Research on the Reform and Exploration of News Communication Network Teaching Driven by Big Data

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Abstract: The emergence of big data will drive profound changes in all aspects of society. In people's lives, people's behaviors, life trivia, theoretical research, etc. all rely on data, not people's experience and experience; in education, students' knowledge framework, chapter structure, etc. must be measured by data, the editor of the book, rather than relying on the level of experience and qualifications of the teacher. The era of big data has put forward new requirements for journalists, such as rapidly mining "micro-values" in massive data and methods and capabilities for data calculation and modeling analysis. However, the current situation of China's news communication education cannot meet the demand of news talents in the data age and it is urgent to explore a new path to adapt to the development of the data age.

1. Application of big data technology in news dissemination

1.1. Increase the depth of news reports

In the previous journalists, in order to ensure the authenticity and timeliness of the news, journalists want to obtain relevant data and need to communicate through the field and communicate with the relevant departments and relevant personnel. In order to report a news article. The whole process is very cumbersome and slow, but in the context of modern big data, it is very different from the past. The emergence of the network has made the data of all countries in the world at your fingertips, which has accelerated the speed of news and news. The value of information itself. For example, in the past few years, there was a news in technology, titled "Leno surpassed HP and became the world's first computer maker." Faced with this news, it caused the suspicion and speculation of the news readers. In order to strengthen the reader's convincing power, Bloom berg News conducted a deep analysis using big data technology. In 2004, Leno and IBM signed an agreement as the starting point[1]. The statistical analysis of the statistical data shows that the stock price changes on the five major personal computers in the world, which strongly demonstrates that Nobleness share of the market in the past eight years is expanding, thus achieving The catch-up of HP, the application of big data technology in the news, solved the reader's doubts and confusion and enhanced the persuasiveness of the news.

1.2. Improve the timeliness of news reports

The characteristics of the news are new, fast and accurate. In the context of the era of big data, journalists are able to access news information in a comprehensive manner and on a large scale and to sort out them by applying big data technology as quickly as possible. For example, the Wench earthquake. However, after the incident, the dissemination of news reports spread to the rest of the world at a faster speed. After the reporters gave a detailed and true report on the status duo of Wench, the state and the people adopted relevant policies to assist Wench. Wench recovered quickly after suffering great damage. Without the application of big data technology and the timeliness of news dissemination, it is very likely that Wench will not recover in a short period of time. Therefore, the application of big data provides a strong guarantee for the scope and speed of news dissemination[2]. The development of news in various places is shown in Table 1.

Table 1 Development of news in various places

Years	Beijing	Tianjin	Shanxi	Hebei	Neimenggu
2013	198.7307456	174.9317211	23.61439956	56.57072532	35.37132147
2014	199.1301055	175.3896317	23.3962178	57.20186065	35.0683661
2015	198.6647106	176.4549592	23.59410189	57.80382465	35.21925943
2016	198.6048976	177.6775634	23.54223732	58.14491462	35.23485042
2017	202.8134354	179.464162	23.26054122	59.51871759	35.65912618
2018	201.0394803	180.6576182	23.40216193	59.91116861	35.57131109
2019	199.8133271	182.4403187	23.70102552	61.01055452	35.97912547
2020	201.81926	184.4100668	23.3196793	61.95669451	35.67429655
2021	197.5697071	185.9678811	23.50687407	63.08840763	35.50125854
2022	197.0642787	187.3958864	23.60994983	63.82350583	35.53697318
2023	198.7296459	188.7080717	23.18915943	64.04369375	35.83789317
2024	200.1646676	189.6924516	23.47518755	65.36261722	36.10549235
2025	200.5805114	191.836037	23.4405099	66.75554689	36.24007715

2. The lagging development of traditional news communication education

First, the educational concept is difficult to meet the needs of the big data era. The disciplines of journalism and communication majors in China are more detailed and there is a lack of integration between professions and professions and even a professional gap is difficult to create an all-round talent with data thinking and analysis skills[3]. Second, the aging curriculum system is difficult to cope with the challenges of the big data era. For a long time, the curriculum system of various majors of journalism and communication in China has mostly met the needs of talents in traditional media, lacking the emphasis on interdisciplinary general education and represented by data mining, analysis, modeling and visualization. There are few courses related to data dissemination and the curriculum system lags behind the development of modern media. Third, the lack of practical conditions limits the expansion of talents in the era of big data. At present, news practice is still lacking in platform construction and laboratory equipment updating, lacking forward-looking and guiding. Fourth, the fault of the teaching staff hinders the cultivation of talents in the era of big data. At present, the knowledge structure of journalism communication teachers in China is mostly single. With the current background of the data age, the teacher forces have restricted the in-depth training

of journalism professionals.

