

FROM TELEVISION BROADCASTING TO AUDIO-VISUAL CONTENT DELIVERY IN DISTANCE EDUCATION: Strategy, Design, Production

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ABSTRACT

Television broadcast in Open and Distance education system has a 34-year history in Turkey. However, it has become unavoidable for the system to evolve to a new phase with the emerge of the innovations in "new communication and media technologies of 21st century. This change has progressed on two basic elements; content delivery (broadcasting and e-learning) and design of audio-visual content. The first step to be taken with this regard is to determine the future strategy of distance education (Open and Distance Education System 2020 Strategy Report) and then establish a new broadcasting model (TRT OKUL) under the light of the adapted strategy. This study aims to report and analyze the whole process of transformation beginning from 2010 and demonstrate what works and studies were carried out, how audio-visual contents were designed, what broadcasting strategy was employed, what techniques were used in the adaptation of broadcasting strategy to other educational tools, with applications and the results obtained through these applications.

Keywords: Distance education, educational television, Anadolu University, TRT Okul, interactive television, VoD, Web-TV,

INTRODUCTION

A lot of research (Bates & Gallagher, 1977; Bates, 1988; Demiray & et. Al., 2002; Rovai and Lucking, 2003; Hakan & et. Al., 2004; Bozkaya, 2006; Akhter, 2011; Kucukcan, 2011) has been carried out in the literature regarding the use of TV in distance education, and they have attempted to come up with solutions for two basic things; the first is the rating of open and distance education programs, the second is whether TV is an effective tool for teaching. None of the studies in the literature discusses if the use of TV is necessary in open and distance education. Just opposed to that, it is a presupposition.

However, this presupposition is about whether TV is a delivery model regarding broadcast or about the use of audio-visual materials regarding the contents.

In fact, both of them are included in this presupposition. However, televisions' gain of tradition broadcast (terrestrial, cable or satellite) regarding the new approaches beginning from the first quarter of the 21th century (digital broadcasting, interactive television, VoD, Web-TV, Mobile TV) and innovative "e-learning" practices have made it necessary to reevaluate the presupposition mentioned above.

The idea regarding that this new broadcasting models could be used much more effectively in education has led to diversification of content delivery systems and to the reorganization of relevant content in distance education considering the diversification mentioned here.

Bates, who has served as the head of the Institute of Educational Technologies, Audio-visual Media Research Group at Open University UK for many years, released an article in 1984, and he suggests that technological advancement has led to new trends in distance education suggesting that these trends are;

- Media will be the most common means of interaction at home,
- Access to new media will provide a vast diversification,
- Expenses will decrease with the start of new media, New media will provide students with a big control and interaction power. (p.5-6)ⁱ

We should remember what Bates meant to say with new media is videocassettes, videodisks and cable TV. However, we can understand that Bates was right looking at new technological advancements in today's world. Although Kirkwood (1991) consider that "developments in audio-visual media production for distance education should not be "technology led", but should embrace the desire to enhance the educational effectiveness of teaching and learning" (p.5), it is now understood that there are advancements in both directions in today's world. However, it is not right to think that these innovative ways of broadcasting have rendered unnecessary the traditional broadcasting because this can only be suggested depending on the distance education models used, the number of the students registered in the system, the geographical and economic conditions of the country.

Daniel (1998) defines the universities with more than 100.000 students as mega universities. Because of the geographical conditions, TV is one of the easiest channels for such universities to reach their students. Besides, students' economic conditions, the fact that media literacy is something newly learned with the use of new technologies and access problems to the internet have made the continuous use of TV compulsory. Anadolu University, Open Education Faculty, which is one of the universities with more than 1 Million registered students, has been performing a "second generation distance education" as suggested by Kaufman (1989) and Nipper (1989). This second generation distance education program which has been delivering distance education to a lot of students is a model in which books and TV broadcast are used as a shared education material.

Chinese television Universities and Open Education in UK are also two of these second generation distance education provider universities.

The main focus in this system is TV as well as some printed materials for which students are responsible.

The researches carried out in literature have revealed that there is a significant relationship between students' viewing habits and the quality of broadcast, the duration and timing of the broadcast. It has been suggested that regulating the program schedule considering students' needs and expectations (Bozkaya, 2006), steady broadcast streaming (Akhter, 2011) and announcement of these steady broadcast streaming to the students (Bozkaya, 2006), delivering quality program rebroadcasting to students (Bates, 1975; Gallagher, 1977) are predicted to lead a regular viewing habits on students as well as an increase in the number of viewers.

On the other hand, whether or not television provides effective educations for students, which are the concern of the second part of the research, closely depends on whether the content is effectively used or not. Kirkwood (1991) suggested that "it appears that print is still the dominant medium of instruction in distance education throughout Europe, but where audio and/or television materials are used; they usually enhance the teaching effectiveness of courses and the learning experience of students" (p.4).

Although new education materials have been developed and adapted in many distance education programs nowadays, books are still at the center of education and still play effective supporting roles in education.

Therefore, television is considered to be audio-visual teaching material, the content rather than a delivery model. How the content is delivered with the tools of delivery (television, video players, VoD, web content portals, Mobile) influences the effectiveness of the program. Chute, Thompson, and Hancock (2009) argued that television play role to deliver lessons to distance learners who has no regular interaction with a formal teacher in preparation of assessment (as cited in Akter, 2011, p.189).

It is not what we aim to say that teachers also need to be parts of television. Television itself plays the role of teacher here. Audio-visual aids of television take over the role of teachers, which is not true for any of other teaching materials. Ability of the TV is to bring resources to learners which would not be possible through any other medium, or even through direct experience (Bates, 1987, p.6). Thus, using real life samples, animations, music, voices and etc., students can be served with the information, experience and different teaching methods that are normally given in normal face-to-face education. The fact that it is difficult, costly and time consuming for teachers in formal education to prepare audio-visual materials to effectively fulfill their teaching, reveal that the advantages offered by television in distance education setting are far more than that of face to face education. Bates (1981) claims that the medium used in learning process is suggested to have two functions:

- The presentation of knowledge in a different way from the presentation of the same knowledge through another medium, thus providing a broader base of "knowing" – knowing "what" in different ways;
- The development of certain mental skills in using knowledge -knowing "how" in different ways. (p.6)

Television is a very rich medium in terms of information density; because of the amount and type of symbol systems it can simultaneously carry (Bates, 1987, p.6). The richness of the symbols, better recognition of the information and terms taught through texts give students new opportunities for better analysis exemplify and help students interpret.

This new system is different from the symbol systems of books and much richer as well. The representers' power of television is a source for a lot of teaching materials. These audio-visual materials offer advantages that cannot be offered by any of other educational materials as students are studying at home. Bates (1987) lists the characteristics of audio-visual educational materials as follows:

- To demonstrate experiments or experimental situations
- Principles involving movement over space and/or time
- To provide students with case-study material
- Archive audio-visual material
- To demonstrate processes

The characteristics listed above help students in some conceptual processes. Thanks to audio-visual contents, students can reinforce the knowledge that they get from their books and they can use this newly learned knowledge for new samples and cases. Thus it makes it possible for students to interpret abstract knowledge that is difficult, complex to learn through different models. This is the analytical process and it helps students improve their learning skills.

