Universal Systems Model – Breakdown Handout 1

Universal Systems Model:

| Goal | → | Input | → | Process | → | Output |

Feedback

(Feedback loops back from Output to Input)
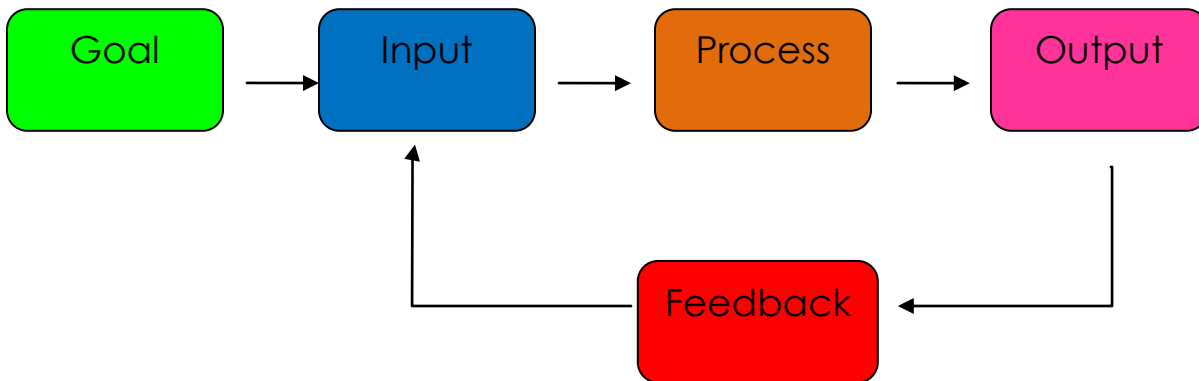
Steps of the Universal Systems Model describing the operation of a skateboard

Step	Example
Goal	The goal is to ride the skateboard down the street
Input	Get on the board and kick off
Process	The wheels spin and the board travels down the road
Output	The board moves forward and you ride it
Feedback	All of the information you receive that cause you to make adjustments. (Example: you see a puddle and shift your weight to steer around it)

Definitions:
  Idea (goal): What you want to happen
  Input: Command given to the system to reach the desired result. Ingredients that go into the system (tools, information, people, time, energy, materials)
  Process: The action part of the system, the part that takes place to make things happen
  Output: The result of the system
  Feedback: Information about the output that is used to adjust the system

Two types of feedback systems: *Open-loop* and *closed-loop*

Open loop systems have no way of adjusting to changing conditions (closing your eyes riding a skate board)
Closed loop systems can change under different conditions (eyes open riding a skate board)