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Media Education in Higher Learning Institutions in Korea: Changes and Realities Reflected in Curricula[☆]

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ABSTRACT

Over the years, the types of media and media usage patterns have rapidly changed and communication channels in society have diversified. The courses in the universities on "media" have accordingly been altered to adapt to these changes. To investigate the ways in which the higher learning institutions in Korea have adapted to the changes in the media environment, this study analyzed the curriculum provided by the communication/media departments in the areas of Seoul and Gyeonggi-do. For the curricula analysis,names of the course soffered at the selected universitie swere analyzed; then keywords were extracted from morphological analysis of these enames. Also, to investigate the changes over time, the courses offered in the years 2008 and 2017 were selected. The network analysis was done by using Netminer; the shape, main components, and major nodes of the network were compared. The results showed that firstly, overall shape of network from 2008 and 2017 looked similar. Due to the existence of concentrations within the major, the overall shape of the network showed several independent components, rather than one network. However, the analysis revealed differences in major nodes in the 2008 case from 2017. In the 2008 case, 'programming,' 'media,' 'introduction' among others were the major nodes; in 2017, 'editing' was the most important node. This signifies that in 2017, the curricula in the selected universities emphasized more practical and technical media education. In other words, the universities have adapted to the changing environments by including new topics, paying more attention to video media, and providing students with more direct field experiences.

🖙 keyword : Titles of courses, Curriculum in the department of Journalism and Broadcasting, Network analysis, NetMiner

1. Introduction

Media, such as newspaper and broadcasting, are tools of mass communication, and they are enabled by technology. The essential function of mass media is to relay messages to a large number of audiences, and the media as a field have been developing itself in parallel to technological advancements to successfully carry out communicative function. Information and communications technology (ICT), which emerged in recent years, has been especially instrumental in bringing changes to the media services landscape. It has altered the ways in which media contents are produced, distributed, and consumed. The advanced ICT has contributed to diversification of media service operators and the opportunities for users to

Furthermore, with advancement of personified media, it became possible for an individual user to produce and broadcast media contents. Users can upload their personally produced contents on platforms such as Africa TV or YouTube, and they can consume these contents on these platforms. In the background to such advancement of personalized media is the development of easy-to-use software that allow consumers to record and edit contents.

These changes in media environment inevitably demand refinement of education in universities-higher learning institutions that nurture people who would eventually work in media. When the society experiences major changes as in the case of media environments, it is imperative for higher educational institutions to determine the contents and direction of their education to reflect such changes, that is, it is crucial for the academic institutions to steer educational wheel in the direction of the changes taking place in today's society.

In this context, this study responds to the serious questions about whether the existing university education system could

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utilize media in innovative ways.

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modify to implement technological and service requirements of the current media industry.

In particular, this paper investigates whether the contents of university education from the years between 2008 and 2017 reflect the timely alteration. The courses offered by the universities in a wide range of the timeframe were subjected to analysis. The titles of the courses taught in the media related departments/schools, such as journalism and mass communication departments, were analyzed.

2. Literature Review

Departments of journalism and broadcasting in Korean universities have evolved, and their educational contents have been restructured since the establishment of media as a field of study. After the Chosun Journalism Institution began offering a class in 1947, a related course was created in the 1950s in other institutes. A few universities in Korea created departments of journalism and broadcasting in the 1960s. From then on, a quantitative growth occurred in the 1990s-materializing in 14 universities in Seoul and in 41 provinces by August 1998 that offered media related education.

In earlier days of its establishment, a typical department of journalism and broadcasting has faced with issues involving curriculum, practical skills reinforcement, and academic identity. For instance, a record of a group interview conducted in 1965, during the days when only a handful of universities had this department, shows a concern over the identity of journalism and broadcasting, the absence of practical education, and the demand for education aimed at nurturing journalists [1].

The question regarding what constituted a university education as a means to foster talented individuals who could work as journalists in media companies after graduation was still being asked ten years later. An interview with a group of journalism and broadcasting graduates conducted in 1979 revealed that there were still doubts about whether completing the curriculum was beneficial to becoming journalists. The participants of the 1979 interview pointed out that less than 20% of the graduates had joined media companies and stressed the need for the university curriculum to groom students for careers as professional journalists [2].

