Concept Cartoons and Their Using In Life Studies Lesson

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Abstract

In recent years with the participation of students to process for making education and training process more effective and as a natural consequence of this situation using of visual materials increased in education. One of the effective materials to provide contribution to this increase as a necessity of this constructivist approach is surely concept cartoons. The development of concept cartoons; while searching a way to assist them to increase their knowledge in science and their understanding of science as a part of professional development program of primary school teachers of Brenda Keogh and Stuart Naylor their performance emerged as a result of their studies. The first concept cartoons were developed in year 1991 to emerge opinions of students, to discuss accuracy of these emerging opinions and as a strategy to support students for their developing understandings. Using of these concept cartoons initially being emerged by focusing to science education in the beginning becoming widespread in Math and Foreign Language Lessons in nowadays. In this study it is claimed that concept cartoons can also be using in Life Studies Lesson in 1-3rd classes of primary schools in Turkey by giving place to sample concept cartoons being established by researchers.

Key Words: Constructivist Approach, Teaching Materials, Concept Cartoons, Life Studies, Teaching of Life Studies

Kavram Karikatürleri ve Hayat Bilgisi Derslerinde Kullanımı

Özet

Son yıllarda eğitim ve öğretim sürecini daha etkili kılmak adına öğrencinin sürece katılması ve bu durumun doğal bir sonucu olarak da eğitimde görselleştirmenin önemi oldukça artmıştır. Yapılandırmacı yaklaşımın gereği bu artışa katkı sağlayabilecek etkili materyallerden biri de hiç şüphesiz kavram karikatürleridir. Kavram karikatürlerinin gelişimi; Brenda Keogh ve Stuart Naylor'ın ilköğretim öğretmenlerinin profesyonel gelişim programının bir parçası olarak bilim hakkındaki bilgilerini ve bilim anlayışlarını geliştirmelerine yardım etmek için bir yol ararken yaptıkları çalışmalar sonucu ortaya çıkmıştır. İlk kavram karikatürleri öğrencilerin

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fikirlerini ortaya çıkarmak, ortaya çıkan bu fikirlerin doğruluğunu tartışmak ve gelişen anlayışlarında öğrencileri desteklemek için bir strateji olarak 1991 yılında geliştirilmiştir. Başlangıçta fen eğitimine odaklanarak ortaya çıkarılan ve bu alanda kullanılan kavram karikatürlerinin günümüzde

Matematik ve İngilizcede de kullanımı yaygınlaşmaktadır. Bu çalışmada ise kavram karikatürlerinin, ilköğretim 1-3. sınıflarında okutulan Hayat bilgisi dersinde kullanılabileceği öne sürülmektedir. Bu amaçla, Hayat Bilgisi dersinde kullanılabileceği düşünülerek araştırmacılar tarafından oluşturulan örnek kavram karikatürlerine yer verilmiştir.

Anahtar Kelimeler: Yapılandırmacı yaklaşım, öğretim materyalleri, kavram karikatürleri, hayat bilgisi, hayat bilgisi öğretimi

Introduction

Cartoon; is an Italian concept '' Caricare'' (Özşahin, 2009); defined by Matthew ; '' A very special form of humor evoking smile and laughter with some different lines in minds of audience'' (Matthew, 1991). When the field—literature are investigated it is possible to encounter with different expression forms of common expressions such as exaggeration, humor and thought-provoking. Besides cartoons have different classifications in form, structure and objective of preparation (Özşahin, 2009). For instance; According to Kazanevsky cartoons are classified under 3 groups as; drawing reflecting philosophical problems of human being, drawings criticizing social structure of society and finally cartoons covering non-verbal humor (Kazanevsky, 2005). Cartoons used for training are classified under 3 titles as; cartoons aimed at attention and fun, cartoons aimed at research and thinking and concept cartoons (Özşahin, 2009). Cartoons aimed at attention and fun has the aim to contribute consciousness when having fun. Cartoons aimed at research and thinking aim to direct readers perceive the massage intended to be given by using brain storm as a means. Finally concept cartoons designed with the objective to be a visual material for science in 1990s by Keogh and Naylor and covering the first two types and significantly being different from them is being defined as effective lines reflecting events from daily life. (Keogh, Naylor & Wilson, 1998; Naylor & Keogh, 1999; Naylor, Downing, Keogh, 2001; Balım, İnel, Evrekli, 2008).

