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## Lesson 4.2 – Design Teams

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### Concepts

1. Teams of people can accomplish more than one individual working alone.
2. Design teams establish group norms through brainstorming and consensus to regulate proper and acceptable behavior by and between team members.
3. Engineers develop Gantt charts to plan, manage, and control a design team's actions on projects that have definite beginning and end dates.
4. Virtual teams rely on communications other than face-to-face contact to work effectively to solve problems.
5. Each team member's strengths are a support mechanism for the other team members' weaknesses.
6. Conflict between team members is a normal occurrence, and can be addressed using formal conflict resolution strategies.

### Performance Objectives

*It is expected that students will:*

- Explain why teams of people are used to solve problems.
- Identify group norms that allow a virtual design team to function efficiently.
- Establish file management and file revision protocols to ensure the integrity of current information.
- Use internet resources, such as email, to communicate with a virtual design team member throughout a design challenge.
- Identify strategies for addressing and solving conflicts that occur between team members.
- Create a Gantt chart to manage the various phases of their design challenge.

### Essential Questions

1. Why are teams of people used to solve problems?
2. What are group norms?
3. What does *consensus* mean, and how do teams use it to make decisions?
4. What is the purpose of a Gantt chart?
5. What types of communication methods do virtual teams rely on in the absence of face-to-face contact?
6. How do teams deal with individual team members' weaknesses?

7. What methods do teams use to formally address conflict between team members?

## Key Terms

[Arbitration](#)

[Consensus](#)

[Critique](#)

[Evaluate](#)

[Gantt Chart](#)

[Mediation](#)

[Negotiation](#)

[Norms](#)

[Open-Ended](#)

[Protocol](#)

[Storming](#)

[Synergy](#)

[Virtual Team](#)

## Instructional Resources

PowerPoint® presentations

[Teamwork](#)

Word Documents

[Project 4.2.1 Virtual Design Challenge](#)

[Activity 4.2.2 Team Norms](#)

Evaluation Documents

[Design Project Tally Sheet](#)

[Engineer's Notebook Evaluation](#)

[Periodic Self-Evaluation](#)

[Periodic Teammate 10-Point Evaluation](#)

[Summary Presentation Evaluation](#)

[Teammate Performance Summary](#)

[Lesson 4.2 Key Terms and definitions in Excel](#)

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