The supplementation of new educational technologies and materials makes it necessary to question the process with regards to aims of learning and learning methods.

Therefore, the research looking for the answers to the question of how television will contribute to the effective learning is more related to the audio-visual content of television rather than the television itself.

The most basic research items out of these investigations are students' expectations regarding the contents, the structure of the contents, how pedagogical approach will be reflected on audio-visual content, what quality visuals mean and how new content diversification will be with the start of new media.

This paper aims to compare the experimental results of the new television model which was started with cooperation between Anadolu University and TRT (Turkish Radio Television) for distance education purposes and to come up with further considerations.

METHOD

"TRT Okul (TRT School)", which was started in 2010 with cooperation between Anadolu University and TRT, has two basic aims:

- Functioning as a general education platform (broadcast is under TRT's watch) for the Turkish speaking communities and Turkey within the scope of "life long learning" and

- **Establishing a new television-broadcasting model that will support distance education services within the scope of Anadolu University, Open Education System.**

The scope of this study is limited to distance education television broadcast of Anadolu University and its audio-visual content practices and its outcomes. The applications and their outcomes will be analyzed under the light of the following researches:ⁱⁱ

- **The results of the "Search conference for Educational TV" which was held at the start of establishing the educational TV channel (9-10 October 2010);**
- **"Open and Distance Education System 2020 Strategy Report" which resulted from the search conference of "2020, Design of Future" which was held for the purpose of investigation of Open and Distance Education System, Anadolu University, 2010 (17-19 April) and study of the television evaluation carried out by Kucukcan (2011).**
- **The finding of the studies carried out by Hakan and et. al (2004) and Bozkaya (2006) for Open education System, Anadolu University;**
- **The researches of Bates and Gallagher (1977), Bates (1988), Rovai and Lucking (2003), Akhter (2011).**

BRIEF HISTORY OF BROADCASTING IN DISTANCE EDUCATION IN TURKEY

Television programs prepared by Open Education system Anadolu University started to be broadcasted on TV1 (TRT 1) in 1983. TV4 (TRT4), which was launched for the purpose of education and music started to be the host for the broadcast of distance educational programs beginning from 1990.

In 1991, the amount of time spared for distance education was 27 hours in a week, 10,5 hours on TRT 1, 6,5 hours TRT2 and 10 hours on TRT4 continued till 2008.ⁱⁱⁱ Whereas broadcasting duration and number of programs have changed in years, 5000 television programs have been displayed through 25 years in 24 weeks and for 37 hours in a week and 888 hours in total.

The structure of the television programs broadcasted early in the morning or late at night is generally based on teachers' reading the course books on the TV screen in a "talking heads" format. As program durations allow covering all the units of the course book, teachers have to repeat each unit through brief summaries.

Teachers usually use boards in their teaching and they also use printed graph and visuals from time to time. This has caused students to find the television programs boring which led to low ratings of the television program.

Although new and different television formats started to be used beginning from 2000s, it was found that the rate of those viewing television programs was found to be 12%, and 60% of them was found not to view television programs (Bozkaya, 2006; Küçükcan, 2011).

The first suggested reason for students not to view television programs are that they find TV programs boring and the broadcasting times of the programs are inappropriate (Hakan and et. al., 2004; Bozkaya, 2006; Küçükcan, 2011).

The television programs were stopped in 2008. The search conference of "2020 future Design" which was held for the purpose of evaluating Anadolu University, Open and Distance Education programs in 2010 and the basic vision of the strategically planning have come up with the understanding of "Lifelong Learning"^{iv} and the most basic principle of this new understanding is to use television programs as basic elements of open and distance education system.

In parallel with these decision and aims, Anadolu University signed a new contract with TRT in 2010 and they agreed on establishing new education programs considering the needs of TRT regarding its educational principles and a new protocol was signed in May, 2010. After completion of an eight-month preparation, TRT Okul which is the first education oriented television channel started broadcast on 31 January, 2011.

The protocol between Anadolu University and TRT aims a strategically cooperation and also aims to broadcast programs for open and distance education programs as well as appealing to a large mass of people "Young and Old Alike, Lifelong Learning". The frame of the new TV channel that was formed in cooperation of two sides is as follows:

- Anadolu University will broadcast for 12 hours out of 24 hours.
- It will be a thematic channel based on only educational programs.
- The channel will broadcast by satellite (Turksat 2A) and its coverage area will extend from England to China, not limited to Turkey. Therefore, the channel aims to appeal to all Turkish speaking communities' across the target geography.
- 70% of the broadcasting of Anadolu University will be about the courses at Open Education System, the 30% of the broadcasting will be spared to the education, culture and art programs appealing to general mass.
- Broadcast prototypes will be determined in cooperation with two institutions. (Küçükcan, 2011, p.149)

SEARCH CONFERENCE FOR EDUCATIONAL TELEVISION

Anadolu University, Open and Distance Education System which started its first educational programs through monochrome transmission on January 15, 1983 on TRT 1, went on its broadcast following the start of color TV transmission of TRT in 1984.

This change which seems to be a simple one, actually led to developing new perspectives in program designs and broadcasting new programs which would attract students. However, along the 33 year duration from that year, the rapid and huge transformation in the field of TV broadcast has dragged TV broadcast understanding to different points.

The emerge of video recorders, even for ordinary consumers, satellite television technologies and cable transmission technologies and the growth of commercial broadcasting 1990s have all made it possible for multi channel broadcasting, which then created a competition in the sector.

The emerge of digital broadcasting technologies in early 2000s, meeting of HDTV technologies with consumers have both led a diversification in channels and made it possible for viewers to have a high quality broadcasting, which also have increased consumers' expectations.

Before these technologies become fully widespread in the world, mobile technologies which later will be named as "new media" platform have led to an industrial, economic and technological convergence.

These advancements have reached a point which is named as "new communication era" or "Knowledge and Information era" by some people, that nobody could accurately predict 30 years ago.

In accordance with all these advancements, "Open and Distance Education System 2020 Strategic Report" have revealed that the flow information could not be accomplished through the use of models and strategies which were popular 30 years ago

The strategic partnership with TRT has made it necessary to start investigation regarding "what kind of Instructional TV is needed?" and as a consequence of that, search conferences with broad participation were held. With the participation of 90 experts in the field of education, distance education and instructional broadcasting, a search conference was held in Turkey on 9-10 October 2010.^v The conference, which lasted for two days, was carried out at three stages:

- To set out main principles of an ideal instructional television.
- Information exchange and enlightenment about present state and design of TRT Okul.
- Bringing forward a proposal to fill in the gap between the present state and the ideal one.

