

explicit model is needed to create an effective virtual university. Such a model seems more suited for preserving well-established knowledge than for developing individual potential in a rapidly changing world.

An important aspect of university life to which Rada gives little attention is the preparation of young adults for entering professions such as medicine, teaching, law, and engineering, characterized by exercising professional judgement in situations of uncertainty, ambiguity, and complexity. Central to that preparation is the integration of theory and practice and the collaborative generation and critique of professional knowledge. Rada sees teachers and students as knowledge workers, but gives no analysis of how the virtual university ought to prepare its students to engage fully in the creation of knowledge to guide their work in a society characterized by major shifts in the forms and distribution of labour and wealth.

Rada's systems approach addresses important practical considerations for universities as they become increasingly virtual. His book needs to be coupled with analyses of how the direction and methods he describes affect the role of the university as social critic, as home of uncensored critical inquiry, and as generator of new knowledge to guide human endeavour in an increasingly complex and inter-related world. The cultural transmission model of the university on which Rada bases his discussion provides some guidance to university educators and administrators for keeping afloat while preparing for more radical change.



Fundación, Santillana. (2002). *Aprender para el futuro: universidad y sociedad*. Madrid: Fundación Santillana. Pages: 211

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The Santillana Foundation (Madrid, Spain) annually holds a cycle of conferences dedicated to several educational subjects. In November 2001, the "Monographic Week Santillana" was devoted to the analysis of postsecondary education. This cycle, "Learning for

the Future: University and Society,” sets out to analyze the evolution of the university in recent years, its prospects for the future and its relationship with society in general. A year later, a volume with the papers was published.

The book consists of five sections with a final chapter of conclusions. The first section, “The University in the Global Society and Learning” includes a paper by the director of this cycle of conferences, R.D. Hochleitner, who defines some common points of discussion for the speakers. The author briefly analyzes the legislative and contextual changes that the Spanish university system has suffered in the last years. In Hochleitner’s view, Spanish universities haven’t learned to compete and need to move to the participative model frequently used in other universities in Europe. As any society can be foreseen in its universities a quarter of century earlier, universities should become centers in which knowledge is continuously updated. This change would require a parallel evolution in the professorial task, which should move from the teaching concept to that of learning and innovation.

In the second chapter, R. Martín Lees examines the current reforms of higher education systems in the world and offers some suggestions for the direction these systems should take. He also describes the mission and activities of the University of Education for Peace, founded by the General Assembly of the United Nations in 1980. The last lecturer of this section, V. Pérez Díaz (Professor of Sociology and Director of the Office of Studies ASP), offers a general reflection about universities. Professor Pérez Díaz affirms that professional knowledge, investigation, and science should share space with general cultural knowledge, in order for the university to foster a capacity for analysis and to develop the kind of training which is necessary to respond to future problems. Subsequently, he applies these observations to the Spanish situation.

The relationship between universities and creativity is the focus of the next section, in which five lecturers present their views. H. Gurgulino of Souza, Vice-president of the International Association of Rectors of Universities and former Rector of the University of United Nations in Tokyo, affirms that, somehow, universities mainly remain local institutions, so they must combine the logic of thinking globally

and acting locally. P. Renato Souza, Minister of Education of Brazil, gives a general view on the situation of education in his country. He develops some new ideas on the need to find innovative financing models that will allow the inclusion of new founts of resources. The Rector of the Polytechnic University of Catalonia, J. Pay Fita, warns of the lack of flexibility in Spanish university regulations that, for example, obstruct the capacity for universities to create their own degrees. Complementing the previous paper, V. Ortega (General Secretary of the Council of Universities in Spain) examines the last reforms of higher education in this country. Finally, A. Cross Arauzo, Director of Alcatel University, discusses the application of the business model of client satisfaction to the organization of university education.

