How Do I Assign Students to Groups?

Presented by:
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Hi. My name’s Ike Shibley and I’d like to welcome you to the 20-Minute Mentor Series. This particular mentor section is called, *How Do I Assign Students to Groups?* What I want to do over the course of the next 20 minutes is, first introduce you to group work and the benefits of group work. Then, we’re going to go through some of the definitions of the different types of groups, some of the main decision points you’ll have to make in establishing groups. We’re going to spend several minutes going over a decision tree that’s in your handouts.

You will need the handout as I’m talking through this, so you can follow through and look at that handout that will guide you through some of the key decisions. Obviously, I can’t cover all the decisions, but I think it’s a fairly useful decision-making tree that you should be able to use as you’re thinking about group work. Then, I do want to end with a few minutes of discussion on grading – and I have some resources available for you. There’s a website that talks about some of the rubrics that are available for grading group work. So, without further ado, let’s talk about groups.

Group work is one of those areas that some business faculty think that it’s essential and some engineering faculty think that group work is important because that’s what those students will be doing in the workplace. I don’t want to undermine that view but I do want to say that there’s a lot more to group work than just getting ready for the working world. We learn better when we share our ideas with others. When we have to articulate those ideas, have others bounced those ideas back to us, try to justify claims or statements that we’re making, even in the hard sciences, there’s a lot of benefit from working in group.

If one student doesn’t understand something, another student may be able to help the struggling student look at a concept a slightly different way that the teacher hasn’t been able to get through to the student. Hearing different ways of thinking about information, in each of our courses, is critically important. Group work can completely change the dynamic of your course. Without spending a lot of time on the theory, I do want to encourage you to please try group work in your classes.

The teacher in a group class is no longer the central person. Students will still look to you for grades but students start to build up positive interdependence. In other words, they start to trust each other and they start to utilize each other to help learn the information. When their gaze focuses on classmates instead of you, it can be a little discouraging for a teacher because the students seemed to be able to learn some of this without your direct assistance. But what you’re doing is facilitating the effective functioning of groups. So if you’re teaching groups, one of the best ways to know whether you’ve created a great assignment is to see what happens when the students get to work. If they start to get to work
and the volume rises in your class, you know that students are starting to learn from each other and you’ve done a great job.

When we ask students about group work, they do enjoy learning from each other because they have to talk – because they have to share. This is an active learning. Group work does not occur without activities and activities are so named because students have to be actively engaged and wrestling with the content. It’s essential that your activities, with the groups, get everyone involved. It’s not an easy skill to develop but the more you work with groups, the better you’ll be at finding ways to get everyone in the group working.

In some classes, working with groups is a great way to get immediate feedback. If you’re doing problems in a math class, students can help each other. “Is this the right answer?” “No, that’s not what I got.” Have them check each other, look through to see what work is being done. The students can often help each other. You’re there as a backup if the students say, “We can’t figure out what the difference is.” Now your role as a teacher is to help those students.

I’m telling you, when you walk past classrooms – and I like doing this, I just have a lot of energy so I walk around a lot during the day, and I can tell you when I walk by classrooms where there’s group work going on, there is a level of energy that is not present in a classroom where the teacher is at the board, lecturing with either chalk, and blackboard, or PowerPoint. The students seem much more passive in this lecture classes; they’re not in control of their learning. That energy is missing. Reports can energize your students and I think you’ll find it can energize you as a teacher.

Why would you want to change? I have each of these next few slides cited in the resource material. Let me just tell you that I think these three are critically important. The workplace is changing; so the business folks and the engineers who say, “Hey, students need to learn to work in groups,” they’re right. Working in groups is an important skill for students to learn.

Changing student population. Students are not coming to class anymore with an ability to sit for hours on end while you lecture at them. Students want to be actively engaged. I know we complain about the video generation but the fact is, that the more that you actively engage students, the more you have them wrestle with concepts in your course, the better their learning is going to be. They’re rehearsing while they’re doing it. They need to challenge themselves to get a better sense of where their limitations are and where they have to work outside of class.
The changing teaching paradigm from teacher-centered to learner-centered is critically important in all this. We know, from the pedagogical research, that teachers who find ways of engaging students are the teachers that have students who perform better on exams, on writing assignments, on group presentations. These are students who are learning more. In a learner-centered classroom – the student learns more.

