

HONEY, WHERE'S MY ELECTRON?

A Guide to PLTL and Peer Mentoring



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Introduction

Dear SAM students,

Welcome to Seminar of Academic Mentoring, Fall 2018 edition! You have been chosen to be PLTL Leaders and Peer Mentors, and you have a very special mission: to help students in General Chemistry learn how to navigate the road of General Chemistry and succeed. Pretty easy for people with superpowers like you! Right?

No, this is not easy! And we did not choose you because it would be easy for you. We chose you because of your demonstrated leadership and sense of responsibility, commitment to learning and collaboration, and proof that you made a successful transition into college. You are role models for your students. More importantly, you have gathered experience through failure and success, and were able to turn it into a positive outcome while learning long-lasting lessons along the way which you will use throughout your career and life. Now, THAT is a superpower.

We take the Peer part of our programs to the ultimate level, therefore the SAM course is here to help connect you to your peers and students as you develop your skills as a PLTL Leader/Peer Mentor. In SAM, we rely on each other as a source of knowledge and wisdom, as well as the advice from experienced PLTL Leaders/Peer Mentors who were in SAM last year.

The Fall 2017 SAM students chose *The Incredibles* for their book theme. Since we are upon the recent release of *The Incredibles 2* (the movie came out in June 2018), the themes of the first movie (which was released in 2004!) are resurfacing and being remembered by many people. Throughout this SAM book, we will explore the themes of *The Incredibles*, as they relate to important aspects of your first-semester experiences as PLTL Leaders/Peer Mentors. Throughout all, remember that your identity is your most prized possession. Unlike *The Incredibles*, we need your PLTL Leader/Peer Mentor identity to not be as secret. We want you to be proud of being part of this wonderful community, as you help new students navigate the transition to college and succeed in Gen. Chem. Let's begin.

1st session and Collaborative Learning Strategies (CLSs): "After all, I am your biggest fan"

In this section, our PLTL Leaders/Peer Mentors discuss ways to start the semester off in the best way possible, how to use facilitative talk and silence to help you throughout your session, and how to learn from mistakes and successes alike.

To start us off, **Khalid Mahmood** recommends getting comfortable with silence, and to occasionally mix things up by playing games in the middle of a session.

In case that you are feeling any doubts about your start as a PLTL Leader/Mentor, **Jessica Rosenblum** reminds you that you belong as a PLTL Leader/Peer Mentor, because you "all slayed Gen Chem". She also recommends that you start your sessions off with excitement, and to come off as a peer rather than an authoritative figure.

Kate Simpson recommends that you start off by planning: "make a list of everything you want to do and say at the beginning of your session". And as you use the pairs CLS, remember that you have a whole semester to make improvements to how your pair your students.

As a follow up, **Rinat Tal** shares the suggestion to make sure that students are comfortable working together, therefore ice-breakers are useful to get everyone to know each other.

As demonstrated by *The Incredibles*, we can do our best work when we work together. The

first sessions are the prime time to help establish the environment for collaborative work that will continue throughout a semester. However, there is always time to improve and reset the environment if needed.

Types of students and more complicated CLS: “Everyone is special, Dash”

Indeed, everyone is special. **Pooja Belur** recommends that you spend time assessing your students’ personalities, and she gives great examples of how to use the CLSs to “maintain balance in the class”.

Andrea Buscescu suggests using “Hybrid learning strategies” to help facilitate the session while handling students with different personalities. **Michael Liu** agrees and states that “you have the power and flexibility to let the collaborative learning strategies cater to the group dynamics in your own sessions”.

Helene Miles shares her strategy of keeping “an ongoing document on my computer that I’d fill out after each session to describe how the group did that day and noting which students seemed prepared and those who seemed to be struggling a bit more”.

Finally, **Tess Nienaltow** gives examples of how to use round robin and scribe in ways that all students get to participate, and **Maddy Yaggi** provides suggestions on how to use the physical space and objects, such as a stuffed animal, to help maximize everyone’s participation.

