Being a 6.042 Team Coach
Team Learning

The objective is to teach students to learn from each other.

These are the best students in the world.
Team Learning

They are highly motivated, proven high achievers.
They are a great resource for each other.
Team Problem Solving

The team focuses on writing problem solutions on their white board. Every team member should endorse and be ready to explain.
Team Problem Solving

Problems give focus for studying together
Team Studying

Problems give focus for studying together

Don't let team rush to finish and leave.
Team Studying

Problems give focus for studying together

Don't let team rush to finish and leave. Use extra time to review, critique, generalize
Team Dynamics

Focus on fostering teamwork. Observe who is
• not participating
• dominating the board
• being unpleasant
Focus on fostering teamwork.

Observe who is

• unhappy
• bored
• already knows the material
Team Dynamics

Focus on fostering teamwork. Observe who is

- doing so well they could be an LA
Team Dynamics

Report your observations in staff meeting and get advice on managing.

Notify instructors if urgent.
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Team Solutions

A good answer is one that a student from another team who wanted the solution could look at the board and say “of course.”
Team Solutions

Every team member should individually confirm readiness to defend solution by explicit "OK" or thumbs up
Team Solutions

Team indicates when done by checking the soln.
Then coach says what’s unclear or wrong.
Let the team figure out fix.
Team Solutions

If checkmarked solution OK, then ask if everyone is ready to be called upon to explain every part.

(Warn them you plan to call on the most worried looking 😊)
Team Solutions

If anyone doubtful, delete checkmark

Let team (not you) resolve doubts & restore checkmark
If all are ready you can call on someone—not a volunteer—to explain some tricky part (or just identify the trickiest part)
If all are ready you can call on someone or just move on if you believe them.
Coaching not Tutoring

• Answer a question with a question:
  “Did you ask your teammates?”

Watch out: students say “yes” when they mean they asked someone, not everyone.

You can help by calling the team’s attention to the student and have him ask his question.
Coaching not Tutoring

• A little floundering is educational. Give students time to struggle. When they are stuck and struggle is no longer fruitful, provide just enough guidance to get them going--no more.
Coaching mistakes

1. Tutoring instead of coaching.

During problem-solving, when you find yourself talking to your whole team a mental alarm should go off: “Why can’t I get a student to say what I’m saying?”
2. Talking to one student

The student should be getting answers from his teammates.* Did he try? You should check and verify that no one could answer.

In which case, you should answer the whole team, not the one student.

*... unless it’s personal
3. Showing tricks & mental teasers

Usually a bad idea. Your students are already struggling with a lot of new material.

We're trying to teach them concepts not quick facility.
Coaching mistakes

3. Showing tricks & mental teasers

Their plate is full—you don’t need to add to it.

Stick to the class problems and info in the staff solutions.
Initial Review

Start session with short list of the main topics.
Ask for questions. See if team member can answer.
Check that team wants explanation. If mostly not, postpone answer till after class.

Review < 10 min
Discussion Questions

Some problems meant for discussion.
Usually worthwhile.
Don’t let students blow off.
Discussion Questions

Try to get team engaged. Suggestions to stimulate discussion in staff solutions.
Participation Grades

Take attendance.

0 for absence.
1 for unprepared, read email, fell asleep, ...
2 satisfactory (90% of grades)
Participation Grades

3 extraordinary contribution—better than staff solution.

Once or twice for a team during the term.
Participation Grades

Email students for unexplained absence:

“I noticed you were absent today. Hope you are OK. Look forward to seeing at next class.” cc instructors.

March 14, 2015
Participation Grades

Tell students who get a 1:

“Given your team activity today, I’m not comfortable giving you full credit for participation.”
Tell students who get a 1:
Follow up by email & cc the instructors.
Preparing yourself

Prepare yourself: look at all material (text & online) and ask in advance about anything you’re not sure of.
Coaching is *satisfying*

Most students appreciate the guidance of their coaches. Many are former students who want to return the favor.

It’s a satisfying role and a way to gain valuable leadership and communication skills.
And it should go w/o saying

You are in a supervisory position, perhaps for the first time. Do not abuse it. For example,

- no personal relationships with team members
- no bribes
- no undeserved “hardship” grading