At the stage of "setting out the main principles of an ideal television", which is the first stage of the process, attention was called to some major points; which are;

- Dissimilarity of target audience: Do the differences between the mass of open and distance education and general mass of TV views make any difference?
- Difference between viewing behaviors and media structure: Foreign participants were reminded that they should keep in mind the media structure and culture in their own culture and that of Turkey.
- The relationship between television and open and distance education. Television, as a medium, does not cover all open and distance education system. TV should be regarded as one of the key points of the system.
- Channel Identity: it is very important to find out a "channel identity" to be able to change the 30 year-sense of television regarding open and distance education.
- Television compatible courses: Considering today's broadcasting characteristics, what does the concept of "television compatible course" mean?
- Pedagogical approach: The question of "how will pedagogy be implemented in television programs in both formal and informal education" should be one of the main focuses.
- Convergence: In TV broadcasting, information, communication and entertainment convergence come to the fore more than technological convergence.

1. Stage: "Ideal Educational Television"

The consensus of the experts is that an ideal educational television needs to be established on the following principles:

- **Lifelong learning:** It should be a television appealing to everybody in the society under the light of life-long learning principles.
- **Understanding viewers:** Understanding viewers, meeting the needs and expectations of viewers, and designing the broadcasting content accordingly should be the main principles.
- **Interaction:** the mechanism which will lead to an interaction with viewers needs to be integrated into TV programs and channel format.
- **Cooperation:** Cooperation and partnerships should be established with national and international institutions, universities to develop content and format for the purpose of program development.
- **Technology:** Different technologies need to be converged within the channel, different media channels (traditional and up to date) need to be used in cooperation. The internet definitely needs to be used in a way to support the system. The channel needs to continuously focus on innovation (such as IPTV, Internet TV, Mobile TV)
- **Diversity:** the content needs to be delivered to target viewers through different formats and platforms (content and broadcast diversity)
- **Accessibility:** The programs need to be planned in a way to make it possible for all viewers/students to access the content whenever and wherever they want.
- **Assessment and evaluation:** Assessment and evaluation mechanism need to be established so that viewers and students' achievements can be measured, and the achievement and performance of the channels can be measured. The programs need to be prepared under these principles.
- **Edutainment:** The channel integrates entertainment and game concepts with learning and education concepts.
- **Pedagogy:** Active learning needs to be provided, and viewers are also given chances to create contents when possible.

2. Stage: Present State and Design Works

During the period between May 2010 when the corporation charter for TRT OKUL was signed and October 2010 when search conference was held, relevant preparations were made, strategical planning of the channel was done, organizational schema was created, infrastructure for production and broadcast technologies were prepared, investment process was planned, the ways and conditions of facilitating coordination between TRT and Anadolu University were agreed.

Product and broadcast planning was done and then the programs started to produce relevant broadcast. The works done and the decisions made along this process can be summed up as follows;

Television Strategical Plan

The most basic aim of the broadcast which was finalized following the evaluation strategical planning within the frame of "Open and Distance Education 2020 Strategy Plan" is as follows:

- **Delivering formal-non-formal and distance education programs to target audience through television, IPTV, Mobil TV and Web-TV.**

The basic points for the educational television under the light of this aim are as follows:

- It will be a thematic channel for educational purposes.
- Programs appealing to all walks of life need to be broadcasted for "lifelong learning" as well as open and distance education courses offered.
- The needs of target audience need to be made clear.
- The broadcast transmitted needs to be always accessible for the target audience everywhere through different broadcasting alternatives, such as IPTV, Mobile TV and Web TV as well as traditional television broadcasting.
- Interactive broadcasting needs to be integrated into education.
- Televisions programs with strong visual elements, high quality and high standards as well as the content delivered, need to be designed.
- Broadcasting should be done at different times of the day with repetitions depending on the profile of the target crowd and needs. (Küçükcan, 2011, p.149)

Organization

Anadolu University had an Educational Television Production Center (ETV), which was established in 1978, to produce distance and open education programs, and it operated as planned till 2010. It had operated like a production company. However, the new educational television channel, TRT Okul, which was established in a strategically cooperation, made it a necessity to make a change in the model organization to be able to produce for 12 hours a day, to be able to be part of broadcasting business as well as some other production businesses.

The studies carried out have come up with that "functional organizational structure "would be the most appropriate one and Channel Coordinator position was established in place of General Manager Position, which is the head of the organization in such structures. To find out how the Channel Coordinator and other sub-units will function, a new investigation was planned under the name of "Organizational Schema and Distribution of Roles" which will be prepared by the newly established Educational Coordinator.

Technological Infrastructure

The use technology in education obviously offers a lot of benefits, but it is in the center of distance education. Bates (1997) suggests four basic reasons to use technology in educations;

- to improve access to education and training;
- to improve the quality of learning;
- to reduce the cost of education;
- to improve the cost-effectiveness of education. (p.94)

The radical changes experienced in 2000s in the field of broadcasting focus on two basic points: High definition TV and diversification in media delivery (New Media).

The increase in the image quality made it necessary to bring visuality to the fore, and the use of audio-visual power by media also made it a necessity to increase the quality of the content.

With the advancement in digital technologies, integration and distribution of the content into different mediums (New Media and e-learning) also brought about diversification. As suggested by Bates (1997), what makes quality in technology-based educational materials are content quality, delivery quality, teachers' design and student service and support. The study carried out by Kucukcan (2011) reveals that students at Anadolu University, Open Education System have high expectations for the production quality and broadcasting quality (p.147).

These changes in technologies led all television program producers and broadcasters to both adaptation to these technologies and transition to digital broadcasting infrastructure and HD broadcasting technology to increase their competitive power and deliver high quality content to viewers. The purpose of "delivering formal/non-formal and Distance Education program to target audience through television, IPTV, Mobile TV and Web TV" which was determined following the "Open and Distance Education 2020 Strategy Planning" evaluations requires transition to digital broadcasting technologies. Anadolu University temporarily stopped educational TV programs (2008-2011), the gap within the transition period was turned into an advantage and no investment was made into intermediate technologies, and all investment was made into final formats on which international broadcasting agencies and technology companies agreed. As a consequence of that,

- Transmission to HD technology from present SD technology and all productions were produced in HD format. One of the present TV studies was transformed into HD and the other was also taken into planning for transmission. The equipment for exterior shooting was also upgraded to new technology.
- When the number of present staff is compared to the planned number of productions and durations of the productions, it was clearly seen that present infrastructure would lack of performing planned tasks. Therefore, considering the advantages of digital technologies, preparatory works were planned for "tapeless" production system. Decisions were made regarding what kind of "Media Asset Management" would be used and relevant investments were planned accordingly.
- New organizational broadcasting technologies were renewed to adapt to TRT infrastructure, satellite uplink, fiber infrastructure necessary for broadcasting technologies and live broadcast equipment was taken into future planning for further renewal.
- New technologies, such as "video wall", touch screen, virtual studies, and channel identity graph infrastructure were taken into future technology renewal plan to increase viewers' visual interest, to be able to compete with main stream televisions, to be able to increase the number of productions and to integrate into modern broadcasting.
- Anadolu University, Computer based Research and application center (BAUM) and Open Education Faculty, E-learning unit started to work in coordination for an interactive broadcasting to integrate New Media into educational processes, and relevant decisions were made for preparatory works.