Entering the 2000s, the traditional department of journalism and broadcasting had an external makeover; a few universities changed the name of the department or restructured the curriculum for media education. Some began referring their departments to "the faculty of media and video" or "the department of media and information" while others reorganized their curricula [3]. Such modifications were possible due to the awareness that "journalism and broadcasting" did not sufficiently reflect the needs of the field.

At the time, the concept of media was expanding to mean information; therefore, the department required a name that went beyond specific media, such as journalism or broadcasting. In the 2000s, as the Internet usage was widely spread, the Internet became one of the major competing media channels. With this change, there came the existential identity crisis of the departments that used to cater to newspapers and broadcasting. To respond, some departments changed their names to reflect the changes in media environment. Along with name changes were alteration of curricula in the 2000s.

These changes seen in the 2000s are continuing to this day; as of 2017, the name, "Department of Journalism and Broadcasting" are found in only a handful of universities. Departments of journalism and broadcasting and other similar departments have recently been undergoing another big shift known as "convergence." Media technology is rendering the distinction among newspapers, broadcasting, advertising, and other media meaningless. The changes in the information infrastructure are leading to diverse and integrated distribution and consumption patterns associated with media contents.

Scholars and educationists point out that "convergence" and "integration" are keywords in education. Convergence should take place by "crossing boundaries' … by blending different things placed on boundaries, making them comprehensible, and drawing new ones from the mixture," and integration should aim for the level at which communication is possible between fields-moving beyond the physical mixture or chemical combination of existing majors [4].

Due to the phenomenon of convergence between media technology and the media field, and the shift to the digital media ecosystem centering on the Internet and mobile technology, the education of the communication field should

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be actively searching for shifts in paradigm. Accordingly, the traditional department of journalism and broadcasting and other similar departments of the same age need to improve their curriculum to enable convergence with various fields, such as broadcasting, newspapers, advertising, and games [5]. Above all, it is important to enhance education in media technology. Those who are currently employed in the field assess that education on content production provided by universities still falls far behind from meeting the expectations [6].

In this regard, this study was conducted to analyze the changes in the educational curriculum from the previous to the current one. The time frame was set at 10 years apart: the curriculum of the year of 2008 and the 2017 were compared. To see the patterns of changes over time, the paper analyzed the course titles by using the network analysis.

3. Methods

To investigate changes in courses offered in media related departments in universities in Korea, this study utilized network analysis method. Firstly, the courses that were offered in departments of journalism and broadcasting and other similar departments at four-year universities in Seoul and Gyeonggi-do Province were obtained. Secondly, the keywords were extracted from the course titles by parceling syntax. After the data were obtained, finally, it was subjected to the network analysis. The networks of keywords were constructed, main keywords were identified, and the components were interpreted. In order to investigate the changes, the network based on the course titles in 2008 and the network driven from the 2017 course titles were compared. More detailed description follows below.

3.1. Data Collection

The raw data was the course titles offered in the departments of the mass media or similar departments in universities in Seoul and Gyeonggi-do Province. The list of the universities were collected from the websites of the Ministry of Education, and the course lists by each departments were obtained from the corresponding

university's websites. For the universities that did not provide the course list on the website, the authors made contacts with the universities and obtained the list. To examine the trends across time, two years of 2008 and 2017 were selected.

Among the courses, the departments whose curriculum were not relevant were excluded. For the 2008 course titles, two universities were omitted, and in the case of one university 2005 data was replaced with 2008 data. Finally, a total of 19 departments in 19 universities were selected, and the course titles from the departments were analyzed.

3.2. Data Preparation

The total number of the courses was 1,456, with 639 courses from 2008 and 817 courses from the year 2017. The morphological analysis was performed onto the course titles to extract keywords out of the course titles. The Morphological Hangul Analyzer (moHANA) was used to decompose the course titles into morphemes.

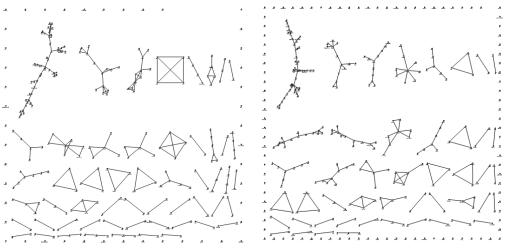
3.3. Data Analysis

The extracted keywords were analyzed by the NetMiner to perform the network analysis. Firstly, the keywords which appeared only once were excluded. Secondly, the link values between the keywords were calculated by the Jaccard coefficients methods. And lastly, the links whose value was 0 were excluded. Among the 2008 data, there were 13 keywords that appeared only once and 486 links (56.4 %) with the 0 value. Those keywords and links were excluded. From the 2017 data, 9 keywords and 707 links (61.9%) were excluded.

