



Turaç, M., Yıldırım, N. (2021). An educational fiction of the future adhering to science fiction movies. *International Online Journal of Education and Teaching (IOJET)*, 8(4). 2618-2635.

Received : 26.06.2021  
Revised version received : 09.08.2021  
Accepted : 10.08.2021

## AN EDUCATIONAL FICTION OF THE FUTURE ADHERING TO SCIENCE FICTION MOVIES

(*Research Article*)

### Corresponding author:

Memet Turaç  :<https://orcid.org/0000-0002-2623-0766>  
Elbistan Science and Art Center, Turkey  
[mehmetfatih46@hotmail.com](mailto:mehmetfatih46@hotmail.com)

Nail Yıldırım  :<https://orcid.org/0000-0003-3697-8783>  
Kahramanmaraş Sütçü İmam University  
[nailyildirim@ksu.edu.tr](mailto:nailyildirim@ksu.edu.tr)

### Biodatas:

Memet TURAÇ has received MA degree on Educational Sciences from Sütçü İmam University Graduate School of Educational Sciences in Kahramanmaraş Turkey. He is the director of Elbistan Science and Art Center. He teaches Mathematics of elementary education in the center.

Nail YILDIRIM is the Dean of Faculty of Education in Kahramanmaraş Sütçü İmam University. He is a full time Professor of Educational Sciences in the same university and offers lessons in BA, MA and PhD classes.

Copyright © 2014 by International Online Journal of Education and Teaching (IOJET). ISSN: 2148-225X.

Material published and so copyrighted may not be published elsewhere without written permission of IOJET.

## **AN EDUCATIONAL FICTION OF THE FUTURE ADHERING TO SCIENCE FICTION MOVIES**

Memet Turaç

[mehmetfatih46@hotmail.com](mailto:mehmetfatih46@hotmail.com)

NailYıldırım

[nailyildirim@ksu.edu.tr](mailto:nailyildirim@ksu.edu.tr)

### **Abstract**

The aim of the study was to speculate about the education in the future in terms of students, classrooms, teachers and schools by adhering to science fiction films. The samples of the study comprised 50 science fiction films selected purposefully among motion pictures by two academics from the field of educational sciences, and one expert from the area of cinema and television. In the research, the science fiction films containing the power of thought, biological, space phenomenon and technological subjects were analyzed. The data were analyzed using MAXQDA program. Based on the findings of the study, it was predicted that the school phenomenon would change depending on the development of technology in the future. With the help of VR glasses and fitbit (wearable technology), a teacher would be able to teach in three dimensions by visiting students' homes without leaving their own homes. On the other hand, the necessity of school-like structures in which students could socialize for peer communication seemed inevitable. It could be thought that the idea that science fiction films took the lead of technology was diversified by the acceptance of the society. In this context, it was seen that each science fiction film fulfilled the task of "instilling ideas" on many subjects to the society.

Key words: Education in the future, science fiction, futurism, movies

### **1. Introduction**

While positive contributions are made to people's lives through education and training, developing and changing information-communication technologies are more common as time progresses in different and new teaching approaches. Innovations in science and technology, which enable quicker access to information and presenting it in various ways, include films that provide intense use of information and emotion transfer, where sound, motion and image are blended and used together, apart from new computer technologies. Researchers report that films, which not only provide information but also maintain their validity in acculturation, which is known as a social formation, can be used to transfer some pedagogical formations to individuals (Kramer, 2004; Osborne, 2002; cited in: Yakar, 2013). The continuation of learning environments throughout life, in other words, education with films and documentaries included in the informal education framework, is an education that can be realized at any time, with all kinds of environments and materials where knowledgeable and opinion can be obtained. Türkmen (2010) shows that depending on informal education, people continue to learn from television, cinema, family and friends, museums, theater, magazines, books and newspapers in their ongoing life. In Takmaz, Yılmaz, and Kalpaklı

(2018), it is stated that the diversity brought by the film contents, the blending of fiction and imagination, is of great importance in terms of knowing the behaviors and consequences that may occur in humans in advance, discussing the results, and associating this with daily life by knowing the education in schools beforehand. . However, it is also stated that in the use of films that can be projected on the big screen in different fields and subjects on the education side, detailed film analyses, classifications and evaluations are not made, and the number of such analysis, classification and evaluations should be increased urgently (Birkök, 2008).

