

Stage 2: Start of Semester

The purpose of this stage is to equip students to manage both the learning objectives of the project, and to understand why explicit training in teamwork is an important part of those learning objectives.

STEP 1	Communicate the process to students	
STEP 2	Introduce students to team role preferences	
STEP 3	Provide team training	
STEP 4	Introduce Teams101x	

Stage 2, Step 1: Communicate the process to students

The strategies proposed in this manual need to be disseminated to the students for them to be effective. This communication needs to be made in the initial lecture to emphasise the importance of teamwork and the penalties for social loafing and unresolved team dysfunction.

As well as other introductory matters, the first lecture needs to cover whichever of the following that you have decided to employ:

- the importance of teamwork for achieving learning objectives;
- the intentional selection of teams to maximise student potential and performance (no more detail is given than this so that students can establish the characteristics of the members of the team without any pre-conceptions);
- the strategy for addressing social loafing whereby peer assessment and a chance to reassign social loafers mid-semester will be used to discourage and appropriately reward such behaviour (<u>Stage 3 Step 3</u>);
- how teamwork will affect course assessment, namely:
 - the peer assessment factor (PAF) and the sensitivity of individual marks with respect to it. Table 6
 can be used as an example to show the spread of marks for a team of six students (A to F) who all
 received the same mark for a team-based deliverable but who received different peer assessment
 factors (PAF);
 - the team assessment mark (TAM) and the sensitivity of final marks with respect to it (also shown in Table 6); and
- the reason for, and timing of, initial workshops and mentor meetings.



Table 6: Example of the Application of Peer Assessment Factors

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Student name	Team Mark (/100)	PAF	Amended Mark (/100)	TAM (/100)	Final Mark (/100)
Α	70	0.9	63	60	62
В	70	1.1	77	60	74
С	70	1.2	77	75	77
D	70	1.0	70	75	71
Е	70	0.8	56	45	54
F	70	0.9	63	45	59

Column explanation:

- **Column 2:** The mark out of 100 achieved for the team deliverable. In this case, there are no individual sections and hence a single mark has been given.
- Column 3: The Peer Assessment Factor (PAF) calculated as per <u>Stage 4, Step 2</u>.
- Column 4: The amended project mark, calculated by multiplying columns 2 and 3.
- **Column 5:** The Team Assessment Mark (TAM) allocated to each student based on teamwork performance (see <u>Stage 3 Step 2</u>). Remove this column if you are not employing a TAM.
- Column 6: The final mark, calculated based on column 4 and 5 by assigning weightings to the value of each of the exercises. In this illustration, the TAM is worth 20% of the final mark: Column 6 = (0.8 x Column 4) + (0.2 x Column 5); remove this column if you are not employing a TAM.

At this stage, the students could be directed to complete the first sections of TEAMS101x.

Stage 2, Step 2: Introduce students to team role preferences

The way we work within a team is shaped by our personality traits and attributes. If our individual preferences for how we communicate and how we do our work match well with those of our team members teamwork is more likely to flow smoothly. If our preferences clash, tensions and conflict can arise. Understanding our own traits and attributes, as well as those of our fellow team members, is a significant part of understanding how we can all work together as an effective team. [Teams101x]

I recommend the use of a personality quiz or a team role inventory in the early stages of semester, or in the workshop outlined in Stage 2, Step 3 as this allows students to:

- understand the various roles within teams either through the questionnaire itself or through information that you supply for interpretation purposes;
- challenge their perceptions of how they like to work within teams;
- complete an ice-breaking activity that will help them plan for the coming semester building on team member's strengths.

There are several systems that can be used but some are proprietary and come with a commensurate cost:

 Meyers Brigg type indicator – a free on-line personality indicator. Rodriguez Montequin, Fernandez, Balsera and Garcia Nieto (2013) have developed profiles for a number of the MBTI personality types in the context of student project teams and this information could be circulated to students to help with interpretation.



- Five Factors a free on-line personality indicator. There is no definitive article on how the five factors
 affect team work but you could certainly ask the team to compare their scores and think about what this
 means for the team going forward.
- Belbin Team Roles Inventory a proprietary team role questionnaire which needs to be purchased on a
 per head basis⁸. An alternative to getting students to do the questionnaire is to ask them which role
 they most identify with. There are free online resources provided by the Belbin Institute for this
 approach.

All these systems and their interpretations are covered in Teams101x. You could ask your students to move through this chapter of the MOOC and report back if relevant.

Stage 2, Step 3: Provide team training

Initial activities should be planned to allow both team formation and continued team collaboration. This is best done if the activities achieve both project and team requirements and thus appeal to the student. Effective communication to students in these sessions will reduce subsequent demands for explanation, so it is worthwhile checking as you proceed that students have grasped the key points. Get them briefly to cross check their understanding with the person sitting next to them.

I use workshops as shown in Tables 7 and 8; undertaken in a two-hour session in the first week and in a one-hour session the following week. Not everything in the table will be necessary for your course but I have included it here for completeness. The use of Teams101x will also reduce content.

Table 7: Workshop 1: Initial Teamwork Briefing and Training (1-2 hours)

#	Learning outcome	Resources	Student activity	Time (mins)
1	Why teamwork is important, how teamwork will be employed in the course, and how it will be assessed.	Intro Powerpoint	Listen, make notes, ask questions	15
2	Overview of the team project(s) and subtasks	Project handout	Listen, make notes, ask questions	15
3	Team roles and individual preferences (Note 1)	Weblink to online survey or handout Debrief Powerpoint	Complete questionnaire	20
3	To get students in their teams	Student team lists	Find your team	10
4	Icebreaker – who is in your team, wha are the team's strengths and where will extra effort be required.	tTemplate for completion by teams	Discussion	20
5	Team Charter agreement – vision (Note 2), team name, set of rules (Note 3), initial leadership	Team charter template (Appendix B)	Completion of Team Charter	30

⁸ As of 2017, the cost was between \$19 and \$23 per student depending on the depth of analysis and support required.