4. Results

4.1. Network Visualization

The keyword networks were produced by the NetMiner program (Figure 1). When the shape of the networks were compared, they showed similarity. Both networks consisted of the middle-ranged clusters and many small clusters without a dominant cluster which would cover large portion of a network. In the case of 2008 on the left, small clustered



(Figure 1) Keywords network comparison between 2008(left) and 2017(right)

on the uppoer part are independently spread out. In the case of 2017 also, small clusteres are independently separeted.

The shape of the networks is understandable considering the data is driven from the departments' course lists. The absence of a large cluster and the composition of the independent small clusters mean that the departments offer a variety of contents rather than focusing on one main content.

4.2. Analysis of Components

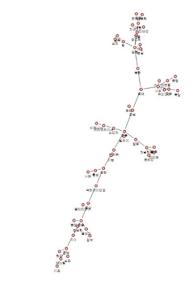
In the 2008's network, there were 99 components and 3 components which contained 11 or more keywords. In the meantime, the 2017's network had 146 components. Among these 146 components, 5 consisted of more than 12 keywords. Each component reflected the unique contents of the courses.

In the 2008 network, the biggest component, component1, included 53 nodes such as introduction, debate, practices, society, technology, journalism, English, and others. The component 2 was composed of 14 nodes including editing, reading, news, and others. And the componet 3 was composed of 11 nodes such as program, scheduling, internship, and others.

Based on these components, we can understand which contents were taught with more emphasis. Firstly, the contents on general introduction were provided which addressed communication (i.e, discussion and speaking) and modern media. Secondly, the journalism contents on editing,

reading and news were taught; and thirdly, the practical courses were taught with more focuses on programming, organization, and internship.

In more detail, the nodes between splits in the upper parts and the horizontally connected nodes in the middle section of the biggest components are closely related (Figure 2). The nodes in the upper section of the component includes 'society,' 'new media,' 'literature,' and 'introduction,' that center around 'contemporary.'



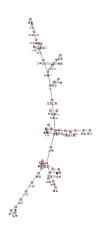
(Figure 2) Major components of 2008

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In the meantime, the network of 2017 showed three big components which included 49 nodes, 15 nodes, and 14 nodes, respectively. The bigget component was composed of editing, seminar, major, history, news report, internship, advanced, composition, and others. The second biggest component included English, ethics, freedom, special guest, press, and others. And the third component had its nodes such as computer, design, UX, and others.

Taking a closer look at the main contents of the 2017 curricula with the biggest component as the standard, it becomes clear that there are three major contents that are emphasized.

The very top portion of the components in Figure 3 indicates courses on producing, drama, documentary, and so forth. This means practical courses on program production were offered. The middle section where several nodes are connected indicate courses on seminar, small business, and project. This shows that practical courses were offered. The bottom section of the component shows nodes for courses on editing, news writing, collaboration, and basics which means that journalism related courses were offered.



(Figure 3) Major components of 2017

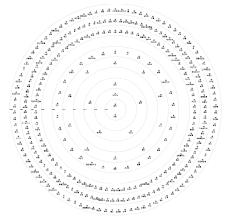
In comparison of the courses offered between 2008 and 2017, the overall shape of the networks showed similarity, but the detailed contents showed differences.

In 2008, courses on general theories of communication studies (speech and journalism, for example) were considered to be important, and sociological approach to the relationship between mass media and society was found. In contrast, in 2017, more practical and pragmatic courses were emphasized. The main contents of the biggest component were on producing and career development. In addition, in 2017, courses included computer, design, UX, and others, which were not dealt with in 2008. Courses such as design and UX used to be taught in other departments. However, the exansion of the meaning of the media from the medium based media such as news papers or broadcasting to device based media using channels with computer at its base seems to have led to such changes in the curricula.

4.3. Analysis of Important Nodes

For better understanding on changes in curricula, it is as important to analyze the major nodes as analyzing the overall network shapes and components. Major nodes in a network were extracted by calculating degree values and between-centrality values of each node. By using Netminer's concentric display function, the degree values of nodes can be calculated, and the most important nodes and other nodes can be visualized (Figure 4).