Known as the seventh art; In addition to music, painting, sculpture, architecture, literature and theater (Gök, 2007; Okur, Söğümlü, Göçen, 2013; Vincenti, 1993) and the most influential one (Nowell-Smith, 1996), cinema, besides providing the transmission of culture, provides an education. it is a tool of management (Yanmaz, 2011). Cinema cannot be viewed only as a means of entertaining people, as a means of making the representation power of cultures permanent and permanent in minds (Elmacı, 2013). Cinema also has purposes such as activating and informing societies (Yanmaz, 2011). Besides it is known that cinema contains considerable tools for a complex research that combines audio and visual expression (and film analysis within them); does not deal with defining reality, but constructs it (Rose, 2001; cited in Orhan, 2010). Cinema is one of the most influential branches of art. The doubling of the number of visitors to the ruins after the movie Troy can be shown as an example of the effect of cinema on people (Yanmaz, 2011). According to a study (Yolcu, 2012), it was concluded that the smoking scenes in the cinema are a factor in the initiation of smoking, especially among the young population. The rate of the participants who accepted that they were affected by the movies and started smoking is 4.2%. There are many studies that show that watching movies adapted from books and transferred to the cinema has a positive effect on the reading of students (Okur, Söğümlü, Göçen, 2013) and that educational movies provide positive contribution and acceleration to the professional development and lives of teacher candidates and teachers. (Kaşkaya, Ünlü, Akar, Sağırlı, 2011; Oruç, Saribudak 2015). Cinema; By combining music, painting, acting, dance, theater, architecture and literature, it takes its place in education as one of the most effective instruments that can be a material in education, creating a language that is rich in diversity, contemporary and capable of responding to the liveliness and popularity of its age. It is seen that many educational methods such as concretizing the subjects encountered with difficulties in understanding, repetition of teaching, in-depth analysis and ensuring retention in mind through the use of films in education pave the way for positive outcomes to be achieved (Yakar, 2013). When approached from another point of view, cinema is an important tool that contributes to the differentiation of the society's point of view by directing it as a result of reflections, gaining levels and enriching the feelings and thoughts of the society, and helping the development of a common perspective on issues that are little known by the society (Güçhan, 1992). cited, Önder and Baydemir, 2005). The phenomenon of education is also among the subjects discussed in cinema, and movies have always been intertwined with education, both directly and indirectly. In the movies, education has been handled with different perspectives and sometimes it is a goal to be achieved, and sometimes movies are made as a tool. A society's perspective on education, expected educational outcomes, problems encountered in the education system, obstacles that make education partially or completely impossible, etc. It is possible to understand the subjects by analyzing the subjects covered in the films (Yurdigül, 2014). Along with the intense visual and auditory accumulation of information and the possibility of transferring this accumulation to the audience, the hidden meanings of the information processed in the movies can be conveyed to the audience thanks to the art of cinema. The processing of education in movies is an effective element that does not lose its importance, as the motto "seeing is believing" in terms of the concept of education is embodied in people's lives. Visual images are created with

movies and provide a faster and more effective information transfer when compared to written materials in the transfer of uncluttered information. In other words, by making movies watch, behavioral models can be transferred to the trainees and used in education. Considering the reasons mentioned, it should be adopted that movies should not be seen as a one-dimensional way but as enrichment by using the differences in teaching tools, on the contrary, they should be seen as a unique way of teaching and education (Birkök, 2008). Preferring movies that are liked and watched by the society in education will prevent both the trainers and the trainees from the monotonous and boring course of the lessons and prevent the reluctance and boringness experienced in educational environments (Nadir, 2013). On the other hand, cinema and films can be used in the education of the society so that the audience can get more products in a shorter time, while giving more thoughts and products to the educated with less energy and effort compared to the written and non-image, hearing-based education (Tezcan, 1972). For these reasons, the use of movies for educational purposes in our country has been supported by the Ministry of National Education, and an "Instructional Film Center" (Gökmen, 1989) has been established within the Ministry of National Education. It has been mentioned that there are various usage areas with cinema and cinema films (Proctorve Adler, 1991; Zorn, 1991 as cited in Champoux, 1991). These areas of study are listed by Champoux (1999) as the teaching objectives, teaching styles and the perspective of the knowledge and experience desired to be taught, by making sense of the various experiences, situations, experimental experiences, metaphors, satires, various elements, inferences and time transitions of the films and bringing them to the audience. In this context, it is important to analyze the fact that the important effects of cinema and motion pictures on education cannot be underestimated, and to make inferences after the educational evaluation of different films that can be effective materials in the field of education.

When the effects of all kinds of art on human life and the traces of these effects are taken into account, films will be an important method in gaining product, output and awareness, starting from individuals, to parents, teachers, and educational administrators in understanding the importance of the concept of education (Yıldırım et al. 2016). Humanity keeps the interest in its own future constantly alive and at a high level. The innovations and relaxation that science and technology add to human life, imagines the individual's inner world in a forward-looking way, and accelerates and always keeps him alive on the way to create a way of life for the future. Science fiction has an important place in this formation. Science Fiction is the symbolic message of what is likely to happen in the near or far future, can be lived, can be found (Zillioğlu, 1986). With the increase in the effectiveness of science and technology on human life and the progress with such a great effect that it can give its name to the age, science-fiction has also created a possible future, albeit imaginary, as a result of scientific change, development and technological innovations, worthy of its name. In this context, sci-fi movies contain many impressive factors. The existence of unreal science includes science in its content, its subject being the future, the future of technological products among the ideas it put forward, the processing of opposite concepts such as bad and good, the appeal of imagination to the individual, environmental conditions and the effective power of cinema. appealing to the individual” means that the individual has the opportunity to compare the dreams produced in his own world with the dreams that will arise from science fiction. Perhaps the most important thing is to bring new perspectives to people and to develop and direct dreams (Ekem, 1990). However, if a negative attitude is developed, the attitude towards the future will be based on unreal science and a product of imagination. It can be said that science fiction, which is shaped by human scientific curiosity and imagination, mostly deals with the following topics (Uşun, 2000):

1. Space walks, time travels and displacement, adventures in different dimensions or different universes.
2. Encountering mindless or intelligent monsters, space creatures from different stars.
3. The default date of the future world. How the world will come to an end.
4. Extraordinary situations created by inventions. Robots, supersensory perception and telepathy (ESP).
5. Fictional worlds, utopias.

