

The Challenges for the Philosophy of Education in a “Data-Driven Society”: Reconsidering “Data,” “Information” and “Knowledge” for the Future of Education

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Purpose of the Discussion

What impact will the Fourth Industrial Revolution which is bringing about the new vision of society, such as so-called “Society 5.0” or “Data-Driven Society” have on the nature and concept of “education” and “human beings”? The new society will be characterized by an expansion of the Internet of Things (IoT), utilization of big data through artificial intelligence (AI), the development and spread of robotics, and other rapidly advancing innovations. How would education and learning in the new society be transformed or how should we transform them?

Considering the issue of education in the new society, we tend to focus on it as a method to develop human resources for innovation and new technologies. There is also a position, as is evident in the discussion of “Singularity” that reads the future of technology and human beings as conflicts or confrontations and attempts to conceive of education as countermeasures against them (e.g., “Education will never lose to AI.”)

What these discussions have in common, however, is the concept of education to develop useful human resources in response to changes in the social structure. This is, so to speak, an “educational technology” approach. Though it is clear that education plays a functional role in responding to changes in society, this approach is based on the idea and concept of education that prevailed after the Industrial Revolution (Society 3.0), when education was organized and institutionalized on a global scale as a powerful device contributing to the development of nation-states and their economic and industrial

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growth. In the new society (Society 5.0), following the information society (Society 4.0), which is envisioned as a “human-centered society that achieves both economic development and solutions to social issues through a system that highly integrates cyberspace (virtual space) and physical (real) space,” these ideas and concepts of education and human have become the dominant conception. Will the ideas and concepts of education and human be retained in this new society (Society 5.0)? The philosophy of education has its own challenges in dealing with the advent of a new society brought about by rapid technological innovation.

In particular, the innovation currently underway is forcing a fundamental redefinition of the concepts of “data,” “information,” “knowledge” and their interrelationships which have served as the foundation of human intellectual capacity. This in turn calls for a transformation of the modes of learning and education themselves.

This discussion aims to look at the transformation of the nature and concept of education and learning in the new society, and to clarify the theoretical and philosophical issues as well as the practical challenges. We will also focus on the reconstruction of the relationship and meaning of “data,” “information,” and “knowledge” in the new society, and deepen our discussion on how these changes will affect the practice and theory of education in the future.

Points of the Discussion

1. General discussion of current trends in AI and other innovations and their educational and humanistic implications.
2. Discussion on the reconstruction of the relationship between “data,” “information,” and “knowledge” in a “data-driven society” and its impact on the nature and concept of education.
3. Discussion on the challenges and implications of a “data-driven society” on educational academic research and philosophy of education.