Transferring Learning to Effect Learning Transfer

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Appendix A

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My approach to this project is to demonstrate how I have transferred my learning from this class to the Health and Wellness Workshop project I've been developing in my Instructional Design class to enhance learning transfer. This paper refers to the PowerPoint presentation created for the workshop, including the Instructor Notes embedded in that presentation. Initially I will explain a bit about how the framework of the workshop was conceived and later about the specific and general instructional strategies I have incorporated in the content to improve learning transfer.

Considering the many learning theories and theorists I have studied during this program, I have struggled to identify with any particular learning theory. I am not a believer in individualizing instruction based on learning style, though I do see application in that approach for personal tutoring. Likewise, I am not sold on the concept of multiple intelligences, though I don't doubt that people have strengths and preferences in learning. Furthermore, I am not a proponent of throwing the "kitchen sink" of techniques at my audience hoping that something "sticks". In fact, my personal educational philosophy continues to blur the lines between the various orientations to learning. I tend to believe that instruction that motivates and is memorable is most effective.

This semester I was introduced to the instructional theory of Robert Mills Gagné. Gagné outlined his theory in *The Conditions of Learning and Theory of Instruction* (1985). The tenets of his theory continue to influence the industry of instructional design in particular. What I found most attractive and interesting about Gagné's instructional theory is that it draws from many schools of thought rather than making a one-size-fits-all prescription for a particular approach, though it is based primarily on an information processing model and a cognitive approach.
According to Gagné, the conditions of learning are a combination of circumstances that must be managed properly for learning to occur—conditions internal to the learner and those of the learning environment. Learning, he says, is evidenced by a change in performance that is the result of a learning event, and that only if there is a change in performance can it be determined that learning has occurred. This is the very heart of learning transfer—application! Is it not?!

**Developing the Framework**

Gagné's instructional theory begins with the end in mind. What are the outcomes or capabilities that the learning event intends to accomplish? This requires first identifying the problem that needs to be solved from which objectives can be derived. The problem identified for this project was the impending health crisis due to the increase in serious and often preventable health issues that are plaguing this nation, with the overarching goal of the instruction defined as "for learners to adopt a more holistic mindset regarding health and identify strategies to improve their wellness" (King, 2012, p. 1).

Of course, there would be no point of developing instruction unless there is a need and an audience exists for it. This relates directly to Gagné's internal conditions, specifically regarding learners' knowledge, experience, and motivations to attend. A representative population was surveyed to determine their interest levels and concerns related to improving their health and wellness through specific behaviors and their interest in further education in one or more of these areas. From these analyses five major topics for the training were distilled: eating healthier, increasing activity, improving sleep, reducing stress and seeking appropriate preventive screenings. For each of these areas, specific goals and objectives were identified as well as assessments (Appendix A) to demonstrate that learning had occurred.

**Creating the Content**
Appendix A

Rather than customizing instruction to the individual, Gagné suggests using teaching strategies that are most effective for the skills being taught. He identifies five varieties: intellectual skills, verbal information, cognitive strategies, motor skills, and attitudes. Thomas (2007) states it another way: "the balance of content and skills to be learned and used are in relationship to how learners participate and their personal motivation to want to change" (p. 6). It was with this balance in mind that the content was developed.

By design the nine events of instruction (teaching strategies) identified by Gagné align with the stages of information processing: 1) gaining attention/reception, 2) informing learners of the objective/expectations, 3) stimulating recall of prior learning/retrieval, 4) presenting the stimulus/selective perception, 5) providing "learning guidance"/semantic encoding, 6) eliciting performance/responding, 7) providing feedback/reinforcement, 8) assessing performance/retrieval and reinforcement, and 9) enhancing retention and transfer/retrieval and generalization. My application of Gagné's theory is not pure, however I believe I have captured the main ideas to keep the audience engaged (internal conditions) and that the strategies used promote learning (external conditions).

The instruction begins with attention-getting questions to get the audience involved: "How many have lost more than 100 pounds?" and "How many of you are allergic to exercise?" (gaining attention) and incorporates humor. I explain up front that the goal is to motivate them to improve their health versus prescribing a quick fix (stating objectives). To establish a baseline definition, I ask the learners to define what healthy means to them, either verbally or visually, after which various definitions are shared and documented. This exercise offers some insight into the motivations of the learners and can be referred to throughout the workshop.
Each topic is introduced using facts or statistics to shift learners' attention and/or pique their interest (gaining attention). The module related to healthier eating addresses why diets and quick fixes often fail (stimulating recall) and presents the concept of food as fuel (stimulus). Shocking statistics are provided to help learners remember the importance of avoiding empty calories (stimulus) which then leads into strategies for healthier eating. Rather than focusing on calorie counting, mnemonics such as the 5-20 rule for reading nutrition labels and visuals of household objects for portion sizes are used (learning guidance) as measures to simplify making healthy choices. Throughout the module, humor is injected and questions are asked to keep the audience involved. Interactive exercises allow learners to consider the impact minor changes can make when eating out, shopping, and cooking at home (stimulus, learning guidance, eliciting performance, providing feedback, assessing performance), while offering the instructor insight regarding what concepts have been learned and which need review (assessing performance).