The realization of knowledge and skills such as critical and scientific thinking, questioning, searching and finding answers to questions in the biological, physical and technological world is directly related to the individual and the professional qualifications of the teacher (Uşun, 2000). For this reason, those who can think scientifically and apply it by transferring it to the classroom, love the teaching profession, are creative and aware of what they can do, are aware of the development processes of students, know their characteristics, conduct effective and successful human relations, develop and respect social values, are aware of the needs of the student and the environment. Being a pioneer in teaching and producing materials and providing teaching are the characteristics of the modern teacher (Şahin & Yıldırım, 1999). Having these features in teachers is also of great importance in terms of ensuring that the learning-teaching stages are carried out more effectively (Çemrek, Anılan, Anılan, Balbağ, & Görgülü, 2005). It is desired to create individuals who can categorize the information, distill new information through new inferences and put this information at the service of the society. (Erdem and Demirel, 2002). Raising individuals with these qualifications is a necessity of education systems. This necessity requires the individual to think critically and scientifically, to question, and to actively participate in the activities of finding answers to questions and problems in the biological, physical and technological world (MEB, 2004). If it is accepted that the individual creates the learning itself (Vural, 2005), it may be beneficial to use science-fiction films effectively in this process. In this context, if it is accepted that the subjects of science fiction films are predominantly science and mathematics, it can be thought that it can have a positive effect on attitudes towards mathematics and science lessons and on the academic achievement of the courses listed.

Chomsky (2019) points out that Karl Marx expresses the future as follows: "It is not enough to understand the world, it is necessary to change it. In other words; If the goal is to change the world, you can't do it without understanding the world. This doesn't mean reading a book, listening to a conversation, although it may seem helpful. You learn by participating in actions. You learn from external factors. You learn while trying to organize people. By formulating our ideas, we are all responsible for acquiring knowledge and experience to put them into action and pass them on to future generations. In ancient times, Leonhar (2018) continued the radical transformations in societies formed by humans through a single element of transformation with a driving force. For example, the transition to factory automation with steam and electrical energies, which was put into use in the order of wood, stone, bronze and iron, and the development of internet technology made this transformation permanent. Although innovation is not thought to be postponed, it should not be ignored that the great risks it contains belong to us. İsmihan (2005) will be positioned in the future to benefit from assets that can work on their own and that can turn into machines over time. The fact that these creatures have some human characteristics will make them weak. In this context, it has been tried to benefit from technological creatures such as robot, Humanoid, automaton, computer and android, which are stronger, more durable and complex than humans. The first to use the concept of robot is Czech Karel Capek. He included it in his work called "R.U.R."

(Rossum's Universal Robots) and added it to the literature. In many places in the work, beings who are skilled in mechanical works, emotionless, more machine-like than human beings are depicted and processed in plots. This is "Automat" (Graaf, 1971; 141). When considered in these contexts, by following the developments in technology without leaving behind, the application of this technology on science fiction will find an area of application for educational fictions that are likely to be applied in the future, and it will be possible to model the reaction, acceptance and success of the society to these applications. Showing some figures with larger and exaggerated drawings, as we can call it art or science fiction, almost created an educational setup for their future. With this research, creating a future-oriented education setup with the codes taken from movies created as science fiction today helps to shed light on the future of the education system. We think it will help us.

In this research, answers were sought to the questions about the subjects covered in science fiction films, the world fiction and plot of science fiction films, the skills of the heroes in science fiction films, the relations between education in science fiction films and future educational fiction and school structure. From this point of view, the aim of the research is to present a projection for the future of education based on science fiction films. For this purpose, answers to the following questions were sought:

1. What are the educational clues in the scenes and scenarios (lines) in science fiction movies?
2. How can a projection be drawn on education, school, program, teacher and student subjects in the light of science fiction movies?

## **2. Method**

### *2.1. Research Design*

In the study, qualitative research method was adopted. The reason for this is the difficulty of analyzing the examined visual sources in quantitative research (Creswell, 2017). Qualitative research, on the other hand, can be considered as more flexible and appropriate methods for dealing with such sources. The qualitative research method used in this study made it easy to carry out the research and to create a design because of its flexible structure. According to the state of the research to make changes in the research design; at every stage, it provides the opportunity to develop new methods and approaches. The reason for this is that social events and phenomena that are constantly changing cannot be thought of independently of the environments in which they develop (Yıldırım and Şimşek, 2008: 52).

### *2.2. Samples*

Science fiction films constituted the sample of the study. In this context, criterion sampling method was chosen. Criterion sampling includes dealing with situations with predetermined characteristics (Yıldırım & Şimşek, 1999/2016). The science fiction films analyzed in this research were decisively selected. In this context, fifty science fiction films were selected among the motion pictures and analyzed. In the process of determining the samples, the films were selected in different regions around the world. The number of the sample films was kept wide, and two academics who were experts in their fields, and a radio television expert guided in the selection of the films.

### *2.3. Validity Studies*

The validity of the study was provided via the selection of fifty science fiction films among which the findings of the study were obtained, and via the opinions and

recommendations of two senior academics who were experts in their fields, and a radio and television expert. Those fifty purposefully selected films were watched by the researcher in three stages. In the first stage; the films were watched without any notes but only with ambiguity (dilemma) as the meaning, and rewatched from different film platforms in order to avoid the risk of mistranslations causing misunderstandings. In the second stage, the timing of the lines to be taken from the movies was determined and recorded. In the third and final stage, the lines were transcribed according to the determined timing. These stages exceeded three hundred hours in total.

#### *2.4.Data Collection Tools*

The data of the study were collected via review of literature and the movie content cards which were developed by the researchers. Providing data by analyzing written documents which contain information about facts and events related to the subject examined within the scope of the research is called document analysis (Yıldırım and Şimşek, 2008). A lot of information about the research area can be obtained through document review without the need for interviews and observations. In this way, the researcher saves time and resources. It is necessary to decide which document is important and can be used as a data source by looking at the research topic (Yıldırım and Şimşek, 2008). In the data collection process, the movie content cards were used as the main data collection tools. Before watching each sample movie, a literature review was conducted about the movie, and the tag of the movie was created. The movie content cards were created by answering the questions determined according to the research questions of the study (See Figure 1).

