

1: Team-based learning | Center for Teaching | Vanderbilt University

Teaching LARGE Classes We generally think of large classes as including students or more. But whether you have 50 or 1, students, if your class feels big, there are important design considerations that promote a successful learning experience for all.

Theoretical basis Patricia Hrynchak and Helen Batty provide an excellent analysis of the theoretical basis of team based learning. The teacher is a guide to facilitate learning. Learners should encounter inconsistencies between preconceptions and new experiences to provide a basis for development of new understandings. A focus on relevant problems accompanied by group interaction promotes learning. Team-based learning is consistent with all of these elements. The teacher establishes the learning objectives and chooses the problems on which the students will focus but then acts as a guide while teams work toward their solution to the problem. A careful choice of problems can help reveal common student misconceptions, and the constant interaction and debate among team members allows learners to compare their current understandings with those of other team members and to construct new understandings. Group interaction and a focus on relevant problems is an inherent element of team-based learning. Finally, team-based learning provides several opportunities for reflection: Team-based learning is one version of a flipped classroom, which is supported by a study by Richard Hake. He found that students taught with interactive engagement methods exhibited learning gains almost two standard deviations higher than those observed in the traditional courses. More specifically, team-based learning has been shown to produce learning gains in a variety of healthcare education classrooms. A selection of those studies are described here. Levine and colleagues incorporated team-based learning into a psychiatry clerkship curriculum, replacing half of the lectures with TBL activities including readiness assurance tests and application exercises. Following implementation of team-based learning, students performed significantly better on the National Board of Medical Examiners psychiatry subject test. They also scored higher on attitudes about working in teams and reported the team learning activities to be more effective learning strategies. Students exhibited higher mean scores on questions that assessed knowledge of content learned via TBL than on questions assessing content learned using other methods. Importantly, students within the lowest quartile showed the greatest gains: Zgheib and colleagues investigated the impact of team-based learning for second year medical students in a pharmacology course. They found that team-based learning approaches were more effective than traditional lecture-based pedagogy for improving student learning of difficult concepts but were not more effective for easier concepts. Where can I learn more? The best source of information about team-based learning is the Team-Based Learning Collaborative website. References Hake R. Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. American Journal of Physics. Hrynchak P and Batty H. Applying educational theory in practice. Transforming a clinical clerkship with team learning. Teach Learn Med. Using team-based learning to teach pharmacology to second year medical students improves student performance.

2: Workshop: Using Team-Based Learning in Large Classes

team-based learning (TBL) in any class, but especially in large enrolment classes, where smooth logistics are essential. The text is based on a lecture and workshop.

