Ten Essential Components of Great eLearning

There are many components that make great e-Learning. Ultimately, the measure of greatness of an e-Learning program, or any learning program, should be a direct reflection of the level of improvement in educational outcomes as a result of the program. Put simply; the more a program lifts educational outcomes, the better it is.

E-Learning programs tend to fit into one of the following categories:

- Electronic Textbook
- Productivity / Creativity enabler
- Curiosity enabler
- E-Reader
- Simulators and manipulatives
- Skill builder
- Expert modelling
- Research facilitator
- Shared learning tool
- Class management tool

There are excellent examples available for all of these types of e-Learning programs. Each category will have a different set of criteria in the key components to make them great. Let's focus on the category of Skill Builders - these have the largest potential to directly lift educational outcomes.

1. Fun and engaging, but not distracting Without question, to make a program fun and engaging is the most important component. Without this, everything else becomes irrelevant. It is true there are some children who do not require an e-Learning program to be fun and engaging; however they are in a significant minority, and tend to be the students who least need help from programs. If the child is genuinely engaged over an extended period of time, amazing outcomes are possible. Multiplayer games are a particularly powerful way to engage children. It's amazing how much more excited and motivated children become when they are playing with each other. A critical balancing act occurs when children are immersed in highly engaging learning environments. It is important that the "fun and games" element does not become the dominant focus that ultimately distracts from the learning. Fun and games must be carefully blended to ensure they support the learning, as opposed to simply being a fun game with some learning thrown in.

2. Simple to use – The "it just works" principle Never underestimate the value of keeping things simple. It is better for a learning program to do a few things really well, as opposed to doing lots of things poorly. Apple has proven how powerful the creation of wonderful devices that "just work" can be. The key objective is to make a program that is exceptionally powerful, but super simple to use.

3. Motivation and the Award systems There have been some very interesting studies under the topic of game theory and the design of reward and award systems as the best way to motivate actions. In a learning context, we try to encourage appropriate use over an extended period of time. We do not want children to use the programs obsessively for a few weeks and then never again. Therefore, the reward and award system needs to encourage lots of short sessions over many months and years. It should recognize genuine efforts for each child, as opposed to simply excellence, which may be unattainable for some students. For the reward or award system to be effective, the children must covet the rewards and awards. These should be specifically tailored to the target age group using the program.

4. Teachable moments – Immediate feedback and support Every parent and teacher knows that there are certain moments when a child is most receptive to feedback and support. Great e-Learning will intervene at precisely those moments! Immediate feedback and support aids selflearning, the most powerful form of learning. It's also valuable for the support system to be scaffolded in such a way that it becomes less prominent when the child no longer requires it.

5. Opportunity to make mistakes… including some consequences! This is actually one of the most critical elements to make effective e-Learning, yet it is surprisingly one of those most often overlooked. Create an environment where there is an opportunity to make a mistakes and where there are some consequences for the mistake. It is remarkable that at least 50% of e-Learning programs have no built-in consequences for the child in relation to mistakes. They simply provide options such as "click again," and the child often randomly clicks through the various possible answers. This approach does not aid in learning. There must be an environment where the child feels comfortable with his/her mistakes as these are great learning opportunities. Ultimately, the child wants to rectify those mistakes so that the mistakes do not continue to impede them.

6. Fast paced – build automaticity Most children learn best when placed within a fast-paced learning environment. The explanation for this is that when they work at a rapid pace, it aids engagement, whereas if questions are presented too slowly, boredom sets in. The aim is not for the child to become a speed reader or an incredibly fast mathematician, it's simply to build automaticity at these core skills. Slow readers will struggle with comprehension since so much of their attention is directed to decoding. A fast-paced learning environment is also highly efficient, with children typically answering more than 400 questions over a 30-minute period.

7. Adapts to the child and chooses just the right curriculum The ability to present the child with just the right question at precisely the right time is the hallmark of a great e-Learning program. By definition, this will be a unique pathway for each and every child, and will fully account for individual strengths and weaknesses. There needs to be just the right balance of new content with revision content. Again this will depend upon the individual.

8. Flow of data to teacher and parent E-Learning programs work best when they fully involve teachers and parents. Good e-Learning programs amass a tremendous amount of data. Of greatest value are detailed reports to teachers and to parents that highlight specific strengths and weaknesses of the individual child. Tremendous benefit comes when teachers and parents recognize the wonderful achievements of the child; equally, parents and teachers need to be alerted when their support and guidance is needed. Sadly, of the more than 10,000 learning apps available for the iPad, there are only a handful that share their data with teachers and parents.

9. Learn by doing – not simply watching! “Tell me and I’ll forget; show me and I may remember; involve me and I’ll understand.” – Chinese proverb There are some wonderful e-Learning resources which show you how to do almost anything. The best ones provide expert modeling of the task. In order for these to be truly beneficial, they must also spur the learner to action and let them practice the skill.

10. Make full use of various learning channels E-Learning programs are able to utilize visual, auditory and kinesthetic learning channels. Printed mediums, such as workbooks, are limited to simple visual approaches through text and static diagrams. Their effectiveness is heavily dependent upon a child’s ability to read. On the other hand, E-Learning can use highly-interactive visual and audio material to aid in learning. One of the great advantages of tablets such as the iPad is that they are able to provide a more tactile learning experience in comparison to the traditional desktop. One key area is “anywhere, anytime”. The last decade has seen movement from CD-Rom and network based programs to web applications, and now to the most accessible, mobile applications. E-Learning programs that maximize the “anywhere, anytime” principle will also maximize learning opportunities. Skoolbo incorporates all of the above mentioned best qualities into the Core Skills. In order for e-Learning to change the world, it must be free, and in so doing allows every child the opportunity of a first rate education.

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