

**DISTANCE EDUCATION
AND EDUCATIONAL TV PRODUCING PROCESS:**

**THE ROLE OF EDUCATIONAL TV PROGRAMMES AS BEING ONE OF THE EDUCATIONAL
COMPONENTS IN DISTANCE EDUCATION SYSTEMS AND PRODUCING PROCESS OF
EDUCATIONAL TV PROGRAMMES IN FACULTY OF OPEN EDUCATION AT ANADOLU
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INTRODUCTION

Distance education is a contemporary education system realized with the help of educational technology and distance teaching methods in a setting that learner and teacher are not face to face. In the foundation of the system lies the facilitating technologies that provide a person learn himself. These are printed materials, TV, radio, video, computer and so on.

The most important education medium is the printed material at the Open Education Faculty of Anadolu University. 382 course books for all program have been published and produced so far. 399 editors and 1050 authors have had the responsibility of preparing these books.

Academic counseling is the other dimensions of The Open Education Faculty which are held in 54 centers with 724 academicians and instructors.

Computer-assisted education has been started to be offered in the laboratories in different cities since 1993-1994 education year. Students strengthen what they have learnt by watching the program containing exercises, sample problems and trial tests.

The Open Education Faculty has 65 offices for to service to its students of all over Turkey and 2 offices abroad have been put into service. Registration, re-registration, provide communication and book delivering processes for the students in some programmes are realized via these offices. Besides course books, TV and radio program are used effectively at the Open Education Faculty. One of the most significant activities as a mass-media medium is education. Especially for the societies who haven't been able to solve the education problem with conventional education, TV, which uses the elements of image, sound and movement as expression medium, provides a variety of equal possibilities to the people.

Some characteristics of TV that is an education channel in the application of distance education may be ordered as follows:

- **Although TV when production and broadcasting processes are taken into consideration-is an expensive medium in terms of investment, it has a decreasing financial burden when the masses are aimed.**
- **Production process requires fast and planned work. It means a better workforce and technology, a more demanding budget.**
- **Technological innovations of today make TV an effective medium of communication. This is a very important development for a distance education student.**
- **To show an operation, an experiment or an event while telling at the sometime is more effective for a student rather than just narrating. The most effective medium that can convey this to the masses is TV.**
- **One of the basic problems of education in Turkey is that everybody is not able to get education that is a basic of human rights. TV as an education medium which is ready to solve this problem by using distance education approach.**
- **TV is a medium that has opportunities of presenting different faces to students unlike the conventional education's ordinary environment. While TV transferring information, it also increase the target's interest, it given crucial information, and changing attitudes, opinions and feelings, it provides permanent change on people.**
- **The superiority's TV presented here as one of the main channel of distance education required it to be used together with the other education channels in the application of Open Education Faculty of Anadolu University just like in the other examples all over the world.**

The opinion of distance education has discussed in 1960s in Turkey. After some applications as Yay-Kur and Correspond education, it has been realized by foundation of Eskisehir Anadolu University in 1982 to meet the intensive demands to education and to make contributions to form opportunity equality in education in with the terms of today's distance education meaning. .

Open Education Faculty that has more than 600.000 students today and started with only two programmes, namely Business Administration and Economics in 1982. has reached the dimension of a university itself and got two more faculties in 1993 with a new structuring. Based on the new structure, the Faculties of Business Administration and Economics are responsible from a four-year university education for degree programmes, and Open Education Faculty is responsible pre-license. programmes, completion program for university degree and all kinds of certificate programmes. And also, the Open Education Faculty is responsible to give services to new structured the other distance education faculties.

TV programmes that are crucial in reaching the students of Open Education Faculty are produced in Radio-Television Production Center (ETV), which is the main department of the faculty.

The establishment of Radio-Television Production Center that has all kinds of modern equipments today lies to the 1970's as a part of Eskisehir Academy of Economics and Commercial Sciences with the name "The Institution of Education via TV". In 1977, The School of Cinema and Television was put into service in order to meet the workforce of the Institute.

Like the similar applications all over the world, the Open Education Faculty reaches it students through radio-TV programmes, academic counseling, Computer assisted education and video cassettes together with printed materials, and increases its educational fields every year.

Here are projects produced in Radio-Television Production Center, as being important unit of faculty so far:

- A four-year Accounting and Financing, Marketing and Management-Organization university degree programmes under the Business Administration faculty
- A four-year Economics, Finance, Public Organization, Industrial Relationships, and Work Economy university degree programmes under the Economics Faculty,
- A two-year Nursing, Midwifeship, Health Technicianship, Local Government Administration, Foreign Trade, Business Administration, Public Relations, Sales Management, Accounting, Tourism and Hotel Management, Banking and Insuring, Office Management, Health Institutions Administration, Home Economics, Social Sciences, Agriculture, Veterinary-Health, Education are pre-license programmes.
- English, German, French, Art, Physical Education, Chemistry, Physics, Biology, Mathematics, Turkish Language and Literature, Geography and Basic Education university degree completion programmes.
- Tourism education certificate program.
- TV school and summer school programmes for secondary and high school students
- University preparatory programmes having Turkish and Mathematics lessons and many in-service education programmes for governmental institutions.

