

## Chapter 3

# The Formation of Human Capital and Its Relationship With the Knowledge Society in Mexico

**María del Rocío Soto Flores**  
*Instituto Politécnico Nacional, Mexico*

**Ingrid Yadibel Cuevas Zuñiga**  
*Instituto Politécnico Nacional, Mexico*

**Susana Asela Garduño Román**  
*Instituto Politécnico Nacional, Mexico*

### ABSTRACT

*The processes of economic globalization and accelerating technological change have led to changes in economic and social life at a global level. New technologies, such as the TICs, systems of artificial intelligence, scanning, connectivity, nanotechnology, and biotechnology, among others, have transformed the national productive structures and human capital that require technologies disruptive today. In this context, education has become the main element of the knowledge society and training of human capital that demands a knowledge-based economy. The objective of the chapter is to analyze the relationship between human capital formations in the construction of a society of knowledge in Mexico. The structure is organized in three sections: 1) an analysis of the knowledge society, 2) the formation of human capital and the institutions of higher education in the knowledge society, and 3) human capital formation and its relationship in the construction of a society of knowledge in Mexico.*

DOI: 10.4018/978-1-5225-8461-2.ch003

## **INTRODUCTION**

For some decades, planetary economies and global societies have witnessed multiple transformations associated with the emergence of a diversity of technologies, all of colossal complexity. This accelerated technological change has meant that organizations modify their traditional work schemes, to adapt to the new conditions required by a more informed society and productive processes specialized in advanced technologies that demand the formation of a highly qualified and specialized human capital in the management and control of these technologies.

In this narrative, UNESCO (2005) states that “the radical changes provoked by the third industrial revolution - that of new technologies - have in fact created a new dynamic, because since the mid-twentieth century, the formation of people and groups, as well as scientific and technical advances and cultural expressions, are constantly evolving, especially towards a growing interdependence.” In this transformation, knowledge and new technologies are propagated as the main element of economic progress and development of the societies of the world. That is, knowledge and its rapid exploitation by economic and social agents, mainly from advanced economies, have generated greater divergences between rich and poor countries, which prevent prospering towards information and knowledge societies worldwide.

The objective of this chapter is to analyze the relation that the formation of human capital has in the construction of a knowledge society in Mexico. The structure of the chapter is organized into three sections: 1) A brief analysis of the Knowledge Society; 2) The formation of human capital and the Higher Education Institutions in the Knowledge Society and, 3) The formation of human capital and its relationship in the construction of a knowledge society in Mexico.

## **BRIEF ANALYSIS OF THE KNOWLEDGE SOCIETY**

Different authors agree that the term knowledge society was used for the first time in 1969 by Peter Drucker (UNESCO, 2005; Casas, 2010).

Years later, in the nineties, the concept was deepened in other investigations such as Robin Mansell's or Nico Stehr's. The notion of knowledge society is also inseparable from the studies on the information society generated by the development of cybernetics and [telematics]. At the end of the nineties, the trilogy of Manuel Castells, devoted to the “information age”, with its relevant analysis on the information society, synthesized in a certain way the transformations and tendencies described or glimpsed by the first precursors: penetration of power by technology, new economy of scientific knowledge, changes in work, etc. (UNESCO, 2005).

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/the-formation-of-human-capital-and-its-relationship-with-the-knowledge-society-in-mexico/231055](http://www.igi-global.com/chapter/the-formation-of-human-capital-and-its-relationship-with-the-knowledge-society-in-mexico/231055)

## Related Content

---

### Ontology

William Buchholz (2008). *Knowledge Management: Concepts, Methodologies, Tools, and Applications* (pp. 3058-3069).

[www.irma-international.org/chapter/ontology/25321](http://www.irma-international.org/chapter/ontology/25321)

### E-Business Knowledge

Petter Gottschalk (2007). *Knowledge Management Systems: Value Shop Creation* (pp. 70-112).

[www.irma-international.org/chapter/business-knowledge/25045](http://www.irma-international.org/chapter/business-knowledge/25045)

### Risk Management: Strengthening Knowledge Management

Suzanne Zyngier (2008). *International Journal of Knowledge Management* (pp. 19-32).

[www.irma-international.org/article/risk-management-strengthening-knowledge-management/2730](http://www.irma-international.org/article/risk-management-strengthening-knowledge-management/2730)

### Knowledge Acquisition, Knowledge Application, and Innovation Towards the Ability to Adapt to Change

Lejla Turuljaand Nijaz Bajgori (2018). *International Journal of Knowledge Management* (pp. 1-15).

[www.irma-international.org/article/knowledge-acquisition-knowledge-application-and-innovation-towards-the-ability-to-adapt-to-change/211234](http://www.irma-international.org/article/knowledge-acquisition-knowledge-application-and-innovation-towards-the-ability-to-adapt-to-change/211234)

### Challenges in Green Intellectual Capital and Knowledge Management in Sustainability and Industry 4.0

Irene Martín-Rubio (2021). *Knowledge Management for Corporate Social Responsibility* (pp. 150-166).

[www.irma-international.org/chapter/challenges-in-green-intellectual-capital-and-knowledge-management-in-sustainability-and-industry-40/262939](http://www.irma-international.org/chapter/challenges-in-green-intellectual-capital-and-knowledge-management-in-sustainability-and-industry-40/262939)