Perkins and Salomon (2012) suggest that transfer requires that learners connect what has been learned to a new situation (outside the classroom at least), detect an opportunity to apply what they have learned, and elect to take action (p. 256). Covering the topic from a variety of angles, providing simple methods, and relating the instruction to personal and familiar events like eating out, shopping, and cooking at home helps learners generalize their learning to many situations they may encounter.

The instruction related to increasing activity levels guides learners to choose activities for specific health benefits that lead to quality of life versus extreme goals. Moderation is encouraged rather than a "no pain, no gain" approach. Rather than prescribing a particular activity, learners are encouraged to move more and look for opportunities to increase their activity levels as part of their daily routine. Quotes such as, "Losing weight means you'll look
good in clothes, exercise means you'll look good naked" and "for each hour of regular exercise you get, you'll gain about two hours of additional life expectancy, even if you don't start until middle age" ("Physical Activity," 2012, para. 6) link this module to the previous one, lighten the mood, and are hoped to persuade learners of the benefits of fitness. A fun video is shown that demonstrates various types of exercises.

The remaining topics for preventive screenings, improving sleep, and stress reduction are covered in a similar fashion. Each module begins with statistics or a quote that highlights the need for action and provides specific guidance in that area. Participation is encouraged and learners are assessed for understanding as they discuss particular issues and offer solutions.

The workshop ends with a discussion about how the five modules of the workshop are interdependent and equally important for avoiding illness and achieving overall health and wellness. Learners are invited to consider whether their definition of healthy has changed and how since the beginning of the workshop. At the close of the training, the learners complete an action plan where they document their intentions to implement at least one aspect of the training and share the benefit they expect as a result. Though intent does not guarantee learning transfer, according to Baldwin and Ford (1988) goal setting may "increase the motivation of the trainee to transfer skills" (Baldwin & Ford, 1988, p. 69). Learners' intrinsic motivation to transfer learning is enhanced if they enjoyed the experience and feel they gained something of value (Wlodkowski, 2008). As a standalone workshop, the opportunity to follow up with participants is likely to be limited, therefore conducting a course evaluation (Appendix B) at the end of the course may be the only opportunity to gauge participants' reactions and motivation levels to apply what they have learned as well as to uncover weaknesses in the program for future revision.
The primary capability to be achieved by learners as a result of this workshop is a change in attitude. Attitudes, defined as "an internal state that influences (moderates) the choices of personal action made by the individual" (Gagné, 1985, p. 63), can be difficult to change. The goal of this workshop is not as much to teach learners anything they don't know as to help them re-envision solutions. With that in mind, it is hoped that learners will view the end of this workshop as a place to begin...again.
References


LEARNING ASSESSMENTS, METHODS, AND EVALUATION CRITERIA

Eating Healthy when Eating Out (Goal 1/Objective 3):

METHOD: Pull up Interactive Fast Food Menu at http://www.extension.org/pages/24398/interactive-fast-food-menu (See screen shot below). Begin by asking one person to identify their typical meal from that restaurant and complete an analysis of that meal as an example (Sample meal: Big Mac, large fries and a medium chocolate milk shake). Check those items on the menu (referencing the Key at the bottom). Choose volunteers from the class to suggest healthier options from the foods shown on the menu and state them out loud. As those items are selected on the menu instead of the original meal, note improvements in the Key at the bottom. Encourage learners to explain their choices and describe any special requests they would make (Sample satisfactory response: “I would choose the grilled chicken sandwich because it is not fried and ask for the condiments on the side.”). Repeat for each of the five remaining menus.

EVALUATION: Learners responses should incorporate previous discussions, such as cooking methods, empty calories and general knowledge about fat, calories, etc. that will reflect improvements in the Key. Correct faulty logic and invite peer input to suggest better alternatives if one or two students cannot apply the principles.
SHOPPING HEALTHY (GOAL 1/OBJECTIVE 1):

METHOD: Have learners write down a list of 10 food items that they frequently purchase. Next to three items, have them write down a healthier option for that item. Once everyone has completed their lists, have each person share one swap they would make and why the alternative is healthier (i.e., calories, fat, sodium, fiber, vitamins, etc.)

