Chapter 2

Systemic Evaluation of Knowledge Management: Perspective of Graduate Students in Education in Mexico

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ABSTRACT

This chapter focuses on the study that will offer a systemic evaluation of the characteristics of knowledge management, from the approach of the postgraduate students in Mexico. It will consider the generation cycle – storage – distribution – utilization and generalization of knowledge, as stated by (Nonaka & Takeuchi, 1995). The purpose will be to design academic management strategies for the strengthening of human capital, which comprises the post-graduate students in Mexico, who are enrolled in this type of educational programmes. The proposed chapter is structured as follows: The first section centers in the description of the characteristics of knowledge management, the second one will target at the characteristics of postgraduate education in Mexico, the third section includes the study methodology, and the fourth one will be the research proposal for drawing the research conclusions.

INTRODUCTION: KNOWLEDGE MANAGEMENT AND SYSTEMIC EVALUATION

Knowledge management is a relatively new subject that aims to reach current generations interacting intellectual capital comprising human capital, structural capital and relational capital, technology and information in order to capture, produce, process, disseminate, store and use knowledge. Therefore, if

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adopted as a tool in education, they are more likely to generate constructive changes that result in a better quality of learning. On the other hand, systemic evaluation is characterized as complex, ie, comprehensive and interrelation with which manages information with a holistic view, taking into account the components of each system, with the main objective to enrich the knowledge.

**KNOWLEDGE AND TAXONOMY**

Knowledge is defined as information possessed by a subject in his mind, which can be personalized and subjective, related to facts, procedures, concepts, interpretations, ideas, observations, judgments and elements that can be useful or not, precise or structural. The information turns into knowledge when processed in the mind and, then, back into information once it is articulated or communicated to other people through texts, electronic templates, oral and written communications, among others. In addition, the receiver can process and interiorize the information, and turn it back into knowledge (Alavi & Leidner, 2001).

In the same regard, (Alavi & Leidner, 2001) describe the taxonomy of knowledge barely, referring to twelve types of knowledge, as may be observed in Table 1.

**TACIT AND EXPLICIT KNOWLEDGE**

Nonaka & Takeuchi, (1995) mention that knowledge can be tacit or explicit. The earlier is difficult to express by formal language as it is learned from personal experience and involves intangible factors such as beliefs, viewpoints and values. The latter, can be expressed through formal language, including grammar statements, mathematical expressions, specifications, manuals and so forth, and can be

<table>
<thead>
<tr>
<th>Types of Knowledge</th>
<th>Definitions</th>
</tr>
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<tbody>
<tr>
<td>Tacit</td>
<td>Knowledge rooted in actions, experiences and particular contexts</td>
</tr>
<tr>
<td>Cognitive tacit</td>
<td>Mental models</td>
</tr>
<tr>
<td>Technical tacit</td>
<td>Know how applied to specific work</td>
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<tr>
<td>Explicit</td>
<td>Articulated and generalized knowledge</td>
</tr>
<tr>
<td>Individual</td>
<td>Knowledge created and inherent to subject</td>
</tr>
<tr>
<td>Social</td>
<td>Knowledge created and inherent to collectivity and to team actions</td>
</tr>
<tr>
<td>Declarative</td>
<td>To know about</td>
</tr>
<tr>
<td>Procedural</td>
<td>To know how to do</td>
</tr>
<tr>
<td>Causal</td>
<td>To know why</td>
</tr>
<tr>
<td>Conditional</td>
<td>To know when</td>
</tr>
<tr>
<td>Relational</td>
<td>To know how relations work</td>
</tr>
<tr>
<td>Pragmatic</td>
<td>Useful knowledge for an organization</td>
</tr>
</tbody>
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