Types of groups. There are different ways of talking about this but I’m not going to go into detail with all five of these. This is a fairly complicated breakdown. There are “Completely Cooperative” groups where students get graded together; they have to do everything together; they turn and one assignment. “Cooperative” is usually where students are working together but they work together and maybe turn an individual work. It’s kind of like collaborative work, that number three, “Helping Obligatory” – where the students have to work with each other; like in a laboratory setting, students have to set up the lab together; they have to do the lab together but they write up individual reports.

“Helping Permitted” is more where students take individual exams but they work in a group inside a classroom and if one of them doesn’t understand something, they are allowed to help each other. “Peer Mentoring” is just where more experienced students are in a class and they only work with the student in a mentoring relationship where the students are really working much with each other, within a group.

So, let’s start talking about some the decision points. You need to know how many people you want any age group. Critical decision – I’m going to go through the decision tree to help you make some sense of how many you want in each group. Another decision point – do you want a heterogeneous grouping or homogeneous grouping? Do you want all students that have similar majors, similar interests, similar grade points? How do you want to group students? Do you want to do the grouping? Do you want to allow students to group? And if you do group, do you want them random – where you just throw names in a hat and pick them out – or do you want to assign them? Obviously, if it’s random it’s going to be a heterogeneous grouping, but you possibly run the risk of getting a homogeneous grouping. So if you don’t care about heterogeneous verses homogeneous, maybe you want the random. If it’s assigned, you need to think about how you want to assign them.

Critical decision point with your groups – do you want students to do outside-of-class work or do you want to only do it in class? Or do you not want to do any in class and only outside of class? You’ve got to figure out how you what your students working in groups because the clearer you are, with how you expect the groups to work, the better the students will be able to understand what their expectations are.
We need to define formal verses informal. A formal group is a stable based group. This is either assigned or that the students sometimes self-select — although I don’t recommend that, and we’ll talk about that in the decision tree. Now you’re looking at students in a group that meet with that group throughout this semester. So it’s kind of a continuum, that they start and they go all the way through the semester in that grouping. The informal is where you’ve got lots of different students in any given class. Some are here; some are here, the next class you rearrange. Some people call this the kickball strategy, where you say, “Hey, let’s count from one to ten,” and you go, “One, two, three, four, five, six, seven, eight, nine, ten,” have every student remember their number. All the ones up here, all the tens back there. So informal groups have a lot of benefit and there are different goals affiliated with informal groups than with formal groups.

So, grading. Do you want a grading individually? Do you want to assign one grade? Do you want Completely Cooperative or do you want something more collaborative where, maybe, there are individual grades but the students still work together? You have to answer some of these questions before you ever start getting into group work.

Composition. Okay? Two, three, four, five – we do have different reasons for this. I’m going to talk about this a little more when we get to the decision tree. Let me just introduced that too is good for pairing and sharing. You introduce a concept. You ask students to do something and you ask them to share with the person next to them. It doesn’t require students to move; it doesn’t require really any special arrangements on your part. It just asks students to sit there and talk a little bit. They can interview each other.

Interviews are like editing — where you’re doing, maybe one-on-one peer review, each student reviews the other’s papers. Three or four is where you’re doing more group editing; where you have more of a group project or, possibly, a stable based group that’s solving problems throughout the semester. Greater than five, I don’t recommend for much more than brainstorming — where you bring students together just to think about ideas and generate some ideas. More informal role-playing where students will each take a particular role. So if they’re members of a team of lawyers or a board of trustees and each of them gets assigned particular roles, that’s where you sometimes need more than five.

So, let’s go to the decision tree. This decision tree is on your handouts and what I’ve done is just given you some simple questions to ask yourself based on those decision points? The first question I think you should ask is — will the same groups meet throughout the semester? If the answer is yes, in their formal based groups. If no, if you don’t want groups throughout the semester, then they’re called informal and let’s start with the informal because that’s a little easier.
If you’re doing informal groups, will students meet outside of class? If they do— if you expect an informal group to meet out of class – then you’ve got to have a group size no bigger than four – three to four, ideally. You have to be able to have them be able to arrange their schedules to meet together. If you have less than three, all of a sudden you’re not really focusing as much on a group. You still want different ideas coming together.