2399 TV program have been produced for these projects so far. Besides TV, radio that is parallel with printed material is also used at the Open Education Faculty. The number of radio programmes produced is 441. Since The Open Education Faculty does not have the possibility of broadcasting, programmes are broadcasted on TV4 and TV2 through Turkey. Radio and Television Cooperation (TRT) as daily. The broadcasting of radio programmes is provided by the same association. Programs are broadcasted every week days for 25 weeks. The average broadcasting time on TV4 is 45 hours, and on TV2 is 8.5 hours. Weekly broadcasting of radio programmes is 2 hours.

PRODUCING PROCESS of EDUCATIONAL TV PROGRAMMES

While some of the projects that are not included in Open Education Faculty's main fields may be suggested by the Ministry of Education, the faculty itself may suggest, as well. Based on the accepted project, education planning group defines the curriculum and adapts the curriculum with of Inter-Universities Association. When the curriculum presented to Higher Education Council is approved, cooperation with the Ministries in question is held.

After the written of the books under the study of education planning group is completed, course texts to be adapted to TV are determined by the same group. Another step following this is the organization of the director who will produce the programmes.

These criteria are taken into consideration so that the author of the text, editor and director of the program can come to a good conclusion on the text topics to be adapted to TV.

TV education programmes should be produced to emphasis the important points in course text, to enlarge the viewpoint on the topic, to give good examples and to strengthen the information. What can be done with available technical possibilities should be determined. After this phase, the expert prepares a script as a source to scenario by script-writer so, a program outline is formed.

While adapting a script to the TV at The Open Education Faculty one of the different program types or a mixture of these is used. These are; real images, narration, conversation, interview, dramatization and graphical-animation. Production forms applied in education programmes are formed in three categories:

- 1- Direct teaching program,**
- 2-Information-transferring program and**
- 3- Reinforcing program.**

Program outline is the written script of production process or education program. The step after written the program outline is to prepare the scenario script of education program. Scenario is a script that explains the form and flow, the content and production information of a program with the elements of image and scenario.

An important problem in forming the scenario for TV education programmes is who will write the scenario. It is impossible to assume that a scenarist be an expert on the lessons. In Radio-TV-Production Center, a scenario unit has been formed to write educational scenarios. Those who have been trained at Radio-TV-Production Center department works together with experts on the topics, advisors and directors. Educational scenarios prepared in accordance with defined program goals are checked by an expert when they are turned into shooting-scenarios and production-director starts to the other preparation before the shooting. Production-director is charge of the realization process of scenario.

One of the most important thing that director does before the shooting is planning. In this phase, staff, in accordance with the scenario, is determined. The staff, according to the program, may be presenter (reporter), TV teacher-expert, actor-actress and a person who will make a sound recording for the program. These people are interviewed on content and timing and led to the shot. In the applications of the Open Education Faculty expert TV-teachers are usually benefited from, especially during the phase of presenting-reporting. These experts are supplied information and led before the shot. If there is any dramatization on the program, actors or actresses may be rehearsed before the shooting.

The step after determining the staff, is to determine the settings. Since settings are very important for a program, they are investigated and selected according to available time and finance, to aim of the program, and to transportation of technical team and equipment. For the shootings that will be held in studio, designs and accessories are determined, and contacted to the responsible staff of the unit. Program sets (designs, decors) are produced in the workshops of Radio-TV Production Center.

Graphics and animations that are necessary for the scenario are demanded from the Graphic department and until the step of editing, graphic cards, two or three dimensioned electronic graphic or animation are provided by the department. What is important here is to evaluate if the graphic is effective in learning or not.

During the production of educational program, the archive of the institution is using also. Radio-TV Production Center, has all produced programmes since the foundation of the institution, by its archive unit. The director determines older visual materials which archived to use. At the same time, if necessary, director prepares some elements like a sound effect or music from the sound archive unit.

After the planning shooting time and equipment, the director reserved the shooting team, equipment, and studio from the Production Planning and Coordination Department.

Based on the shooting plan determined during the shot step, production meetings are held, studio shootings or out door shootings are realized and sound recordings are made.

During the editing phase, the director, when necessary, works with the educational expert. In all circumstances, before the legal checking, the program is checked by the director and expert, and if there is something wrong scientifically, it corrects immediately. At the last phase before the broadcasting of the program checks by TRT inspectors.