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Notes

- 1. Students are asked to discuss their strengths and weaknesses in terms of their team roles and then to discuss how this may make the team strong or weak. If a team knows that it is weak in a particular area, then efforts can be made to ensure that this does not negatively affect their work. In addition, students are directed to identifying any possible conflicts that may occur through their individually preferred methods of working in teams.
- 2. Students may not like putting together Vision diagrams but this step ensures that the goals of the team are discussed and agreed. An alternative is to incorporate this step into the Team Charter/ Code of Conduct by asking what grades they want, what quality they want their final deliverables to be etc.
- 3. Students can reflect on positive and negative experiences that they have had in the past and formulate rules that will preserve the former and eliminate the latter. The Team Charter/ Code of Conduct has comprehensive questions with respect to rules. You can edit this document to simplify it should this make it more relevant for your cohort.
- 4. Preliminary task allocation can be done through the Team Charter or perhaps students (especially later year students) may like to generate a work breakdown structure, flow diagram or similar.

I emphasise that weakness on a team or individual basis in any of the team roles does not mean failure. What it means is that the team will consciously need to address the weakness and thus ensure that failure does not result. In this way, the skills associated with the role are learnt. This then illustrates the other point of emphasis which is that team roles are not static and they change with experience, maturity and with the input of other team members. It should also be stressed that team roles are not cause for stereotyping.

Upon completion of Session 1, students will have:

- met and broken the ice;
- defined their intra-team relationships, potential conflicts, and potential weaknesses/ strengths;
- be well progressed in the team forming having decided upon shared goals, and written up a set of rules for operation; and
- be on the way to performing as they have a team task to complete for Workshop 2.

Teams are asked to bring the deliverable for the second workshop, in this case a plan for work breakdown and task allocation, to the second workshop (Table 8) where a mentor will review and discuss the plan with them and answer any questions that they may have.

Table 8: Workshop 2: Team Training and Mentor Introduction (1 Hour)

#	Learning outcome	Resources	Student activity	Time (mins)
1	Introduction of mentors and their role	Powerpoint	Listen	10
2	Meet mentor and discuss sub-task/ work breakdown deliverable (Note 1, 2)	Mentor allocation	Mentor meeting	10/ team
3	Produce schedule for semester	-	Preliminary Gantt chart	40



Notes

- 1. Activity 2 runs concurrently with Activity 3; mentors will move from one team to another.
- 2. You can change the amount of time for each mentor meeting depending on how many teams each mentor is assigned (e.g. 10 minutes allows for 5 teams at 10 minutes each).

Upon completion of Session 2, students will have:

- met their mentors and understood the rhythm of the course with respect to mentor meetings and their function;
- a better idea of the preferred roles of their team members;
- a better idea of methods of communication; and
- a schedule for completing the allotted team tasks.

One final thought. It should be no surprise that many students who will be identified as social loafers do not come to the first lecture and thus miss learning about the measures put in place to allow teams to penalise this behaviour. As a remedy to this, I email the cohort in the week prior to the beginning of semester and let them know how important attendance at the first lecture is. However, you should ensure that students with reasonable excuses for missing the first lectures are directed to, and have access to, the information you present.

Stage 2, Step 4: Introduce Teams101x

One of the issues that I first noticed was that in our effort to fit discipline-specific content into our courses, we neglected to give students any direction in terms of teamwork. Although teamwork skills are best learnt experientially, there is still a lot of information that we can arm students with so that they do not have to approach the team-based project on a trial and error basis.

This led me to develop Teams101x, a free online MOOC through the UQx/ EDx platform. As previously mentioned you need to decide if and how you will use this resource: you can choose to integrate the MOOC into your course or just offer it as a convenient stand-alone resource. You can choose to view/ collect/ grade the students' reflections and input and you can also track how long each student spends on each page to ensure that the material is read. However, if you want such oversight of the student activities you are better using the MOOC as a SPOC9.

The sections in the MOOC are shown in Table 9; more details are given in Appendix C.

Table 9: Teams101x

Section	Content	Activities
1. What is a team?	 Teams: An introduction The lifecycle of a team Reflect on your experiences of teams 	Short answer (4x)DiscussionPollQuestionnaire x2
Personalities and role preferences in teams	 Teamwork requires many roles Personal traits and attributes Belbin team role types 	 Poll x1 Discussion x2 Drag and drop x1 Drop down x1 MCQ x2

⁹ Contact the UQx team at https://uqx.uq.edu.au/ or uqx@uq.edu.au if you wish to have Teams101x as a course-level SPOC.



Section	Content	Activities
Critique a hypothetical team	 Meet our hypothetical project team Peer assessment: Team roles and dynamics (Parts 1 and 2) 	 Critique a hypothetical team Short answer x4 Peer assessment x2
Everyday teamwork planning tools	Tips for new teamsTeam meetingsProject planningTeam decision-making	No activities
5. Leadership, assertiveness and cooperation	LeadershipAssertiveness and cooperation	Poll x2Discussion x2Short answer x1
6. Maintaining your team	 Effective communication Embracing diversity Staying ahead of team conflict	MCQ x3Drag and drop x2Discussion x1
7. Addressing team conflict	 The reality of team conflict and dysfunction How conflict escalates Addressing team conflict Addressing team dysfunction DIY team problem solving diagnosis tool 	 Questionnaire x1 Short answer x2 Discussion x1