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PREFACE

The 5th International Household & Family Research Conference was held in Savonlinna, Finland on 6 – 9 June 2006. The main theme of the conference was Human Perspectives on Sustainable Future. The conference brought together scientists from various fields of household research. The conference was attended by 110 participants from 17 countries, and a total of 108 papers were presented.

Subsequently, from among all the conference papers the scientific committee chose the following topics and papers now available and presented in this proceedings book. We have organised the proceeding into the following four themes: Home Economics in Transition; Crafts and Collaborative Design; Sustainable Living and Perspectives on Sustainable Education. For us, the significance of these themes is one indicator of coherence in the paper that are presented.

We sincerely hope that the present papers will stimulate new multidisciplinary approach to household research. They certainly reflect multidisciplinary research interests and give us greater knowledge about contemporary perspectives on family and community as well as on sustainable livelihoods. Furthermore, they increase our understanding about the processes adopting and practising sustainable ways of living.

At the end of the book professor Sharon Nickols reflects the outcome of the conference in her paper Lessons for the Future. We express our deepest gratitude to her and to all scientists who have contributed to the success of this conference as well as this volume, and in particular to the members of the Scientific and Organising Committees as well as to the invited speakers.

November 2006

Anna-Liisa Rauma, Pirita Seitamaa-Hakkarainen and Sinikka Pöllänen

FINNISH PRE- AND IN-SERVICE TEACHERS' CONCEPTIONS, VALUES AND TEACHING PRACTICES IN HEALTH AND ENVIRONMENTAL EDUCATION

Säde Kuurala¹, Graça Carvalho², Pierre Clement³, Franz X. Bogner⁴, Tuula Kyllönen¹, Osmo Hänninen⁵, Anna-Liisa Rauma¹

¹University of Joensuu, Savonlinna Department of Teacher Education, Home Economics

PO Box 86, 57101 Savonlinna, Finland

²University of Minho, Portugal, ³University Claude Bernard Lyon 1, France, ⁴University of Bayreuth, Germany, ⁵University of Kuopio, Department of Physiology, Finland

Abstract

Health and environmental education in Finnish schools is guided firstly by the national core curriculum and secondly by the individual curricula in each school. However, teaching practices are influenced to some extent also by teachers' own conceptions and systems of values. The aim of the study was to examine Finnish pre- and in-service teachers' conceptions, values and experiences concerning health and environmental education. Respondents (n=312) comprised of pre-service teachers (52 %), in-service teachers (37 %), and other teachers and students in Biology, Home Economics, and Finnish language (11 %). Respondents regarded health and environmental education important. Their principal goal in education was rather to have an effect on pupils' behaviour than to provide scientific knowledge of health. Constant lack of time as well as inadequate training and material were most often cited as obstacles in teaching health education. Teachers in general had a positive attitude towards environment, although biologists seemed more environmentally-oriented compared to other teachers.

Introduction

"Responsibility for the environment, well-being and sustainable future" is one of the seven cross-curricular themes for basic education in the Finnish national school curriculum (Finnish National Board of Education 2004). Health and environmental issues are integrated into several subjects. Consequently, teachers of different scientific backgrounds teach these subjects.

In a primary school, environmental and health issues are integrated into Environmental Studies in the grades 1 to 4, in Biology and Geography, and in Physics and Chemistry in the grades from 5 to 6. Health education is also part of Physical education. (Finnish National Board of Education 2004).

In the secondary school, Health education became an independent subject in 2006. In addition to this, some entities of health education are taught e.g. in Home economics, Biology, Chemistry, Physical education, and in Social studies. Environmental education is still integrated into Biology, Geography, Physics, Chemistry and Home economics. (Finnish National Board of Education 2004).

Teaching health and environmental subjects is guided in schools by the curriculum which is based on relevant pedagogical theories. However, teaching practices are influenced to some extent also by teachers' conceptions and systems of values. Data on teachers' attitudes and values with regard to health and environmental issues is insufficient. In this study we wanted to find out about Finnish teachers' conceptions of health and environmental education, as well as their attitudes and values related to the environment. The study is part of the EU-funded BIOHEAD-citizen project that was conducted in 19 countries.

