Abstract

The contribution comprehensively describes an eight-year research process of incorporation of the university television broadcasting into the educational university process. The result is the implementation of a practice and community medium into the university structure. The sample process is verified on the basis of triangulation in a theoretical and empirical research with the analysis of a three-year operation of a university television broadcasting called the NEON TV on the ground of Tomas Bata University in Zlin. The research results become the basis for implementation of a community medium operating within the academic environment synergically at two levels. First, at the level of a practice medium on the basis of an audiovisual laboratory; second, at the level of a community medium with informative, educational and community functions.

Keywords: community medium; the Internet; television; education

1. Introduction

At the beginning of the research in 2005 there was a grant (FRVŠ, 2010) for the purposes to technically equip audiovisual laboratories. The objective of the grant was to educate students by means of the AV technologies.
In connection with the development of a narrowly segmented videocontent on demand (VOD), the project of incorporating the community medium (CMFE, 2013) into the university structure in order to educate by means of the VOD and live video streaming of a popular-scientific content.

Synergic utilization of technologies via the community media within the academic ground becomes an original extension to the project. The AV lab technology background is used to educate students of audiovisual studies and media communications. Their outcomes then create the content of the university television broadcasting station that serves as an educational and informative medium of the academics with an overlap to the public.

The research subsequently verifies the project of incorporating practice-community media into the academic ground with the emphasis on education of content creators in the AV labs and on education and informing the recipients via the NEON TV community channel. The contribution brings an innovation in the management of audiovisual communication focused on the faculties in the form of transformation of their outcomes into a four-dimensional content. The community, educational, academic and rhizomatic one (Carpentier, Lie, Servaes, 2003; Cammaerts, Carpentier, 2007).

2. Community and practice media

The community media are locally focused media activities devoted to the principles of freedom of speech and of participatory democracy (Howley, 2005). Tabink (Tabink, 2002) defines the community media as the media operating within a community for the community, about the community and by the community. The European Parliament's Report on Community Media in Europe (European parliament resolution on Community Media in Europe, 2008) attributes the community media with the role of local sources enhancing the awareness, creativity and diversity of a content, and at the same time as a support of the community media as an effective means for enhancing cultural and linguistic diversity, social integration and local identity. The Council of Europe (Council of Europe, 2008) also emphasizes the role of the community media in supporting the social cohesion and intercultural discourse. The Council of Europe also stresses the role of the community media in guaranteeing freedom of speech for effective participation of groups and individuals in democratic processes.

In the countries such as the UK, Ireland, Austria, the Netherlands, Hungary and Australia and many countries of Latin America, the community media are regarded as the third media sector alongside the commercial and public media (Carpentier, 2013). The social role of the community media is described by four basic dimensions (Carpentier, Lie, 2003; Cammaerts, Carpentier, 2007). A community dimension, alternative dimension, human dimension, rhizomatic dimension.

Content production on the academic ground takes place in an audiovisual laboratory that is a HW basis on which the media content is created. The AV lab represents a technological prerequisite for a practice medium which is a platform providing students with its technological background for practical workshop education. Based on The Media Practice Model (Brown, Steel, 2001) student creating activities are in our case put on a higher level as a consequence of the technological and educational development from a practice medium into the community medium of four factors.

Tomas Bata University and the Faculty of Multimedia Communications (Thomas Bata University, 2013) initiated the process of creating a community student medium in 2005. The objective of the contribution is to offer the project of incorporation of the community medium on the academic ground to more similarly-oriented educational institutions, to which we thus offer an effective tool for communication and education of the four-dimensional content: Community, educational, academic and rhizomatic.
Our objective was to make an audiovisual hardware lab out of a practice community medium on the basis of The Practice Model (Brown & Steele, 2001). From the managerial point of view, this entailed specific issues in human resource management represented by the students whose activities and production was promoted from practice to a community one. Thus it became public and open to criticism.

3. Research methods and time plan of the research

The research at TBU (Tomas Bata University) in Zlín was conducted since 2005 when an audiovisual lab was equipped upon the financial grant (FRVS, 2010). By the means of statistical methods the demand for a community medium, according to the definition saying that the community media are managed by a community for the community and about the community (Tabing, 2002), had been verified within the university.

RQ Research Questions

RQ1. Is there a majority interest in an on-line broadcasting within the whole TBU?
RQ2. Is the difference in the interest in an on-line broadcasting and in the preferences of subprograms across the faculties, gender and class significant?
RQ3. Is the project sufficiently perspective for a consequent transformation into a community medium?

Research methods

The character of a research intention and related research questions determines the utilization of statistical analytical tools. The main method is an extensive questionnaire survey as a tool of a quantitative research. Based on the knowledge of the sample in statistical inference – induction – estimations will arise which will speak about the perspective of the project.

