Web Knowledge Turbine as a Proposal for Personal and Professional Self-Organisation in Complex Times
Application to Higher Education

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ABSTRACT
This article describes a proposal for sustainable way to adapt to current complex process of global transformation, using the ‘Web Knowledge Turbine’ (WKT) as a self-organised ecosystem for the co-creation of personal and collective narratives. The authors contemplate all human social systems as Complex Adaptive Systems with the capacity for self-organisation derived from a permanent learning process. Accordingly, a shift in the focus of teaching programmes from mere mechanisms of knowledge transmission, to a process focused on learning and in particular, a process of self-directed, connected, and deep learning which has at its core the profile of the eLearner as the central protagonist. The cornerstone of this process is a Complex Ecosystem of Personal Knowledge (CEPK) which will support teaching at an undergraduate level, progressively and transversely, from its outset. Considering the classroom as a networked community of learners whose objective is not only to gain a command of a particular subject (WHAT content do they need to learn?), but also HOW and WHY they need to learn it.

KEYWORDS

INTRODUCTION
Process of Global Transformation
One of the major challenges facing us today in our rapidly transforming world is to identify and respond to the changes that are taking place in our environment on a global scale. If we were asked to describe the current situation, the majority of us would probably use words such as uncertainty, insecurity, lack of confidence, instability, worry, crisis, over-abundance of information, etc.

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Globally, we are witnessing the emergence of a new, unpredictable and hyperconnected social system which is in a process of constant flux and change and which impacts on all aspects and elements of human activity, in particular on teaching and learning, both on a personal and a collective scale.

Paradoxically, in this unstable situation of transformation and growing social change, we continue to apply traditional principles and perspectives such as predictability, certainty, hierarchy, order and control in order to resolve major questions, difficulties and issues which arise. However, these processes are no longer relevant because they have their roots in the mechanistic logic of an industrial society and are therefore incompatible with the reality of our emerging expanded (offline and online, local and global) and complex ‘vital’ environment.

The Complexity Gap

The complex nature of this new vital environment stems from, and is defined by, its unprecedented level of interactions (Johnson, Manyika, & Yee, 2005); today’s hyperconnectivity and interdependence require a new approach to solving the multiple and diverse problems that arise within Complex Systems (CS). Therefore, it seems congruent that we should apply concepts derived from Complexity Theory as a new conceptual focus that will assist us in the understanding of a transforming, diverse, hyperconnected and interdependent world (Rubio, 2011).

In particular, we consider all human social systems as Complex Adaptive Systems with the capacity for self-organisation derived from a permanent learning process. This in turn leads us to perceive reality from a perspective of learning as a medium for permanent adaptation to the new vital environment which is in a process of continual flux and change, constantly increasing in complexity.

In transferring and applying this vision of a new vital environment to the field of teaching, it quickly becomes apparent that the traditional teacher-centred models based on contents which are static and hierarchically generated no longer provide an adequate response to the dynamic evolving social system. The Internet has provided us with an unprecedented opportunity to develop in terms of resources, learning and personal and collective empowerment; as human beings, we are intrinsically motivated by the generation of meaning, and our perception and increasing awareness of the significance of the complexity gap are inciting us to develop a corresponding understanding of the world that surrounds us based on skills and competencies. Furthermore, the European Higher Education Area makes an extrinsic demand on our education system to adapt our degree programmes to a new, learner-centred model, based on facilitating the acquisition of significant skills and competences that can be measured in the form of learning outcomes. In today’s expanded complex hyperlinked digital environment, this can only be achieved by being permanently present, and participating, in the digital culture and by using emerging digital technologies to their full effect.

In order to provide an adequate and proactive reaction to these demands, it would seem pertinent to ask ourselves the following key question:

*What do we need to do in order to provide a coherent and sustainable response to the challenges and requirements of this new teaching-learning model in our current complex times?*

In order to address this question, we will break it down into several related and relevant sub-topics that need to be considered in order to give an adequate solution to the challenges that arise from this emerging scenario.

The Emergence of New Social Structures in Response to the Expanded, Networked and Complex Vital Environment

Effectively, this new environment demands the ability to recognise that we urgently need new mental models that will allow us to explore and understand the increasing complexity of our times, which are characterised by their structural instability. It is also necessary to develop a sustained open and
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www.igi-global.com/chapter/internet-diffusion-hospitality-industry/13885?camid=4v1a

The Influence of Attitude on the Acceptance and Use of Information Systems
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