

## Teacher's Views Towards Concept Cartoons Supported Problem Based Learning\*

## Ali Günay Balim<sup>1</sup>, Suat Turkoguz<sup>1</sup>, Sevinç Kaçar<sup>1</sup>, Ümmühan Ormanci<sup>1</sup>, Huriye Denis Çeliker<sup>2</sup>, Didem İnel<sup>3</sup>, Ertuğ Evrekli<sup>4</sup>

Dokuz Eylul University, Education Faculty, Science Education Department (Turkey)
Mehmet Akif Ersoy University, Education Faculty, Science Education Department (Turkey)
Uşak University, Education Faculty, Science Education Department (Turkey)
Celal Bayar University, Education Faculty, Science Education Department (Turkey)
Gunay.balim@gmail.com, suat.turkoguz@gmail.com, kacarsevinc@gmail.com,
ummuhan45@gmail.com, denishuriye@hotmail.com, dideminel@gmail.com, eevrekli@gmail.com

## Abstract

In this study, it was aimed to examine the views of Science and Technology Teachers towards concept cartoons integrated to problem based learning (PBL). In this context, teacher's views was reviewed to compare before and after the experimental treatment of a project. Data was gathered with qualitative research method. Participants of this study were Science and Technology Teachers from 9 elementary schools in İzmir city in 2011-2012 education year. In first step of study, an 30 hour workshop including theoretical subjects, applications and experimental treatments about concept cartoons was presented to teachers. Then teachers (n:9) were interviewed by a semi-structured interview form. In following of this workshop, all applications and experimental treatments towards the project consisting of this workshop was requested to teachers to apply for developing of students. After the experimental applications and treatments towards this project, the same teachers were again interviewed by the semi-structured interview form used in parallel to previous interviews. The semi-structured interview forms were developed by researchers in the project, the semi-structured interview form consisting of five question items was used in before experimental applications and treatments and then the same form was developed to get teachers' insights adding different two question items to them. Data was analyzed by the content analysis method. According to findings teachers indicated that problem based learning modules improves student's critical thinking, inquiry learning skills and help students to relate their information with daily life. During study teachers said that they had problems while student's group work, problem determination, research phase. After the study they indicated that sometimes problem based learning sessions take longer time than courses, activities were pushing students and these were parts of limitations of PBL. What is more, when interviews before and after experimental applications and treatments was compared, it may be said that teachers focused on similar properties about concept cartoons. Teachers said that concept cartoons are interesting, includes visual elements, encourages to participate in course, provides permanent learning and these are positive parts of concept cartoons.