AN EXPERIENTIAL EXERCISE TO ILLUSTRATE DIFFERENCES IN INFORMATION PROCESSING BEHAVIORS AND STYLES

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ABSTRACT
The following describes the use of an experiential exercise in an introductory principles of information systems management course to illustrate differences in information processing styles and potential implications for computer-based information systems use and design.

PURPOSE
- To provide an information processing activity for participants to experience
- To give participants an opportunity to observe and identify differences in information processing behaviors & styles
  - To provide a forum for discussing these differences and their potential consequences, both positive and negative, on interpersonal communication, particularly in group or team settings
- To discuss implications of these differences for information systems use and design

MATERIALS:
Facilitator:
Copy of the "Unscrambling the Bank Accounts: Group Problem Solving" exercise (1987 Annual: Developing Human Resources, p. 51-56)

Chalk board/chalk or flipchart paper/easel/markers/tape

Participants:
One copy of the “Unscrambling the Bank Accounts Fact Sheet” (p. 54) for each participant
A set of “Unscrambling the Bank Accounts Data Cards” for each group (I include the “wild card” clues listed as an option on p.52)

Paper and pencil for each participant

LOGISTICS:
Group size: 2 or more groups of 4-7 members
Time: approximately 1 hour
Physical setting: a room that allows groups to work without disturbing one another

EXERCISE:
1. The facilitator describes the purpose of the activity.
2. Participants are asked to form groups of 4 • 7 members.
3. Each participant is given a copy of the fact sheet, paper and pencil.
4. Each group is given one set of the data cards and told to distribute them among their group in some way so that each person has some of the clues. The exact method of distribution is left up to the group. The participants are told that they may not pass their individual clues around to other group members - but they may read them/tell them to the group. The groups are then instructed to work on the problem as a group and to inform the facilitator when their group has solved the problem.
5. When a group indicates it has finished, the facilitator checks that group’s answers using the “Unscrambling the Bank Accounts Answer Sheet.” If any part of the answer is wrong, the group is told to continue working on the problem because the answer is incorrect.
6. After all teams are finished, the exercise is processed.

PROCESSING THE EXERCISE:
The following questions/issues can be used to process this activity:
1. How did your group go about distributing the “clues” to individual participants? Why did you choose this method and what were the possible implications of this?
2. Once the clues were distributed, how did your group “organize” or go about sharing the data?
3. What are the differences between verbally communicating your clues/information versus being able to pass the clues around for others to read?
4. What is the difference between information that each of us “owns” or has in our own heads, versus information we receive from others? Do we process it or use it differently and if so how? What about the “source” of the information?

5. Was there any “extra” information that you did not need to solve this problem? What impact did that have on the process?

Once these and any other questions/issues have been adequately addressed, a brief “lecturette” on information processing styles can be given. I use a brief input based on the two dimensions of perception and judgement (based on Myers-Briggs interpretation of the Jungian types). I follow this with a discussion of the implications of this for (1) personal information processing and decision making, and (2) interpersonal communication and information processing between individuals, including group or team settings. The potential for conflicting as well as complementary styles and the impacts on group process and decision making are noted. Finally, I discuss the four possible type combinations (from the Myers Briggs Type Indicator) in relation to computer based information systems and their development and use in both individual and group decision-making in organizations.

COMMENTS:

Since this exercise was originally designed as a group problem solving exercise, many group process issues can also be addressed. I encourage participants to consider and share their own experiences and insights as we discuss the various questions/issues. Although I do not “time” the exercise or conduct it as a competition, it was originally designed and can be executed that way. As a variation, participants can be given the option to do the exercise alone, as opposed to being part of a group. In processing the activity, comparisons can be made between the experience of individual versus group problem solving (advantages/disadvantages).