

## **National Capstone design Conference Team Dynamics Panel Discussion**

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I wish to propose the outline for topics of discussion during a panel and audience participation session related to Team Dynamics in capstone design courses. I am the Senior Capstone Design Instructor and Coordinator in the Agricultural and Biological Engineering Department at the University of Illinois and have many years of industrial product design and business experience for entrepreneurial and traditional manufacturing and consulting companies, as well. I am offering to be the session moderator and panel member or panel member only if so desired by the organizing committee. It is our experience that the understanding of the reasons behind and the utilization of team dynamics information is very important and that the capstone experience for the students and the results obtained for the project sponsors is maximized when the following elements of human teamwork are acknowledged and guided, rather than left to chance. It will be very instructional for attendees to be exposed to the treatment of the topics by panel members and to freely offer their comments, suggestions and ideas to the panel and other attendees. The discussion should be revealing and refreshing to all participants and lead to better preparation of the students as they enter their chosen fields. The discussion should also lead to providing practical ways for attendees to adopt techniques appropriate to their philosophy and academic mission. Some topics for discussion include:

- Student preparation for the capstone experience:
- Teamwork in other courses and professional workplace experiences
- Curriculum prerequisite courses and class level standing
- Breadth of curricula represented on teams
- § Personality profiling
- What is done, when and what is used
- Prediction of team member / whole team moods and attitudes
- Team building exercises
- What is used, and why
- Team formation
- What techniques are used to decide team makeup
- How is team leadership determined
- How is project division of labor determined
- § Measures of performance
- Peer evaluation techniques
- Sponsoring organization evaluation techniques
- Faculty and observers evaluation techniques
- Expected outcomes, their forms and how evaluated
- § Team guidance
- The role of the instructor in the course and the relationship to the teams
- The qualifications and traits of the instructor
- Frequency of meetings between team members and between teams/instructor
- § The meeting experience and format
- Styles of meeting /class settings
- Styles of how meetings are conducted: as a classroom, a professional workplace or other variations.

I envision the format being a fairly traditional one of having a maximum of 5 panel members representing a mix of organization type and size, giving brief opening remarks about any or all of the above topics, utilizing visual media such as PowerPoint presentations as desired. The floor would then be opened for questions and additional comments and experiences from any participants in attendance. Participation on some level by some students who have gone through capstone programs would be beneficial.