.

Sample items related to each dimension of the assessment instrument are as follow:

Item	Orientation
- Interests and needs of students should be the basis of curriculum developing.	Humanistic
- Research methods is the most important learning field of primary and secondary school curricula.	Cognitive
- Learning should consist of certain systematic methods.	Technologic-System
- Students learn in the best way when they are allowed to analyze, investigate and evaluate real social problems.	Reconstructivist
- Curriculum should require teachers to teach the most important and best field content to their students.	Academic

The assessment instrument was found to be sufficiently reliable, valid, and regarded as suitable for the aim of the study. This instrument was applied to 20 final year pre service physical education and sports teachers at nine universities in Turkey. 15 deficient or defective scales among 180 scales were excluded.



Graph 1. Values Related to Curriculum Orientations of Pre-Service Physical Education Teachers

Data analysis

The SPSS 17.00 program was used to analyze data obtained from the assessment instrument. Mean, standard deviation, minimum and maximum scores of each sub-dimension was calculated in the data analysis. The following comments were used while interpreting the arithmetic means. In addition, the one-direction MANOVA was performed to determine any difference between curriculum orientations according to independent variables. As the variance equation was obtained through MANOVA, The Tukey test was used among multiple comparison tests (Post Hoc) in order to explain differentiations between groups. Pearson Moments Correlation was calculated to determine any correlation between curriculum orientations. Values used to interpret means were ranged as “1.00 - 1.80= Very low”, “1.81 - 2.60= Low”, “2.61 - 3.40= Medium”, “3.41 - 4.20= High”, “4.21 - 5.00= Very high”.

3. Findings

Findings of the first sub-problem.

This study aimed to determine the level of curriculum orientations of pre-service teachers regardless of variables. The obtained findings are presented in Table 2.

Table 2. Values Related to Curriculum Orientation of Pre-Service Physical Education Teachers

	N	Min.	Max.	Mean	S.d.	Comment
Humanistic	165	3.33	5.00	4.35	.42	Very high
Cognitive	165	3.33	5.00	4.13	.33	High
Technologic-System	165	2.83	5.00	4.04	.43	High
Academic	165	2.33	5.00	3.93	.52	High
Reconstructivist	165	2.67	4.83	3.72	.52	High

As can be seen in the Table above, the most preferred curriculum orientation of pre-service teachers is the humanistic orientation, which is at a

very high level ($\bar{X}=4.35$). It can be seen that other curriculum orientations are high as well and the ranging of these orientations is as cognitive, technologic, academic and reconstructivist.

Findings of second sub-problem.

The aim was to determine whether there is any difference between the curriculum orientations of pre-service physical education teachers according to the variable, 'gender'. The obtained findings are presented in Table 3.

Table 3. Comparison of Curriculum Orientations of Pre-Service Physical Education Teachers According to Gender

	Male		Female		F	p
	\bar{X}	sd	\bar{X}	sd		
Academic	3.94	.61	3.92	.45	.037	.848
Cognitive	4.17	.31	4.09	.36	.732	.396
Reconstructivist	3.77	.53	3.68	.53	.430	.515
Humanistic	4.32	.44	4.38	.40	.276	.601
Technologic-System	4.01	.51	4.08	.34	.368	.547

Wilks' Lambda=.953; $F_{(1,53)}=0.478$; $p=,0.79$

* $p>.05$ Insignificant

One-direction MANOVA was applied to determine whether there is a significant difference between the curriculum orientations of pre-service physical education teachers according to 'gender' variable. According to this analysis, no difference was found between curriculum orientations of pre-service physical education teachers according to 'gender' variable.

The aim was to determine whether there is any difference between the curriculum orientations of pre-service physical education teachers according to the variable of 'grade point average'. The obtained findings are presented in Table 4.

Table 4. Comparison of Curriculum Orientations of Pre-Service Physical Education Teachers According Grade Point Average

	Between 1.0 and 2.5		Between 2.6 and 4.0		F	p
	\bar{X}	sd	\bar{X}	sd		
Academic	3.99	.46	3.77	.67	2,087	.154
Cognitive	4.13	.31	4.13	.41	.014	.907
Reconstructivist	3.79	.55	3.56	.43	2.203	.144
Humanistic	4.38	.37	4.27	.53	.829	.367
Technologic-System	4.04	.31	4.06	.65	.023	.879

Wilks' Lambda= .862; $F_{(1,53)}=1.567$; $p= .187$

* $p>.05$ Insignificant

One-direction MANOVA was applied to determine whether there is a significant difference between curriculum orientations of pre-service physical education teachers according to grade point averages. According to this analysis, no difference was found between the curriculum orientations of pre-service physical education teachers according to 'grade point average'.