Concept cartoons, set to work by inviting learners to discussion with characters by claiming a different scientific point of view of cartoon characters (Keogh, Naylor & Wilson, 1998). In concept cartoons; the discussion of three of more characters is reflected with painting. In this discussion each character defense different opinions. One of the onions submitted during the discussion expresses way of thinking expressing truth;

others represent opinions not scientifically true but reflecting students' ideas. These kinds of way of thinking also accepted as concept faults by the scientists (Kabapınar, 2005). In concept cartoons generally group discussions providing access to truest admissible knowledge are used [2](Keogh, Naylor & Wilson, 1998). Naylor, Downing and Keogh (2001) also used concept cartoons on student groups in primary school level in different numbers and characteristics and verified this knowledge by reaching to positive results (Naylor, Downing, Keogh, 2001).

According to Keogh, Naylor, Wilson (1998) concept cartoons those have to have the following characteristics;

- Using short texts aiming to consider individuals having inadequate reading – writing skills in any age
- Proper designing of scientific information as compatible with the daily life to provide learners understand relationship between scientific information and daily life.
- Since it is possible for the learners to defend many alternative opinions designing as research based to provide learners to develop different opinions
- Scientifically approved opinions to be available among alternatives
- Opinions set forth by the cartoon characters to be arranged in equal possibilities to prevent learners to access accurate opinions

Was firstly emerged to provide an effective and innovative approach to Science teaching (Keogh, Naylor & Wilson, 1998; http://www.millgatehouse.co.uk/projects/concept-cartoons-project) . Right after its emerging it rapidly popularized as learning and teaching approach and became widespread in different environments (Keogh, Naylor & Wilson, 1998).

Constructivist Approach and Concept Cartoons

The importance of approaches where student activity is at the forefront such as constructivist approach for providing an effective and innovative learning- teaching technique in science and many disciplines for the rapid popularization of concept cartoons as learning and teaching approach is growing significantly.

A constructivist based curriculum is followed in primary schools in Turkey since 2005. According to this approach and curriculum, construction of subjects and concepts is shaped as problem solving, critical thinking and active student participation (Gürbüztürk & Mala, 2008; Evrekli, İnel & Çite, 2006). For that reason it is necessary to provide learning by doing and living

forming as the top step in life cone of students and have them relate their new information and also necessary for them to actively participate to process (Balım, İnel & Evrekli, 2007). These requirements those to be met with thanks to the constructivist approach in the meanwhile are perquisites for the realization of learning. Because learning is only possible by the active participation of students.

In this case, constructivist approach with a general point of view; can be expressed as a learning approach where they construct new opinions by relating them with old knowledge by taking central principle claimed by Keogh and Naylor as "Students may give the meaning to new knowledge with their current knowledge" (Naylor & Keogh, 1999).

When their qualifications are considered constructivist approach is significantly different from traditional student – teacher profile. As a natural result of these difference duties of teachers and students also differs. In constructivist approach student profile; as continuously repeated; consist of active, thinking, having critical and interrogator point of view and individuals having capabilities to construct new knowledge by using previous knowledge. Teachers' profile covers individuals capable of undertaking roles directing students to interrelate student's knowledge and to reach new knowledge (Balım, İnel & Evrekli, 2007; Birişci, Metin & Karataş, 2010). Methods, techniques and tools used by teachers for the effectiveness of teaching based on constructivist approach must have capacities to interrelate new knowledge with daily life (Balım, İnel & Evrekli, 2007). One of the most effective visual aid used for teaching and training is concept cartoons.

Concept Cartoons and Their Area of Use

The wide spread of use of concept cartoons in science when compared to other disciplines as a result of local and foreign field literature scanning with thanks to its characteristic being supporting active learning in science, social sciences, math and many other courses manifests itself.

Science having a wider concept facilitates usage of concept cartoons in this course. In Turkey after 2005, "students can perceive massages in cartoons" recovery also in Turkish lesson besides Science and Technology lessons (MEB, 2005a) and also in lessons relevant to skills and recoveries "skill of using visual evidences" in 5th class Social Studies Lesson (MEB, 2005b) also direct cartoon usage was emphasized (Ersoy, 2010). But studies relevant to the use of concept cartoons in Life Studies almost non-existing. However Life Studies Lesson for both constructing the infrastructure of science and for its structure among disciplines, are not only lessons aiming

to teach lessons only by instruction; (Özşahin, 2009) this is a proper discipline for the usage of concept cartoons (Detailed definitions are to be explained under title "Life Studies Lesson and Concept Cartoons".) However Life Studies Lesson with thanks to its training of skills and values training covering a wider place within themes available in 1,2 and 3rd classes, with both teaching and assessment objectives of cartoons (Ersoy, 2010) is an easy to find lesson. It may not always be possible to find a proper cartoon suitable for the subject matter and student level in Life Studies Lesson. For that reason, teachers may instruct students to draw cartoons for the purpose of reflecting their knowledge about the lesson and they may learn clues about meanings they attribute to the surrounding events and values, norms and rules which they have (Ersoy & Türkkan, 2010) .