The technological renewal period, which lasted between 2010 and 2014, has provided diversification in many ways, such as quality in design and distribution, in speed and content. During this period, 2800 programs (20 and 40 minute) were shot, diversity in program formats was increased and new design models were created. Thanks to the infrastructure, students were transmitted through quick and different media (VoD and e-learning).

Coordination Between TRT and Anadolu University

The established institutions with a long history also establish their organizational culture. Although Anadolu University and TRT have worked in coordination since 1983, their relationship was based on Anadolu University's content production and TRT's content examination and broadcast of the content. Owning a joint TV channel and being strategically partners made it compulsory for both sides to adapt a new coordination model.

Channel Coordinatorships were established within both sides, Anadolu University and TRT with equal rights to harmonize organizational culture of two sides.

The rights and distribution of authority for coordinators were clearly defined in the contract. Besides, similar models were carefully examined; the cooperation between BBC and Open University UK was specifically investigated.

Production and Broadcasting Planning

Within the frame of 2020 Strategy, the emergence of new perspectives in distance education following the decisions for renewal and reorganization in Open and Distance Education System has made it necessary to make relevant decisions to be able to compete with international broadcasting models, to increase effectiveness and efficiency and to produce new television programs. Therefore, there was a need for a new broadcast and production plan. Following these decisions;

- **Renewing all present television programs**
- **Renewing 1200 television programs each of which lasts 20 minutes in three years; accordingly, choosing 40 courses to make 400 television programs for the first year.**
- **Priority in the choice of the courses was given to those courses with more than 20.000 registered students. The target for the first year was to have 80.000 students, 40.000 students for the second year and 20.000 students for the third year.**
- **Reexamining the researches carried out on viewers in the past and designing new researches to determine future viewers' needs and expectations.**
- **Inviting nationally and internationally recognized academicians to programs and benefitting from them as advisors.**
- **Benefitting from instructional designers to be able to more effectively use instructional materials and establishing new teams for creative works.**
- **Investigating similar models from the world to make programs watchable**
- **Making the broadcasting plan in coordination with TRT, ensuring that "broadcasting models" and "broadcast streaming" are planned under the light of distance education principles.**

3. Stage: Suggestions

The participants of the search conferences delivered their suggestions regarding how to fill in the gap between the present state and ideal state, and the one which are considered to be applicable following the relevant analysis were gathered under some headings.

Course Format

- **Course format needs to be compatible to multimedia and latest technology**
- **The course which can be made into television programs need to be chosen and then broadcasted on TV.**
 - **Criteria need to be set out for course choice.**
 - **The courses which have the potential to reach more students need to have priority.**
- **Durations for courses should be 20 minutes.**
- **Live broadcast and broadcast by satellite need to be used.**
- **Short "information bits" need to be designed (the programs in 5 minute length, explaining specific issue, calling attention of general mass)**
- **Broadcast format needs to be made clear (SD;HD)**

Content, Format, Pedagogy

There is a need for the programs which meet the needs of target audience through appropriate methods and which can also renew itself continuously:

Content

- **A general field should be focused rather than details.**
- **Real life information and example should be given.**
- **There should be an effective introduction and there should be a brief summary at the end of each program.**
- **There should be a harmony between books and TV programs; TV should support the contents of the books.**
- **Educational contents should be designed in coordination with all educational tools.**
- **Format and Visuality**
- **Trainings regarding visual richness, drama, graphical animation, narration, body language and diction, receiving help regarding clothing, the use of appropriate color to the channel identity, channel colors.**
- **Latest technology should be used (virtual studio, touch screen, video wall, 3D). Durations of the programs should be brief, but they should be flexible enough to extend when necessary.**
- **Presentation**
 - **An active and interactive presentation technique should be used; it should be constructive, sensitive, clarifier, attractive and interpretative.**
 - **Presentation language should be clear enough to interpret.**
 - **As programs are produced, academician, media designers and instructional designers and producer and scenarist should work in cooperation.**
 - **Some courses can be shot out of studies, at relevant settings (for example, accounting office, law office etc.).**
- **Pedagogy**
 - **The structure of the programs will support cognitive, social, emotional, physical and psychomotor development.**
 - **"Edutainment" concept should be reflected on pedagogy.**

Broadcasting Schedule

A consistent broadcasting schedule should be established to promote desire to watch:

- There should be a fixed broadcasting schedule to make it clear for everybody to know when a certain program will be on.
 - There should be some mechanism to announce broadcasting schedule (integrating schedule into books, posting on the web and etc.)
- As broadcasting schedule is planned, viewers' habits, approaches and life styles should be taken into consideration.
 - Turkish media structure should be taken into consideration (news bulletin is viewed at 7 pm and TV series are viewed at 8 pm)
- Programs should start at the announced time (without any delay)

Interactivity

An interactive structure should be established to make students and viewers feel the identity of Anadolu University:

- Feedback mechanisms (GSM, e-mail, telephone (call center))
- On demand videos (can be viewed on the internet and downloaded)
- Interaction with digital TV facilities
- Announcing e-mail address and call center communication information at the end of each program for further interaction
- To establish a sense of identity, students are invited to Open Education Studies.
- Announcing broadcasting schedule to students through e-mails
- 10 minute live broadcast prior to the programs (preparatory, regulatory)
- Live broadcasting from every city where there is an Open education office

Assessment and Evaluation

The channel should meet the expectations, motivate viewers and be watchable:

- Before programs are broadcasted, pre-test applications should be made.
- Recorded and live programs should be included in the assessment in exams, and students should know that they will be responsible for them in exams.
- "Credit System" needs to be integrated into programs.
- Questionnaires should be administered to students during recordings.
- The knowledge obtained from the programs should be assessed daily through 5-10 minute competitions.
- Quiz programs and voting modules should be integrated into TV programs.
- Students should be given the chance to reply questions asked in programs through some tools like SMS
- Tools on the Internet should be used for assessment and evaluation.

