

# **PLTW Engineering**

# 12/Teamwork

April 14, 2020



#### 12/EDD Lesson: **4/14/2020**

#### Objective/Learning Target: Students will be able to explain what a team is, the benefits of a team, and the stages of team development



#### What is a Team?

A team is a collection of individuals, each with his/her own expertise, brought together to benefit a common goal.

Teams are often comprised of people who do not know each other and who must work hard to develop productive working relationships despite personal differences and cultural practices.



#### Stages of Team Development

- 1. Forming
- 2. Storming
- 3. Norming
- 4. Performing
- 5. Adjourning



## Forming

The initial phase of Team development is *Forming*, during which team members introduce themselves and share information about their background and experience. Each team member forms impressions about other members and the group. The team will also learn the objectives and goals of the group.

- Initial team formation
- Team members share information about themselves
- First impressions
- Identify the team's mission



## Forming

When getting to know each other, team members should share information about themselves. Each member should identify his/her strengths and weaknesses and share past experience so that roles and responsibilities can be assigned.

- Identify strengths and weaknesses
- List individual talents, skills, and limitations
- Share experience
- Remember that each team member's strengths are a support mechanism for the weaknesses of other team members



### Forming

An important part of the *Forming* stage is identifying and communicating the team's mission so that every team member understands the goals and objectives of the team

## Identify the team's mission

- What does the team have to do?
- How will the team accomplish the task?
- What information is needed?
- What resources are available?



#### Storming

The Storming stage is marked by conflict among team members and is inevitable within a successful team. Team members compete for status and argue for their ideas. There are different opinions on what the team should do and how the team should proceed. Eventually a successful team will learn how to work together and share responsibility.

Listening to others and respecting other peoples' ideas are essential skills that all team members should strive to master in order to move through the *Storming* stage and facilitate the success of the team.



#### Storming

Because the input of all team members is valuable, often more aggressive team members must learn to allow others to share their thoughts. Additionally, more timid team members must learn to be more assertive.

- Competition among team members
- Difference of opinions
- Learn how to work together
- Settle into roles and share responsibility



In the *Norming* stage, the team members grow to respect the opinions of others on the team. The team begins to work more cohesively and concentrates on team goals as opposed to individual goals.

During this stage the team agrees on team rules: how to work together, how information will be shared, how to resolve team conflicts, and how the goals will be met. These rules are often referred to as "team norms".



This stage also marks the beginning of significant progress toward achieving the objectives of the team.

- Mutual respect among team members
- Team members work collaboratively
- Focus on team goals (rather than individual goals)
- Agree on team rules (norms)
- Significant progress toward goals



# Establishing Group Norms

- Create a list of norms by brainstorming with teammates.
- Analyze each norm and discuss its impact on the team and the overall goal.
- Identify key norms that everyone can come to consensus on.
- Commit to follow these rules
- Establish consequences if norms are broken.



- Typical Group Norms
- Input from all team members
- Meeting schedule and project timeline
- Communication protocols
- Conflict resolution protocols



## Performing

The *Performing* stage is marked by highly performing team members who can work independently toward the team goal. The team is highly motivated to reach the goals and requires little oversight.

- Team members know each other, trust each other, and rely on each other
- Team functions at a high level
- Focus on reaching team goals
- Conflict and changes are handled quickly without interruption in team progress.



# Adjourning

The Adjourning stage is reached as the project comes to an end and team members begin to leave the group for other projects. For successful teams that reach the *Performing* stage, team members typically become close and are saddened at the prospect of losing the connection to the team.

- Project comes to a close
- Team members leave group





#### American Society of Quality guide to teams

#### **Psychology of Highly Effective Teams**