Concept cartoons, although used in primary training and secondary training are used in families, women's organizations, in interactive science centers where members from people available and in London Subway excluding formal training systems (Keogh, Naylor & Wilson, 1998). This wider area of use of concept cartoons and when the expression "Hardness of finding proper cartoon for the student level in Life Studies lesson" the question of Matthew (1991) encountered "How Much knowledge is needed to understand different types of science cartoons?" interrogates availability of perquisites for the usage of cartoons in training (Matthew, 1991). Clark's expression "concept cartoons provide different point of views against similar situations evoking higher motivation and sensation for student of different ages and origin" given under study called "New Strategy: Concept Cartoons" bear qualification of an answer. The characteristic of using short texts for concept cartoons to be attractive and accessible for learners of each age despite their literacy skills determined by Naylor, Keogh and Wilson (1998) is also supporting Clarks's expression (Keogh, Naylor & Wilson, 1998; Clark, 2012).

Concept cartoons addressing people from each age group and origin is used in an effective manner for the teaching of a new concept or for the analysis of a rudiments, for the determination of concept faults and for the development of their weak sides, shortly used for the effective usage of assessment processes (http:// www.millgatehouse.co.uk/projects/concept-cartoons-project; Song, Heo, Krumenaker & Tippins, 2008). Teaching with concept cartoons with thanks to this intended use;

- Helps to interrogate students their opinions, expand their opinions and brings different point of views to events
- Acts as a stimulator for the formation of discussion environment and provides participation of students to lessons

- Guides students to solve problems they face in their daily lives
- Makes questions and misconceptions on minds of students out
- Avails for consolidation and usage of efficiencies of expanding the matter
- Minimizes problems encountered for class management (Keogh, Naylor & Wilson, 1998; Dabell, 2008).

When its consecutive characteristics, objectives and contributions are considered; the Mathew's question "How much we can learn from cartoons" can be answered again with his expression and importance of cartoons for training can be effectively mentioned (Matthew, 1991). When it is considered from this point of view it can be claimed that it can easily be used in Life Studies where they for the first time meet in a formal and systematic manner.

Matthew (1991) as a result of its research by expressing that "Learning physics from cartoons may be an exaggerative expression but it is not strange thing to have belief of obtaining a realistic understanding.''; (Matthew, 1991) emphasized that students may obtain a real and new point of view with the usage of concept cartoons based on constructivist approach. This emphasizes points out that scientific concepts can easily be used for Life Studies Lesson. Moreover in Akengin and İbrahimoğlu (2010) 's study called ''Effect of Usage of Cartoons in Life Studies Lesson of Student to Academic Success and Lessons" by using quantitative and qualitative observations together investigated effects of using cartoons in Social Studies lesson and concluded that usage of cartoons in Social Studies to students' success increases students' success and constitutes a general positive difference for the opinions of student for lessons (Akengin & İbrahimoğlu, 2010). When it is considered from this point of view it can be considered that its usage in this lesson may raise effective results also in Life Studies Lesson.

Life Studies Lesson And Concept Cartoons

Life Studies Lesson is a lesson having its information basis from social sciences and natural sciences, constituted as conforming to child development, to the max life-oriented and preparing basis for students as more effective individuals and citizens and in the meanwhile is a lesson constituting basis for Science and Technology lesson and Social Studies lesson (Baysal, 2006). With its structure, it is the first science based formal lesson in primary school where social life and natural environment are considered within their naturalness in real environments and where they are arranged as compatible with their development levels (Bektaş, 2009). Life Studies Lesson in Turkey is a lesson among disciplines available in 1st, 2nd

and 3rd Classes prepared as compatible with mass training approach available in primary school curriculum by the year 1926.