<b><u>MOVIE CONTENT CARD</u></b>	
<b><i>Name of the film</i></b>	<b>:</b>
<b><i>Director of the film</i></b>	<b>:</b>
<b><i>Scene Director</i></b>	<b>:</b>
<b><i>Actors/Actresses</i></b>	<b>:</b>
<b><i>Summary</i></b>	<b>:</b>
<b><i>1)Noticable dialogues on education:</i></b>	
<b><i>2) Vocabulary uttered by the actress/actresses in the film:</i></b>	
<b><i>3)Influence of the behaviours and attitudes of the actors/acteresses on social behaviours:</i></b>	
<b><i>4) Future o education in the light of the film:</i></b>	

*Figure 1. Movie content card*

#### *2.5.Analysis of the Data*

In the study, document analysis and content analysis from qualitative research designs were used. Document analysis is a qualitative research method that is used rigorously and systematically to analyze the content of written documents (Wach & Ward, 2013). The underlying process of content analysis is to combine similar data within the limitation of a certain concept and theme and interpret it as a form that the reader can understand (Merriam, 2018; Neuman, 2012; Yıldırım & Şimşek, 2008).

In the coding phase of the content analysis, after examining the information obtained and dividing it into meaningful sections, it was tried to find the equivalent of the expression of all sections in terms of concept. The sections mentioned can be inductive words, sentences, paragraphs or one page of data. These sections, which preserve their meaningful integrity within themselves, were named by the researcher (Neuman, 2012). Two principles were taken into consideration while making thematic coding. The first principle is "internal consistency". That is, it is the meaningful integrity of the data that makes up the themes. The second principle is "External consistency", the data obtained as a result of researching the themes were explained meaningfully. Although these themes are different from each other, it has been observed that they form a whole among themselves (Yıldırım & Şimşek, 2008). Detailed coding was done in the first stage, thematic coding was done in the second stage, and then the data were defined and interpreted according to the findings that emerged as a result of the data editing. The data were defined in a way that the reader could understand, then explained and presented after processing (Yıldırım & Şimşek, 2008).

The concept of future education fiction, which is the examined phenomenon, has been evaluated as the future of science fiction films in the past, and it has been seen that many phenomena that were seen as dreams in the past are already used. After explaining and interpreting the collected data, opinions and interpretations were made. In the light of these comments, the data were made meaningful and the conclusions between the findings and the results were explained. (Lightning and Simsek, 2008). The data of this research comprising visual materials were analyzed via MAXQDA program.

### *2.6. Validity and Reliability*

The subject of "the future of education adherin to science fiction films" was discussed as a whole and it was seen that the perception of the future, which was shown in science fiction films that were shot before, took place in a certain period of time, from the past to the present (Yıldırım and Şimşek, 2008). During the data collection, data were collected on the scenes specific to education in science fiction movies, and then during the analysis of these scenes, consistency was ensured by creating codes from the words frequently used in the concept of education. Although it is not known whether all of the lines on education were received during this process, maximum attention was paid to this issue and "internal validity" was tried to be ensured by monitoring this situation in three stages (Yıldırım & Şimşek, 2008).

The 50 films in the research were selected with the knowledge, opinions and guidance of two academicians who are experts in the field. The films were chosen from the past to the present, and since the subjects covered in the films that see the present as the future take place today, the data obtained from these films can be generalized to all science fiction films and predictions can be made for the future.

It has been tried to reach conclusions about the future and education concepts. Considering that the data obtained as a result of the research can be supported through a different sample selected from among the science fiction films, the findings obtained as a result of the research were generalized to all science fiction films and "external validity" was tried to be provided. (Lightning and Simsek, 2008). The fact that new lines are not sufficient to be included in the research except for the lines determined in the second stage of the films and the lines determined in the third stage of the films is an indicator of the reliability of the research. It can be said that there are three types of safety criteria in measurement. These are:

- 1) No change over time,
- 2) Independent observers who are compliant with each other,
- 3) Internal consistency.

Reliability is divided into internal and external reliability (Yıldırım & Şimşek, 2008). The assumptions and conceptual frameworks in the analysis of the obtained data are defined. Data collection and analysis methods are explained in detail (Yıldırım & Şimşek, 2008). It is known that there are various validity and reliability problems that threaten qualitative research (Creswell, 2017). The use of public, accessible and recorded documents is one of the factors that strengthen the reliability and validity of this research. As a matter of fact, the fact that the obtained data are convincing and that the steps of how a qualitative study is analyzed (Miles & Huberman, 2016) are followed are other factors that make the research valid and powerful. The inaccessibility of some data, the fact that various sources are protected and difficult to interpret (Creswell, 2017) can be seen as the limitations of the method used in this research. Easier collection of visual attention and in-depth analysis of data are the advantages that can overcome this limitation.

### 3. Findings

In the study, some scenes in which the future and future education are interspersed in the selected films and the lines in these scenes were determined and tried to be transformed into findings in line with the sub-problems of the research. While the films were divided into categories, the subject of the film, the visuals used in the film, the places, etc. were carefully studied. The findings of the study about the future of education are presented below:

#### 3.1. Findings Related to Education in Scenes and Scenarios (Creations) in Science Fiction Movies

In order to find clues about education in scenes and scenarios (lines) in science fiction movies, educational words in movies were used as codes. These codes are Education, Future, Success, Management, Planning, Economy, Idea, Digital, Choice, Feelings, Harmony and Parasite (See Tables 1-3).

