

Three Focus Points for Enhancing College Students' Cybersecurity Concept Education in the Context of Media Convergence

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Abstract. Media convergence has led to significant changes in the content, scope, speed, efficiency, and methods of information dissemination, presenting new challenges to network ideological security globally and affecting the public, particularly college students, the most. However, it is also essential to recognize that media convergence has both negative and positive impacts on college students' cybersecurity concept. Effectively utilizing "media convergence" as a critical tool to improve college students' cybersecurity literacy and strengthen societal cybersecurity concept is a pressing issue worldwide. Higher education institutions must correctly analyze and grasp the mechanisms by which media convergence empowers cybersecurity concept education for college students. They should focus on meeting audience needs, overcoming media barriers within universities, and leveraging the effectiveness of converged media to comprehensively enhance media convergence quality, thereby effectively advancing the high-quality development of cybersecurity concept education for college students.

Keywords: Media convergence, College students, Higher education institutions, Cybersecurity Concept, Focus points

1 Introduction: The Impact of Media Convergence on Cybersecurity Concept Among College Students

With the continuous development of information technology and the advancement of digitalization, various media have begun to break down barriers, and media convergence has become a trend that all social entities must adapt to.

On January 25, 2019, Chinese President and General Secretary of the Communist Party Xi Jinping emphasized in the twelfth collective study session of the Political Bureau: "Promoting the development of media convergence and building an all-media environment is an urgent task we face." [1] With the global proliferation of new media and the deepening of global connectivity, the national security environment, especially the

cybersecurity environment, has become increasingly severe. As key players in the network society, college students are particularly affected.

Xi Jinping also stated: "We must insist on the integrated development of cybersecurity education, technology, and industry, forming a virtuous ecosystem for talent cultivation, technological innovation, and industry development." His significant discussion on media convergence and college students' cybersecurity concept education endows college students' cybersecurity concept with new qualitative elements and contemporary connotations, providing practical focal points for higher education institutions to promote media convergence and cultivate students with high cybersecurity concept.

2 Focus on Meeting Audience Needs and Disseminating Cybersecurity Messages

As the global cybersecurity situation becomes increasingly severe and the background of dissemination continues to evolve, cybersecurity education for college students must also develop continuously.

The rise of the Internet and big data has enabled precise dissemination of information and user targeting. Various emerging and traditional media, social platforms, and even artificial intelligence target user needs and push relevant information, providing a prerequisite for timely dissemination of leading cybersecurity concepts by the ruling party and the state.

However, it also creates possibilities for foreign media to engage in infiltration and disruptive activities through the network. In this context, it is necessary to thoroughly examine the current needs of the target audience for cybersecurity concept education, i.e., college students, fully utilize the advantages of media convergence, tailor approaches to individual needs, and actively explore the construction of media convergence platforms to empower and enhance cybersecurity concept education.

2.1 Innovate Expression Methods and Tell Cybersecurity Stories Effectively

The target audience for cybersecurity concept education is college students, who are also major recipients of converged media. In any country, college students are considered "natives" of the network, with advanced thoughts, open concepts, frequent contact with the Internet and new media, and strong autonomy. Therefore, cybersecurity concept education for college students must move beyond traditional didactic approaches and materialize the concept of "cybersecurity" to effectively enhance the appeal and attractiveness of the education.

Chinese President Xi Jinping has offered profound insights in this area, suggesting the use of "reasoning" and "storytelling" to shape college students' cybersecurity concept, indicating that simple and vivid stories and language should be used as educational material. Additionally, the Chinese Communist Party and the People's Republic of China have carried out a series of practical activities in cybersecurity education, providing clear guidance for cybersecurity concept education for college students. Higher education institutions in various countries should focus on "telling cybersecurity stories"

well," analyzing cybersecurity cases and stories relevant to college students, and creating engaging, relatable, and vivid content to effectively improve the efficacy of cybersecurity concept education.

2.2 Utilize Emerging Technologies to Enrich Cybersecurity Expression

The rapid development of information technology and media tools has provided strong impetus for the innovation of expression methods and forms, offering new means, channels, and methods for educating college students on cybersecurity concept.

Institutions should leverage the increasingly developed emerging technologies, enhance the performative role of media rituals, and strengthen college students' understanding and recognition of national cybersecurity laws and policies. For example, in Hefei City, Anhui Province, China, the "2022 National cybersecurity concept Week Opening Ceremony and Cybersecurity Technology Summit Forum" aimed to enhance national cybersecurity concept and protection skills while promoting related industries. The summit, broadcasted by China's Sina Corporation in the "Xinhua All-Media+" format, used emerging media technologies to promote China's major achievements in cybersecurity through multiple forms and channels, extending the impact of cybersecurity education for over six months.

