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K-SAM GRADUATES: A MODEL TO DEFINE 21\textsuperscript{ST} CENTURY-ORIENTED HOLISTIC GRADUATE OR HUMAN CAPITAL

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1. INTRODUCTION

All the parties involved with Higher Education as well as in the field of Human Capital Development have observed that 21\textsuperscript{st} century needs human capital with various capabilities to resolve the problems in the modern organizations. Various articles and experts have highlighted various aspects and features of those factors but we cannot find a simple, easy to remember type of a model to explain all of those qualities and features. This model is an outcome of the efforts to fill that gap.

2. LITERATURE REVIEW

Based on the literature available in the areas of Education, Pedagogy, Higher Education, Outcome Based Education (OBE) (Spady, 1994), and Student Centered Learning (SCL) (O’Neill and McMahon, 2005) we found that various articles and papers are available to explain the student’s attributes like Knowledge, Skills and Attitudes. But there was no Mindset & Paradigm factor which plays a vital role in 21\textsuperscript{st} Century education has been identified and incorporated into the first three factors. This is the first time Mindset & Paradigm factor has been incorporated into an Education Model. At the same time Vision for life which plays a vital role of a student’s quality also has been incorporated to this model. On the other hand under the each component of the model sub components have not been defined in the available literature. At the same time to define the 21\textsuperscript{st} Century Oriented Human Capital there was no simple model to follow for both Higher Education Institutes as well as to the Human Capital Managers we found. As a result K-SAM Graduates model was developed to fill the above gaps we found through literature review.

3. PURPOSE / AIM / OBJECTIVE OF THE STUDY

Today all the top level politicians, administrators, managers as well as academics are trying to define the features of the 21\textsuperscript{st} Century Oriented graduates and human capital. Various academics and journal articles have defined various attributes of the 21\textsuperscript{st} century oriented graduates but
remerging those attributes is so much difficult since those were not organized and presented in a simple manner. The main objective of this research is to present all the attributes of modern human capital in a simple but comprehensive, easy to remember model. This proposed model will help to identify the total expected attributes of the graduates of 21st Century by the job market and pave the way to fill those gaps through modernizing Curriculums, Teaching & Learning, Evaluation and Continuous Improvements.

4. METHODS

4.1 Data sources

As a result of extensive literature review in the above mentioned fields we found that various factors and attributes have been highlighted by various scholars, opinion leaders as well as business community but there was no simple model to explain those in comprehensive but simple manner. In available literature Mindset and Paradigm attribute is missing but we have incorporated that one of the most important attributes to this model to make it a comprehensive one to explain total human capital or full-option graduates. We found this gap through our day to day involvement in the field of higher education and through our experience as well as through adopting novel approaches in teaching and learning. Then the model was developed and presented to many Vice Chancellors, Deans, Head of Departments, Professors, as well as Human Capital experts and researchers and obtained their reviews, comments and ideas and modified and improved the model. This final model is the outcome of that process.

4.2 Data collection

There was no formal data collection was done but model was tested among the academics in the way of presenting it in front of the academics and get their frank opinion and criticisms and improved the model through discussions and workshops.

5. FINDINGS AND DISCUSSION

Finally, this model was accepted by the academics and adopted as the basis to develop the Sri Lanka Qualification Framework (SLQF).

Table 1. K-SAM Graduates

<table>
<thead>
<tr>
<th>Core Area</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K</strong>nowledge</td>
<td>Theoretical or <strong>K</strong>nowledge of Discipline</td>
</tr>
<tr>
<td>(What they Know)</td>
<td>Practical <strong>K</strong>nowledge</td>
</tr>
<tr>
<td><strong>S</strong>kills</td>
<td>Communication</td>
</tr>
<tr>
<td>(What they can do)</td>
<td>Teamwork and Leadership</td>
</tr>
<tr>
<td>CTCMIS</td>
<td>Critical Thinking and Problem Solving</td>
</tr>
<tr>
<td></td>
<td>Managerial and Entrepreneurial</td>
</tr>
<tr>
<td></td>
<td>Information Management</td>
</tr>
</tbody>
</table>
### Social Skills and Responsibilities

<table>
<thead>
<tr>
<th>Attitudes, Values, Professionalism and Vision for Life (How do they Behave – think &amp; say)</th>
<th>Attitudes: are the manifestation of our VALUES - they are expressed through what we SAY or DO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values: make us accept certain things and reject others - how we act and what we say present our ATTITUDES</td>
<td></td>
</tr>
<tr>
<td>Professionalism: the skill, good judgment, and polite behavior that is expected from a person who is trained to do a job well</td>
<td></td>
</tr>
<tr>
<td>Vision for Life: vision of a future situation or society is what you imagine or hope it would be like, if things were very different from the way they are now.</td>
<td></td>
</tr>
<tr>
<td>Mindset &amp; Paradigms (How they Perceive the World – Effectiveness of the decisions)</td>
<td>Mindset: a mental inclination, tendency (Fixed vs Growth mindset – Dweck)</td>
</tr>
<tr>
<td>Paradigm: Lens through which you view the world.</td>
<td></td>
</tr>
</tbody>
</table>

### 6. CONCLUSION

The two most highlighted graduate attributes today are “what the graduates know” and “what they can do”. However, the 21st century organizations are looking for two more graduate profile characteristics: how do they behave and think (attitudes, values, professionalism and vision for life etc.) and how do they perceive the world (mindset and paradigms). Mindset (Dweck, 2008) and paradigms, which will be discussed in detail in the paper, are not equal to attitudes. According to Outcome-Based Education principles, we should define Program Learning Outcomes (PLOs) or Intended Learning Outcomes (ILOs). Those PLOs or ILOs can be summarized into four areas as K-SAM: K – Knowledge (theoretical and practical), S – Skills (communication, teamwork, leadership, problem solving, etc.), A – Attitudes, Values, Professionalism and Vision for Life and M – Mindset and Paradigms (how do they perceive the world or lenses through which they view the world, which is directly linked with lifelong learning). This paper explains the new K-SAM model as a simple framework to produce the expected 21st century graduate (K-SAM graduate) from any degree program. The proposed framework is a universal model illustrated using Sri Lankan experiences as examples. This model defines the “Total Graduate Profile” and provides a novel approach to assure the total quality of the graduates linking with curriculum, teaching and learning, assessment, evaluation and continuous improvement.

### REFERENCES


of School Administration: Arlington, Virginia.

**Keywords:** Mindset and Paradigm, PLOs and ILOs, K-SAM Graduate, Outcome Based Education, Lifelong Learning, Vision for Life