Table 1. Frequency table of the education tips in the movies about power of thought

Code	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15
Education		2				1									2
Future	1	2			1	2		1				3	4		5
Success	1			4	1	2	2		1			1	1		
Management					1	2		1	1						
Planning	1				1		1					1			
Economy						1									
Idea		9										2		1	
Digital								1							
Choice		1							1						
Feelings		1	1	1				7	1			1	2		
Harmony														1	
Parasite		1													

When we look at the films in which the power of thought is examined, it can be said that the phenomenon of "future" comes to the fore, followed by the concepts of "idea" and "education". The fact that the "Future" and "Education" codes are more specific than the other codes, and that the "feeling" code is not equivalent to these codes. However, the evident

in the "feeling" code can be thought to indicate that the power of thought and the concept of education are closely related. The low frequency of the "harmony" code can be thought to be related to the latent "individuation" and "integration" codes.

Table 2. *Frequency table of the educational tips in the films about biological changes*

Code	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26	F27	F28	F29
Education			1		1						1			
Future					2	1	1	1	1			1		
Success			2		1		1				1	1		
Management	1								1	1	1			
Planning			3										1	1
Economy	1		1										1	1
Idea					1							1		
Digital			1					1	4					
Choice														
Feelings							1							
Harmony								1	1	1				
Parasite			1						2		1	1	1	
Code			1		1				1			1		
Education												4		

Considering the distribution of codes, it is seen that the concepts of "future" and "product" are repeated more often than other concepts. It can be said that this situation results from the fact that a biological effect is always desired to be based on the product. It can be thought that the products that will be needed in the future can be obtained through biological changes.

Table 3. *Frequency table of the educational tips in the films about the concept of space*

Code	F30	F31	F32	F33	F34	F35	F36	F37	F38	F39	F40	F41	F42
Education						1							2
Future	2	2			2	1							
Success			2			1	3						
Management					1		1						1
Planning	6		2				2	2					
Economy	1		3		1						2		
Idea		1											
Digital									2				
Choice							1						
Feelings	1		1						5			1	
Harmony		2								1			
Parasite					1				1				

It can be said that we need to focus in order to succeed, according to space-based films in which the codes of "future", "planning", "success", "harmony", "feeling" and "idea" are often and homogeneously processed.

### 3.2. Findings Related to How Projections Can Be Drawn on Education, School, Program, Teacher and Student Subjects in the Light of Science Fiction Films

In the research, the findings were analyzed by quoting some movies. When the films were examined, several examples were found on different learning techniques and teaching methods.

One of the most obvious of these is the example of double-sided writing in the movie “Arrival”.

**“IanDonnelly:** *Imagine you want to write a sentence with both hands, starting from both sides. You have to know both every word you want to use and how much space they will take. A heptapod can write a complex sentence in two seconds without any effort. It takes us a month to prepare the simplest answer, then we expand our vocabulary. (00:55:16-00:55:40)”*

Another example is the voice coming from the TV in the background in the third kind of close-ups movie of 1977.

*“Now let's get to know the frame, is it a frame? No, this is a triangular square, all its sides are equal. So are the doors square? No, the doors are rectangular”.* It is seen that education is given on television. (00:12:09-00:12:35).

From this point of view, it is seen that different learning styles and environments can be mentioned according to developing and changing situations, including hybrid learning. The fact that globalization will change everything that belongs to human beings by affecting deeply is in the movie exmachine;

**“Nathan:** *The strange thing about search engines is that in a world where work was not invented, there was so much raw material to find oil, no one knew what to do with it. You see, my competitors were busy shopping and monetizing that information through social media, they thought search engines were a map of what people were thinking, but it was actually about how people were thinking impulses reactions liquid imperfect pattern mixed”* (00:38:12-00:38:51:00)

Education and training environments and the management of these environments act in parallel with the developments in the world, and it is seen that the focus is shifting from the teacher to the learner. In this context, it is no longer mentioned about the renewal of hardware in physical environments, but the renewal and development of software in terms of size. The lines in the exmachine movie on the subject are as follows;

**Nathan:** *I had to stay away from the structured gel circuits I needed something that would be adjusted and recalibrated at the molecular level but retain its shape when needed we had to stay still for memories we had to act for thoughts.*

**Calep:** *Is this your hardware?*

**Nathan:** *Wet hardware.*

**Calep:** *Well ah ah software?*

**Nathan:** *I am sure you may guess.*

**Calep:** *Blue book.*

**Nathan:** *The strange thing about search engines is that in a world where no work was invented in this business, there was a lot of raw material like finding oil, no one knew what to do with it, you see, my competitors were busy turning that information into money through shopping and social media, they thought that search engines were a map of what people thought, but it was actually about how people think urges reactions liquid imperfect molded mixed (00:37:39-00:38:51:00)*

It is a fact that it is necessary to think about how long the school and classroom environments will preserve their existence. In the movie “Edge of Tomorrow”;

**Major William Cage:** *Imagine we have an army of ritabrateviski who managed to kill hundreds of copies on the first day at the front even with new clothing technology and limited time training (00:02:08-00:02:17)*

In this scene, it is emphasized that wearable technology can be used in education in every field. In this context, although there was no electricity and computer at the time of the invention of the wheel, this is a technological development.

Toplumsal yönlendirmelere yönelik olarak aşağıdaki filmler örnek gösterilebilir.