The third general aspect treated in the book is the relationship between university and innovation. For R. Tarrach (President of the Upper Council of Scientific Research in Spain), there cannot be innovation without basic research of the highest quality. I. Saragossi, representative of the European Commission, presents the foundation and goals of the ERA (European Research Area) initiatives, and a description of its new activities. M. Albornoz proposes a remarkable theoretical framework in which he analyzes the concept of innovation distinguishing two types — radical innovation and innovation of incremental nature — giving an account of controversial and negative aspects. The author affirms that there is an inherent part of the competitive process that, as a general tendency, displaces and marginalizes those people who are not able to update themselves. On the other hand, J. A. Sánchez Asiain (President of COTEC Foundation for the Technological Innovation) maintains that it is necessary for the university to allow for stratification of quality and prestige, based on the competition among universities. To support this claim, he briefly reviews many international documents regarding the processes of innovation and the role of the university within such a process. Finally, S. de La Plaza (Principal of the Polytechnic University of Madrid and President of the Conference of Spanish University Rectors) offers some concrete data on the indicators of the Spanish system of science and business technology, concluding that the research in Spain lacks support and, in general, displays a deficient situation.

The fourth section is titled "Management of Advanced Knowledge: A New University and Business Paradigm." It begins with an introductory paper by I. Fainé, President of the Spanish Confederation of Executives and General Director of La Caixa. This paper demonstrates how an industrial society has made way for a learning and knowledge society. Following this line of thought, many authors in this section speak about the importance of flexibility in the face of constant change of knowledge, while the university system remains attached to specific and static knowledge. J. M. Fluxá (President of the Association of the Social Councils of Universities) analyzes the process of managing knowledge, the different factors involved, and the possibilities within the new Spanish university regulations. A. Martín Municio (President of the Real Academy of Natural Sciences) reiterates the need for new contributions related both to the business paradigm and the university. The former Rector of the Complutense University of Madrid, R. Puyol, insists on the need for flexibility and refers to the new emergent values, such as initiative, creativity and risk. Finally, M. C. García de La Paz, Director of the Virtual University of the Technological System of Monterrey in Mexico, describes the organization of this institution, analyzes their experiences with virtual education, and outlines future directions.

The last section is probably one of the most interesting of the book. It offers a prospective vision of education in the 21st century based on the labor and education changes of the last years. According to the first lecturer, J. Iglesias Ussel (General Secretary of Universities), the great challenge for the current university is to remain open to the social environment and to offer services which deal not only with formal education, but also with continuing education, research and other ways of collaboration with the labor and business world. J. Núñez Velázquez (President of Education Policy and Instruction Commission of the CEOE) states that the university should become the new scene for permanent training. To do so, it should concentrate more on the aptitude to learn rather than on the concrete learned contents. In this same way, F. Michavilas, Professor at the Polytechnic University in Madrid, argues about the necessity to search for an equilibrium among humanism, science, and technology within every university curriculum. It should be then the

option of students to give major or minor weight to these dimensions in their personal curriculum. J. M. Morán (Counselor of the Spanish Social and Economic Counsel), also suggests the urgency to reformulate educational discourse, which is up to now seated in stable knowledge, in order to come closer to the kind of knowledge required for permanent learning. Finally, J. L. García Garrido (Professor of Comparative Education at the Spanish Open University) presents in a schematic way the different tendencies of current higher education systems which are derived from three different processes: democratic development, scientific development and the development of the State. To conclude, the author proposes six priorities for Spanish university policy. The book ends with a set of conclusions and recommendations which are elaborated on by F. Lanzaco, Manager of the Polytechnic University of Madrid.

This undoubtedly is a very rich volume which explores the current problems and trends of university policy from different angles. It includes both local and conceptualized papers, some limited to certain societies, others with a more global scope offering conceptual approaches. The Santillana cycle of conferences "Learning for the Future: University and Society" brought together speakers of world-wide prestige, whose different origins and varied environments of work give added value and a multi-disciplinary dimension to the book.



Hudspith, B., & Jenkins, H. (2001). *Teaching the Art of Inquiry*. Halifax, NS: Society for Teaching and Learning in Higher Education. Price: \$10.00 CAD.

Reviewed by Skip Hills, Faculty of Education, Queen's University.

Hudspeth and Jenkins' *Teaching the Art of Inquiry* is the third in a series of monographs prepared by the Society for Teaching and Learning in Higher Education. The series is aimed primarily at college and university faculty and is focussed on issues associated with teaching and learning at the postsecondary level. This manual has been written as "guide-book" for teachers interested in encouraging critical thinking and