1. __________________________  __________________________________
   2. __________________________  __________________________________
   3. __________________________  __________________________________
   4. __________________________  __________________________________
   5. __________________________  __________________________________
   6. __________________________  __________________________________
   7. __________________________  __________________________________
   8. __________________________  __________________________________
   9. __________________________  __________________________________
  10. __________________________  __________________________________

EVALUATION: Observe whether learners are able to identify if an item is unhealthy due to high calories, high fat, high sodium, etc. or whether the product contains empty calories such as high fructose corn syrup or other added sugars, hydrogenated fats, etc. If a couple of learners are unable to identify healthier options, lead them with questions and/or review of previous related instruction. Additionally, correct faulty logic and ask for peer input.
**Recipe Substitutions (Goal 1/Objective 2)**

**METHOD:** Refer to handout showing three "before" recipes: a main dish, a side dish and a dessert (see below). Have learners form three groups. Each group will be assigned one of the three recipes. Ask them to come up with at least one (more if possible) substitution or addition that could be made to reduce the calories or fat and/or increase the fiber or nutrition of each recipe. Learners should be encouraged to refer to substitution handouts if necessary. [Instructor will visit each group to give hints if necessary.] Have each group share one or more ideas they would use to improve the recipe.

**EVALUATION:** Observe whether learners' responses incorporate earlier discussions and tips from handouts. After discussion about each recipe, the instructor will reveal the “after” versions and the actual substitutions that were made. Learners are not evaluated based on being able to guess the actual substitutions, but on their logic for the recommendations they made.
Benefits of Physical Activity (Goal 2/Objective 1):

METHOD: Refer to the slide showing 10 activities (below). Identify one activity at a time, then call on individual learners to state the benefits of that particular activity. If their answer is correct, ask the class if there are any other benefits for that activity. If their answer is incorrect, invite other learners to offer alternatives. Summarize the benefits of each activity (see correct responses below) before moving on to the next one, until all have been discussed.

Correct responses:
Pullups (strength)
Tennis (endurance, balance, flexibility)
Walking the dog (endurance)—can add strength or flexibility
Snow skiing (endurance, balance)
Pushups (strength, flexibility)—can add balance by lifting feet and shoulders
Tai Chi (balance, flexibility)
Squats (strength)—can add balance by lifting one foot
Hiking (endurance)—can add strength and balance depending on terrain
Bicycling (endurance, balance)—can add strength depending on terrain
Pilates (flexibility, balance)—may also improve strength depending on method

EVALUATION: Observe whether learners are able to accurately identify the benefits of each exercise. Correct faulty reasoning. If multiple learners struggle to respond, review previous related instruction.
Small Steps to Increase Activity (Goal 2/Objective 2):

**METHOD:** Refer to the Identify the Benefits slide from Goal 2/Objective 1. Tell learners these are just a small sampling of activities. Ask them what other ideas they can come up with for ways to increase their activity levels in meaningful ways? Provide as an example: "Gardening has many health benefits: digging (endurance/strength), reaching (flexibility), bending (balance/flexibility), squatting (strength)". Go around the room and have each person name one suggestion for a small step to increase activity.

**EVALUATION:** Observe whether learners are able to identify everyday activities that they can add to their daily routine that have potential health benefits. If learners struggle to come up with answers, refer to examples from “Tips for Increasing Physical Activity” handout, then continue discussion asking learners to think of similar activities that are not listed.
Preventive Screenings (Goal 3/Objective 1):

**METHOD:** Refer to the Who, What and When slide (below). Each condition should be addressed separately, one at a time. For each condition, ask learners to identify which preventive screening would detect that condition. Ask learners to raise their hand if the screening is applicable for somebody of their age and gender. Learners should be encouraged to refer to their Adult Wellness Visits... and AHRQ handouts.

**Who, what and when?**
- Diabetes
- Oral cancer
- High cholesterol
- Breast cancer
- High blood pressure
- Skin cancer
- Glaucoma

**EVALUATION:** Observe whether learners are able to identify the appropriate screening. Once the correct response has been revealed, observe whether the learners respond correctly to whether the screening would be appropriate for them personally. If hands are raised incorrectly, rather than calling on individual learners, review the handout for that screening to describe who should be screened for that condition.
Reducing Stress (Goal 3/Objective 3):

METHOD: Referring to the slides below, ask for a volunteer to share verbally with the class a personal examples of an event that causes them stress and how they tend to react. As a group, discuss potential solutions for reducing stress and anxiety related to the events that learner shares. If learners are unwilling to share personal stories, the instructor should be prepared to offer at least two scenarios for the learners to consider (e.g., a coworker who continually clicks their pen, a spouse who makes plans without consulting them first, etc.) Encourage learners to share strategies they have used successfully to reduce stress related to the events that learner shares. Repeat for additional learners depending on time.