Findings of third sub-problem.

The aim was to determine whether there is any significant relationship between curriculum orientations of pre-service physical education teachers. The obtained findings are presented in Table 5.

Table 5. Correlation Values between Curriculum Orientations of Pre-Service Physical Education Teachers

	1	2	3	4	5
1.Academic	1	.435**	.031	.177	.078
2.Cognitive		1	.518**	.449**	.403**
3.Reconstructivist			1	.552**	.398**
4.Humanistic				1	.750**
5.Technologic-System					1

** $P<0.01$ significant

As can be seen in the Table, there is a positive relationship at the medium level between academic and cognitive curriculum orientations. It was found that there are positive relationships at the medium level between cognitive and reconstructivist orientations, and humanistic and technologic orientations. Furthermore, there is a positive relationship at the medium level between the reconstructivist and humanistic orientation and positive and weak relationship between the reconstructivist and technologic-system orientation. It was found that there is a positive and strong relationship between humanistic and technologic-system orientation.

4. Discussions

This study was conducted to evaluate ideas of final year pre-service physical education and sports teachers on curriculum developing orientations using the descriptive method.

The study found that most of the participants adopted a humanistic approach. Other adopted approaches were cognitive, technologic/system, academic and reconstructivist, respectively. Studies conducted by Bay et al. (2012) and Eren (2010) also found that the most preferred orientation was humanistic orientation. The humanistic orientation enables students to realize themselves. The field of physical education and sports is also a field that helps

people realize themselves as individuals. Learners are, therefore, the basis of curricula in this field. For this reason, the preparation and implementation of curricula on physical education and sports in line with this goal are effective factors.

No statistically significant difference was found between the curriculum orientations of pre-service physical education and sports teachers according to the 'gender' variable. In the literature review, some studies on this issue (Cheung and Wong, 2002; Bay et al., 2012) found that there is no significant difference between curriculum orientations according to gender which present similarly to the results of the present study. In the literature, there are also studies which found significant differences between various curriculum orientations according to the 'gender' variable. Crummey (2007) found that male teachers the adopt system/technology curriculum orientation significantly more than female teachers. Reding (2008) found that female teachers and managers adopt a humanistic orientation more than males. Jenkins (2009) found that female teachers adopt a humanistic and eclectic orientation more than male teachers. To conclude, the present study found that there is a significant different between curriculum orientations according to the 'gender' variable although some other studies reported that gender is an effective factor in various curriculum orientations. In addition, it was found that participants lean towards the humanistic dimension with the rate of ($\bar{X}=4.38$) and the technologic-system dimension with the rate of ($\bar{X}=4.08$). The present study did not find any significant differences according to the 'grade point average' variable.

According to the analysis, it was found that there is a positive correlation at high levels between the humanistic and technologic/system orientation of participants with $r=.750$, $p<.01$. Cheung and Wong (2002) found that there is a high correlation between humanistic and technologic orientations similar to the findings of the present study. It was also found that there are positive relationships at the medium level between cognitive and reconstructivist orientations, and humanistic and technologic orientations. Furthermore, there is a positive relationship at the medium level between reconstructivist and humanistic orientations and weak and positive relationship between reconstructivist and technologic-system orientations. In the academic orientation, no significant correlation was found between the humanistic, technologic, reconstructivist orientations. In the literature, it is reported that curriculum orientations are not isolated from each other and do not have a systemic structure (Cheung

and Wong, 2002; Eren, 2010). Findings related to the relationship between factors are similar to other results in the literature.

To conclude, teachers are expected to apply official curricula in schools. Teachers should primarily adopt a certain curriculum orientation in order to apply official curriculum in a desired and expected way. In this manner, teachers of the future should have a prevailing curriculum orientation. For this reason, teacher training programs and learning processes should be prepared in line with official curricula in order to obtained desired results.

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