Marketing and Business Model

- Viewers' needs should be interpreted and recognized.
 - Viewer/student analysis
 - Feedback (gathering expectations at the end of each program (post-hoc))
- Promoting cooperation with internal stakeholders

- Sources required at the establishment stage should be levelly distributed.
- Marketing activities:
 - Marketing DVDs prepared under topic titles.
 - The sale of programs and broadcasting time.
 - Advertising activities appealing to all covered areas.
 - Activities regarding reputation management.
 - Marketing activities to increase the number of students and advertising income.
 - International Programs.
- Business Model:
 - Integrating television and e-learning into some tools such as IPTV, Mobile TV within the frame of interaction (cooperation with Turkish GSM operators and Turk Telekom)
 - Mobile activities with Turkish GSM operators
 - Producing new TV formats and programs and marketing them.
 - English language teaching (cooperation with Cambridge)
 - Television portal interuniversity
 - A university oriented insert newspaper

Cooperation, Partnerships, Co-productions

Cooperation with international universities and broadcasting cooperation should be at the highest level:

- Sponsorships
- Co-productions with other universities, televisions, public and private institutions.
- Purchasing television programs from other institutions.
- Broadcasting Turkish dubbed versions of foreign programs in Turkish
- Cooperation with other international open education universities (Japan, UK, Russia)
- Cooperation with Teachers TV, Cambridge Press, Medien LB

APPLICATIONS AND RESULTS

The program groups and the number of programs that were shot between 2010 and 2014 by Anadolu University to broadcast on TRT OKUL channel are as follows:

- 558 20-minute course videos.
- 503 40-minute course videos
- 541 20 and 40-minute education, art and culture videos related within the frame of "lifelong learning".
- About 1200 news, live broadcast and students support and help programs.
- Videos were shot for 144 courses.
- 117 of these courses had over 40.000 registered students
- The shot programs appeal to 80% of the students.

Limitations

In this study, some limitations and problems which were experienced in former analysis studies but thought that they would not be experienced again in this study, were still experienced for TRT OKUL project. Time, budget and equipment limitations, which are the most basic determinants of this system, were

the most obtruding difficulties for the system to overcome. To know about these is very important to understand the causes of some failures in this project.

Time

Television is a medium that experiences time-related difficulties in both production and broadcasting stage. There is a need for a perfect coordination between production and broadcasting stage.

However, the 9-month period between April 2010 when the partnership contract was signed between Anadolu University and TRT and January 2011 was not long enough for both preparation and 12 hour program production for every day. Besides, time related limitation has an organic relationship with budget and equipment limitation. The limitations related to equipment and budget extended the production durations and caused problems with the coordination between broadcasting and production.

Budget

Television broadcasting is an expensive and tiring branch of culture industry. Producing and broadcasting can only be achieved simultaneously with a lot of expensive equipment and costly production expenses. Especially when it is the aim to compete with mainstream television channels, expenses become higher.

No matter how much planning is done, there is always a need for hot money inherently. However, financial and administrative structures of universities in Turkey do not allow them to be flexible enough in broadcasting related expenses.

Therefore, the duration of investment extends. Investment budgets are planed within the financial frames set out by the state, which generally lacks meeting the needs of the investment.

Similarly, because of some regulations, universities cannot buy products from external sources. Therefore, as a consequence of special conditions of broadcasting business, TRT was legally allowed to use a flexible budget.

As relevant regulations do not allow Anadolu University to make a shared budget with TRT, no help could be received from TRT. Moreover, no result could be gotten from the attempt to make necessary chances regarding the regulations.

Team

In today's world, large scaled television channels carry on their broadcast with 700-7000 employees, and medium or small-scaled television channels can continue their broadcast with 350-700 employees. Although they have experts employed within their body, they still buy 40% and 80% of their programs from external sources. Only 20-60% of their programs are made within the company.

Even the channel Coordinatorship of TRT Okul in Ankara produces 60% of their 12-hour programs from external sources. Anadolu University Television Production Center produced in-house programs all of which were produced within the university by 120 people in 2010, and this number could reach only 206 in 2014.

Design of Course Program and Criteria

Future progress in learning design will require more and better research on users, their needs, contexts of use and the affordances of the various tools and

resources that are meant to improve their design activity (Kali & others, 2011, pp.130). Therefore, determining the structure and the needs of target students' profile is one of the primary aims. Demographic structure and present "viewer behaviors" obtained from present researches were compared and then students' viewing behaviors were analyzed. According to that, 71.2% of the students were below the age of 25 (Kücükcan, 2011, pp.145), which revealed that main target audience was young, and then young peoples' viewing behaviors were investigated.

When viewers' expectations from television programs were analyzed, and television programs were found to have positive effects on students' achievements, to have helped them understand the courses better, and therefore to have contributed to their education positively (Kucukcan, 2011, pp.147).

However, it was also found that students investigated in the research found the number of programs broadcasted in the past insufficient and demanded more programs (Kücükcan, 2011, pp.147)

The following issues were paid attention in program design regarding the criteria for course choice of courses and other tools:

- Number of students for courses
- Difficulty level of the courses considering achievement averages of courses
- Overall objectives and outputs of courses
- Suggestions of TV course editors.
- Some courses appeal to everybody (general audience) as well as open and distance education students within the frame of "lifelong learning".
- Suitability of courses to e-learning format.

Content

In a system in which print education materials are at the center, the roles of supplementary visual and audial materials are very important. What needs to be paid attention to in determining content strategy is the quality of students' studying behaviors. What distance education system expects from students is to read the relevant content in their course books prior to viewing relevant television program. This should be a behavior for students. But unfortunately, according to findings of study, most of students don't read course unit before watching program (Akhter, 2011, pp.192). However, what needs to be always remembered is that education is a repeating process (Bates, 1985, pp.8).

Therefore, delivering different versions of instructional content through different tools with the help of different approaches will increase the effectiveness of education. Therefore, presenting the content of the course books in a matching way with the television programs as if they were new contents, will both increase students' analytical learning skills and help them attempt to make analysis comparing the related content. Bates (1985) argued that television can be very helpful at this stage of presenting an analysis; often, though, as teachers we want students to develop their own skills of analysis and application of principles by providing learning situations where the analysis has not been completed, or where a variety of individual interpretations are possible. (pp. 8)

On the other hand, the structures of the courses are also very determinant in course content. Although these structures which are given to students through both theoretical and applied course in formal education, are delivered to students through only theoretical courses in distance education seem to be a disadvantage, it is possible to compensate it with the advantages offered by television.

The fact that the course contents which are only taught through examples from real life can be given through television programs, that some contents or experiments of the books can only be supported through television, support conceptual learning and also makes some abstract issues concrete to facilitate students' learning.