**“Limitless”;**

**EddieMorra:** *Do you see this guy I was a little while ago Can someone without a drug or alcohol problem look like this but it's weird if he's a writer no one believed I had a book deal science fiction it's a science fiction novel but it reflects my personal ideas about the 21st century creating a utopian society where everyone is something really really well that day was the day I was going to start writing here we go here we go we go it will be great you need to take time and stay in the room key point don't leave this room (00:03:54-00:04:46)*

**“Upgrade”;**

**AshaTrace:** *I am also in this sector, I work for cobolt, our area of expertise is robotics for veterans, robotic limbs, we are not yet as advanced as VC, but we are developing*

**EronKeen:** *Yes you are not, I'll show you why, follow me, I want to show you what is my today is the world's tomorrow, it's called STEM*

**GreyTrace:** *Wow! What an incredible thing!*

**AshaTrace:** *So what is it doing?*

**EronKeen:** *Literally anything can use anything can talk to anything can calculate a new and better brain.*

**GreyTrace:** *Can it give birth to a baby or play football, for instance?*

**EronKeen:** *It can do anything for the good of the society.*

**AshaTrace:** *OK, you know what I mean.*

**GreyTrace:** *I say you should leave some things to people and you may see the future in that thing, I see the people waiting during the job search. (00:08:00-00:09:02)*

Here, too, it is emphasized that many things that humans can do can be done with robots and the importance of STEM education is revealed.

#### 4. Conclusion and Discussion

In accordance with the findings of the study aiming to produce ideas about the future of education attributing to some science fiction films, it is seen that the concepts come to the fore in films are; Education, Future, Success, Management, Planning, Economy, Idea, Digital, Choice, Feelings, Harmony and Parasite. These concepts are still used in the education systems. Based on these concepts, it is seen that education will focus on the same concept components in science fiction films in the future.

According to the analysis findings of the lines and scenes in the movies, the following basic points can be drawn for education:

It is seen that different learning styles and environments can be mentioned according to developing and changing situations, including hybrid learning. Today, with the effect of the pandemic process, the hybrid learning model has become much more known and applied. With the start of taking the necessary precautions, albeit partially, within the conditions of the pandemic, the hybrid learning model, which consists of the combination of distance education and face-to-face education, has been tried to minimize the negativities of both models. Usta (2007) concluded that students who study in hybrid learning environments are more successful in comparing the academic achievement of students studying in hybrid learning and face-to-face learning environments.

In the movies, it is no longer mentioned about the renewal of hardware in physical environments, but the renewal and development of software in terms of software. We are passing through a period in which classical learning-teaching environments are left behind, these environments gain a new dimension, and student-centered teaching models are brought to the fore (Balaban, 2010). This situation, which affects the present, seems to affect the future as well. As a result of progress and development in information technologies, it has been inevitable for learning and teaching environments to undergo a continuous change. While students carry homework notebooks in their bags in order to write their homework, assigned by their teachers through smart applications through classes created in virtual environments, and the teacher can interact with even the parents of to provide feedback through virtual environments. In the light of these developing technologies, with hologram projection, the teacher can conduct the lesson as a guest in the students' homes without the need for school. An example of this is when an image previously shot by Peter in the movie "Prometheus" is shown at a later time.

It is already discussed that the blackboard in the past has been replaced by virtual reality applications and smart boards, that educational environments will not be dependent on physical environments, and that there may be learning in digital areas (Çalık and Sezgin, 2005). In this context, individuals will be able to produce new information as a result of these discoveries by transferring the knowledge and skills obtained based on education and training in the physical environment to virtual environments. By sharing the new information produced with blog type virtual applications that allow information sharing in virtual environments, and as a result of this situation, the way of globalization will be opened.

Again, the films focus on the globalizing world and its effects. It is a known fact that all countries in the world are under the influence of globalization. Globalization causes various changes and innovations in the field of education as well as in all fields. If we compare the subject of cinema and science fiction films, the first novel about space; "De la Terre à la

Lune”, is the first science fiction example written by French writer Jules Verne in 1865. The novel, which was written in France, was transferred to the big screen in France in 1902. In this context, the USA established NASA in 1958, right after the first space travel experiments were carried out in 1957 and then by the Soviet Union (wikipedia.org). This cycle can be an example of the global spread of education in this field. From this point of view, it is seen that the flow of information has accelerated in the globalizing world and the ways of obtaining information have diversified. Balay (2004) emphasizes that education is the focal point of the changes and developments in our country as a result of the changes and developments in the world affecting globalization, and emphasized that schools should follow this globalization in order to survive in the future world.

In a scene from the movies, it is emphasized that wearable technology can be used in education in every field. In this context, although there was no electricity and computer at the time of the invention of the wheel, this is also a technological development. No technological development can be more complex than the transmissions in the mind. Because the starting point of all technological developments, including artificial intelligence, is the brain of individuals. In fact, all technological developments are trying to reach the point of reaching the human brain. Today, rapidly developing technology has emerged with the existence of humanity (Bonasio, 2010). As this development affects a wide variety of fields, educational environments are also affected. Along with the speed of the development of technology, learning and teaching environments and forms will also evolve in the same direction. With the methods of web design, hologram and virtual reality, which we already know and which are increasingly used, educational environments and schools will compete and lose the mission they have undertaken in the past. According to Arslan et al. (2019), with fitbit wearable cameras containing 8D technology, students will directly contribute to learning in a way that will benefit from time and space unlimitedly. Technological developments that are likely to be experienced in this context will also affect education and school in the same direction.

The importance of planning is also emphasized in some films. Emphasizing that planning should include structural processes, Koşar (2010) predicts that the number of school-age students will decrease between 2023 and 2050. It is seen that the scenes and what is said in the science fiction films of the past years are in the later life. Leonhard (2018), who sheds light on the future based on this fact in the movies, sheds light on the future with the statement that "almost all the actions performed by many groups (white-collar-blue-collar) in our society, which we are used to being done entirely by humans, will be performed by robots in the near future." Here, too, it is emphasized that many things that humans can do can be done with robots and the importance of STEM education is revealed. Augmented reality, virtual reality, hologram, implants, brain-computer interfaces, limbs developed with nano technology and synthetic technology will be summarized and the technological process in this regard will be summarized in the future, and artificial intelligence will fulfill emotional functions as well as human physical functions. Increasing the rate of the use of human brain through some biological and chemical reactions as in the movie "Lucy", or determining the social behaviours of societies via artificial intelligence as in the movie "Ex Machine", it is hard to distinguish between human and robot by developing expected and desired type of robots in society. Or, as in the movie "Upgrade", the development of a technology in which the management of the body is left to the wet software, and finally, as in the movie "Selfies", education is primarily focused on education by combining the biochemical process and technological developments that prevent the loss of the characteristics of gifted people who come to the world through interbody transfer in later life processes. We

may come across a future where processes such as innovation, awareness and management can be carried out as desired.