This demonstrates that media convergence can enhance the emotional recognition of cybersecurity work and concepts among the public, including college students. Higher education institutions should draw lessons from this experience, abandon outdated methods, and adopt an open and innovative approach using new technologies and methods to enhance the relevance and modernity of cybersecurity education content, thereby increasing the impact, guidance, and persuasiveness of cybersecurity concept education.

3 Focus on Breaking Down Media Barriers in Higher Education Institutions to Facilitate Comprehensive Cybersecurity Concept Education

Currently, with the rapid development of various dissemination methods globally and the increasingly complex network environment, a single media form is inadequate to meet the media demands of contemporary college students and address the severe cybersecurity situation. Therefore, advancing media convergence is both an inevitable trend for the media industry and a necessary path for empowering cybersecurity concept education for college students.

Higher education institutions should thoroughly understand the practical needs of students, address the challenges and pain points of media convergence, and actively explore various interactive forms, dissemination modes, and educational formats to effectively enhance cybersecurity concept education.

3.1 Overcome the "Integration Without Coherence" Phenomenon and Build an Interconnected Dissemination Framework

Campus media convergence is not merely about transferring traditional campus media online or crudely reorganizing or eliminating traditional media organizations. Instead, it involves grasping dissemination content, channels, and mechanisms, focusing on cybersecurity concept education, and promoting the deep integration of all dissemination elements.

This includes achieving integration and optimization of content creation, editing, and dissemination processes, fully integrating educational content, platforms, technologies, and channels, and enhancing the "up-and-down" knowledge dissemination channels and cybersecurity publicity channels to cover all college students and increase their participation and proactive engagement in cybersecurity concept education and practices.

3.2 Implement the "All-Platform Deployment" Principle to Optimize the Cybersecurity Concept Education Dissemination Chain

The effectiveness of single dissemination media is often limited by two main aspects: first, due to technical and model constraints, the coverage range of a particular dissemination platform is limited, affecting the breadth of content dissemination; second, different dissemination platforms have varying characteristics, mechanisms, and formats, leading to significant differences among users and audiences in terms of gender, age, etc. Therefore, to empower cybersecurity concept education for college students through media convergence, it is essential to break down barriers between platforms, integrate information resources and dissemination paths from different platforms, and promote multi-party collaboration. This will achieve information sharing, resource sharing, and coverage sharing, forming a comprehensive and multi-layered dissemination force for cybersecurity education content and concept.

3.3 Develop Converged Media Technologies to Create a "Holographic Dissemination" Effect for Cybersecurity Concept Education

"Holographic dissemination" is a form of media communication that breaks physical dimensions and realizes the diversification of media information formats. In this context, all information, including text, images, audio, and video, can be converted into data and accessed with a smartphone. [2]

To achieve a holographic dissemination effect in cybersecurity concept education for college students, experiences from China's "smart party-building" construction can be referenced. This involves multi-party collaboration and various measures to leverage the strengths of both official and commercial media, and social media platforms, integrating rich and diverse cybersecurity theories, practices, and stories with information technologies. This will enhance the authority, leadership, diversity, and appeal of cybersecurity concept education content. Multi-channel dissemination of vivid and immersive cybersecurity education content, integrated with advanced technologies such

as 5G, virtual reality, metaverse, artificial intelligence, and big data, will make cybersecurity education content and processes more visible, perceptible, and experiential, significantly improving the impact and coverage of cybersecurity concept education for college students.

4 Focus on Leveraging the Effectiveness of Converged Media to Build a Discourse System for Cybersecurity Concept Education

Media convergence development has been a national strategy in China for over a decade, evolving from "addition" to "integration" and has created a unique path of media convergence development with Chinese characteristics.

With the continuous advancement of science and technology, media convergence has been deeply integrated with the digital economy, communication strategies, and industrial development. College students, as the main body of information consumption and dissemination, have higher requirements for the effectiveness and quality of cyber-security concept education. Higher education institutions need to explore new ways to build a comprehensive discourse system, break through the constraints of existing discourse systems, strengthen the depth, breadth, and precision of cybersecurity concept education, and achieve an effective enhancement of cybersecurity concept.

4.1 Explore New Discourse Channels and Strengthen Positive Cybersecurity Guidance

To build an effective discourse system for cybersecurity concept education for college students, the core issue is to create new and powerful discourse channels.

