

Learning on the Run: 18a: Merging Individual & Systemic Goals

How can you demonstrate the interaction between what individuals want and what the system requires?

The Request. The Training and Safety Manager of a State Department of Forestry asked for help in designing a half-day component of a conference that heralded the implementation of a new Geographical Information System (GIS). The conference sponsor, a GIS staff expert who reported to the Department Director, wanted to help all 280 staff (e.g., foresters, wildlife biologists, land managers, recreationists, etc.) that collected any geographically-based data to buy-into using a new centralized system.

Larger Context. Database management was occurring faster than anyone anticipated. Experts recommended that a system-wide solution was needed. Department forest resource staff had always collected all sorts of data on the forest land that they managed. With the advent of desktop computing, measures and coding was being developed uniquely by different individuals around the regions of the state. For example, some staff were recording whole timber volumes while others were recording the diameter at breast height (DBH). Sometimes, the same data overlapped because it was collected by different staff. Multiple reports for different geographical levels (forest stand, drainage area, ecosystem) required an extended lag time to update the data and combine it into one report. Many individual staff only had experience with their own process for collecting and storing their data. However, the department was looking to create consistent, common standards, definitions and formats. They wanted a GIS system in which the data could be entered once, updated as needed and used in different ways, by different applications and by anyone in the department for different levels of analysis.

Consulting Intervention. We decided on an experiential approach to help staff realize that the goal for the new system was to craft a software solution that met the individual's need for data reporting and the system's need for data interconnectivity and networking. The exercise we used at the conference was a slight modification of Johnson and Johnson's Broken Squares Exercise (1). Our purpose was to have staff experience how their initial perceptions might affect their willingness to adopt a GIS system. Also, the exercise might map out the way the individual and system level goals interact. The exercise, in brief, consists of the following: A team of 5 starts off with puzzle pieces in front of each team member. To complete the game successfully, each individual on the team wins when they form a complete square in front of themselves and the team wins when there is a perfect square in front of each member. The goal would be to work towards a win-win. There is no talking and the only way to influence the process is to give pieces away to other team members. Having used this exercise a few times, we had a few expected points we wanted to highlight.

Last Line. One way to help develop a current understanding of the interplay of individual and system level goals during change is to use an experiential exercise that clearly demonstrates those dynamics.

(1) Johnson, D. and Johnson, F. 1975. *Joining Together, Group Theory and Group Skills*. P. 93-94. Prentice-Hall, Inc., Englewood Cliffs, NJ.