The Open Education Faculty's educational TV programmes are prepared by nearly 200 well educated experts in their fields who are working in Radio-TV Production Center. Production of educational TV programmes need well knowledge and also rich experiment from point of esthetic technique and educational perspective. Production-direction department's staff who have been trained in Communication Sciences Faculty's Cinema-Television and Press-Publishing Department. Their level of education goes up from university degree to Ph.D. If necessary to give an example, the levels of 70 of whom for Production-Direction department are as follows.

- Those who have Ph.D. in communication %20
- Those who have MA in communication %21
- Those who have university degree. in communication %44
- Those from other faculties %14 (Business, Economics, Education etc.)

In other words, approximately of %85 of the staff are well educated in the field of Communication Sciences what they are, working. In terms of technical team, the rate of staff who have vocational education is %100 %50 of whom have university degree and %50 of whom have technical high-school degree.

Additionally their formal education, staff gets in to in-service training in their special working area. The average of working year in the institution for the personnel is about 10 year. This is well and positive indicator for the Open Education Faculty's fifteen-year background.

The technical opportunities of Radio-TV Production Center of Open Education Faculty that has been producing TV and radio programmes since 1982 with its expert personnel all as follows:

All the technology available for Open Education Faculty Radio-TV Production Center of Anadolu University has the international standards in terms of broadcast quality. This is the case that should be, as well. Hence, some of the necessities we will try to order require this kind of a equipment.

Since the opinion of this institution emerged, the aim has always been to prepare/product educational programmes and everything has been focused on international broadcast quality. Another necessity is that programmes are broadcasted by TRT. TRT, according to CCIR and EBU contracts, requires new broadcast quality (5,5 mega Hz band width) in all programmes it broadcasts.

The other necessity requires all kinds of graphics, pictures, scripts, texts and tables to be easily watch able in technical respect. This is directly related to the further phase of the broadcast quality; High Definition (HD) or Advanced Definition (AD).

In terms of technique, another advantage of international broadcast quality is that it has longer life for archiving, keeping and duplicating. Also, it provides a multi-generation opportunity during the edition of programmes.

It is necessary to point out that although this kind of a technology is very expensive, it has fewer problems and lasts longer than the others. For example, The Open University in United Kingdom that has been realizing distance education for years has given up the U-matic (semi-professional) system and started to use betacam system, that is broadcast quality system.

After determining the necessities to form technical opportunities for Open Education Faculty, it is better to be acquainted with technical equipment/situation of the institution. In the Open Education Faculty there are six TV and sound recording studios. Three of

these have technical capacity to be able to broadcast in an international broadcast quality. The other three studios are used for different purposes and when necessary they are included in producing program, as well. The technical specifications of the first three studio are as following:

TV Studio 1

It has 17x8 m length and 6 m. height. It is equipped with perfect/complete light systems and has acoustic sound mechanism.

Total light power is 100KW and is controlled from a 24 channeled electronic dimmer.

Different discplayers, cordless microphone sets, microphone and accessories.

Cameras having 1 inch tubes in broadcast quality, videotape recorders and edition units.

A Bosch vision mixer having 10 channels, a specific effect device and chrome key possibility.

TV Studio 2

A 362 m2 hexagonal studio, its height is 15 m and equipped with light systems.

A 48 channel light control system controlled by a computer and programmable according to the various decors. Its total light power is 250KW.

A sound mixer with 16 entries, 4 group and stereo exists, sound recording devices, disc players and tape recorders.

Different kinds of microphones, cordless microphones and playback possibility in the studio. Boom and sound accessories.

3, 2/3 inch tube studio cameras (SONY BVP 360 SP) on pedestal. The cameras are controlled by a computer. Camera color adjustment opportunity for thousands of different color systems.

A vision mixer having 32 entries, 3 mix effects and opportunity for 10 different chrome recordings.

Various video effect devices working in connection with control panel. (Models like Gemini 3, Chyron M4 1000, Charisma, Picture Maker 60)

Remote control prompter devices that can be connected each camera separately.

Various accessories used for different camera movements be realized easily.

To give a few examples; hydraulic crane that has the capacity of rising 2.5 meters, a vinten make dolphin manual crane, a vinten tri-track wheeled portapad.

TV Studio 3

This studio is the most modern studio which equipped with the best and the latest technological systems in the size of 14x15x12 meters.

A 48 channel, computer controlled light systems the power of which is 160KW.

A sound mixer having 16 entries and 8 group and stereo exits, professional sound recording devicer (timecode system) discplayers, digital audio effect processor, 1/3 octave 30 band graphic equalizer, Studer telephone hybrid unit (In order to record and send sound on telephone line). Playback opportunity. Different microphones, boom and sound accessories.

3 units Sony BVP 360 SP 2/3 tubed studio cameras in broadcast quality. Totally computer controlled color adjustment units.