Using the CLSs appropriately, and creatively, will help you ensure a successful facilitation of your PLTL/Peer Mentoring sessions.

Growth Mindset and Exam debrief: “Be elastic; We Survived but We’re Dead”

The chapter about growth mindset is important because we will discuss how to encourage students to learn from the academic challenges they face.

Emily Carnes points out that “Growth mindset is all about resilience” and it “allows the mind to flourish and stay hungry to learn more”. **Sam Grillo** builds on these ideas by stating that “as your students grow in confidence, they’ll be more willing to make mistakes. This is actually great, as mistakes highlight areas where your students still need help, and it can provide an opportunity for other students to jump in and help their peers”.

Andy Xu makes you aware that ALL students need to adopt a growth mindset, even the ones who are doing well in the course. In the same line of thought, **Jiayi Hu** encourages you to have a growth mindset as well by “jotting down the ideas that stand out to you. Taking notes will not only help you stay more engaged, but it will also provide you with more ideas to add to your pool”. You will also make mistakes in your sessions, and your facilitation methods will evolve as you pay attention to what works best for you and your students.

The time of the first Gen. Chem. exam can be very stressful to students. **Nikki Menis** mentions that she shares her personal experience with Gen. Chem. exams, to help encourage students and also so they know that what they experience is normal.

In general, adopting a growth mindset can help everyone navigate the semester more smoothly. As PLTL Leaders/Peer Mentors, you can set an environment to help your students adopt a growth mindset. We will explore this in more detail throughout SAM.

Emotional support and mid-semester slump: “It’s a Marathon, not a Dash”

In this section, the PLTL Leaders/Peer Mentors focus on the importance of everyone’s well-being, including yourself.

Gaby Altman reminds you that “It is really important to make sure you take care of yourself so that you can perform this job properly. To be a good PLTL Leader/Peer Mentor you need to come to PAM prepared and make sure that you are present at your sessions.” **Mindy Bernstein** agrees by stating “I find that practicing self-care and recognizing that college is more than just school are necessary for making the most of one’s WashU experience”.

Clara Henkes recommends that you try to “be understanding and empathetic toward your students! Make sure to tell your students about your own struggles with staying motivated throughout the semester”

James Jin gives suggestions on how to help students think of ways to re-vamp their study skills, so that they continue with the momentum of the semester. And **Kate Wasden** warns you that students may come unprepared to sessions, therefore you will have to make sure to show enthusiasm for being there.

The suggestions from this section of the book will help you deal with the inevitable mid-semester slump. You will also discover techniques that work specifically for you and your students. It might seem daunting at first, especially because you might also be going through the effects of the slump yourself. Do not despair, though! Just as we learned from *The Incredibles*, when the time comes, you’ll know what to do.

Ending on a strong note: “Whatever You Do, Don’t Stop”

The final section of this book includes strategies for the last few sessions of the semester. As is bound to happen, attendance may dwindle during the last weeks of the semester. **Max Hershey** reflects on how having a small session can actually be beneficial, because that provides an opportunity to get to know students very well “and they felt comfortable amongst each other”.

When you are a sub for another Leader/Mentor, **Sam Margolis** recommends that you contact them to “ask about group dynamics”. He also recommends that you make sure to prepare well for the last sessions, to help students stay motivated throughout the end of the semester.

Megana Vasu reminds to continue having a growth mindset, use the CLSs in different ways to help you facilitate the session, and to continue displaying excitement for learning so that your students also get enthusiastic.

Above all, *The Incredibles* teach us that it is important to stay true to yourself. The PLTL Leaders and Peer Mentors who wrote this book recommend that you do the same.

We want you to remember that we are a community, ready to help each other succeed. We look forward to working together, and finding that electron in incredible ways.

Here we go!

Best wishes for this semester!

Dr. Gaby Szteinberg and Mani Raman (Class of 2018)

You Sly Dog! You Got Me Monologuing!

