

## A NEEDS ANALYSIS OF CHARACTER EDUCATION ON SOCIO-BIOLOGICAL HUMAN EXPLORATION USING BORICH PRIORITY AND LOCUS FOR FOCUS MODEL

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### ABSTRACT

The development of the industrial economic system radically shifted the values of our civilization and modern industrial society transformed humans into selfish people. Ethical education provides a platform for our students to explore the infinite variety and richness of mankind. In this study, we investigated how students' perceptions of twenty-three questionnaires for character education changed with the passage of time. For this study, the need analysis was conducted by using focus individual interview, Borich's educational need equation and the Locus for Focus Model, and highly ranked priorities on both methods proposed as the highest priorities. According to the locus for focus type model, 'Service' appeared as HH belonging to the first quarter. After one semester class, students' perception changes were examined. 'Understanding', 'Practice', and 'Legal & Social systems' were statistically significant difference. Completion of a social biology course at a university is motivating and exciting to think about moral thinking.

**Keywords:** Borich's educational need, character education, ethical education, Locus for Focus Model.

### INTRODUCTION

The teaching of ethics includes the formation and the promotion of a personal commitment to the dignity and freedom of all human beings, the importance of human rights and responsibilities, the place of justice within society, and the service of the common good. Morality, ethics, values, and the recognition of a human being as relational being are central to social and spiritual development. This course will provide students with the opportunity to enhance their critical thinking and self-awareness skills through the exploration and questioning of personal and societal values. It has been recognized policy for individual schools within Educate Together to develop their own Ethical Education Curricula (Kelleher et al., 2004). While the statement of aims and objectives for these individual curricula may vary in approach and in the priority afforded to specific themes, each curriculum is compatible with the Educate Together philosophy. This philosophy recognizes that the spiritual dimension of student's lives within Educate Together schools is nurtured and that children are made aware of a sense of moral and ethical standards in the areas of honesty, respect, justice, integrity, trust and responsibility.

The Ethical Education Curriculum is intended to support schools in the task of developing individual school programs which reflect the four key principles and recognize the moral and spiritual dimensions of student's growth and development. The subject is taught in a topical way with a view to our changing society.

Ethical dilemmas that may rise from an interview are difficult to predict but the researcher needs to be aware of sensitive issues and potential conflicts of interest (Orb et al., 2001).

Sociobiology is a field of biology that aims to examine and explain social behavior in terms of evolution. While the term "sociobiology" originated at least as early as the 1940s, the concept did not gain major recognition until the publication of E.O. Wilson's book *Sociobiology: The New Synthesis* in 1975 (Wilson, 1975). The definition of human sociobiology is the study of human behavior based on a Darwinian paradigm (Harpending et al., 1987). Human sociobiology is not particularly concerned with genes, and we suggest below that the most useful contribution of Darwinism to human behavioral science will be a new theory of culture. Sociobiology is important because its theories and findings, however they may be regarded, have challenged sociology to respond to them, just as sociology, in its own way, has challenged Sociobiology to respond to it.

Exploring Humans is a complete overview of the most important currents in the philosophy of science up to the 21st century. It is an outstanding introduction into the philosophy of science for students of sociology as well as economy. Knowledge and attitudes necessary for informed and thoughtful participation in society require a systematically developed programme focusing on concepts from social studies (Oppong, 2012).

The purpose of qualitative studies is to describe a phenomenon from the participants' points of view through interview and observations if there is an impact in students' ethical changes during at "Socio-biological human exploration" lecture class at D University in B City, the Republic of Korea. The curriculum of socio-biological human exploration is the education of a personality with one's own identity, with interiorized ethical standards, with mature moral judgement and therefore with the behavior determined by one's own beliefs; with a positive attitude to himself/herself and other people and that is why he/she is able to cooperate and to initiate cooperation.

## METHODOLOGY

### Subjects

This study conducted in a Dong-eui University. The subject of the analysis is a student who takes the liberal arts course "Socio-biological human exploration" in the first semester of 2018. Ethics and values education is also concerned with respectful attitude towards others (both individuals and communities alike) and putting one's beliefs, attitudes and values into practice and everyday life. This study was conducted according to the development study method of Chi et al. (2004) and their Development and Validation of the Character Index Instrument.

