# research snapshot
## summarize | mobilize

## Making E-learning work for management education requires looking closely at teaching methods.

### What is this research about?

The internet is a powerful tool for supporting learning and self-development. E-learning online systems are increasingly being used in management education where it is fairly common for students to use the web for tasks such as registering for programs, accessing course materials, submitting assignments, and getting their grades online.

Although e-learning is popular and demand is growing in part because it makes learning accessible from anywhere and at any time students desire, the million dollar question is: Does web-technology help or hold back learning? A key factor for answering this question is whether the objective is to teach students *hard* skills such as book keeping or *soft* skills such as critical thinking.

### What did the researchers do?

Researchers immersed themselves in the field of online learning for over a decade of hands on exploration and experimentation. In the process they
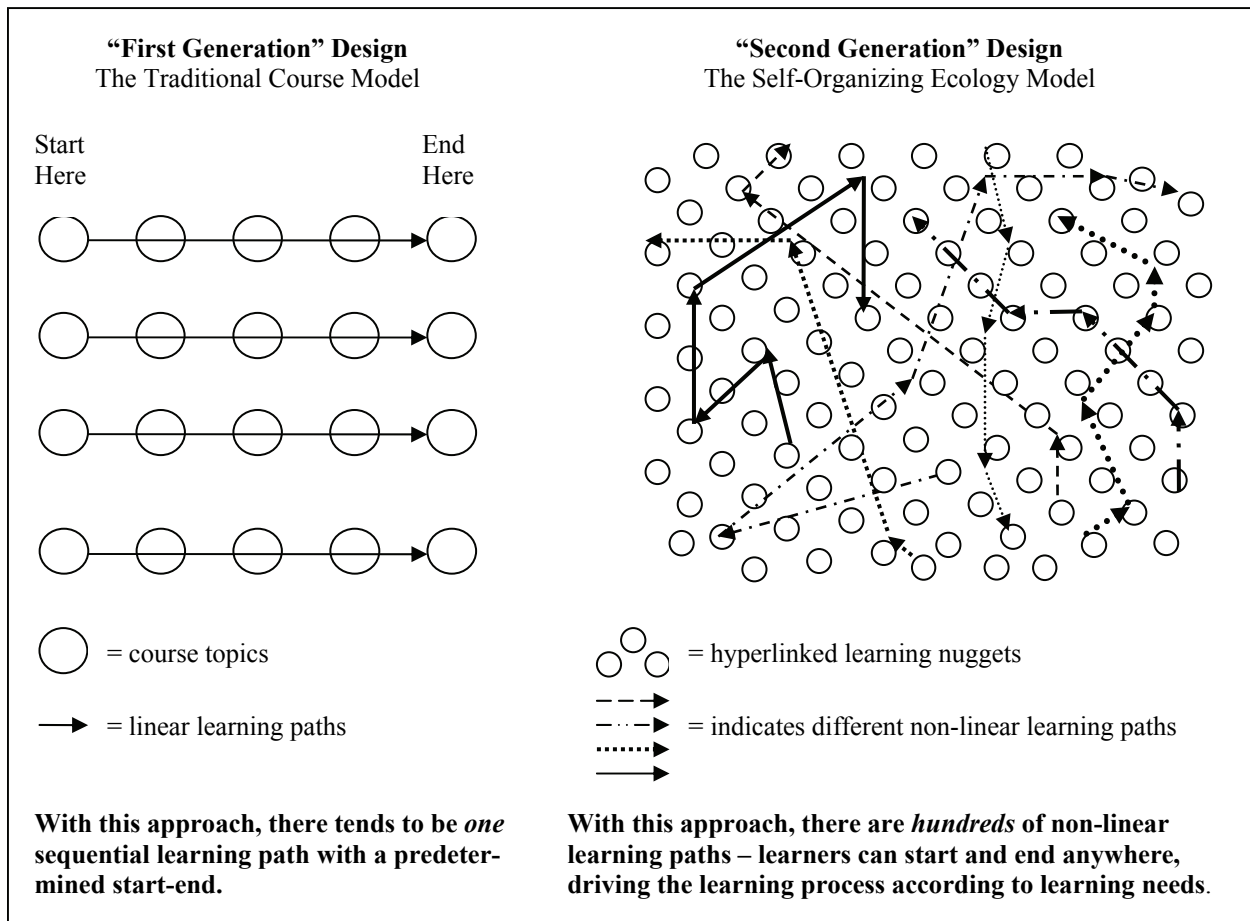
### What you need to know:

In order to make learning effective, it is important to know the difference between technical skills and *soft* skills when selecting e-learning tools and technologies to design and deliver online educational programs. For hard skill development, use first generation systems. For soft skills, a second generation network will be more effective.

The researchers offer the following key questions to help educators align their teaching strategies with the use of appropriate learning technologies:

1. Are you teaching hard skills or soft skills?
2. Is your main goal for student to conform and follow your exact instructions, or to create empowered learners?
3. How important is collaboration, joint discussion and group learning?

designed and created an e-learning system from scratch and pilot tested it in

## Figure 1: Typical "First" and "Second Generation" Learning Paths



**"First Generation" Design**
The Traditional Course Model

Start Here          End Here

◯ = course topics

⟶ = linear learning paths

**With this approach, there tends to be *one* sequential learning path with a predetermined start-end.**

**"Second Generation" Design**
The Self-Organizing Ecology Model

◯◯◯ = hyperlinked learning nuggets

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⟶     = indicates different non-linear learning paths

**With this approach, there are *hundreds* of non-linear learning paths – learners can start and end anywhere, driving the learning process according to learning needs.**

various academic and workplace contexts. In the process, they developed a model to show how e-learning has developed over time.

## What did the researchers find?

The researchers found that e-learning has evolved through two generations. The first generation of e-learning was found to be more useful for teaching technical skills. First generation e-learning systems simply put traditional learning tools like textbooks and classrooms online. The common feature for the first generation approach is that the instructor is in control of the learning process, as in traditional lectures. Second generation e-learning was found to be more useful for teaching soft skills because it is designed to put learners in control of their own learning. In a second generation learning approach, students are presented with a network of connected learning opportunities instead of a library of texts. The networked approach enables *every* learner to follow

a personal, unique learning path. This makes highly customizable learning a reality (see figure 1). Understanding the difference between these two generations was found to be crucial to designing future e-learning programs.

## How can you use this research?

Policymakers, educators, and community groups can use this research to design and improve current e-learning programs. The findings of this research may be applied to management education but would also be helpful in any other program where teaching soft skills like critical thinking online is a priority.

## About the Researchers

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## Keywords

*E-learning, management education, soft skills.*

## Knowledge Mobilization at York

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