Subjects and Methods

Data was obtained by using a pre-tested questionnaire. Convenience sampling contained 15 sub-sample occasions in schools, universities and teacher meetings in five different cities in Finland. Data was gathered from teachers in their school context in Savonlinna, Kuopio and Joensuu and

during the national Home Economics and Biology teachers meetings in Helsinki and Tampere. Schools included primary (grades 1-6), secondary (grades 7-9), and comprehensive schools (grades 1-9).

The questionnaire consisted of three parts: Personal Information, Transversal and Environmental Education Questionnaire, and Biology and Health Education Questionnaire. Questionnaires included structured questions about teachers' conceptions and values concerning the topics: Health education, Ecology and environmental education, Human sexuality and reproduction, Human brain, Human genetics, and Human origin.

In about half of the questions, the respondents were asked to indicate to what point they agree with the statement (e.g. "Health education at school improves pupils' behaviour"). Responses were scored on a four-point scale from 1 (I agree) to 4 (I don't agree).

Results

The total number of questionnaires used in the analysis was 312 since 8 questionnaires were rejected due to missing answers. Respondents comprised of pre-service teachers (52 %), in-service teachers (37 %), and other teachers and students in Biology, Home Economics, and Finnish language (11 %). The majority of respondents (83 %) were females, and males comprised 17 % of respondents. Respondents' age ranged from 19 to 73 years (mean 33; SD 13).

Health Education

Most of the respondents (78 %) rated Health education important for pupils' health behaviour and consequently, 89 % of the respondents thought that the principal goal is rather to correct on pupils' health behaviour than to provide pure knowledge. There were some substantial differences between groups. Humanists (Home economics, Finnish language and primary school teachers/students) were significantly more optimistic about the effectiveness than biologists ($p < .01$). Also in-service teachers emphasized more the effects on health behaviour as the main aim of

Health education than pre-service teachers ($p < .05$).

When asked about the obstacles in teaching Health education (Table 1) almost half of the teachers (48 %) who had actually taught it ($n=73$) reported lack of time or adequate material. Every third of the teachers (31 %) said that they did not have proper education for this purpose.

Table 1. The most important obstacles in teaching Health education.

Obstacle	n	%
I haven't got enough time or adequate material.	35	48
I haven't got adequate training in health education.	23	31
It is hard to find partners to cooperate with.	7	10
Parents may react badly	7	10
I find talking about some subjects embarrassing.	1	1
Total	73	100

When asked about sex education, 32 % of respondents thought that teachers avoid sexual education because these topics are private and should not to be taught at school. Humanists reported this reason significantly more often than biologists ($p < .01$) and pre-service teachers more often than in-service teachers ($p < .001$).

According to the respondents, some of the sexual topics should be introduced already at primary school at the age between 6 and 11 or even before that, and other topics later on a secondary level. The majority (55 %) of the respondents thought that pregnancy and birth should be introduced already at the age between 6 and 11 years old, and 25 % thought that these issues should be taught even before the age of 6. Some of the respondents (40 %) would speak about incest and sexual abuse at a primary school age, but some others (39 %) later at a secondary school age. Most respondents thought that sexual intercourse (54 % of respondents), orgasm and sexual pleasure (69 %) as well as eroticism and pornography (52 %) should be taught at the age between 12 and 15 years. Some of the respondents thought that certain subjects should never be introduced at school, e.g. eroticism and pornography (15 % of respondents).

Environmental Education

Most respondents (95 %) reported that the goal of teaching environmental subjects was the development of pupils' responsible behaviour more than providing pure knowledge. Humanists and secondary school teachers emphasized this significantly most often ($p < .05$).