3. The development trend of news communication education in the new era

3.1. Traditional media transformation

In the era of big data, the media industry is experiencing a comprehensive baptism from the effects of communication, news value, news business, media database to media functions under the influence and drive of big data. Data-driven news set off a new wave of media change. The "data-driven news" or "data news" news production method is the new favorite of the media practice field in the era of big data. In the era of big data, technological breakthroughs have made it possible to enhance the user experience by capturing and analyzing the relevant media activities of the audience through big data. Using big data can not only predict the news cues that are of interest to the audience, but also analyze and grasp the needs of different audiences to achieve precise marketing and accurate dissemination. The transformation of the media information dissemination model in the era of big data is bound to catalyze the innovation of report types. Information explosions make it increasingly difficult for people to make decisions, which also makes big-data-based trend forecasting reports even more important. The interactive visual communication of data news makes the visual expression advantage of chart news stand out. Chart news is known for its data analysis and data interpretation and has become the main method for reporting media applications in the media industry[4].

3.2. Education accuracy

In the era of big data, education has moved from "fuzzy" to precise and scientific. At the same time, the new information dissemination structure has also had a subversive impact on the traditional journalism education model. With the development of big data technology, the future news communication education will work in a scientific, forward-looking and practical direction. In the era of big data, to improve the concept of news communication education, we must establish the teaching ideas of big data thinking and establish the concept of training all-round professional talents. Big data thinking creates the possibility of personalized news communication education. In the future, news communication teaching should develop students' big data thinking, build a perfect big data theory knowledge system and cultivate data journalism production and communication ability as the teaching tenet. In 2014, Songhua University launched the Master of Big Data Composite Program, relying on faculty departments to become an innovative practice in the era of big data era "breaking the boundaries of disciplines and education"[5]. Its calculation formula is as in Equation 1.

$$Z^{(1)}(k) = 0.5x^{(1)}(k) + 0.5x^{(1)}(k-1)$$

(1)

The training of talents in China's news communication education should also gradually shift to individualization, constantly adjust the curriculum system, re-create the teaching process and finally build a big data-oriented news communication education system. The news department can tentatively introduce the computer intelligent teaching system into the course teaching and construct the knowledge tracking (Knowledge Tracing) model. Secondly, it is necessary to improve the curriculum and teaching structure of news communication. The personalized news communication education in the era of big data has ushered in new opportunities and the professional curriculum needs to be fundamentally changed. From the "traditional theory" to the "innovation of time" reform curriculum, the construction of a wide-caliber, thick-based, cross-media, professional curriculum

system. As a social sciences, the journalism communication community pays more and more attention to the issues related to data mining and application. The teaching curriculum should be prioritized to include big data related courses. A data mining course that adapts to the visual production of data journals should attract the attention of the journalism departments. Through this course, we will train future journalists with good technical skills, skilled use of computer and network technologies and mastering certain data mining and analysis techniques. In addition, viewing pictures has become a new way of visualizing the dissemination of data news, interactive maps, dynamic charts, information maps and other widely used. Therefore, the related visual concepts and operation teaching of the news department should also be put on the agenda. It can be seen from the above that in the era of big data, the curriculum of journalism and communication education in China should strengthen the transformation of science, cutting-edge and practicality as a whole.

4. Conclusion

In the era of big data, news communication education should focus on the integration of journalism practice, information technology and the international community while striving to break the rigid teaching pattern. Big data has provided an opportunity for the promotion of the concept of "open news". Teachers of the journalism department should pay attention to changes in related concepts such as the objectivity, authenticity, transparency, balance principle and visualization of narrative techniques. These changes are incorporated into the classroom in an appropriate manner.

Acknowledgement

References

[1]Rosa Salzberg,Massimo Rospocher. Street Singers in Italian Renaissance Urban Culture and Communication[J]. Cultural and Social History,2012,9(1).

[2]Qureshi, S., Trumbly-Lamsam, T.. Transcending the Digital Divide: A Framing Analysis of Information and Communication Technologies News in Native American Tribal Newspapers[P]. Hawaii International Conference on System Sciences, Proceedings of the 41st Annual,2008.

[3]Liang Dongsheng, Lv Benfu. Research on Diffusion Theory Paradigm Applied in Network News Communication of Crisis Event: A Case for NetEase Online News Comments on the "Open Chest to Check Lung" Incident[P]. E-Product E-Service and E-Entertainment (ICEEE), 2010 International Conference on,2010.

[4]Lu Huang, Rongfang Cao, Xinyu Wu. Two Cases of Sports Political Communication[P]. Intelligence Science and Information Engineering (ISIE), 2011 International Conference on,2011.

[5]Liang Dongsheng, Lv Benfu. Further empirical research on Diffusion Theory Paradigm applied in Network News Communication of crisis event[P]. Emergency Management and Management Sciences (ICEMMS), 2011 2nd IEEE International Conference on,2011.