CERTIFIED PUBLIC MANAGER PROGRAM
FLORIDA CENTER FOR PUBLIC MANAGEMENT
THE FLORIDA STATE UNIVERSITY

LEVEL 6 ASSIGNMENT
GUIDELINES

IMPROVING SYSTEMS

February, 2014
BACKGROUND

Many practitioners, writers, and scholars believe that government must be transformed from time to time to better serve the public. In this Level 6 Assignment, you are asked to apply systems thinking to address a “big picture” systems problem that impacts your agency.

Traditionally, most improvement efforts focus on the work process level (such as the CPM Level 2 Assignment), but in this Assignment we want you to focus on a higher level: the system, sub-system, or work system level. These may cross over traditional organizational boundaries to include other divisions, agencies, or customer groups.

Peter Senge proposes that one reason improvement strategies fail is that they focus too narrowly on “detail complexity” instead of seeing the interdependencies and relationships that affect the overall system—which he calls “dynamic complexity.” This assignment asks you to shift your thinking from the detail complexity of your individual work processes to the dynamic complexity of systems and the relationships between multiple elements in those systems.

The following illustrates the relationships between these terms:

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  SYSTEM
    ↓
  SUB SYSTEM
    ↓
WORK SYSTEM
    ↓
WORK PROCESS
    ↓
INDIVIDUAL PERFORMANCE
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The delination between these five layers can be illusive and can sometimes be applied differently depending on what is being viewed and by whom. When you focus at the work process level, you can identify various work processes fairly easily. As you move up to higher levels, however, there are multiple relationships that come into play.

We have included a diagram that illustrates these levels in one organization.
A Systems Diagram of a Hospital

Mission
- Care of sick and injured
- Professional training
- Health research

Planning
hospital management

Input resources
- Doctors, nurses
- Pharmacists aids
- Data, records, info
- Dr, labs, wards
- x-rays
- Medicine, drugs
- supplies, diets
- Building, energy

Subsystems
- Exam
- Prescription
- Attention
- Test
- Diagnosis
- Treat
- Therapy
- Rehabilitation

Output results
- Reduced sickness
- Cured injuries
- Trained professionals
- Health care improvement projects

Output/input measurement
- Sickness treatment time ration
- Discharge/admittance cost ratio
- Percent bed occupancy
- Meals served/dollar expense
- Percentage of interns completing residency
- No. of journal articles per doctor

SYSTEM
Hospital

SUB-SYSTEM:
Treatment (one of many)

WORK SYSTEM:
Surgery (one of many)

WORK PROCESS:
Anesthesia (one of many)

INDIVIDUAL PERFORMANCE
Anesthesiologist (one of many)
PROCEDURES

1. This application may be done individually or as a group.
2. Follow the steps as outlined on the next page of these guidelines.
3. Be certain to address all of the elements in each step.
4. Cite any course materials you use as you address each step.
5. Type your application in a double-spaced format and include a title page with your name(s), date of submission, email addresses, and your phone numbers.
6. There is no minimum or maximum length but obvious understanding and meaningful application of systems thinking are required.
7. Upon completion, you should submit this assignment through our website: https://www.fcpm.fsu.edu/students/fcpm_partlogin_000.cfm

This will bring up a log-on screen. Enter your email address and password (the last four digits of your Social Security number), then click “Next Step.”. This will take you to your Transcript. Click on “Submit Assignment” for the particular assignment or exam. If you are uploading a Group Assignment, enter the names and email addresses of group members in the drop down menu. Click “Browse” and locate the file on your hard drive (usually in “My Documents”), then click “Open.” Once the file is listed in the menu, click “Submit File.”

Your submission will be automatically entered into the database. It will show on your transcript as “Being Graded.” You will also receive an automated email notifying you that it has been added to your transcript.

Once your assignment is graded, and if it passed, you will receive an automated email saying that it has been “Completed.” If your submission does not pass, you will receive an email telling you to resubmit, and explaining what you need to do to pass. Your work will be graded within 60 days, although CPM instructors typically grade assignments sooner than that.

If you encounter problems submitting your homework, please contact Dan Vicker, the CPM Student Liaison, at dvicker@admin.fsu.edu or the CPM office at CPM@admin.fsu.edu. You can phone our main number at 850-644-6460 or 850-644-0161.

Submissions will not be returned, so you should keep a copy for future reference. Your work is considered confidential and the CPM Program will not share or discuss it with anyone, other than you.
OVERVIEW

This assignment requires you to apply the concepts of systems thinking, as discussed in Level 6, to a “big picture” systems problem that impacts your agency. You are expected to draw upon and reference materials from the notebook or from outside reading on systems. Your submission must include the following steps:

STEP ONE

A. Identify a “big picture” systems problem that impacts your agency and you as a stakeholder.
B. Give a detailed description of this problem and how it diminishes your agency’s ability to achieve its desired outcomes.

STEP TWO

A. Describe the larger system(s) which this problem affects (this could be at the work system, subsystem, or system level).
B. Describe the purpose of this system in terms of its desired results.

STEP THREE

A. Drawing on Level 6, Module 2 (Systems Modeling), draw a systems diagram (model) of this work system, subsystem, or system.
B. Be sure to show the various elements in this system and the connections between them.

STEP FOUR

A. Provide a narrative description of the relationships between the elements of this system and any patterns of influence among them.
B. Be sure to describe the interdependencies that exist among these elements (describe any reciprocal influences or feedback loops among the elements).

STEP FIVE

A. Systems thinking attempts to understand why complex problems exist. In your example, provide an in-depth description of why you believe this problem exists. You should provide background information about how this problem arose and any previous attempts that failed to solve it.
B. You may find it useful to reference some of the basic systems principles covered in Level 6, Module 1.

STEP SIX

A. Russell Ackoff suggests that there are four ways to treat a problem: absolve (wash your hands), resolve (quick fix), solve (satisficing), and dissolve. Systems thinking attempts to redesign the system so the problem is dissolved. As a systems thinker, how would you recommend that this systems problem could be dissolved? Provide detailed recommendations for your proposed treatment.
B. Based on your recommendations, what changes would need to be made in the elements of the system, and what outcomes would you envision?