Proceedings

Adolescent Girls' Views On Science: A Maltese Study

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Summary. This study was carried out in Malta in an area secondary school for girls. It is an ethnographic investigation of the adolescent schoolgirl culture from the girls' own perspective. The paper focuses on the girls' ideas and opinions on science, what they think about science, why they think science is more appropriate for boys than for girls, and what interests them in science.

Keywords: adolescent girls, science interests.

Introduction

Girls view science, particularly physical science as masculine (Klein, 1989). Despite the fact that girls view science as predominantly masculine, they are still interested in and want to learn more about science. The problem exists not in trying to find out why girls and boys have different science interests or how to make what is considered to be "masculine" science more appealing to girls but rather to identify what in science interests girls and to build on these interests. As Whyte (1988) states "women have a particular contribution to make to science by virtue of their being women".

Girls are more interested in the biological sciences than in the physical sciences. They are interested in subject matter related to health, nutrition and the human body especially when the subject matter is placed in a context related to daily life or to society. Girls are also excited by science lessons which emphasise practical 'hands-on' experiences (Peltz, 1990).

As a result of my early experience of teaching girls, aged eleven to thirteen, in an area secondary school in Malta, I was interested to learn which topics in science the girls wanted to cover and what they themselves really wanted to learn. The main purpose of this study was, therefore, to explore the students' own views, ideas and opinions about the way in which they were learning science.

Methodology

In this study, the students were allowed to express their own ideas and opinions, in line with what Davies (1982) stated: "children have been written about from many perspectives, and for a multitude of purposes but rarely have they been asked to speak for themselves". This study was therefore intended to "lay stress on the study of everyday life and on the actors' own interpretations and definitions of the situation" (Delamont, 1978), and thus an ethnographic style of research was selected.

The study was carried out in the school where I had

previously taught. As in Pollard (1985), I decided that "I could positively use the shared experience and rapport which I had built up previously to the advantage of the research". The five students enrolled for this study all came from working class families and were described by the headmistress as "students who do not shine in their work". Starting in September, I met these girls for about an hour every day. The meetings were in the form of informal group interviews. We would sit around one of the laboratory benches and talk, and I would interject at intervals with open-ended questions. Throughout the interviews a relationship of trust and understanding was established with the students. Within the relationship' (Davies, 1982) which was developed, the students actively sought to help me see things their way. They felt that they could be open with me and for them, ".... You were like a friend to us.... more than a friend.... you were like a sister not like a teacher...".

All the conversations with the girls were recorded and later transcribed. In the process of transcribing, some patterns started to emerge. The transcripts were divided according to the themes which were emerging, for example, a section relating to science interest, one to teachers, the school and so on. Following through each section until a clear picture of what was happening started to emerge, in turn resulted in a narrative of what the girls had told me. A prepared plan of action and preconceived ideas initially formulated changed as the relationship with the students developed, and consequently the way in which the data was interpreted.

Girls' Views About Science

When the students were asked to write down the first thing that came to their mind when they heard the word science, the following words emerged: animals, chemicals, personal care of body, growing up, nature, feeding of animals, what things are, environment, laboratory, experiments, our life, medicine, how things in the world work, discovery about things, our body, what things have inside. These descriptions only relate to the biological and chemical aspects of science. There was