You do need to have a clear rubric. You need to tell students exactly what they’ll be graded on so that there’s not the fear of loafing. I’ll tell you up front that one of the major fears that students have in groups is that they’ll be doing all the work. That someone else is going to be a freeloader. There are some great ways to assign students responsibility for grading each other at the end of a group assignment. So you may need to do that but if you have a rubric, at least students now what their being graded on.

If the answer is no, students won’t meet outside of class, now it’s a lot less important for you to make sure you’re doing group size. Now it’s just a matter of convenience. “I have 60 people. I’ll make them into groups of 6 and that’ll give me 10 groups.” So it can be random – the kickball strategy works here. You can just give in class instructions. You don’t have to worry about making formal rubrics for in class.

If you move to the other side of the decision tree – will the same groups meet throughout the semester?. If the answer is yes, they’re formal based groups. Will students meet outside of class? If the answer is no, you can have a slightly larger group. The students are going to come to class. Now you might want five members in each group, because one member might not be present and you still have groups of four. You can do assigned or random. Now assigning becomes a little more important because it’s a formal based group. You may want to worry about some of that heterogeneous grouping. I’ll tell you that one of the things that I like to do, in chemistry groups, is to put students together by major. I don’t worry about their grades, but I do worry about what majors they are and I make sure can never put three of one gender with one of another. So not three males and one female; not three females in one male. If I’m making a mixed group, I put two and two, or three and two if it’s groups of five. You can do in class instruction if you’re doing this inside of class work.

The last decision point there is – yes, students will meet outside of class and they’re formal based groups. Now, group size of three to four is essential. You do not want large groups. You need to have the students work together. You need them to have them be able to work together efficiently and effectively throughout the semester. You better assign them. You do not want students picking their friends at this point because there is more of a tendency to forget who’s doing what. You don’t have the assigned roles because they’re friends and they already have those
roles taking care of. If the students don’t know each other, they are more likely to fall into roles that are functions of the group only. You definitely need to have rubrics – you have to have a clear set of grading criteria for the students.

So the decision tree, I hope, will help you. At least try to get through the thicket of all the different types of group, when you need rubrics, when you don’t, how big the groups should be.

Let’s talk about grading before we wrap up here. There’s two types of grading; there’s low stakes and there’s higher stakes. Low stakes grading can go with informal groups. You can do a pass/fail; you can do a low number of points. You just want to make sure the students have some obligation for actually getting together and doing the work. In a formal group, though, I can’t emphasize enough the need for rubrics. You also need to think about giving students a chance to assess each other. The last two pages of your handout, right after the decision tree, are a guideline for getting students to assess each other. It’s fairly long but it is available on the website that I gave you. I would suggest you go to that website to get some ideas for how to let students assess each other. I think it’s just too important to not do – to ignore. Students want to know; if they’re in a group that there’s going to be a fair grading criteria applied and you want to relieve some of that anxiety that students have with groups.

I’m not going to go through and tell you all of the ways for individual verses group grade. I will tell you that individual grades are a lot easier because then you know that students are responsible and that you’re going to assess them individually. But group work is important. There’s a changing paradigm for groups, so you may want to get students to work together and challenge them to get those skills – which means a group grade, but now that accountability is essential.

So in conclusion. If I’ve done anything, I hope I’ve convinced you to at least try groups. Please read some of the literature that I’ve provided. Use some of the ideas that we’ve talked about in here. Try groups. Make sure you have clear goals so that you know what you want the groups to do. You don’t just what groups for groups’ sake. And please, make your grading policies as clear as possible. You cannot get away with just telling students, “Oh, we’ll figure out how you’re going to be graded.” You need to have clear rubrics – please, your group works will be much better.

I will end by thanking you. There is a survey. Thanks a bunch and good luck working with groups.

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