There are objectives in the scope of Life Studies Lesson such as to prepare individuals to life for the purpose of giving most proper response against some problems that individuals may encounter, to remind and teach them their tasks and responsibilities how to take lessons from these events for the purpose of giving most proper responses to various problems (Savaş & Ünüvar, 1999). Besides these objectives scientific process skills and basic concepts stands an important place in lesson curriculum. In the meanwhile, in Life Studies lesson 14 basic skills (Critical Thinking, Creative Thinking, Problem Solving, Research, Communication, Decision Making, Effective Use of Sources, Self- Management, etc.) and individual and universal values (Respect, love, responsibility, Tolerance, patience, honesty, charity, etc.) is tried to be thought. When viewed from this aspect constructing the lesson by daily life and live examples shall more comfortable. In such case usage of concept cartoons shall be a proper basis for Life Studies Lesson.

Moreover Life Studies Lesson is a very important lesson for concept teaching. The first lesson for children's constructing concepts after family and peer groups is Life Studies lesson (Dündar, 2007). It is known that children construct concept differently from adults. Since the children prefer not to consider the things told by the adults as they are but they interpret by using their own pre-information. It must be considered how they will think when building up sentences covering concepts. This necessity undertakes the duty of transporting (Bektaş, 2009) concepts by taking them from level understood by the adults and eliminate the current concept faults and aims to prevent formation of new concept faults.

Constructing of concepts with the life experiences of students; brings the necessity of providing their relation with daily life by considering student interest characteristics of teaching programs and individuals oriented arrangements. For the purpose of meeting this necessity for Life Studies Lesson in the curriculum one of the effective training materials to be used can be claimed as concept cartoons.

Concept cartoons are tools to be easily used for Life Studies Lesson since they not only provide them to construct a new concept but also effective for determination and eliminating concept faults currently available. Concept cartoons are given as examples below as a sample implementation relevant to the Life Studies Lesson:

Above the opinions of Arda, Hakan and Merve for the method to be followed for the selection of class president is given. Which one gives the most democratic way of electing the class president?

Arda's……………………………………………………………..opinion can/ cannot provide election of class president in a democratic manner.

Hakan's……………………………………………………………opinion can/ cannot provide election of class president in a democratic manner.

Merve's……………………………………………………………opinion can/ cannot provide election of class president in a democratic manner.

Description: In this concept worksheet; is prepared for the purpose of forming an activity to provide contribution to acquisition A.3.7: Absolute

advantages of democratic implementation are discussed by moving from samples from school life belonging to sub-title called Democratic Life in School given under My School Enthusiasm Unit of 3rd Class Life Studies Lesson.

The students are expected to specify that Arda gave the correct answer and taken equality and voluntariness as basis for candidateship which is one of the necessities of being democratic and to specify that expressions of Hakan "-candidates are chosen by teacher" and Merve's expression "-we elect candidates" are false.
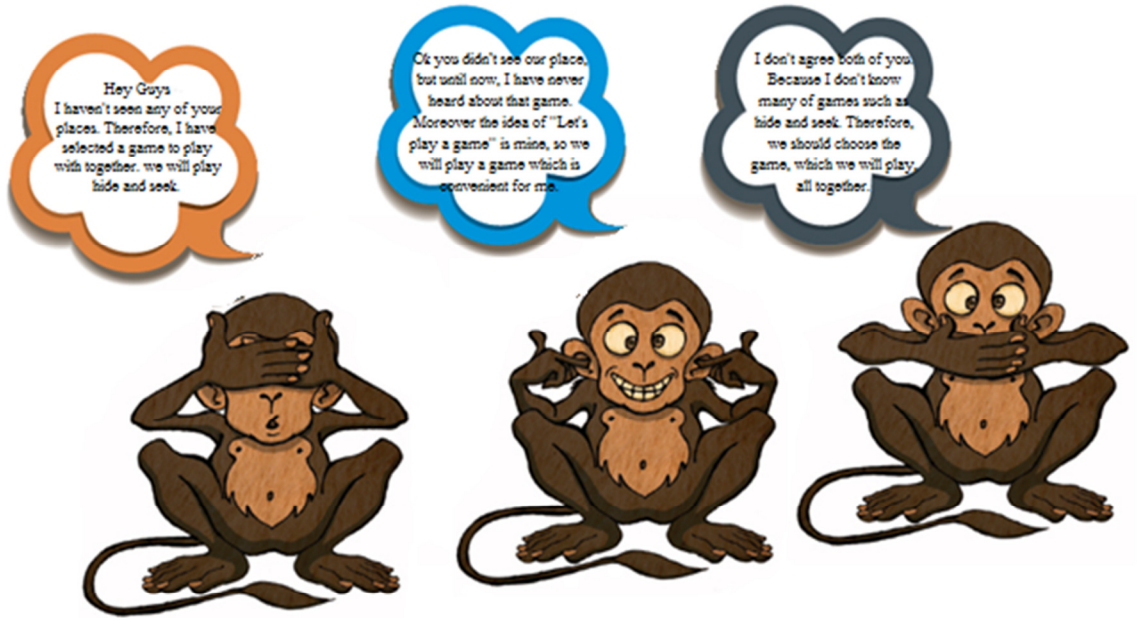
See no evil, hear no evil, and know no evil monkeys want to play a game when they come together. In this game selection;