When looking at the questions indicating respondents' attitudes towards the environment (Table 2) we found out that most respondents enjoyed the trips to the countryside and were interested in observing animals in ponds and rivers. However, biologists compared to humanists ($p < .001$) as well as in-service teachers compared to pre-service teachers ($p < .01$) were significantly more interested in knowing about the animals in ponds and rivers. Industrial smoke from chimneys made almost 60 % of the respondents angry. Most of the respondents (93 %) thought that we should set aside areas in order to protect endangered species. Biologists thought that statistically ($p < .001$) more often.

Every third teacher thought that human beings are more important than other living beings. There were significant differences between biologists and humanists ($p < .001$) as well as between in-service and pre-service teachers ($p < .05$). A small number of biologists (17 %) and a bigger number of humanists (40 %) thought that humans are more important than other living beings. Also students considered human beings more important than the teachers did. Nearly every third (27 %) of the respondents thought that humans have the right to change the environment as they see fit.

Table 2. In-service and pre-service teachers' conceptions about health education and attitudes towards environment.

I agree I do not agree

Statement	1	2	3	4	Differences in educational background		
	(%)	(%)	(%)	(%)	BI-HU	PR-IN	PS-SS
Health education at school improves pupils' behaviour. (n=310)	21	57	19	3	** 1)		
Teachers avoid teaching sex education because these topics are private and are not to be taught at school. (n=310)	6	26	33	35	**	***	
I enjoy trips to the countryside. (n=312)	78	20	2	0,3			
It is interesting to know what kinds of animals live in ponds or lakes. (n=311)	64	27	6	3	***	**	
Industrial smoke from chimneys makes me angry. (n=312)	11	48	32	9			
We must set aside areas to protect endangered species. (n=312)	65	28	5	2	*** 1)		
Human beings are more important than other living beings. (n=311)	10	21	31	38	***	*	
Humans have the right to change nature as they see fit. (n=312)	3	24	39	34			*

Note: BI = biologists, HU = humanists; PR = pre-service teachers, IN = in-service teachers;

PS = primary school teachers / students, SS = secondary school teachers / students

* $p < .05$, ** $p < .01$; *** $p < .001$, Chi-Square Test (χ^2) used if possible

1) Mann-Whitney Test

Conclusion

In this study we have described some of the Finnish teachers' teaching practices and opinions about health and environmental education. Detailed analysis of the data obtained is still process and only after a thorough analysis will we know more about their teaching practices, conceptions and values. The present data showed that teachers appreciate and see the value of teaching health and environmental education at school in improving pupils' behaviour. Problem was that they do not have time and/or adequate training. There is also a lack of appropriate study materials. It seems also that biologists are more environmentally-oriented than other teachers.

References

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HOW HOME ECONOMICS EDUCATION NURTURES STUDENTS' SENSE OF SELF-ESTEEM: AN ANALYSIS OF STUDENTS' VIEWS

Noriko Arai, Mariko Oshima
University of Fukui, Imazu Junior High School

Abstract

This study investigated how home economics education relates to the nurturing of students' self-esteem through the analysis of Japanese student's views on this concern. The findings are the following: (1) Girls sense of self-esteem is lower than that of boys at every school stage, and gender issues seem to have some relation with it. (2) Students' affirmative sense of self-esteem relates to their positive attitudes toward everyday living, to good relationships with others, to their high sense of civic spirit, to decision-making and to their ambitions for the future. These results imply that home economics education has the possibility to nurture students' sense of self-esteem by focusing more on this point through the development of curriculum and classroom learning.

Introduction

Recently, research and commentary suggest that there is a relationship between adolescents' problematic behavior and their lack of self-esteem, and Japanese adolescents' self-esteem is reported to be seriously low in an international comparative study (Cabinet Office, 2004). As background to these phenomena, it may be said that students have very few opportunities for nurturing self-esteem in their daily living. Past research indicates reliable parent-child relationships, mental support from parents and teachers contribute to adolescents' development of positive self-esteem (Gecas & Schwalbe, 1986; Rosenberg, Schooler, Schoenback and Rosenberg, 1995),