## **5. Recommendations**

The recommendations of the study can be stated as in the following:

- Concepts related to education in science fiction films are today's concepts. In the future, there will be education, training, school, teacher, student, only the implementation processes will be different. This idea necessitates giving the necessary importance to the existing education processes.
- The concept of planning comes to the fore in science fiction films. The holistic view that will plan the education of the future should be considered.
- Hybrid models will increase in education based on science fiction films. It requires careful and planned work.
- Technological developments should be clearly defined where they should be in education systems and school structure. All kinds of technological developments that can be transferred to educational environments or developed directly for educational environments should be closely followed, and in this direction, the education system, school structure and classroom structure should be made open to change.
- In order to measure the reaction of the society to the innovations and developments that can be made on the future education fiction, the future fictions should be discussed in the society. A cinema industry should be created that includes the developing and developing technological innovations from the world. In order to catch the future, this field should not be limited to only science fiction films, but also the cartoon industry that children watch constantly should be intervened. Individuals who watch cartoons that are fictionalized by incorporating into different methods and models from a young age will learn to question, express ideas for the future, and be open to innovations. In this context, they will not resist the innovations that can be brought with the grown individual, and they will also have the equipment to contribute to the innovations. Another positive aspect is the increase in the efficiency of structures fed from different constructs in the society in terms of producing products for the future.

## **6. Acknowledgement**

This study was generated from the M.A. thesis of the first author entitled; “An Educational Fiction of the Future Adhering to Science Fiction Movies” under the supervision of the second author at Kahramanmaraş Sütçü İmam University Institute of Social Sciences with the funding of scientific research projects coordination unit (BAP) of the same university.

## References

- Arslan, S., Karahalilöz, O., Karagözoğlu, B., Yıldırım, E., Yaldız, T., Kuş, H., Acar, S. (2019). Geleceğin okulları: Değişim kaçınılmaz mı? *Academic Platform Journal of Education and Change*. 2(2), 201-216
- Balay, R. (2004). Küreselleşme, bilgi toplumu ve eğitim. *Ankara University Journal of Graduate School of Education*. 37 (2), 61-82
- Birkök, M. C. (2008). Bir toplumsallaştırma aracı olarak eğitimde alternatif medya kullanımı: Sinema filmleri. *Uluslararası İnsan Bilimleri Dergisi*. 5(2), 1-12.
- Büyükoztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş., Demirel, F. (2018). *Eğitimde bilimsel araştırma yöntemleri*. Ankara: Pegem.
- Champoux, J. E. (1999). Films as a teaching resource. *Journal of Management Inquiry*, 8(2), 240-251.
- Chomsky, N. (2019). *Geleceği kurgulamak. Making the future: Occupations, interventions, empire and resistance*. İnkılap.
- Creswell, J. W. (2017). *Araştırma deseni: Nitel, nicel ve karma yöntem yaklaşımları* (3rd edition). Eğiten.
- Çalık, T. ve Sezgin, F. (2005). Küreselleşme, bilgi toplumu ve eğitim. *Kastamonu Journal of Education Dergisi*, 13(1), 55-66.
- Çemrek, F., Anılan, B., Anılan, H., Balbağ, M.Z. Ve Görgülü, A. (2005). Bilim-Kurgu Filmlerinin Öğretmen Adaylarının Fen Derslerindeki Başarılarına Yansıması, 14th National Congress of Educational Sciences, Pamukkale University faculty of Education, Denizli, Proceedings.
- Ekem, N. (1990). Eğitim iletişimde bilim-kurgu filmlerinin bilime yönelik tutumlara ve kişilik gelişimine etkisi. *Kurgu Journal*, 8, 501-541.
- Elmacı, t. (2013). Kader ve masumiyet filmleri bağlamında melodram türünün yeniden üretimi. *Zeitschrift für die Welt der Türken Journal of World of Turks*. 5(2), 261-277
- Erdem, E. ve Demirel, Ö. (2002). Program geliştirmede yapılandırmacılık kuramı, *Hacettepe University Journal of Faculty of Education*, 23, 81-87.
- Gök, C. (2007). Sinema ve gerçeklik. *Sosyal Bilimler Dergisi*, 1(2), 112-123.
- Gökmen, M. (1989). *Başlangıçtan 1950'ye kadar Türk sinema tarihi ve eski İstanbul sinemaları*. İstanbul: Denetim.
- Graaf, V. (1971). *Homo Futurus*. Classen Verlag. Hamburg.
- İsmihan, E. (2005). Bilim kurguda temel kavramlar ve kahramanlar. *Türk Eğitim Bilimleri Dergisi*, 3 (2) , 153-162.
- Kaşkaya, A., Ünlü, İ., Akar, M.S. Ve Sağırılı, M.Ö. (2011). Okul ve Öğretmen İçerikli Sinema Filmlerinin Öğretmen Adaylarının Mesleki Tutumlarına ve Öz Yeterlik Algılarına Etkisi. *Kuram ve Uygulamada Eğitim Bilimleri*. 11(4), 1-20
- Koşar, S. Güçlü, N.(2012). Türkiye'de ilköğretim sisteminin geliştirilmesi için gelecek senaryoları. *Education and Science*, 40(180), 265-287
- Leonhar, G. (2018). *Teknolojiye karşı insanlık, insan ile makinenin yaklaşan çatışması*, Optimum.
- MEB. (2004). İlköğretim Fen ve Teknoloji Dersi (4-5. Sınıflar) Öğretim Programı, Ankara: Ministry of Education Publications
- Merriam, S. B. (2018). *Nitel araştırma: Desen ve uygulama için bir rehber* (Çev. Ed.: S. Turan; 3. bs.). Nobel.
- Miles, M.B., Huberman, A.M. (2016). *Genişletilmiş bir kaynak kitap: Nitel veri analizi*, 2 baskı (S. Akbaba-Altun ve A. Ersoy, Çev. Ed.) Ankara: Pegem.