See no evil monkey has found the most logical and democratic solution method with its opinion
…………………………………………………………….
Hear no evil Monkey has found the most logical and democratic solution method with its opinion
…………………………………………………………………...

Know no evil Monkey has found the most logical and democratic solution method with its opinion
…………………………………………………………………....

Description: This concept cartoon worksheet; was prepared for the purpose of forming an activity to provide contribution to acquisition A.3.7: Discusses the advantages of democratic implementation by moving from examples in school life, sub-title called Democratic Life in School given under My School Enthusiasm Unit of 3rd Class Life Studies Lesson.

The students are expected to express the mistakes the way they follow for the game selection of see no evil and hear no evil monkeys and the correctness of know no evil monkey by distinguishing common decision necessity for a democratic selection.
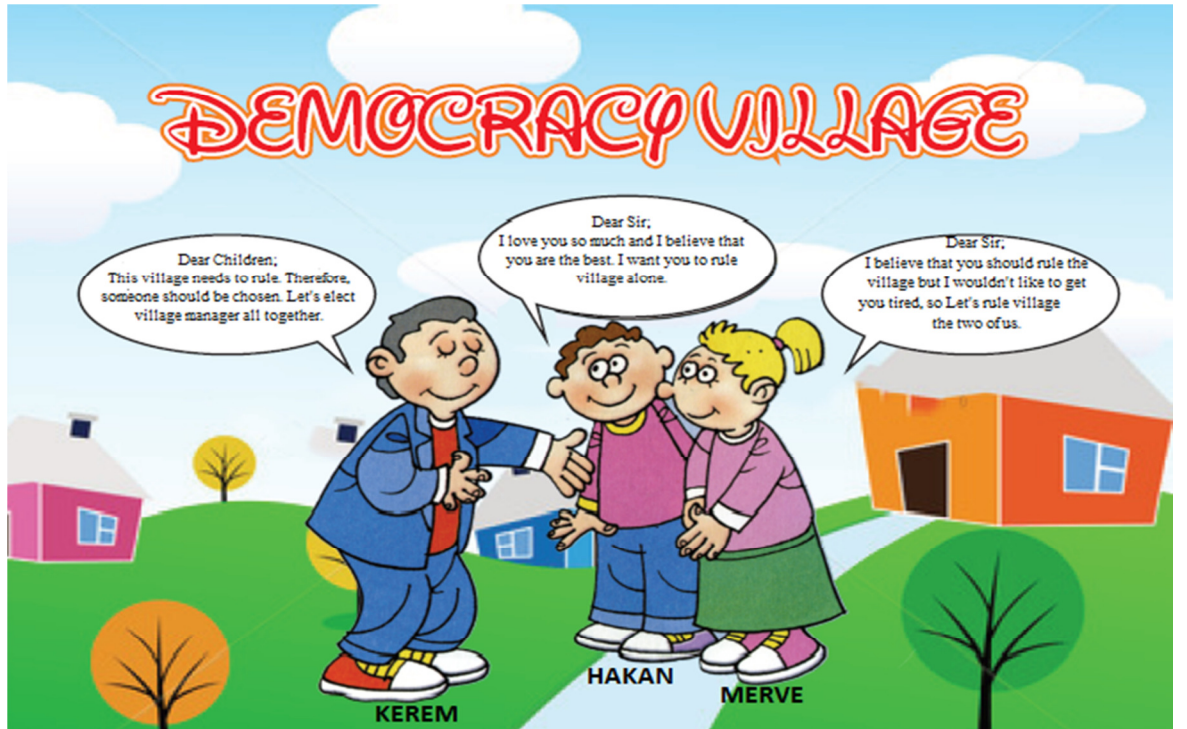
Above opinions of Kerem, Hakan and Merve about the person who will rule the democracy village is given. Fill in the following blanks by considering these opinions.