The questionnaire was developed using the previous literature (Chi et al., 2014). The question of the cognitive moral character consists of 23 questions. Twenty-four questionnaires were divided into four groups (Service, Understandin, Practice, and Legal & Social systems) according to their characteristics. After reading each topic, respondents were asked to rate (1 = not at all, 2 = not like that, 3 = yes, 4 = it really is): (a) how important they perceive this topic to be, (b) what their current knowledge of this topic is, and, (c) what would be their opportunity to use information related to this topic in their present job?

Borich priority determination formula (BPD) was calculated using the following formula:

$$BPD = \frac{\sum_{1}^{n}(RCL - PCL) \times avg. (RCL)}{N}$$

RCL: required competency level, each individual's importance score

PCL: present competency level, each individual's performance score  
Avg.: average of importance by each competency.  
N: total number.

Locus for Focus Model were used for the determination of the priority of needs (Mink et al., 1991).

The second quadrant: LH	The first quadrant: HH
The third quadrant: LL	The fourth quadrant: HL

**Table 1. Twenty-three questionnaires for character education at "Socio-biological human exploration" lecture class**

Category	Questionnaire
Service	S-1. It is important to serve others.
	S-2. It is important to care for the weak.
	S-3. It is also necessary to volunteer for other countries in a difficult situation.
	S-4. I have to work hard for my class and for my school.
	S-5. I do not volunteer if I do not help myself.
	S-6. I volunteer for school and community.
Understanding	U-1. It is bad to bully friends at school.
	U-2. I try to understand the suffering of those who are alienated from society.
	U-3. I feel sick when I think of children from other countries who are starving to death because they have nothing to eat.
	U-4. I try to understand openly the attitudes of people and cultures of other countries.
	U-5. It is important to respect other people's feelings.
	U-6. I worry if my friend looks depressed.
	U-7. I am sorry to see people who are homeless on the road because there is no house.
	U-8. I do not care if my friend is in trouble.
Practice	P-1. I would like to participate if I raise funds for people who have been affected by floods.
	P-2. I help when a physically challenged friend needs help.
	P-3. I am comforted if my friend is sad.
	P-4. When I sit on the bus, a person with an uncomfortable body makes a compromise.
Legal & Social systems	L-1. It is important for countries to cooperate to solve the common problems of the world.
	L-2. I need to try to understand people in other environments as well.
	L-3. I am responsible for contributing to national development as a citizen.
	L-4. I think I should work with my friends if necessary for joint and class activities.
	L-5. I think that if you have a friend who is not good at doing group work because of difficulty, you should help him or her.

This study was conducted on students who took a regular education course of a teacher who was selected as a "teaching method research group for reinforcement of learning capacity"

operated by “Teaching and Learning Support Center” of Dong-eui University in Busan city.

### Research limitations

Students who did not complete the questionnaire or who did not submit a report, either a single item or no answer, were excluded from the analysis.

### Statistical analyses

Statistical analysis of data is a key step in every scientific researches. Data were analyzed using the SPSS version 21 (SPSS Inc, Chicago, IL) statistical software package (IBM Corp, 2012). The results were submitted to an ANOVA with an F test, and when relevant, the **Greenhouse-Geisser** (1959) was used to assess the change in a continuous outcome with two observations across time or within-subjects. Means and standard deviations should be reported for each observation of the outcome with Greenhouse-Geisser corrections.

## RESULTS

In this study, we investigated how students’ perceptions of twenty-three questionnaires for character education changed with the passage of time. Table 2 shows the analysis results of the mean and standard deviation of the educational needs and priorities by competency-unit according to the 23 competency-units. In the case of the mean of the Present Competency Level (PCL), the mean of U-8 (I do not care if my friend is in trouble.) showed the highest score of 10.884, but U-1 (It is bad to bully friends at school.) showed the lowest score of 2.414. The highest value among the 23 items in the June survey was S-5 (I do not volunteer if I do not help myself.). The second highest item was U-8. The lowest value among the 23 items was U-1.