Built on the principle of hierarchical concept organization in chemistry and math, the system asks students diagnostic questions to locate their areas of mastery and then tailors subsequent steps to build on existing knowledge. This list, while far from exhaustive, is intended to suggest starting points for online tools that may improve learning in large classes. Conclusion Ultimately, we do not need to choose between superficial or minimal grading and a grading system that leaves us and our TAs overwhelmed. With the right strategies and techniques, we can both give our students frequent feedback, graded and ungraded, while still maintaining some semblance of a social life. These teaching assistants are often tasked with grading in large classes, but they come to that activity with vastly different conceptions of what effective grading looks like and how one can grade effectively in a reasonable amount of time. Likewise, teaching assistants come to our classes with different teaching skill sets and life experiences. Some of them are mature, effective teachers, while others are preparing to teach their first class. In our large classes, these issues are often amplified by the large number of TAs that we may require. How do we ensure that our TAs are all on the same page and doing their jobs well? Grading One common undergraduate complaint in large classes is with regard to inconsistency in grading. Can I change sections? So how do we ensure consistency and mitigate undergraduate charges of unfairness? Have regular grading meetings! The best way to promote grading consistency among our TAs is to meet as a group soon after collecting an exam or paper. If one is grading essays, identify and photocopy an exemplary essay, a few mediocre essays, and a poor essay and distribute these essays to each member of the group. Prior to the meeting, have each TA grade and comment upon these essays. At the meeting, go through each essay one-by-one. Ask each person what grade they gave to each essay and why. Ask them about the best and worst aspects of each piece of writing. It can serve to calibrate expectations for the exam or paper. The meeting can also serve as a forum for us to explain our expectations for the exams or papers. A carefully designed grading rubric can both minimize the amount of time spent grading, an important consideration in large classes, and serve as a common standard for our TAs. We can even enlist TA support in constructing a grading rubric. Such an exercise can be valuable to TAs because it facilitates the grading process, but it also gives them an opportunity to play a major role in student assessment, a valuable experience for those TAs who hope to teach courses of their own at some future time. It also gives us a new and unique perspective on class exams, papers, and assignments that may ultimately enrich the course. Divide up grading sections. We can better ensure consistency by assigning different grading sections to different TAs. This is more challenging with essays, but is a common approach for exam-grading. What this technique entails specifically depends on the makeup of our exam, but for example, perhaps one TA grades the short-answer section, a second TA grades the first essay, and a third TA grades the second essay. Handling Grade Complaints In most classes, large or small, grade complaints are inevitable. However, the issue can become more pronounced when a couple of upset students becomes a dozen or more. How can we best deal with grading complaints? Have a formalized system in place. Instructors of large classes approach grade complaints in a variety of ways. Some insist that undergraduates come directly to them with their concerns. Others suggest that undergraduates speak to their TAs first before consulting the professor. Still others give full authority to their TAs to handle all grade complaints. The important thing is that we have a formalized system, preferably outlined in our syllabus. Students should know what is expected of them, and what their options are if they feel that they have been graded unfairly. Tell students upfront what the protocol will be. Require complaints to be written out and submitted. One common technique to avoid frivolous grade complaints is requiring a written explanation of the complaint at an early stage in our protocol. Oftentimes, upon starting this piece of writing, undergraduates with a visceral reaction to a bad grade will see that the grade was deserved. Sometimes, students simply see the bad mark and seek out the instructor, rather than reading and mulling over grader comments. Institute a hour rule. What that means is that students are required to take hours before contacting the TA or professor

with a grade complaint. Just as with grading, TAs come to discussion-leading with different levels of expertise. Some will be at home in the classroom. Others will be terrified to speak in front of their students. Some may be independent-minded and will desire considerable control over what happens in their classrooms, and others may require strong guidance. Thus, before we get to know our undergraduates, we ought to get to know our TAs. These meetings can serve many purposes. Ultimately, how much control we want to exert over our discussion sections, lab sessions, or review sessions is up to us, but setting aside a time to meet with our TAs is valuable because it provides professor and TA alike with a support structure in which everyone can talk through issues relating to the class.