Definition of the research sample and the relation to the basic population

The research sample was created by stratification and consequent randomization. The sample of 584 students from all three TBU faculties and the total number of students... presents information in a sufficient extent (the selection ratio is thus... and the reliability of the statistical tests is at 95%). By the basic sample we mean all the TBU students. Note: for partial tests the sample n=584 differs due to the missing values, however, by 3 to a maximum.
4. Statistical evaluation of the acquired results

a) Description of the research sample
The research sample, as was already stated above, consisted of 584 students. The frequency distribution in consideration of a studied faculty and of the gender of the students is shown in the figure below. Stratification according to the class (i.e. year of study) at all faculties was also taken into account, with the questionnaire research focused more on the bachelor's studies students. The reason for this was representation of bachelor's studies students compared to the number of master's students as well as higher relevance of the younger age group with regards to the project objective.

Graph.1. Number of students within the research by a studied faculty and gender, source: own processing, MS Excel software

b) Analysis of the interest in the on-line broadcasting
The interest in an on-line broadcasting is surveyed by statistical inference – induction – on the level of TBU. The interest was observed by question No. 5 of the questionnaire survey: “Are you interested in such an on-line broadcasting?”, with the variable of possible values yes/no (it thus is a dichotomous variable). The interest in the on-line broadcasting itself was sampled by over 68%. On the basis of a proportional test inferring on the behavior of the research variable in the total population, counting with the risk of error of 5%, it can be assumed that at the level of the whole university the interest will be higher than 60 per cent.

c) Analysis of preference data, or of the interest in individual TV shows types
In the sixth question of the questionnaire the respondents expressed their interest or disinterest (again a dichotomous question yes/no) in watching six different types of sessions (TV shows cathegories). Within the six offered cathegories, the following interest was recorded:

Table 1. Descriptive statistics of the interest in individual TV shows types, source: own processing, MS Excel software

|                      | YES | NO  | %     | Lower | Upper  |
|----------------------|-----|-----|-------|-------|--------|
| New (type 1)         | 431 | 153 | 73,80%| 70,24%| 77,37% |
| Student films (type 2)| 368 | 216 | 63,01%| 59,10%| 66,93% |
| Videoclips (type 4)  | 318 | 266 | 54,45%| 50,41%| 58,49% |
| Event broadcasting (type 5)| 298 | 286 | 51,03%| 46,97%| 55,08% |
| Educational programs (type 3)| 232 | 352 | 39,73%| 35,76%| 43,69% |
| Information on projects (type 6)| 193 | 391 | 33,05%| 29,23%| 36,86% |
The point value of the percentage of the interest in a specific category from the middle column of the figure by statistical inference. The confidence interval thus shows, with a 5% risk of error, the total interest of all the university students.

In the six researched categories the total interest had been monitored as well as the interest in individual TV shows across the faculties.

Relatively consistent interest in the proposed shows types may be traced in the graph based on the survey across the faculties. The only significant difference is the FMC students' interest in more shows types – the modus, ie. the most frequent value, of the shows number is 4.

d) The interest in individual types of shows in relation to the faculty / gender / year of study

A significant relationship between a faculty and the individual types of shows was demonstrated in two categories, namely those that are generally the least desirable ones – in educational programs and in the information on projects. In this fact, the influence of the studied faculty reflects itself. The Faculty of Technology promises targeting in the educational programs category and a higher viewership (test result: $X^2 = 17,9066$, $df = 2$, $p-value = 0,000129$ [source: own processing, software: R]). Information on projects is welcomed by the students of the Faculty of Multimedia Communications (test result: $X^2 = 32,6114$, $df = 2$, $p-value = 8,29e-08$ [source: own processing, software: R]).

Another significant correlation was found, or proved by a statistical test, in gender and the intended most commonly watched programs – Type 1: News and Type 2: Student films. In these two types different results were proven in men and women, which did not occur in the remaining four categories. The result of the test to detect the dependencies between the gender category and the category of the interest in news is: $X^2 = 10,2096$, $df = 1$, $p-value = 0,001397$ [source: own processing, software: R]. At the whole university level the increased women interest can be inferred. The result of the Chí-quadrat test of the dependency between gender and interest in student films analysis is: $X^2 = 12,5093$, $df = 1$, $p-value = 0,0004049$ [source: own processing, software: R]. At the same time, the interest is much higher in women than men. Thanks to this information, the student television broadcasting can obtain its form for the future.

The research results bring up an apparent fact that during the years of study, the preferences for various types of information sources remain the same, ie. the fact that the incoming classes do not differentiate from the older students. This is an important piece of information that tells us about the stability of the community members' preferences and of the suitability to link the members by a community medium. The arising platform can thus offer the members a space for its utilization and for spreading the content properties of which are the potential linking of the members with a wider field of candidates; as well as provide the members with the obvious aim for the content which will be completed by the program and shows producers (there will be a professional development of the...
Based on the knowledge of the target group and their needs, a new study subject was included in the syllabus. Its practical outcome is an on-line community media content production.

5. Practical incorporation of the community medium in the academic environment

The community medium established at TBU in Zlín is called the NEON TV and its operation after the years of experiments and revisions was optimized into a form recommendable for other institutions as well.