- Nadir, U. (2013). Aile danışmanlığı eğitimlerinde popüler filmlerin kullanımı ve yapısal aile terapisi kuramı ile dalgaların prensi filminin analizi. *Toplum ve Sosyal Hizmet*, 24(1), 129-143.
- Neuman, W. L. (2012). Toplumsal araştırma yöntemleri: Nicel ve nitel yaklaşımlar I-II. Cilt (5th edition). İstanbul: Yayıncı Odası.
- Nowell-Smith, G. (1996). *The Oxford history of world cinema*. New York: Oxford University Press.
- Okur, A., Süğümlü, Ü. ve Göçen, G. (2013). Kitaptan uyarılma sinema filmlerinin ortaokul, lise ve üniversite öğrencilerinin okuma eğilimleri üzerindeki etkisi. *Uluslararası Sosyal Araştırmalar Dergisi*, 7(33),667-685.
- Orhan, K. (2010). "Modern zamanlar" filmi ve dönemselsel bir çalışma ilişkileri. *Çalışma ve Toplum*, 1. 133-152
- Oruç, Ş , Sarıbudak, D . (2015). Okul yöneticilerinin ve öğretmenlerin eğitim içerikli filmlerin eğitim ortamlarına etkisine ilişkin görüşleri. *Uluslararası Alan Eğitimi Dergisi* , 1 (1), 19-41
- Önder, S. ve Baydemir, A. (2005). Türk sinemasının gelişimi (1895-1939). *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi*, 6(2), 113-135.
- Şahin, T.Y. ve Yıldırım, S. (1999). *Öğretim Teknolojileri ve materyal geliştirme*, Ankara: Anı.
- Takmaz, Yılmaz, M. Ve Kalpaklı F. (2018). Doğa ve çevre eğitimi için öğretim materyali olarak Avatar filmi. *Pamukkale University Journal of Graduate School of Education*, 30, 249-263.
- Tezcan, M. (1972). Toplumsal yaşantımızda sinema ve halk eğitimindeki rolü. *Ankara University Journal of Faculty of Educational Sciences*, 5(3), 171-204.
- Türkmen, H., (2010). İnfomal (Sınıf-Dışı) fen bilgisi eğitime tarihsel bakış ve eğitimimize entegrasyonu, *Çukurova University Journal of Faculty of Education*, 3(39), 46-59
- Usta, E. (2007). Gazi University Graduate School of Education Department of Educational Technology. "Harmanlanmış Öğrenme ve Çevrimiçi Öğrenme Ortamlarının Akademik Başarı ve Doyuma Etkisi" Unpublished PhD Thesis.
- Uşun, S. (2000). Özel Öğretim teknolojileri ve Materyal Geliştirme, Ankara: Pegem.
- Vincent, G.(1993). *Sinemanın yüz yılı*. İstanbul: Evrensel Kültür.
- Vural, M. (2005). İlköğretim Okulu Ders Programları ve Öğretim Klavuzları, Erzurum: Yakutiye Yayıncılık,
- Wach, E., Ward, R. (2013). Learning about qualitative document analysis URL: <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/2989> Accessed on: . 08.02.2021, at: 14:21
- Yakar, H. G. İ. (2013). Sinema filmlerinin eğitim amaçlı kullanımı: Tarihsel bir değerlendirme. *Journal of Hasan Ali Yücel Faculty of Education*, 19(1), 21-36.
- Yanmaz, P. (2011). Turizm tanıtımında sinemanın rolü. *e-gifder*, 2, 112-139.
- Yıldırım, A. Ve Şimşek, H. (1999/2008/2016). Sosyal bilimlerde nitel araştırma yöntemleri (10. bs). Seçkin.
- Yıldırım, N., Tüzel, E., Yıldırım, V.Y. (2016). Aamir Khan filmlerinin eğitimsel açıdan incelenmesi: 3 Idiots ( 3 aptal) ve Taare Zameen Par ( Her Çocuk Özeldir) üzerine bir nitel çalışma, *Atatürk University Journal of Graduate School of Fine Arts*, 36, 210-244
- Yolcu, E . (2012). Sinema filmlerindeki sigara içme sahnelerinin sigaraya başlama üzerine etkisi . İstanbul University Journal of Faculty of Communication.26, 139-150.
- Yurdigül, A. (2014). Eğitim olgusunun sinematografik anlatıdaki yeri üzerine bir yaklaşım denemesi ("Bal" filmi örneği). *Ekev Akademi Dergisi*, 60, 487-502.

Zıllıođlu, Z.M. (1986). Sinematografik Bilim-Kurgu Yayınlarının Çocukların Dünya Görüşünün Oluşumu Üzerindeki Etkiler. Eskişehir: Anadolu University Faculty of Open Education