

A Simple Framework for Youthful Innovation

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This document presents a training framework for innovative thinking. The intent is for youth to be introduced to a basic sequence of elements in an innovation process that accesses personal creative energy and can be applied in classroom as well as extracurricular settings.

What does “innovation” mean to you? The use of the word “innovation” is floated frequently and usually intended to connote product superiority, but on closer analysis, most products are just “different” and sometimes only incremental in positive impact in terms of scope and efficiency, let alone the shift in the currently available options.

What is the most innovative product you are aware of? That is one of the questions asked in a pre-workshop survey of students who participate in the CSDGC Youth Creativity, Innovation and Sustainable Leadership (YCISL) program. You might not be surprised that about three-quarters of the responses to this question relate to a mobile technology device, usually “iPhone”, “Smart Phone” or “iPad.” Also notable are some of the one-offs such as “Writing”, “Glass” and “Internet.” What do you think of the differences between these two groups of products? If you take yourself back in time before the iPhone, what is the probability that you would have imagined something like the iPhone? Do the same thought exercise for glass.

The majority of today’s innovative products fall into the first grouping which is of incremental innovation – many of which are short-lived. This is not a problem because we can view this as extension of a chain and practice for the future big success – that is practice of a discipline to come up with a lasting innovative product (at least that is the hope). True innovations are the first link in a new chain. From this perspective, we view and approach innovation as a process rather than an outcome. Therefore, anyone can learn innovative thinking and practice it. There is no one form or style of innovative thinking – so this practice can be adaptable and accessible.

In the YCISL program, we introduce a 5-phase innovation process to provide (a) an experience of going through the steps from ideation to delivery, and (b) an interactive experience in each of the phases. In real world practice, the process will vary depending

on a variety of factors such as product type, regulatory requirements and culture. Our 5-phase process is a practice model and intentionally simple – real world models are possibly more sophisticated and complex.

The YCISL innovation model includes (1) brainstorming, (2) prototyping, (3) engineering (itself divided into three parts including form, function and testing), (4) finishing and readiness, and (5) rollout. Each of these phases is attached to specific messages that frame the purpose in a youth context. Think of this as a framework that can be used and re-used to practice at getting better at each of the phases and sequencing them. The series of phases delineate a pathway from ideation to delivery (ie, the directional element). Practice in a workshop with oversight involves a demonstration and verification that each phase was learned and understood (ie, the depth element). Individuals are expected to practice repeatedly on their own to develop strength and agility in this process, and gain the confidence to eventually apply this thinking to a wide variety of problems.

Whether you are a student, parent or teacher, know that this model is intended to enable a quick start for a practice regimen. Its simplicity enables its application to most projects. It can be used on individual or group school projects as well as all sorts of extracurricular projects. Expect to get better with practice.

UPS & DOWNS, INS & OUTS OF A SIMPLE INNOVATION PROCESS FRAMEWORK

