

LECTURE 7

CONSTRUCTION MANAGEMENT GAME



*CEEN 4812: Construction Management
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1

OBJECTIVE OF THE GAME

- ◆ To illustrate the importance of clear communication, and allow the project teams to explore their communication style and make improvements as necessary.
- ◆ Reference: Building Communication Skills Game, Management for the Rest of Us, mftrou.com, September 27, 2010.

2

ROLES



There are 5 roles in this game.

1. **Owner: one member of the client team**
 - ◆ Will tell the designer what needs to be built
 - ◆ As a judge, will observe the game and score the teams based on game rule compliance. Has the authority to disqualify a team.
 - ◆ Constraints:
 - ◆ Use up to 10 children's building blocks
 - ◆ Time limit: 5 minutes
2. **Designer: one member of the consultant team**
 - ◆ Will create a model using blocks based on owner specifications
 - ◆ Will give clear instructions to Project Managers (runners), so that Builders can build an exact replica of the model. Cannot show the model to Project Managers.
 - ◆ Constraints:
 - ◆ Use up to 10 children's building blocks
 - ◆ Should be in another room (cannot see the building progress)
 - ◆ Time limit: 5 minutes for creating the model + 10 minutes for instructions during the building step.

3

ROLES

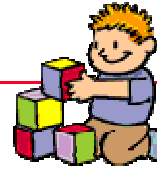
3. **Project manager (runner): one from each team**

- ◆ Will listen to the Designer's instructions and run between Designer's room and his/her Builder in the class room.
- ◆ Will pass on the building instructions to his/her team's Builder.
- ◆ Can ask questions from the Builder and make as many trips as required within the time allowed for this step of the game (10 minutes).
- ◆ Constraints:
 - ◆ Cannot see the model
 - ◆ Cannot build (cannot touch the blocks)
 - ◆ Time limit: 10 minutes



4

ROLES



4. **Builder: one from each team**
 - ◆ Will listen to his/her team's Project Manager's instructions and build the structure from the set of given building blocks.
 - ◆ **Constraints:**
 - ◆ Cannot see the model
 - ◆ Cannot see other team's building work
 - ◆ Time limit: 10 minutes
5. **Observer(s): Rest of the members from each team**
 - ◆ Observe the game and make notes about what worked, what did not work, and how people behaved under pressure etc.
 - ◆ Present your observations to the class after the building step
- ◆ **Total game time = 30 minutes (20 minutes to building + 10 minutes for presenting observations)**

5

FOUR PROJECT TEAMS

Team 1: Consultant

Name: Youngstown Engineering Consultants

1. Baker, David M.
2. **Barton, Wesley S. (L)**
3. Beers, Nathan C.
4. Chaney, Nicholas R.
5. Chen, Wen Jing
6. Dezarn, Kevin T.

Team 2: Contractor

Name: Mahoning Valley Civil Contractors (MVCC)

1. Ekweremuba, Obinna
2. **Gintert, Scott M. (L)**
3. Holsopple, Andrew G.
4. Kovacs, Zachary S.
5. Kwallek, Raymond A.
6. Lang, Kevin T.

Team 3: Client

Name: Youngstown Pipelines

1. Mashburn, Joshua C.
2. Matelan, Lucas R.
3. Monus, Daniel J.
4. **Moore, Kimberly A. (L)**
5. Oddo, Jeremy L.
6. Phillips, Daniel
7. Quetot, Robert E.
8. Sherock, David M.
9. Porter, Thomas R.

Team 4: Agency

Name: Ohio ECA

1. **Smulski, David (L)**
2. Ward, Bradley S.
3. Wiesen, Sandra J.
4. Kiswardy, Justin

6

STEP 1: Make Game Teams

- 1. Client team leader will nominate an Owner**
- 2. Consultant team leader will nominate a Designer**
- 3. Each team leader will nominate a Project Manager**
- 4. Each team leader will nominate a Builder**
- 5. Rest of the team members will be observers.**

7

STEP 1: Make Game Teams

Team	Owner	Designer	Project Manager	Builder
Client	?		?	?
Consultant		?	?	?
Contractor			?	?
Agency			?	?

8

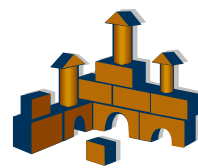
STEP 2: Move the Teams

- 1. The Owner and the Designer will move to the nearest vacant class room.**
- 2. The four teams will rearrange the class furniture to create four sitting areas in the class (Please put the furniture back to it's original location after the game).**

9

STEP 3: Owner & Designer Meeting

- The Owner will meet the Designer to describe what needs to be built**
- Location: Nearest empty class room**
- Duration: 5 min**
- Start time: 0**
- Finish Time: 5 min**



10

STEP 4: Model Creation

- **Based on the owner's specifications, the Designer will create a model using the building blocks provided.**
- **Location: Nearest empty class room**
- **Duration: 5 min**
- **Start time: 5 min**
- **Finish time: 10 min**

11

STEP 5: Building

- **Project Managers: Go to the Designer room to get building instructions. Pass the instructions to your Builder.**
- **Builders: Build a structure based on the instructions and clues from your Project Manager. Ask your Project Manager to bring additional information or answers to your questions.**
- **Location: Class room**
- **Duration: 10 min**
- **Start time: 10 min**
- **Finish time: 20 min**

12

STEP 6: Observations

- **Designer: Reveal the model**
- **Four Teams: Compare the model and the replica you built**
- **Observers: Reflect on how the game went, and agree on one thing your team did well, one thing that didn't work, and one thing you would do better next time. .**
- **Location: Class room**
- **Duration: 10 min**
- **Start time: 20 min**
- **Finish time: 30 min**

13

STEP 7: Repeat

- **If time permits**
- **De-construct the "original" model and create a new design!**
- **Play the game again, either switching or keeping original roles, and see if any improvements are made.**
- **Improve communication by making use of aids such as diagrams.**

14