Therefore, the courses that are selected in distance education system at Anadolu University are divided into following categories as;

- **Completely theoretical courses:** These are math, mathematical statistics, Monet theory, Accounting, International Economics theory, Basic Terms of Law and etc. All of them are based on theories. These course which do not have real life connection for most students and are mostly based on theoretical knowledge or are based on problem solution, are delivered to student in distance education system through a teacher's instruction in a television studio. Some of them are supported with interactive visual graphs, tables and figures and explained by teachers on interactive boards. The risk for these programs to be boring can be eliminated through teachers' way of instruction, the intelligibility of the used visuals, and the appeal of the decor. As done in formal education, establishing an interactive classroom setting in the study can also be very helpful in increasing the intelligibility of the programs.
- **The courses related to real life:** The courses such as Behavioral sciences, Psychology, Occupational Health and safety, Social Services, Communication and etc. are the ones which can be taught through sample events from life. These programs through which students reinforce what they learn from their course books and concretize abstract concepts and students build connections with real life events help student to analyze knowledge and interpret it.
- **Theoretical and Real life related courses:** The courses such as Capital Markets and financial institutions, International Business Administration, Agricultural Economy, Public Relations and Political science, Turkish Economics etc. which are based on theoretical framework, and also have real life connection, help build connection between sector and job, and help students see applicability of the courses.

As these basic distinctions guide television producers in the choice of formats, they also help television writers in content creation.

Bozkaya (2006) claims that for television programs to be able to support course books, both instructional materials need to be designed simultaneously, and thus the prepared instructional material can be an effective tool in increasing achievement.

Thus, such programs may have steady ratings (pp.156). However, this suggestion seems to be true, but it is not so in practice. Primarily, course book contents are determined and then program contents are designed depending on the course book contents and scripts are written. But the audio-visual contents developed for television programs are designed in accordance with other educational tools (e-learning, e-books, VoD and Mobile).

The created audio-visual contents were diversified depending on the characteristics of the tools through which the contents are delivered to target audience.

Format and Visuality

The researches carried out in the field (Bozkaya, 2006; Kucukcan, 2011) suggested that students did not find appealing the televisions programs delivered in the past. Whereas teachers gave instruction in front of the camera in "talking head" format, which seemed to be similar to formal education and which seemed to encourage teacher-student interaction as in formal teaching environments, just opposed to what was expected, this format caused students to feel bored after a while and lost their concentration because interaction was still one way.

At this point, students' up to date visually structured and appealing course expectations will be the most basic guide light of this study.

Kirkwood (1990) suggests the following points in determining a visual and audial format:

- analysis of visual material (dramatic performance, film/video extracts and so on);
- analysis of case study or primary resource material in terms of explanatory theories or frameworks;
- the presentation of complex processes or practical experiments;
- the demonstration of practical activities that students are to carry out themselves;
- the use of animation or adjusted speed techniques to demonstrate changes over time. (pp. 82-83)

The analysis carried out revealed that "talking head" format was approved in the teaching of entirely theoretical courses as suggested in the search conference, but the new format is transformed in way to facilitate student-teacher interaction rather than directly teachers' speaking to the camera.

This new format was named as "Açık Sınıf (Open Classroom)", and in this new format, there are students in the classroom as in real life classrooms, and thus teachers can carry out their instruction more effectively and realistically, students can ask questions, and two-way interactions can be built between teachers and students in the television program. Field experts and guests from relevant sectors were invited to the classroom where sprite graphics and interactive screen-video wall facilities were used to facilitate and support learning. Thus televisions programs were made more interesting and the ratings were increased.

The formats in which case studies and visual materials were used were most commonly used for the courses which had real life connection. Dramatization, animation and interview techniques were used in such programs, and narration format in which documentary and fictional narrative were used as well as

some other formats mixed of these. These kinds of television programs dealt with concrete situations, presented images of complex, real-world situations, and were open-ended, open to interpretation, and non-analytical (Bates, 1981, pp. 8).

Viewing is known to be the most attention taking format, but it may be difficult for students to build a connection between books and television programs from time to time in this format.

In the groups of courses which were both theoretical and real life connected, the format was that there was a teacher speaking to the camera and at the same time, sample events from real life, documentary and experimental structures and interviews were most commonly used in this format. For example, in the course of "Financial markets and Financial Institutions", a mixed format was used, and in this format, teachers taught the class where there were some guests from some financial institutions from Istanbul Maslak, which is a finance center in Turkey, and conducted interviews with sector experts, or taught from bank museums where documentaries related to Turkey's finance history were exhibited.

Except for these formats, foreign language (English and German) educational programs were designed in TV series format in which dramatic narration method was used and teacher/narrator was inserted in the series. Viewers' interest was raised with the use of dramatic narration technique and daily use of the language was practiced meanwhile.

The fact that the most basic power of television is audio-visual content it offers, demonstrates that it should be taken into consideration as visual content is being structured. Viewers are not only important in competition with other television channels but also important in making the content easier for intelligibility. It is very important especially for graphs, figures and tables in educational programs to be easy for intelligibility, to have clearly seen boards on the screen.

It is also very important for viewers to recognize the program looking at the visual identity of the program as they are switching over the lists of many channels. Therefore, considering the importance of channel identity, channel and program identity designs of the new channel were done for TRT Okul and Anadolu University to make it distinctive. To do these designs;

- **Original visual identities were created specifically for some groups of program by art design group.**
- **Programs were supported through colors suitable to channel and university identity.**
- **Decors were designed in a lively way to increase concentration.**
- **Art directors closely controlled teachers' presenters' and field experts' clothes and costumes to see if they were appropriate to the visual structure of the channel.**
- **When no blackboard was needed for instruction, presentations were prepared appropriately to the channel and channel's visual identity by graphic designers.**
- **These graphs were left under the control of the presenter through interactive touchscreens and video walls.**
- **All generics and credits of the programs were integrated considering the channel identity.**

- Depending on program groups, visual items were subject to color correction at the stage of post-production.

Presentation

If the teachers can create an enduring fascination for the subject-matter, the job's almost over: the more the students love the subject, the less help they need in their studies (Koumi, 2006, pp.95). In formal education system, teacher-student relationship is strong. Students learn with the help and assistance of teachers.

But distance education system seems to lack of this opportunity. Television is the most ideal environment to fill this gap. Therefore, teachers' outdoor and indoor studio presentations are very important. According to Anderson (1979), if teachers communicate through the use of words, facial expressions, voice tone, body language and eye contact, they can build better communication compared to those who communicate through the use of words and body language (cited by Bozkaya, 2006, pp.155).

Besides, using a simple presentation language rather than using an academic language makes the presentations easy to interpret and also facilitates effective teaching.

In the instruction methods used before (1983-2008), teachers mostly taught in front of camera and spoke to the viewers in front of television. As this way of teaching was a passive one and teachers read academic texts from the prompter, they were found to be dull, boring and distant from viewers.

The studies carried out on students confirmed these finding. Besides, this way of teaching was also found to be very boring even by the teachers in these programs as speaking to camera was found to be difficult. Therefore, in the new formats;

- Training sessions were organized by TRT to improve teachers' presentation techniques and dictions.
- Teachers were ensured to use active and interactive presentation techniques.
- Audience students were invited to the television programs shot in studios and thus, formal classroom environment was simulated and teachers were given chances to communicate with students and receive questions from them as in formal classrooms.
- As part of interactive process, teachers were not allowed to use prompters so that they could use real life language in their instructions without any academic language.
- The guests who would participate in outdoor shootings were specially chosen considering their dictions and presentation skills.
- When programs were dubbed, certain criteria are set for those who would dub to make them parts of the channel identity.