The NEON TV community medium is conducted as a practical subject within the education syllabus that can be attended by students repeatedly. Thus a natural knowledge base and an internal control system are created in which the advanced students provide managerial agenda of the medium. Hourly schedule is set to two hours a week.

**Mandatory requirements for creation of the content**

The experimental operation found out these mandatories that must be met if we want to manage a community medium whose primary spreading information form is the audiovisual one.

*Human resources*

The optimum number of students per one semester is 80. They are divided into six weekly news shifts. Three students of audiovisual subjects (camera, sound, editing), a production and a reporter and a presenter from communications subjects.

*Spacial sources*

The basic requirement is the room for offline editing that should build on the classic three-camera television studio setup.

*Technological sources*

Tapeless camcorders for a reportage usage with the SDI output for studio integration are a technologically effective solution. The actual studio infrastructure must necessarily be the SDI-HD standard as well as all the installed peripheries.

*Broadcasting technologies*

For the purposes of transmitting the signal, it is optimal to utilize the YouTube distribution live channel (YTB). By its means we can address all target groups on many devices from telephones to tablets and computers in absolute compatibility free of charge and without any costs for server-related technology.

The content is available in the form of the NEON TV.cz web portal, Facebook and YouTube. Operation, distribution and media content storage costs are thus saved. At the same time, worldwide coverage is ensured.

Table 2. Worldwide coverage NEON TV video content, source: Google Analytics, MS Excel software

| Geography          | Views ↓ | Estimated minutes watched | Average view duration |
|--------------------|---------|---------------------------|-----------------------|
| Czech Republic     | 60,416  | 265,045 (90%)             | 4:43                  |
| Slovakia           | 4,626   | 16,363 (6.2%)             | 3:32                  |
| United Kingdom     | 572     | 2,179 (0.7%)              | 3.48                  |
| Germany            | 446     | 905 (0.3%)                | 2:01                  |
| United States      | 378     | 1,266 (0.4%)              | 3:20                  |
| Finland            | 263     | 486 (0.2%)                | 1:50                  |
| France             | 209     | 338 (0.1%)                | 1:36                  |
| Russia             | 204     | 204 (0.1%)                | 0:59                  |
| Poland             | 202     | 210 (0.1%)                | 1:02                  |

A functioning community medium as a news, promotional and popularizational tool

Our NEON TV project is measured by the theoretical bases for the community media in four dimensions.

1. **Community dimension**
Involving students into production, spreading and watching the content. The content is produced by students with an emphasis on the target group student, colleague.

2. Alternative dimension

Implementation of alternative genres, depoliticization and self-presentation. Independent and alternative approaches towards common issues, creative intersection to alternative topics.

3. Human dimension

Self-presentation within the public space, an offer of educational materials to the general public. Popularization of the institution, science and arts.

4. Rhizomatic dimension

Interconnection with the civil society, intersection into the cultural life of the general public, interconnection with the independent subjects across the whole world.

Incorporation of the community media brings except for the communication effect also a vast number of other synergic effects. The students undergo practical creation with a public output, they have the possibility of managerial involvement and acquiring a comprehensive overview of the media functioning in the practice. In the context of the advancement of social networks, even the community media is developing this division and is thus constantly on the top of technological and communication process.

Thanks to the effective utilization of modern technologies, the graduates are quickly and fluently involved into practice and they also bring a number of innovation processes gained in practical education into the community, where the main emphasis is put on the efficiency of production.

The NEON TV content annually reaches 80 000 viewings. It has already addressed 225 000 viewers from all over the world since its establishment. Live broadcasting of lectures watched annually by more than ten thousand viewers is a separate chapter.

Outputs for the period 2009 - 2013

In the final stage of the experiment see p.3 we proceeded to a regular official releasing of the audiovisual works that were created under the production of the university community medium. As was already mentioned above, the youtube channel was chosen for the tool due to the property of an easy audiovisual works releasing and with the function of sharing and searching the content by users who are not directly connected with the community of the given medium target group.

The graph below shows that it is apparent that the volume of viewing and the consumption of the audiovisual content are growing, which confirms the basic predictions of the early implementation of the community medium.

![Graph.3. Increasing volume viewing, source: own processing](image-url)
6. Conclusion

The principle of incorporation of the university practice medium and its transformation into the community medium within the academic institution environment shown on the above presented practice case was successfully applied with a long-term effect, and the medium has become a permanent carrier of information created by the community for the community out of the community background.

From a global perspective, it becomes more and more suitable to utilize transmission of information via audiovisual works in combination with statistical visual features and an accompanying text. Within the future outlook an increase in the audience is expected as well as an intervention in terms of the equipment. The content distribution via the YouTube platform provides a worldwide streaming. In connection with the penetration of videos into tablets and telephones, the community medium is able to get very close to their users.

With the advent of hybrid television broadcasting, the community media penetrate also onto TV screens, which used to be unassailable privilege of large television corporations. In the light of a technological progress, the community broadcasting is destined to strengthen their existing positions in both production and distribution.

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