A vision mixer having 32 channel entries, 2 mix effects, 2000 effect memory that can record seven different chrome.

Sound Studios

One of the other studios is used as a radio studio. Its size is 4x5 meters it has radio recording, film dubbing and editing equipments. The other studio is used as music recording studio and this studio is isolated, its inner acoustic is arranged according to music records and has 24 channels.

Anadolu University has a cinema building. Sometime this building uses as a sound or TV studio when it necessary. It has 16 m x 9 m in size and has a 450 audience capacity.

Portable Studio

There is a live-broadcasting car that it can be call, portable studio. This O.BWAN live-broadcasting car may be called another studio with has 3 Ampex cameras, generator, heating system and briefly since it has all the equipments of a real studio

Post-Production Units

Post-production units have 17 1 inch VTRs and 12 Betacam VTRs. There are many video effect devices, graphic-animation devices and character generators connected to these editing units. Also two of the editing units controls by computer. Again in this system there are some devices use for to transferring from bands to the different band and digital formats.

ENG Equipments:

In the technological structure of institution besides the stable technical equipment in studios, there are portable external shooting equipment in order to realize the steps called external shooting that is ENG shooting.

Four Betacam, SP 3CCD cameras are used as ENG and EFP in broadcast quality.

Four units JVC-KY 320 professional 2/3 inch tubed ENG and EFP cameras, camera tripod and accessories in different types and makes related to these cameras.

Seven units portable Ampex 1 inch (in broadcast quality) video recording and decoding devices (The possibility of decoding simultaneously confidence read) and a possibility of 3 channel sound recording.

There are batteries, battery charge adaptors, straight current adaptors, playback adopters and monitors for these cameras and recording devices.

If need the equipments for outdoor shooting sound recording, these are 2 units 4-2 model Nagra professional portable sound recording devices, portable sound mixers having and 8 channels microphone and line entries and all kinds of outdoor shooting microphones and accessories.

Totally 10KW portable daylight (ark), 60KW tungsten, hallogen portable light sources in different strengths as soft and spot are used. There are generators accessories tripods and filters are available for these devices. Besides these video equipment center has film equipment as well.

Film Equipments:

1 unit 16 mm BL Arriflex and 2 units ST Arriflex film cameras (24-25 frames recording)

1 unit 16 mm one frame recording camera (for animation) 1 unit 16 mm cp Arriflex film camera.

1 unit 35 mm Arriflex Junior BL film camera (the possibility of 24-25-50 frames and one-frame recording).

There are accessories, exposure (light) meter, spot meter, filters and different objectives for these cameras. New technological systems are add to the system whenever need.

However it is necessary to point out that this technical setting has not been carried out immediately. The technical formation process of the institution relies on 1970 the date it was founded.

Another important point is that this technical formation process has been structured by aiming today's broadcasting conditions since 1970. And its most importance aim is to realize its own broadcast.

CONCLUSION

Open Education Faculty has to serve education, its more than 600.000 students. The access of student's number is the most important obstacle in increasing the quality of this service. The faculty uses some mass media like radio and TV to pass over this obstacle. However to follow the era in education and communication to reach the students faster and more commonly new technical equipments need to be added.

For example, 14 of 65 the Open Education Faculty Student Information Bureaus in Turkey, give a service via computer assisted education and it is planned to increase the number of these centers in due course.

The other aim of Open Education Faculty is to supply the opportunity master degree education. For this education a computer connected to a network system or video technology is necessary for the students. The visual and audio support for this technology will be received the same institution preparing TV and radio programmes. Although law does not let to the faculty master degree education, program, the faculty has already included this project in to its future aims.

One of the most important problems of distance education is the difficulty of having face to face education with many students who are a way. A kind of technology that will help to pass over this difficulty is used in many countries especially in the field of distance education. The project that will be applied in a certain area by Open Education Faculty is called "Video-Conference". According to this students in a class facing a large screen may follow the lesson lectured by an instructor, ask question when necessary and they will communicate as if in a real class. Since video conference application may benefit from visual tools like film and graphic, the technology of TV needs to be adopted to the new technology.

The Open Education Faculty broadcasts its own programmes via TRT. But since broadcasting days and hours are not arrange to be fit for the working students. This situation is being loss of time and effort. Also there are some technical differences between TRT and ETV For this reason, technical quality

is discourse. Those bring a reaching and adaptation problems to the students in all parts of Turkey.

For these reasons, Open Education Faculty should improve its technical equipment and well educated expert personnel or work force, and should broadcast its own programmes itself as soon as possible. TV broadcast unit that will be taken in to consideration as an educational channel by university and should be formed with the technological developments of studios that radio and TV programmes so far.

It is common opinion that investment on education is the best think to be done. Based on misunderstanding, Open Education Faculty is an institution that devotes itself to serve qualified education to the masses.

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