Nutrition Education DESIGN Procedure: Creating “DESIGN Online” to facilitate effective translation of theory into practice

**Rationale**
Many courses, particularly in health care fields, teach students a procedure for translating theory they learn in the classroom into practical research-based strategies, counseling, and educational techniques to use in practice. For some students, successful use of research-based procedures can be challenging when the underpinning theories are complex and need to be adapted to a diversity of people and environments. DESIGN Online aims to scaffold the process of learning the theory, procedure, and application in a diversity of environments.

**Steps**

1. **Decide behaviors**
   - Behavior change goal for audience and problem to solve.
   - List of motivating and facilitating determinants of behavior change.

2. **Explore determinants**
   - Theory-based model and statements of educational philosophy and perspectives on content.
   - General educational objectives for each determinant in the theory-based model.

3. **Select theory-based model**
   - A logic model to guide the development and evaluation of your environmental support.
   - Environmental supports objectives for each “output” of your logic model.

4. **Indicate objectives**
   - A planning matrix and an educational plan to use for conducting session.

5. **Generate plans**
   - A detailed plan for accomplishing each of your environmental support objectives.

6. **Nail down evaluation**
   - A plan to evaluate attainment of behavior change goal, determinants, and problem to solve.
   - A plan to evaluate if your environmental support enables audience to do the behavior change goal.

**OUTCOME**
- Behavior change goal (achieved)
- Problem to solve (solved or reduced)

**Lessons learned and students’ quotes**

- More class time on content and discussion, less time on process
- Creating logic models is made easy ... and logical
- Professors can provide more thoughtful and timely feedback
- Procedure is useful for health promotion courses
- Quotes about creating educational plans
  - “The step by step method of the DESIGN model. It organizes the lesson plan for a person and keeps the teacher in check with how it is implemented.”
  - “Theory-based planning, the use of the 4Es, etc. [I enjoyed] the class as a whole and its philosophy.
- Quotes about DESIGN Online
  - “The DESIGN Online tool helped me understand the step-by-step procedure for planning.”
  - “The DESIGN Online enabled working alongside my partner and going through the textbook and DESIGN modules together.”

**What changes were made by working with CTL?**
- Paper-based: students copy and paste from prior steps, repetitive.
- Online system: each step flows into next tasks are tracked as done. Easy way to organize and find plans by text search, audience, and behavior change goal.

**Feedback**
- Faculty feedback online.
- Organizational and management tools are built for tracking process, managing materials, and collaborating with others.

**Team**
Email: designonline@tsc.columbia.edu
Teachers College Team
Faculty: Inbal Contents
Teaching Team: Mariana Burgmeister & Rachel Paul
Center for Teaching and Learning Team
Learning Designer: Paul Joseph Stengel
Programmer: Susan L. Decker
Designer: Marc Raymond
Evaluator: Melissa Wright
Evaluator: Zachary Domach