<table>
<thead>
<tr>
<th>What stresses you out?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hectic schedule</td>
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<tr>
<td>Traffic jams</td>
</tr>
<tr>
<td>Getting lost</td>
</tr>
<tr>
<td>Argument</td>
</tr>
<tr>
<td>Death of a loved one</td>
</tr>
<tr>
<td>Chronic illness</td>
</tr>
<tr>
<td>Caregiver pressures</td>
</tr>
<tr>
<td>Stressful job</td>
</tr>
<tr>
<td>Financial problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduce Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid it</td>
</tr>
<tr>
<td>Plan ahead</td>
</tr>
<tr>
<td>Prioritize</td>
</tr>
<tr>
<td>Prepare</td>
</tr>
<tr>
<td>Manage it</td>
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<tr>
<td>Know the signs</td>
</tr>
<tr>
<td>Relax</td>
</tr>
<tr>
<td>Talk about it</td>
</tr>
</tbody>
</table>

EVALUATION: Observe whether solutions identified are reasonable, non-violent and positive. Learners who share a stressful event with the class will gain potential solutions they will employ the next time that event occurs for them. Through the discussions, all learners will gain experience in asking for recommendations from others.
Improving Sleep (Goal 3/Objective 2):

METHOD: Referring to previous slides (below), ask learners to volunteer to verbally share a sleep issue that they have experienced in the past or are currently experiencing. As a group, discuss the potential health impacts, possible causes and potential solutions for the sleep problem that learner shares. If learners are unwilling to volunteer concerns, the instructor should be prepared to provide at least two scenarios for the learners to consider (e.g., waking up in the middle of the night in a panic, unable to go to sleep at a reasonable hour due to racing thoughts, etc.) Encourage learners to share strategies they have used successfully used to improve their sleep if they have struggled with the same issue that learner shares. Repeat for additional learners depending on time.

- Create a sleep sanctuary
- Establish a calming bedtime routine
- Make healthy lifestyle changes
- Keep a sleep diary

Sleep Treatments
- Aromatherapy
- Foods high in tryptophan
- Homeopathic remedies (teas, etc.)
- Over-the-counter remedies
- Seek medical help if necessary
  - Cognitive behavioral therapies
  - Prescription sleep aids

EVALUATION: Observe whether learners are able to accurately identify one or more health impacts and whether the causes are likely to be related to environment, lifestyle or bedtime routine. Learners are expected to make suggestions that do not rely on drugs or supplements and share strategies they have used successfully to improve their sleep. If suggestions related to drugs or supplements are mentioned, remind learners that drugs/supplements should only be used with a doctor’s recommendation.
MY HEALTH AND WELLNESS ACTION PLAN

What I am doing well:

________________________________________________________________________
________________________________________________________________________

I will improve my diet by (list one or more actions):

________________________________________________________________________
________________________________________________________________________

I will increase my activity by (list one or more actions):

________________________________________________________________________
________________________________________________________________________

I will seek preventive care by (list one or more actions):

________________________________________________________________________
________________________________________________________________________

I will improve my sleep by (list one or more actions):

________________________________________________________________________
________________________________________________________________________

I will reduce my stress by (list one or more actions):

________________________________________________________________________
________________________________________________________________________
Course Evaluation

For each question below, please indicate your feelings about the Health and Wellness Workshop you attended by circling the appropriate response or filling in the blank.

1. I felt the workshop was a valuable use of my time.
   Absolutely  Probably  Maybe  Not Really

2. I felt the workshop was well organized and that the handouts were helpful.
   Absolutely  Probably  Maybe  Not Really

3. The topic that interested me the most was _________________________________.

4. The topic that interested me the least was _________________________________.

5. I had hoped to learn more about: _________________________________.

6. As a result of this workshop I am likely to change my eating habits.
   Absolutely  Probably  Maybe  Not Likely

7. As a result of this workshop I am likely to increase my activity levels.
   Absolutely  Probably  Maybe  Not Likely

8. As a result of this workshop I have gained strategies to improve my sleep.
   Absolutely  Probably  Maybe  Not Really

9. As a result of this workshop I have gained strategies to reduce my stress levels.
   Absolutely  Probably  Maybe  Not Really

10. As a result of this workshop I am more likely to seek preventive screenings.
    Absolutely  Probably  Maybe  Not Really

11. As a result of this workshop I have a more holistic view of what it means to be healthy.
    Absolutely  Probably  Maybe  Not Really

12. I would recommend this workshop to others.
    Absolutely  Probably  Maybe  Not Likely