Pedagogy

Koumi (2006) said that "you cannot sustain students' fascination unless they achieve a really penetrating understanding of the subject" (pp.95). Whereas audio-visual content have this appeal, Salomon (1983), Bates (1987) and Laurillard (1991) recommended that strong links should be made between the events portrayed and the ideas they represent (as cited by Koumi, 1991).

The responsibility of television producers and television writers is to build this strong relationship. This relationship between words and images reveals the relationship between television techniques and teaching functions. To be able to determine a pedagogical frame, primarily there is a need to build a mutual relationship among "target audience", "content" and "aim".

The pedagogical approach to be used should be determined, how the content will be delivered and the format to be used in the delivery of the content should be determined based on target mass's viewing habits. Students need to be cognitively and conceptually taught effectively to motivate them to learning and cause expected behavioral changes on students through visual organizations.

To be able to effectively use pedagogical approach which had not been neglected before, Jack Koumi who designed programs for BBC and Open University in UK was invited to the university and workshops were organized to train the staff.

The programs shot with Koumi who is the program designer and scriptwriter of "My English Cousin" (56 episodes) which is an English Language Teaching program, and these programs shot with the participation of Koumi was found to have contributed a lot to pedagogical approach. "Edutainment in pedagogical approach" which is one of the outputs of the search conference was one of the issues handled during this process. Whereas "education" and "entertainment" are two terms which have been used together in the field of education for years, they are the two terms which started to gain significance in media application beginning from 2000s.

Especially multimedia applications started to be effective tools in students' education. Berk (2009) claims that multimedia presentations have gained huge popularity in many educational institutions in the world (cited by Steffes and Duverger, 2012, pp.1). Education and entertainment concepts on television appeared in kid's programs and have been used for a long time. Sesame Street (1969), which is an American child series, is one of the major programs which brought entertainment and education together systematically. However, the use of edutainment in adult's programs does not have a long history (Wallden and Soronen, 2004, pp. 4).

The fact that there have not been many studies on the pedagogical use of edutainment in distance and open education makes this issue as special one. Therefore, a study group was established to investigate and improve the use of edutainment in television programs. The ratings of "My American Cousin", which is an English Language Teaching program, and "Aussichten", which is a German Language Teaching program, demonstrates how successful the "edutainment" approach is.

Broadcast Schedule

One of the most critical issues in broadcasting is how to broadcast something as well as what to broadcast. Broadcast strategy is very important especially for mainstream channels. Channels compete with one another to gain more viewers monitoring one another's schedule. Thematic channels feel confident for their contents as they target smaller audience. What needs to be done here is to investigate target audience's viewing behaviors.

The rating analysis in Turkey also gives information about viewers' viewing behaviors. This data is helpful for especially mainstream channels in

measuring their advertisement receivers, and it also tells a lot about where viewers are, when they view their programs, what kind of programs are their favorites, and how long they view programs. For example, according to the study carried out by Deloitte (2014), it was found that 62% of the Turkish television viewers prefers domestic TV series, 17% of them views competition and entertainment programs, 10% of them foreign programs, 4% of them domestic cinema films, but 6% of them view other kinds of programs (pp. 8).

The results of the studies carried out before (Bozkaya, 2006; Küçükcan, 2011) suggest that students demand program schedules should be planned depending on students' needs and expectations, and they believe that if it is done so, it will be a major factor in increasing the ratings of the programs. They also suggest that they cannot find enough time to follow the programs. When viewers' profile and general ratings were examined, the broadcast schedule was planned as follows:

- No course programs were broadcasted at prime times (20:00-23:30).
- As 68% of the students work, normal working hours were taken into consideration and broadcasting of the programs were planned accordingly in 17:30-20:00 and 06.00-08.00 when students were supposed to be at home.
- For the 38% of the viewers who did not work, programs were broadcasted in the mornings between 08:00-10:00, at noon between 12:00-14:00. One of the criteria taken into consideration was that most of target mass consisted of women who did not work and they most probably watched women's program out of these times.
- When periodical pilotings were investigated to see to what ratings changed, it was found that the ratings increased between 23:00-02:00, and moreover, the share at that time exceeded that of some TV series. Therefore, this time period was named as precious time and placed into the broadcast schedule beginning from the second year.
- In thematic broadcasting, repetition and time switch in program broadcasts were very important for viewers to follow programs. Continuation of ratings was obtained by designing the program streaming considering different groups of viewers, switching the day and time of programs, rebroadcasting some programs three days on weekdays and one time at the weekend.
- Students had suggested in former studies that program schedules should be announced well before (Bozkaya, 2006, pp.154). Therefore, the websites were established to meet students' need, and then students were informed about the program schedule on TRT's and Anadolu University's web sites, TRT Okul and through SMS.

Interactivity

Traditional television broadcasting was based on immediate consumption, and a fixed broadcasting without any pause or replay (Bates, 1984: 29). Technologies that students can access at any time, sometimes called asynchronous technologies, provide more flexible access (Bates, 1997: 100). Interactivity and being asynchronous offered by "new media" tools that were established as a consequence of convergence of new communication technologies, have made it easy for distance education to deliver educational content "everywhere" and "every time", and it has also extended the borders of traditional broadcasting. Traditional broadcasting has been evolving, viewers can watch

videos on demand, and ratings have been increasing rapidly especially with the use of VoD (Video on Demand).

Thanks to simple applications on mobile devices and mobile communication devices, TV platforms make it possible for viewers to access to any knowledge and educational content. The fact that VoD type content is always accessible for students (pausing, rewarding, and replaying) facilitates students' interaction with the content.

Several of the studies have indicated a rapid "forgetting" of earlier parts of the program progresses in television broadcasting (Bates, 1981, pp.15) and most students find it possible to take notes while viewing (Bates, 1981, pp.16).

Thanks to VoD, students can go back to early videos and replay them or pause to watch later. On the other hand, thanks to mobile technology, it is possible for everybody to access relevant educational content wherever they want regardless of where you are. When students' profiles were examined, it was seen that students highly used these technologies. 95.8% of the students was founded to have mobile phones, 85.8% of them had computers, 10% of them was found to have pocket computers, 5.5% of them was found to have Tablet PCs and only 3.3% of them was found not to have internet access.

Therefore, it is highly possible for students to access to educational contents with the use of new media technologies. With the use of these latest technological advancements of Information and Communication technologies in distance education, learning tools and environments have diversified and increased in number.