Dealing with Cheating

Cheating is a common problem in college courses big and small, but in large courses, it can be particularly difficult to identify cheating when it happens. So what can we do? Be upfront with our expectations. Nevertheless, not a year goes by without a professor at a major American university being accused of plagiarism. Given that fact, the students in our often freshmen-heavy large courses are even less clear on what we mean when we speak of these concepts. If students are allowed to work on homework assignments in pairs or groups, are they allowed to hand in comparable or identical assignments? How do we want students to cite sources in their papers? Is a works cited page required? As the instructor, we need to anticipate such questions. Upon handing out a paper or homework assignment, we ought to have a conversation with students about our expectations. Ideally, we should put those expectations in writing on the syllabus or handout sheet, so that students have something to which they can frequently refer. Putting those expectations in writing also helps should we ever need to charge a student with an Honor Code violation to the Honor Council. Some instructors even choose to dedicate early class time to giving their students a tutorial on cheating and plagiarism. Proctoring can seem basic: However, there are some aspects to proctoring that are easily overlooked. For example, it can be difficult to observe students when they are wearing a hat that covers their eyes, so many professors require that students either remove their hats, or put their hats on backwards. Another often overlooked feature of proctoring is the need for at least two proctors. Randomize the blue books. In many of our large classes, students use blue books for exams. Students are typically asked to bring these blue books with them to class on exam day, especially in large classes where the instructor would have to pay a considerable amount of money to provide all students with exam booklets. Some students see this as an easy way to cheat: Of course, there is an easy way around this problem. Ask students to hand in their blue books as they walk in the classroom. Shuffle the blue books, and then re-distribute them to students randomly. Perhaps the most traditional way to cheat on an exam is for a student to copy off of his or her neighbor. The easiest way to avoid this is to hand out different versions of the exam. We can, however, shake up the seating arrangement. For example, one common technique is to require students seated in the back few rows to switch with those students seated in the front few rows. This can prove logistically challenging with a large class and a limited amount of time, but if we have a couple of minutes to shake the students up, it can do a lot to prevent exam takers from cheating. Switch up our exams each semester. Designing tests can be a time-consuming affair. For that reason, some instructors use the same test questions year after year. While this is tempting, it is not advisable if we hope to prevent cheating. Some fraternity and sorority houses, in particular, keep files of past exams for a variety of courses. Change exam questions up each semester to prevent some students from having an unfair advantage. In large classes, we may not have as good of a sense of our students and their writing, so what can we do to stop plagiarism? Provide students with clear instructions. Many of our students are inexperienced when it comes to citing sources. How do we want them to cite their sources? Will parenthetical citations suffice? What citation style is preferable? Do we require a bibliography or works cited page? Answer these questions in a handout or in the syllabus. So we caught a student cheating. There are a number of ways that we can approach an Honor Code violation. Take the issue to the honor council.

3: Team-based learning - Wikipedia

Team-based learning (TBL), an evidence-based instructional strategy, is an excellent student-centered approach to teaching that emphasizes application of knowledge in a small group setting. Come and learn how to incorporate TBL into your teaching whether you teach a small class or a large class.

Reduce the time spent on administrative matters; never have to deal with scratch forms and clickers. Outstanding tool for face-to-face, web-blended and fully online TBL courses! The time-consuming process of peer evaluation becomes a thing of the past with instant collation and tabulation of feedback. Peer evaluation is incredibly valuable but can be an administrative nightmare. InteDashboard allows students to enter in qualitative and quantitative feedback on teammates easily which faculty can share with students on an anonymised basis with the click of a button. Import students and questions directly from Excel; add a course or export grade reports within seconds. The administrative challenges behind TBL are often viewed as a major barrier to effective implementation. InteDashboard is the only technological solution that puts it all together, allowing the faculty to focus on creating the learning environment- not fumbling with papers, grading and pulling data from different sources. Students get real-time feedback on tests, resulting in higher learning outcomes. Intedashboard really is the premier solution in this category. Extend time on tests, randomise test answers and point spread. Ability to get real-time data on RAT test items during teaching and save this information i. Particularly easy for the students to engage with the platform for the first time. Soe Moe, Professor Easy to navigate and uses a very creative point-spreading system. Provides an accurate and effective way to test students. It also marks quizzes and lets students know about their performance immediately. It could be very useful for students. It should be adopted in all educational institutions " Student - National University of Singapore "Made the administration of TBL much more smooth and efficient. It was easy to use and navigate for students, faculty, and staff. The randomization of the answers sequence for the IRAT lowers the likelihood of cheating. Student responses have been recorded without any glitches. After getting used to the interface, it has been very positive.

4: Teaching Large Classes | Center for Teaching | Vanderbilt University

Team-based learning (TBL) is an interactive teaching method promoted as an alternative to traditional lectures. TBL was implemented in four large second year classes in a baccalaureate nursing program but the implementation process was found to require much more effort than indicated in the literature.