Kerem by saying that …………………………………………………….. has a suitable opinion for the manager choice.
Hakan by saying that …………………………………………………….. has a suitable opinion for the manager choice.
Merve by saying that …………………………………………………….. has a suitable opinion for the manager choice.

Description: This concept cartoon worksheet; is prepared for forming an activity to provide contribution to acquisition; A.3.7: Discusses the advantages of democratic implementations by moving from examples in school life belonging to sub-title Democratic Life in School given under My School Enthusiasm Unit of 3rd Class Life Studies Lesson.

The students are expected to support opinion propounded by Kerem covering the method of join decision making of the individuals available in that society for the selection of a manager to the village and they are also expected to mention that this is a democratic necessity.

Result and Recommendations
The objective of training is to provide a "successful" "effective" or "positive" adaptation of child to his/her environment. Life Studies Lesson is the first lesson to realize this (Binbaşıoğlu, 2003). Life Studies lesson is not only a lesson where student learn about social life and nature but also one of the first lessons of formal learning life where they can determine original ways of learning. For that reason, has a vital importance both by means of its content and also for preparation of learning environments (Bektaş, 2009). For the purpose of mentioning this importance; in Life Studies program organized in 2005 in Turkey just like in previous programs it was emphasized that the Life Studies Lesson is a lesson aiming to prepare student to social life. It was aimed to perceive school by students as a place where they learn new information, skills and behaviors and place where they took part in enjoyable learning activities by considering that students are "game boys" and also considering their need to play (MEB, 2005).
In such case concept cartoons to provide students learning by fun is an effective tool to address objective that is intended to be realized by Life Studies program. Such that Life Studies lesson covers many concepts. However it is expected from the children not to know about these concepts with all of its dimensions but to give a meaning to them as compatible with their age group and development levels (Karabağ & İnal, 2009). In this phase concept cartoons in one hand responding to these expectations on the other

hand provides emerging and elimination of concept faults students perceive and structured previously. Moreover concerns of students who defend faulty opinions to make mistakes are also removed. Because faulty opinions in concept cartoons shall belong to the person who for the first time expresses it that means the character within the cartoon. In such case student, shall be in a position not expressing the faulty opinion but the person approving the said fault (Kabapınar, 2005) and shall not encounter a situation it may have a concern. In this way when the field-literature studies motivating students, guiding them to solve problems they encounter in their daily lives and concept cartoons those used effectively in learning, teaching and assessment processes it was found out that they were used for different purposes by researchers and resulted with positive consequences for training. Balım, İnel and Evrekli in their research called *''Effects of Concept Cartoons Usage in Science Teaching to Academic Success of Students and Interrogative Learning Skills''* they have applied semi-experimental pattern management with pre-test – post test control groups and found out that concept cartoons resulted with effective consequences for science teaching (Balım, İnel & Evrekli, 2008).

Cheng Chen, Hsiung Ku and Chou Ho in their studies called; *'' Implementation of Concept Cartoons Strategy in a Discussion as a Skill Developing Effect for the Students in a Far Primary School Science Class''* they have come to a result that concept cartoons have an ability to increase discussion capacities of students(http://www1.rdoffice.ndhu.edu.tw/exchange/abroad/). Tatalovic in his study mentioned that use of cartoons in science is not adequate and made recommendations to increase their numbers and aimed to provide contribution with cartoons to training (Tatalovic, 2009). Evrekli, İnel and Çite in their studies emphasized changing of science teaching content based on constructivist approach and method and techniques brought forward and mentioned about effectiveness samples about the usage of concept cartoons in Science and Technology training process. (Evrekli, İnel & Çite, 2006).

Concept Cartoons having such importance for the teaching of concepts for science and technology in the meanwhile also used for values and skills training in Social Sciences. Ersoy in his study conducted for the issue of usage of values in primary schools with concept cartoons he found out that it is effective for student to learn by relating with norms and rules (Ersoy, 2010). Besides, Seçgin, Yalvaç and Çetin also found out that teaching of environmental problems in Social Sciences lessons with the aid of cartoons shall have effective results (Seçgin, Yalvaç & Çetin, 2010).

When all these studies and their positive results are considered relevant to the concept cartoons it is explicit that the wider use of concept cartoons is necessary. Concept cartoons being wide spread in Life Studies Lesson which was previously used for Science teaching shall provide a great contribution for the meeting of requirements of this lesson. Moreover relevant to concept cartoons ease of use and fewer explanations speaking balloons shall also be positive for the student newly developing their reading capabilities.

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