Interaction has become possible in various settings. Tuovinen (2000) and Moore and Kearsly (1996) defined that interactivity as influencing one another is used in distance education in four different forms (as cited in Ozgur, 2005). These are;

1. Learner-content
2. Learner-teacher,
3. Learner-learner,
4. Learner-institution.

To increase interaction and to use the alternative ways of interaction;

To establish Learner-Content Interaction:

- A VoD platform was established so that students could watch the content on demand, control them (pausing, rewarding, forwarding, replaying). VoD broadcast was done in 2012 on TRT OKUL web portal, and 2013 on the web site "trtokul.anadolu.edu.tr".
- Beginning from 2013, video downloads on itunes-U in the whole world.
- Talks have started between the years of 2012 and 2014 with digital platforms in Turkey (Digiturk, D-smart, TTnet-Tivibu) and VoD broadcast was planned on these platforms. Great progress was made through the talks with Digiturk but the agreement could not be finalized because of some legal limitations.
- New versions were produced to adapt educational contents to e-learning platform and they were use in e-learning platform.
- Various applications have been developed so that students could build

synchronous and asynchronous interaction and the second screen application was improved especially for math courses.

To Establish Learner-Teacher Interaction;

- Results of perceptions indicate that distance education students experience less involvement, less ability to ask questions and less overall enjoyment (Ritchie and Newby, 1989). Therefore, guests were invited to the studios when programs were shot, and formal education environments were simulated so that students could interact with peers and they could actively participate in the lessons.
- Teachers were not allowed to use prompter in these active processes so that they did not use academic language in their instruction and use simple, easy to interpret language.

To Establish Learner-Learner Interaction;

- Establishing pages on social media and announcing future activities on these pages.
- Some open education faculty students were accepted as guests, presenters and main characters to some television programs.

To Establish Student-Institution Interaction:

- Feedback channels were kept active so that students could deliver their feedback regarding the television programs and broadcast directly or indirectly (e-mail, SMS).
- Feedbacks were gathered through the call center which was already active within the body of the university, and the staffs at the call center were asked to give response to each feedback. The staffs at the call center were given relevant training with this regard.

Assessment and Evaluation

To be a watchable channel and to measure to what extent students can benefit from the educational content is very important for TRT OKUL and Open Education System.

- A qualitative study was carried out in 2013 and 18.5% of the student was found to continuously follow the programs (about 250.000 students).
- However, when the rating scores of TRT were examined, the ratings were found to be higher. But as the samplings of the study was not divided as open and distance education students, it was not possible to know if the viewers measured were the target students or not.
- As known, TRT got out of AGB ratings and established its own rating system. During the talks carried out with TRT, it was agreed that there was a need for establishing a new sampling group in 2013 as open and distance education students. However, TRT got back to former rating system and this agreement could not be put into practice.
- The ratings reveal that the highest ratings were for English Language Programs.
- As VoD platforms were available on different platforms, no valid measurement could be done (TRT, Anadolu University and Youtube). When these platforms were separately investigated, it was found that 10.000 people viewed per a course on each platform annually.
- 22 million downloads were measured from 142 countries on itunes-U, in 1.5 years and most of downloads were television programs.

CONCLUSION

Television broadcasting system has started to change since 1990s and evolved in entertainment broadcasting led by commercial television channels. As a consequence of that "public broadcasting" and educational broadcasting could not stand against this experienced change in broadcasting sector.

Whereas commercial broadcasters aim to appeal to most viewers, which is the most basic aim for them, public broadcasters deliver many programs mixed of different kinds (McKinsey, 1999, pp.19), many European public television channels started to broadcast entertainment programs at prime times as a consequence of the changes in the sector (Brants and Debans, 2000, pp.18-20).

It is very normal for educational broadcasting and distance education to be affected from this process because broadcasting business and productions for television are costly and tiring processes and low efficiency and negative outputs received from these efforts make people question their traditional broadcasting format. The dramatic decrease in the ratings of the educational broadcasting led people to looking for better ways to deliver educational content.

It would not be wise to continue with traditional broadcasting model in distance education systems. The decrease in the ratings delivered through traditional broadcasting models should be considered normal between 1990s and 2000s when new broadcasting understanding started to be dominant in the field. Insisting on the delivery of educational contents to viewers/students through program formats of 1980s and traditional delivery channels would be nonsense. However, 21st century has offered a new and effective perspective in distance education thanks to the new communication technologies.

This new perspective does not aim to eliminate television broadcasting in distance education, but to provide more effective use of audio-visual frame. This perspective has also offered a new opportunity for Anadolu University and Open Education System.

TRT Okul was founded as an outcome of this new perspective in cooperation with TRT. This new establishment which brought about a new educational format, also started to function as a lab for creation of new formats. It is unavoidable for this new establishment to gain a new perspective compatible with new educational environments and materials.

In the following stages, it is very important to evaluate the effectiveness of already produced audio-visual contents and then to effectively deliver the contents of new media as well as producing visually watchable and pedagogically effective contents.

Therefore, the strategy of the new perspective to be developed in open and distance education, educational broadcasting will have the following characteristics:

- **Learners' control will be increased**
- **Contents will be open to access everywhere and ever time.**
- **Diversification of methods which will pedagogically facilitate learning and make learning easier.**
- **Thanks to its compatibility with the other educational materials, students will be led to analytical thinking and making research.**

- Students will be helped to monitor what they have learned in real life.
- Performances will be measured and feedbacks will be gathered and then necessary revisions will be made depending on feedbacks.
- Educational content will be open to access to not only students at open education system but to all university students and everybody within the frame of "lifelong learning".
- It will have a visual and broadcasting perspective to compete with the mainstream broadcasting channels.
- It will be open and flexible for making research and improvements.

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i What Bates means here is "new media" with it sup to date meaning.

ii This study is limited to the analysis and implementations of productions of TRT Okul which started on 31 January, 2011 and continued till July 2014.

- ⁱⁱⁱThe programs of Anadolu University, Open Education were last broadcasted on TRT in 2007-2008 education s and then the broadcast of new programs was delayed till 31 January, 2011 when further agreement was signed. The reason for that is the 21st article of "Law on Radio and Television High Council" numbered 2954 which suggests that open education broadcast and such educational programs are broadcasted on the approved TV channels reserved to the use of Turkish Radio and Television High Council. Pay and broadcast related issues are determined based on an agreement signed between TRT and institutional player.
- ^{iv} For further detail regarding the analysis of Open and Distance Education 2020 vision, mission and main objective, see Küçükcan, Ufuk. A New TV Practice in Distance Education in Turkey. *Turkish Online Journal of Distance Education-TOJDE* April 2011 ISSN 1302-6488 Volume: 12 Number: 2 Article 10
- ^v Participant Institutions: Anadolu University, TRT, Ministry of National Education EGITEK, University of California Media Center, BBC & Open University of UK, Discovery Channel, Teachers TV, Athabaska University Educational Television, Queensland University of Technology, Greek Educational Radio Television, Ministry of Education of Austria, Medien LB, NHK Educational, Open University Japan, Talal Abu Ghazaleh Business University, Turkish American TV, Worldwide Education, Cambridge University of Press, FİLMA CASS, IPSOS KMG.
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