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SUCCESS FACTORS IN EXPERIENTIAL TRAINING FOR CREATIVE PROBLEM-SOLVING TEAMS

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ABSTRACT

Members of successful creative problem-solving teams see the most important work-team characteristic to be: (1) a *challenging goal*; (2) *liking, trusting, and helping each other*; and (3) a *competent, respected, and fair leader*. They value "mutual trust" much more than do members of either engineering design teams or project teams. But they value "team design," "outside support," and "member job-knowledge" less.

THE EXAMINATION OF CREATIVE TEAMS

Odyssey of the Mind [OM] is an internationally recognized *experientially based* program for building and developing innovative teams. Its success demands that we understand its philosophy and procedures. OM, Initiated by Dr. C. S. Micklus and sponsored by IBM, prepares students to solve "long term" problems (complex, multi-dimensional situations) by requiring a *total team effort* (Micklus and Micklus, 1989).

OM guidelines clearly specify that coaches are merely facilitators" and that *solutions must come from team members*. The team's solution must be perfected for a live demonstration before multiple judges, who determine how well the team has *met the diverse requirements*. No more than five members may *actually present* the judged solution. As many as twelve different criteria are applied by the trained judging teams. Since teams are also judged for spontaneous problem solving (brainstorming) they practice and drill for speed and productivity. Local, regional, and national competitions are held, and winners advance. Six hundred thirty eight teams competed at the 1990 World Finals!

This sample was gathered from entire teams, including coaches. Some responses in 1989 came from Colorado teams competing there at the Division and State levels. Other 1989 and all 1990 responses were from the World Finals competitors. Eight specific characteristics of successful teams (Larson and LaFasto,

help each other; (3) The team leader is seen as competent, respected, and fair; (4) Team members know their jobs, and how to get them done; (5) Team members have high performance standards, and expect high performance from each other; (6) Members will do whatever is needed for the projects success; (7) The team is designed to get results; and (8) The project gets outside support, resources, and recognition. Respondents were asked to indicate, on a 5-point Likert scale, "the extent to which you believe (the particular characteristic) is necessary for an effective [problem-solving] team." Results were processed by SPSSX. Key results for the OM teams are shown in Table 1. (See the column headed "CREATIVE.")

OM Ratings were compared to those of design engineering teams and project teams. Each sees the most important characteristic to be a *challenging goal*. "Trust" ("members like, trust, and help each other") was found to be *considerably more important* to creative teams.

However, creative teams expressed *lower opinions of the value of* "team design," "outside support," and "members' job knowledge" (Refer to Table 1, above, and Figure 1, following). Figure 1 clearly displays the difference between creative teams and others. Importantly, this research joins others in pointing a finger toward the critical nature of trust to the success of creative teams (Meeker, 1984; and Mumford and Gustafson, 1988)

FIGURE 1. SUCCESS FACTOR RATINGS BY

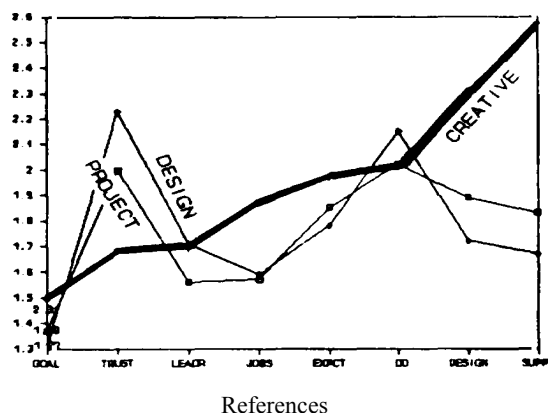


TABLE 1. SUCCESS FACTOR RATING BY TEAM

		Creative N= 233		Design N= 284		Project N=414	
		Mean _c	Dv.	Mean _d	DV.	Mean _p	Dv
(lowest number = highest importance)							
1.	Goal*	1.48	.84	1.31	.604	1.37	.64
2.	Trust	1.68	.99	2.23	.924	2.01	.84
3.	Leader	1.69	1.06	1.71	.823	1.56	.72
4.	Job	1.87	1.04	1.59	.787	1.57	.72
5.	Expect	1.97	1.15	1.78	.869	1.85	.79
6.	Do	2.01	1.13	2.15	1.07	2.02	.87
7.	Design	2.31	1.27	1.72	.940	1.69	.79
8.	Support	2.57	1.33	1.67	.987	1.83	.87

1989; Halterman, Liu and Halterman, 1990) were assessed: (1) Team members know the projects goals, and are challenged by them; (2) Members like, trust, and

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Larson, C.E. & F.M.J. Lafasto (1989) *Teamwork* Newbury Park, California: Sage Publications.

Meeker, B.F. (1984). Cooperative orientation, trust, and reciprocity. *Human Relations*, 37, 225-243

Micklus, C. Samuel, & Carole Micklus (1989) *Odyssey of the Mind Program Handbook*. IBM, 31 pp

Mumford, M.D., & S.D. Gustafson (1988) Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, 103, 27 - 43