Task Twenty-Three

Read this abstract, and answer the questions that follow. It was submitted to a mid-size Information Science conference by a doctoral student in one of our classes.

Collaboratory use and social network change in the space science community

Abstract

1) While collaboration has always played an important role in scientific research, information technology has introduced new opportunities for collaborative research. 2 In particular, collaboratories, which use computer networks to facilitate scientists' access to remote instruments, to remote colleagues, and to archived data, represent a novel environment for scientific collaboration. (3) By diminishing the importance of physical proximity, collaboratories provide a technological basis for new forms of networks of scholars (Wellman, 2002). (4) Based on previous studies of information technology use and on the social networks of scientists, it is here hypothesized that collaboratory use may extend network range. (5) One likely pathway for this is by generating more opportunities for junior scientists and those employed by non-doctoral institutions to become inter-connected in ways comparable to the networks of senior scientists at elite institutions. 6 On the basis of a survey of space scientists and on an examination of co-authorship relations among those scientists from 1993 to 1996, this longitudinal study compares space scientists' social network structure before and after they adopted the Upper Atmospheric Research Collaboratory in order to examine its impact on their scientific work. (7) Results of this research indicate that collaboratory use has led to an increase in the network range of the aerospace science community. (8) More specifically, junior scientists and peripheral institutes have become more connected to senior scientists and elite institutes. 9 The paper closes by discussing whether the space science collaboratory is typical of others or has distinctively predisposing collaborative features.

Part A: Evaluation

CONFERENCE ABSTRACTS

Do you agree (\checkmark) or disagree (X) with the following comments made by participants in a workshop? (For Comments 4 and 5, remember that in many fields it is typically more prestigious for an abstract to be accepted for a presentation rather than for a poster session.)

- 1. ____ "It tells a good story, and one that is easy to follow. There's no ambiguity or confusion here."
- 2. ____ "The relevance of the study is well established, but the actual results are rather vague. I suspect the author has collected the data but not yet really analyzed it."
- 3. ____ "References are thin; there are no references to previous work on scientists' social networks, and none to this particular collaboratory!"
- 4. ___ "I vote to accept it as a presented paper."
- 5. ____ "I recommend accepting it only as a poster presentation."

Part B. Analysis

The nine-sentence abstract has a typical shape. The content narrows as it moves from background to topic to results, but then it widens out in the final sentence. This shape is illustrated in Figure 3.

Figure 3. Shape of Task Twenty-Three CA

