

UNIVERSITÀ DEGLI STUDI DI SALERNO

DIPARTIMENTO DI SCIENZE POLITICHE, SOCIALI E
DELLA COMUNICAZIONE



DOTTORATO IN SCIENZE DELLA COMUNICAZIONE, SOCIOLOGIA, TEORIE E STORIA
DELLE ISTITUZIONI, RICERCA EDUCATIVA, CORPOREITÀ DIDATTICHE, TECNOLOGIE E
INCLUSIONE - XV CICLO

ABSTRACT - ENGLISH VERSION

TESI DI DOTTORATO

IN

**COMUNICAZIONE DELLA CONOSCENZA E TECNOLOGIE EDUCATIVE.
ASPETTI TEORICI E APPLICATIVI DI UN TEMA DI FRONTIERA**

Coordinatore

Ch.mo Prof.
Annibale Elia

Tutor

Ch.mo Prof.
Achille Maria Notti

Dottorando

Dott. Paolo Fusco
(Matr. 8887400013)

Anno Accademico 2015/16

Purpose of this work is to define theoretical and practical aspects of knowledge communication.

The knowledge society is defined by the fact that knowledge is not any more an addiction to the socio-political context, whereas it's engine. Knowledge and creativity have become the economic's basic instruments, and so people are required to acquire cognitive abilities. That's why human capital training is important.

Knowledge has always been an important factor in every human society in the past. But today it has developed so greatly and so widely in all the world, that it has become a fundamental motor of society, not only at work, but even in our free time.

Knowledge nowadays is not only an additional value to productive factors, through technology, but it has become itself a productive factor, able to undermine whole economic sectors and even lands and continent, and to open unexpected opportunities to others.

The role of scientific and technological research has become so systematic and pervasive, that it emerges the need of finding the appropriate way to spread it socially, so that people can understand it. That happens because it has grown the awareness that cognitive, economic, political and ethic impact of scientific knowledge increases, whereas its comprehension for the average person becomes more and more difficult. The reason is that it's not only a matter of accumulating information, but you need to manage it, to correlate it, to put it in a wider context.

That's why only recently the topic of knowledge communication has become important in the university and for all the subjects involved in knowledge production and spread.

The paradox of knowledge society is that knowledge has a cooperative nature and no single person, even the greatest expert, is sufficient to acquire it, because it exceeded individual capacities.

Problem of world citizens, nowadays, is not only that of bondage, lack of democracy or of welfare state, but the lack of availability of advanced knowledge.

But not only single persons must face this task, indeed it's a matter of social actors, like institutions, public services, research centers, firms, trade and media.

There is a debate on the meaning of scientific comprehension.

There are three reasons why knowledge communication is not simply a matter of divulgation: knowledge access is complicated because of plural interests, often conflicting; public communication involves all subjects who want funding for research; there are plural actors –politicians, lobbies, non-government organizations- who affect on application and implication of techno science.

Despite those complications, we can detect preferred channels for scientific communication. Primary the education system, like school and university. But they are subject of reconsideration, due to the new tool of knowledge transmission. Basic in this process is the use of new technologies, which requires analysis of risks and possibilities of internet for safety and divulgation of the knowledge.

The research focalizes three main issues: description of problems of knowledge society, especially the question of knowledge communication; the definition of the role of science communicator, as a professional figure inside the educational system; analysis of internet role and new technologies in the knowledge society.

In the first chapter there are exposed the main theories which describes our society in terms of research, access and transmission of scientific knowledge. Daniel Bell and Lyotard talk about post-industrial society, Zygmunt Bauman about liquid society, Manuel Castells about information society, all referring to the importance of information in our society. A special place takes Gibbon's study about the new knowledge production. The image of an academic science all inside the big institutions and experts, is not any more realistic; it has been replaced by a Modo 2, characterized by the need of questioning about the knowledge impact, which implies transdisciplinary approach and in which there are different competences and goals. Knowledge circulation changes form and content, in relation to the need of common citizens and big multinationals. Science is implemented through an articulated social, political and economic dealing, supported by traditional lobbies or acting as a pressure mean. When science is subjected to deal and restriction, public communication of it works as a delimit of competences from other branches of knowledge. The definition of science communication takes off from the awareness that growth of mass media doesn't mean necessarily better public communication. In this context is published Bodmer's The Public Understanding of Science report, in order to solicit politicians, analysts and scientists to take care about the public comprehension of science, considering that there is a connection between democracy and scientific knowledge. All people must get a correct idea about the themes of research, so that they can contribute in chooses which regard social life. Since then, all governments of industrialized countries are equipped with agencies of public promotion of science, based by a preliminary study of what people know and how do they interpret scientific notions. That's why scientific development is not imaginable without facing up the relation between research institutions and citizens, politic and market. The concept of dialogue is very important therefore, testified by a long debate inside European Union's seat.

Considering the need of comprehension of how the interaction between scientists and citizen functions, the second chapter focalizes the professions concerning the knowledge transmission and the emerging figure of scientist communicator, trying to identify his competences, means and goals and further to describe his scholastic and academic curricular experiences, and this based on recent knowledge transmission activities, like e-learning, the use of multimedia means in the teaching activity, which is analyzed in the third chapter.

Open access and open content create a new approach in the fruition of net information, in which the user acquires an active role in the process concerning creation, production, distribution and consumption of information, like, for example, Wikipedia. In the high technologized and scientific development society, changing continuously, a permanent education is need, in order to allow individuals to front the challenge resulting by innovation of every aspect of social organization. And not only individuals, but institutions, public services, research bodies, factories, trade and media. It's necessary think about economic and political risks, typical of knowledge society.