**Table 2. Educational needs and priorities by competency-unit**

Category	March		June	
	Borich’s needs	Priority	Borich’s needs	Priority
S-1	11.611	7	6.386	14
S-2	8.372	19	5.152	18
S-3	11.408	10	7.898	7
S-4	12.188	6	4.819	19
S-5	15.556	2	16.444	1
S-6	15.265	3	8.327	3
U-1	5.515	23	2.413	23
U-2	10.101	13	8.265	5
U-3	11.409	9	6.143	15
U-4	9.388	15	7.510	9
U-5	8.106	21	4.215	21
U-6	9.141	17	6.934	10
U-7	14.3347	4	8.306	4
U-8	15.816	1	10.884	2
P-1	12.896	5	6.859	11
P-2	10.776	11	5.986	16
P-3	9.630	14	3.728	22
P-4	8.633	18	4.476	20
L-1	8.107	20	5.188	17
L-2	8.107	22	6.810	12
L-3	11.610	8	7.547	8
L-4	9.106	16	8.130	6
L-5	10.102	12	6.735	13

In the March survey, the average of 'Service' domains for personality was 12.4 that of June was 8.17 (Table 3). The gap between March and June was 4.23. According to the locus for focus type model, 'Service' appeared as HH belonging to the first quarter (Fig. 1). This is the first priority to be considered. In the March survey, the average of 'Understanding' domains for personality was 10.47 that of June was 2.62. According to the locus for focus type model, 'Understanding' appeared as HL belonging to the fourth quarter. This is the area where the need for improvement is most perceived. In the March survey, the average of 'Practice' domains for personality was 10.48 that of June was 5.26. The gap between March and June was 5.22. According to the locus for focus type model, 'Practice' appeared as LH belonging to the second quarter. These are the factors that are required for improvement and are relatively high compared to other character education. In the March survey, the average of 'Legal & social systems' domains for personality was 9.41 that of June was 6.88. The gap between March and June was 2.53. According to the locus for focus type model, 'Legal & social systems' appeared as HL belonging to the fourth quarter.

After one semester class, students' perception changes were examined. 'Understanding', 'Practice', and 'Legal & Social systems' were statistically significant difference (Table 4). 'Service' was a statistically non-significant difference ( $p > 0.05$ )

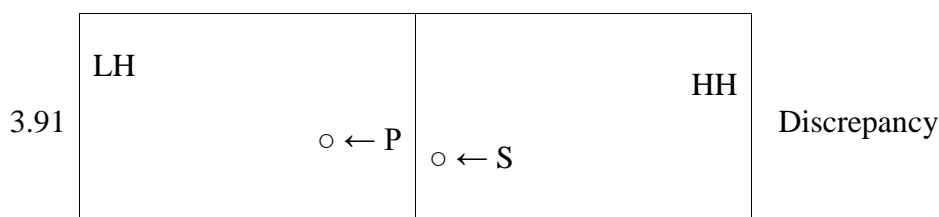
**Table 3. Change of importance recognition in needs assessment in socio-biological human exploration**

Category	March		June		Difference	Locus for locus
	Mean	SD	Mean	SD		
Service	12.40	2.68	8.17	4.29	4.23	HH
Understanding	10.47	3.33	6.83	2.62	3.64	HL
Practice	10.48	1.83	5.26	1.14	5.22	LH
Legal & Social systems	9.41	1.48	6.88	1.11	2.53	HL
Total	10.69	2.33	6.79	2.26	3.91	-

**Table 4. Correlations between frequency counts for categories present in socio-biological human exploration according to time (March and June)**

Test	Category			
	Service	Understanding	Practice	Legal & Social systems
t-test	2.779	6.282**	11.558***	4.225*

The main effects of the model were assessed with repeated-measures ANOVA ( $p < 0.05$ ). Post hoc testing was followed by paired *t* tests (Bonferonni corrections were applied for multiple comparisons.). \*: Significant,  $p < 0.05$ , \*\*: Significant,  $p < 0.01$ , \*\*\*: Significant,  $p < 0.001$ .