They should be set at a suitable level for the students of the course. Clarification session[edit] After taking both the IRAT and TRAT, students will have the opportunity to raise points of clarification or question the quality of multiple-choice questions in the tests. Instructors can then address the questions and facilitate a discussion regarding the topics and concepts covered. Application exercises[edit] Finally, students work in teams to solve application problems that allow them to apply and expand on the knowledge they have just learned and tested. They must arrive at collective response to the application question and display their answer choice in an e-gallery walk in the classroom. Instructors then facilitate a discussion or debate among teams to consider the possible solutions to the application problem. Peer evaluation[edit] This last stage is an optional component of the team-based learning process. At the middle or end of the course, some faculty members do a peer evaluation for their teams. Students can assess the performance of their teammates using software. According to Michaelsen, [6] "most of the reported "problems" with learning groups free-riders, member conflict, etc. Students are accountable for their pre-learning and team work. Team assignments should promote learning and team development. Students must receive frequent and immediate feedback. Benefits[edit] Team-Based Learning has been suggested to help students who seem uninterested in subject material, do not do their homework, and have difficulty understanding material. TBL can transform traditional content with application and problem solving skills, while developing interpersonal skills. Learning how to learn, work, interact, and collaborate in a team is essential for success in this kind of an environment. According to a study done by the Washington University School of Medicine , individuals who learned through an active team based learning curriculum had greater long-term knowledge retention compared to a traditional passive lecture curriculum. Evidently, faculty of professional schools are thus directing their focus towards developing application and integration of knowledge beyond the content-based curricula, rather than simple course objectives such as simply memorizing a concept. Controlled studies of initial implementations of team learning have shown increases in student engagement and mixed results for other outcomes. TBL is often compared to the traditional one-way lecture format that does not develop those skills in students. On the other hand, TBL can engage students and provide an environment of collaborative learning and discussion. TBL is resource efficient. In digitally-enabled classroom settings, the use of TBL cuts the amount of paper used for the lesson. Instructors also do not need to prepare the materials in hardcopy and can easily make changes to the questions to be discussed in class, remotely or on the go. Since most of the learning happens in the form of discussions and feedback sessions in class, unnecessary paperwork is left out of the equation altogether. In addition, instructors can gather data on the performance of a class and automate student grading. Academic[edit] Team-Based Learning has been gaining traction in academic institutions, especially in the field of medicine in the US.

5: Kristen Hessler, Ph.D. - Team Based Learning in a Large Class | ITLAL

The goal of this review is to highlight the key elements needed to successfully deploy team-based learning (TBL) in any class, but especially in large enrolment classes, where smooth logistics are essential.

6: NEA - Team-Based Learning

Team-based learning (TBL) is an interactive teaching method promoted as an alternative to traditional lectures. TBL was implemented in four large second year classes in a baccalaureate nursing.

New York approach Nicet the red book Teach Yourself Gaelic Dictionary (Teach Yourself) The lovely bones novel Wolfowitz : the practical idealist The bloody road to Panmunjom Critical literacy as resistance Microsoft lumia 640 user guide Carolina Early Learning Activities Grunt mary roach Bulliet Earth And Its People Volume Two Third Edition Plus History Student Research Passkey Plus World Hi Protestantism, secularization, and the welfare state The Degradation of the International Legal Order? Popular medicine in thirteenth-century England When in the World Will the World End? Perspectives from the past volume 1 5th edition Cpt previous year question papers with answers STARS deployment update and FAA operational evolution plan review Solita and the Spies Drink entire : against the madness of crowds Ray Bradbury Bright Ideas Science (Bright Ideas) Delhi by khushwant singh Cannabis cultivation business plan Doctrine of native depravity Pensions in the U.S.S.R. Politics in the developing world 4th edition Techniques of soul alignment Ccdp arch study guide First week of Lent : living more deeply in Christ Blue Oyster Cult Cult Classics Imitation of live and televised models by children one to three years of age Lg hbs 700 manual Dream makers on the Nile Loan application letter format Report upon United States geographical surveys west of the one hundredth meridian, in charge of Geo M. Wh Arkansas Made: A Survey of the Decorative Mechanical and Fine Arts Produced in Arkansas, 1819-1870 Volume Linda Bloodworth Thomason Destination Prince Edward Island The Chelidonium complex 4. How to measure program implementation.