Pre-service Student Teachers and Computerized Multimedia Data Bank in Science Education

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One of the important objectives of the Israeli science curriculum is to help pupils at the different grades build a computerized data bank. Student teachers at the department of biological and chemical education of the Arab College of Education were guided to build a computerized data bank in different subjects. We chose to present one of the data banks which we consider very successful and very helpful for other students, teachers and pupils at schools. The data bank contains records of information about many plants and proposed outdoor science research activities. Pictures of each plant photographed in the four different seasons, illustrating the changes that each plant undergoes, the name of each plant in three different languages, Latin, Arabic and Hebrew, textual data containing information about each plant as well as each picture, proposed field research activities for the teachers and the students, proposed teaching methods for outdoor research activities. The photography of the plants and the activities took place in the northern part of Israel, Galilee and Carmel and in the northern sea shore. The pictures were introduced into the computer using the scanning technique. Captured video files were prepared using video adapter card. The aim is to help teachers and students overcome the obstacles in teaching the material of the curriculum, to help teachers encourage students creativity and conduct field research activities and to encourage students to use multimedia in the class presentations and help them in preparing computerized data banks. The data bank will be useful for teachers and students at the different grades. It will be useful also as a tool for conducting science education research. We are planning to take this data bank a step further and place it on an internet site to give international access.