LL	○ ← U ○ ← L	HL
6.79 Required competency level		

**Figure 1. Analysis of the locus for focus model of the needs assessment in socio-biological human exploration.**

## DISCUSSION

The development of the industrial economic system radically shifted the values of our civilization and modern industrial society transformed humans into selfish people. Almost everyone will agree that we live in a deeply troubled society. Clearly, humans are profoundly divided on the meaning of individualism and the meaning of society. For some people, individualism is the acme of social cooperation, because it is voluntary; for others it is the pit of selfishness, individual atoms banging about on their own without the least sentiment for their fellow humans, because they lack solidarity. For a long time in Korea, we have learned all of humanity subjects such as 'morality' and 'ethics of the nation' as a necessity in high school. However, all students do not learn subjects such as 'morals' or 'ethics' in high school. Therefore, in Korea, which has been transformed from an agricultural country to an industrial country, selfish impulse or crime is increasing, which is becoming a social problem. Motivation and interest influence the way information is used and critically evaluated (Limberg, 1998). Completion of a social biology course at a university is motivating and exciting to think about moral thinking. Although it is not a long semester in college, there was a change of personality by education of altruism and consideration of others with liberal arts subject (Table 4). Because graduate programs rely increasingly on undergraduate programs for students, the need to define clearly the nature and purpose of liberal education for social work students has become even more apparent (Reid & Wilkins, 1991). Although many students were not educated in junior high or high school, they will realize that through the liberalization of college, society is composed of many people, so I have to systematically and reasonably live with others. People do not live their lives in moral or ethical isolation but grow up within particular moral traditions (Reiss, 1999; Chowdhury, 2016). Liberal democracy can only flourish if its citizens hold certain moral and civic values, and manifest certain virtues (Althof & Berkowitz, 2006). When students partake in the decisionmaking process, they give priority to values over scientific evidence since values are more important in culture and hence influence their decision-making process on most socio-scientific issues involving them (Aikenhead, 2005). The most important value in this study was 'service' to individuals or social groups who need help (Fig. 1).

## REFERENCES

- Aikenhead, G.S. (2005) Research into STS science education. *Educacion Quimica*, 16, 384-97.
- Althof, W., & Berkowitz, M.W. (2006) Moral education and character education: Their relationship and roles in citizenship education. *Journal of Moral Education*, 35(4), 495-518.

- Borich, G.D. (1980) A needs assessment model for conducting follow-up studies. *The Journal of Teacher Education*, 31, 39-42.
- Chi, E., Lee, Y.S., & Do, S.L. (2014) Development and validation of the character index instrument. *Journal of Ethics Education Studies*, 35, 151-77.
- Chowdhury, M. (2016) Emphasizing morals, values, ethics, and character education in science education and science teaching. *The Malaysian Online Journal of Educational Science*, 4(2), 1-16.
- Greenhouse, S.W., & Geisser, S. (1959) On methods in the analysis of prole data. *Psychometrika*, 24, 95-112.
- IBM Corp. (2012) *IBM SPSS statistics for windows, version 21.0*. Armonk, NY: IBM Corp.
- Kelleher, M., McGovern, F., Mulcahy, C., & Murphy, P. (2004) An ethical education curriculum for educate together schools. Educate Together, Dublin.
- Limberg, L. (1998) *Att söka information för att lära*. Gothenburg: Valfrid.
- Mink, O.G., Shultz, J.M., & Mink, B.P. (1991) *Developing and managing open organizations: A model and method for maximizing organizational potential*. Austin: Somerset Consulting Group, Inc.
- Oppong, C.A. (2012) Exploring pupils' historical knowledge within the junior high social studies course. *Procedia – Social and Behavioral Sciences*, 55, 399-408.
- Orb, A., Eisenhauer, L., & Wynaden, D. (2001) Ethics in qualitative research. *Journal of Nursing Scholarship, First Quarter*, 93-6.
- Reid, P.N., & Wilkins, W.P. (1991) Social work and the liberal arts: renewing the commitment. *Journal of Social Work Education*, 27, 208-19.
- Reiss, M.J. (1999) Teaching ethics in science. *Studies in Science Education*, 34(1), 115-40.
- Wilson, E.O. (1975) *Sociobiology: The new synthesis*. Cambridge, Ma.: Harvard, Belknap Press.