The degree values are values drawn by calculating the degrees in which each node is related to other nodes. The higher the value the closer the nodes are related to each other. In other words, higher values indicate the node plays an important role in a network. Higher the importance the node in a network, the more centered it is in Concentric display, and less important node will be in the outer layer of the display (Figure 4).



(Figure 4) Concentric display by degree

In 2008 curricula, there were three nodes in the center of the concentric display: programming, media, and introduction. In the second most centered nodes were 5 nodes: society, editing, organization, practice, and discussion. In 2017, the nodes with highest degree values were editing and development. In the second most important circle, culture; in the third most important circle, English, major, seminar, computer, administration were found.

From this analysis, it became obvious that the most important nodes in 2008 curricula and 2017 were significantly different. The only commonly important node in both years was editing. In 2008, other than the main nodes, media and introduction showed some importance which indicate that generalized theoretical approaches to education was prevalent in 2008. In 2017, on the other hand, practical skill based courses, such as editing and development, were emphasized.

In addition to the degree values, betweenness-centrality scores are important index for evaluating individual node.

Betweenness-centrality is calculated by computing values of connection between clusters. The nodes with high betweenness-centrality is the node that plays an important role in connection between clusters. Even if the degree values are not so high, if the node shows high betweenness centrality, the corresponding node weighs quite heavily as the medium that connect clusters within the network. The node with the highest betweenness-centrality in 2008 was discussion, and the node with the second highest betweenness-centrality was modernity.

In 2017, the node with the highest betweenness-centrality was editing. The point that 'discussion' or 'modernity' act as important media means that different clusters within the network can be connected through the discussion node or modernity node. Even if the discussion or modernity as keywords were not considered important in each cluster, these keywords are commonly shared by all clusters. Whereas discussion and modern were the most commonly shared keywords in media related majors in 2008, editing was most highly related word in 2017. This signifies that editing was considered most important aspect of media related courses, which coincides with the component analysis results above. This analytical result on betweenness-centrality also points to the fact that technical and practical education

were put on more emphasis in 2017 in university education.

5. Conclusion and Further Research Issues

The results of the analyses in this study proved that university curricular on media education have altered drastically in the last decade. The network analysis of the course titles from university course offerings revealed that the overall network shapes in years 2008 and 2017 did not show much difference. Neither of the networks showed shapes with a few dominant clusters or centered patterns. Instead, both showed several, small independently spread clusters. This pattern is easily understood when considering each major offer several concentrations within the department. Each department offers not only the basic courses, but also several concentrations or tracks that offer more in-depth education of different areas of the major.

Despite the similar shapes, the detailed contents of the two networks showed large differences. The results of the main component analysis revealed that in 2008, courses on genera theories of communication studies and journalism were considered important; in 2017, practical and technical courses were more emphasized. Analyzing major nodes by computing degree values and betweenness-centrality also revealed the same results. In 2008, keywords such as discussion and modernity were found to be commonly emphasized keywords regardless of concentrations. On the other hand, in 2017, editing was extracted as the keyword that was commonly emphasized across concentrations. This indicates that the courses in 2017 emphasized on practical skills.

These changes that took place in the last decade or so in the university curricula reflects the changes taken place in the media environment. With the advancement of ICT technology, mobile devices are used as main platform, and individuals can easily produce and distribute contents in today's media environment. Educational curricula in higher learning institutions accordingly have altered their direction from conventional newspaper or broadcasting related contents to offering courses that emphasize actual production and application of media contents.

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Media related departments from its early establishments have evolved in accordance with changes in media environments. Media field became independent in the 1960s and 1970s with the widespread journalism and broadcasting. With further development of media industry, the media as an academic field grew and matured in the 1980s. With the introduction of the Internet in the 1990s, the media departments faced new changes, and by 2017, these departments have adopted courses that reflect and correspond to changes in media contents consumption and specialization.

However, it is important to pause and raise a question on whether these curricular changes are appropriate. The very first Journalism and Broadcasting Department that was established in 1947 as the Institute, from its beginning, was questioned about their curriculum. Critics asked: if the institute was offering practical and professional education to students or if the academic identity was properly established. It was found that through technical and practical education, the institute was offering practical education to students, yet it still remains questionable whether the media department's identity as an academic field was properly established.

Considering the recent changes in media with the new keyword, 'fusion' at its center, the media related department's identity as academic establishment must be seriously discussed. How and what universities are teaching in their classrooms about these current changes should be investigated as a follow up study.

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