Lee's Rationale for Case Study 1: Scott Allen

Science Online provides quality online education to students in Australia. They wish to offer a series of online learning experiences that will provide learners opportunities to develop and practice higher order thinking skills using a constructivist approach. The design team has received a set of 32 briefs from the writing team which they must winnow down to just 15 briefs from which to develop learning objects.

Placing the design process within context was important to understanding the overall work flow for the project. To this end, the initial map reflects the overall development process and contains layers of complexity focusing on the design team's process and product. To understand the design process context is very important, especially since the responsibilities are divided among 3, independently working teams. The creation of a learning object that does not meet objective or purpose would be counter productive.

How the design team approaches the creation of the learning objects is demonstrated during the team brainstorm over the *Mission to Mars* brief. The case study scenario clearly illustrates the design process being undertaken by experienced professionals well-versed in design models. This process warranted a separate map to isolate the design process from the design product. Ostensibly, this process would be repeated for each brief.

The third map captures the design of a learning object, incorporating suggestions from the design team, information from the original brief, and Bloom's taxonomy. The flow chart nature of the map reflects the fact that learners need to follow the program in order for the most part with options at key points to return and review/change choices based on program feedback.

In addition, this map includes a possible extension to higher grades discussed in the design team brainstorming session. This section is important to illustrate its adaptability and flexibility for other age/ learner groups. The additional options show the learning object can be utilized by teachers to differentiate for learners may be more or less advanced than their peers.

The possible extensions also illustrate how the constructivist nature of the activity can be intensified as the age of the learner increases and his/her sophistication grows. In addition, providing learners with more choices increases relevance and motivation for the learner, if these options are pertinent to their lives.

Color Key	, for Design	Learning	Object	Cmap
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Bloom's Apply	Bloom's Evaluate
Bloom's Analyze	Bloom's Create
Program feature	Primary Learning Goal
Remember/ Understand	Related Skill