Higher education institutions should enhance collaboration and resource sharing between online and offline channels, use converged media technologies to enrich and innovate discourse forms, integrate various media resources, and create a diverse and engaging discourse system. This can involve establishing educational platforms, interactive activities, and online forums, using media channels such as radio, television, newspapers, and the Internet, and utilizing social media platforms to spread cybersecurity concept messages comprehensively.

For example, the "cybersecurity concept Week" activities organized in various regions, which promote practical cybersecurity knowledge and safety skills through multimedia channels, have become influential platforms for cybersecurity education. Institutions should actively explore such successful experiences and practices, create new discourse channels, and enhance the positive guidance and impact of cybersecurity concept education.

4.2 Build a Multi-Dimensional Cybersecurity Concept Evaluation System to Improve Education Quality

To ensure the quality of cybersecurity concept education for college students, it is necessary to build a comprehensive and multi-dimensional evaluation system to assess the effectiveness and impact of education. ^[4]

This system should focus on various aspects, including the content, methods, and outcomes of cybersecurity concept education. Evaluation indicators should be set in terms of students' knowledge acquisition, skill development, behavior changes, and overall concept improvement. Higher education institutions should utilize feedback mechanisms, conduct surveys, organize discussions, and analyze evaluation data to continuously refine and improve cybersecurity concept education. ^[5] By doing so, institutions can ensure that the education provided meets the needs of students, aligns with current cybersecurity trends, and effectively enhances the overall quality of cybersecurity education.

4.3 Focus on Building an Integrated "Home-School-Community" Cybersecurity Education Media Matrix

When conducting cybersecurity concept education for college students, higher education institutions should adopt an "open-door" approach, extending beyond campus boundaries and engaging with the broader society. This involves widely expanding the subjects of cybersecurity education, strengthening collaborative efforts, and creating an integrated "home-school-community" educational matrix.

In practical terms, universities can collaborate with influential official and large commercial media outlets. Particular emphasis should be placed on partnering with local community media platforms that have regional influence and unique characteristics, to jointly build a cybersecurity media discourse platform that serves both students and their parents, both inside and outside the campus. This approach aims not only to mitigate the negative impact of foreign propaganda infiltration on the nation's college students but also to use a matrix-based converged media communication format to effectively explain the country's cybersecurity situation, narrate national cybersecurity policies, and communicate relevant laws and regulations. By doing so, it will better transmit the mainstream national ideology and dominant cybersecurity concept to all college students, providing new strategies and opening new channels for conducting cybersecurity concept education more effectively.

5 Conclusion

Currently, the cybersecurity situation faced by countries around the world, especially developing countries, is not optimistic, and the task of cybersecurity education is becoming increasingly urgent.

As an important body for cultivating morality and talents, higher education institutions should actively cooperate with the government, based on the overall national security concept, taking the current national network security situation as a realistic basis, fully grasping the development background of media integration, further deepening the distinctive background and practical characteristics of network security education for domestic college students, and demonstrating the superiority of media integration and domestic education system in resolving global network security risks. Cybersecurity is no small matter, and security education knows no bounds. Universities around the world should continue to summarize their experiences, play to their strengths and avoid weaknesses, make persistent efforts, grasp the pulse of the era of media integration development, deeply promote the integration and coupling of media integration advantages with the characteristics of college students' cybersecurity education, continuously enhance the discourse power and educational effectiveness of college students' cybersecurity education, and provide new experience references and practical assistance for improving the overall cybersecurity literacy of the whole society and maintaining national security.

References

- 1. Xi Jinping.: Promote the In-depth Development of Media Convergence and Consolidate the Common Ideological Foundation of the Party and the People. People's Daily,02(2019).
- Yuan Xin.: Full Process Holographic Dissemination—A Case Study of the Jizheng Highspeed Railway Puzheng Section Opening Series Promotion. News Enthusiast (5), 105–107 (2023).
- Research Group of People's Daily Online Research Institute.: Observation Report on the Development of Media Integration in 2023. Media(08),29–32(2024).
- 4. Gao Honggui, F. Zhang Chang, S.: Empowering the Whole Process of People's Democracy through Media Integration: Dimensions, Limitations, and Paths. Theoretical Exploration (06), 37–43 (2022).
- Li Hourui, F. An Shuoyu,S.: Research on the Construction Model of Integrated Media Centers in Universities under the Background of Media Fusion. China Higher Education (17), 56–58 (2020).

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