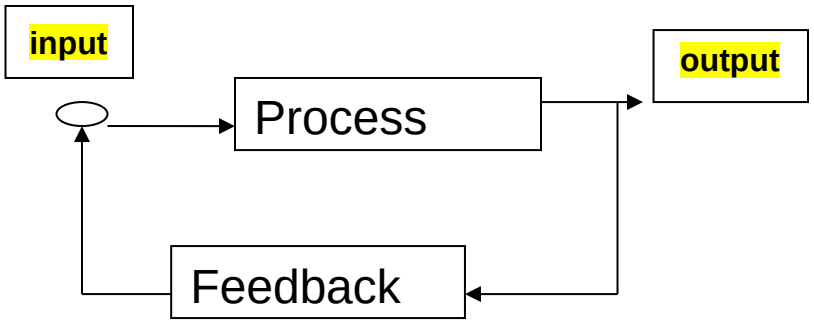
System Thinking

Learning organization:

an organization that is continually expanding its capacity to create its future. We need to get beyond “problem solving” and change the thinking that produces the problems in the first place. We tend to focus on the parts rather than seeing the whole, and to fail to see organization as a dynamic process. Thus, the argument runs, a better appreciation of systems will lead to more appropriate action.

Source -*Peter Senge*

Process feedback



Input: complete, count, define, describe, identify, list, match, observe, recite
Process: evaluate, judge, predict, infer, analyze, reason, explain, distinguish
Output: complete, imagine, predict,
Feedback: speculate, if/then, forecast, idealize, hypothesize, judge

System approach to thinking skill learning

From seeing just the parts to seeing the whole

Strategies:

It is important to give learners the time and opportunity to talk about thinking processes, to make their own thought processes more explicit, to reflect on their strategies and thus gain more self-control. Acquiring and using meta-cognitive skills has emerged as a power idea for promoting a thinking skills curriculum … Carol McGuinness (1999)

Create your thinking strategies:
•Look to make your approach more efficient.
•Look at issues from a system view with inputs, outputs, processes and feedback.
•Think of strategies in "gathering, organizing, analyzing and making conclusions.

* **Break problems into small chunks and study them well.**
* **Begin with the things that are simplest to understand and move to the more complex.**
* **Never to accept anything as true that you do not clearly know.**
* **Be complete in both your work and reviews that nothing is omitted.**

Descartes, Discourse on Methods