By Khalid Mahmood

First off, congratulations on becoming a peer leader or peer mentor! If you're reading this before your first session, you're probably a bit nervous about it. But don't worry: You were chosen for this position. You belong here. Plus, you'll get into a rhythm soon enough, and like anything else in life, you will improve with practice.

One of the keys to a good first session is to set the right tone from the start. You'll want to do names, and I like to ask people to include a couple of other bits of information to share, such as hometown, potential major, and favorite BD station. As an icebreaker activity, I have had success asking students (*if they are comfortable*) to share the last text message they sent, and the context if it is appropriate. This creates a more relaxed environment, where work can get done but people are friendly and mistakes are not punished.

I would recommend introducing a few basic ground rules. I ask that students respect each other, and keep their phones away for the duration of the session, but let them take a quick 5-minute break in the middle of the session. Students may also be annoyed that you cannot give them the answers, and that's okay. For now, you should tell them that the purpose of PLTL is to gain confidence in problem solving, not to get the right answer to any specific problem. If they continue to attend, they will learn firsthand.

The toughest skill for most leaders to learn, including me, is to be comfortable with silence. For example, when going over the PLTL philosophy, I intentionally did not pick anyone to read, and simply asked if someone could start us off. As expected, no one offered immediately, but someone did start reading after several seconds. *This will feel like a long time!* To you it will feel like awkward, soul crushing silence, and you'll want to fill it with words. Be careful not to start monologuing in these situations. To your students, it just feels like silence, since the spotlight isn't on any of them. My go-to strategy is to count to 7 seconds in my head, and after that, I would pick someone. It almost never gets to 7, and someone will volunteer, whether it is for reading the PLTL philosophy or contributing to a solution for a problem. Have faith in your students: They may not want to contribute right away, but more often than not, they will end up saying something worthwhile.

As I mentioned earlier, a key to a successful session is to set a good tone at the beginning. Playing music can help, and one of the other leaders has compiled a list of chemistry related songs that can be found on Blackboard. I have also played a quick game with my students in the middle of sessions to mix things up, called Standing Ovation. One person leaves the room, and everyone else comes up with a simple task (sit in a specific chair, write on the board, etc.) and the person has to figure out what they must do. The closer they get, the more people applaud, until they give a standing ovation when the person has completed the task.

Last but not least, make sure to email your group regularly! Although they rarely respond, it's a good way to keep students engaged. I try to bring food every week, and I make sure to mention that in my emails, as incentive for students to show up. The first session is never easy, but you are more than capable of leading it. Good luck!

How to Lead an *Incredible* First Session

By Jessica Rosenblum

Hi there! If you're reading this, you're probably preparing for your first session of Peer Mentoring or PLTL. Let me just preface the rest of my entry by mentioning that as I am a Peer Mentor, some of my advice might seem to be specifically tailored towards the new peer mentors; however, I believe that everything I have to say applies to all of the new PLTL leaders as well.

If you are a living, breathing, WashU student (which all of you are), you're probably starting to get nervous about how to become the world's best mentor/leader overnight. That's where we come in! First, I'd like to remind you that you were chosen for a reason; most likely, your own peer mentor or PLTL leader noticed your potential for leadership and your knack for explaining difficult concepts to your peers in a respectful, understandable manner. None of you are here by accident! Need I remind you that you all slayed gen chem?! You are all extremely hardworking, intelligent, and passionate members of the WashU community, and with some hard work and the right tools, you all have the potential to become excellent mentors and leaders.

Now that you've been deeply inspired by my words of wisdom, let's move onto the logistics. While I may have quieted some of your insecurities, you're probably still wondering what the first day of mentoring/PLTL is going to look like, and what you should do to prepare.

As you prepare for your first session, you can never be sure what your students are going to be like. There is one trick that can ameliorate almost any sticky situation on day one: food! For my first session I bought my group donuts from target. I also decided to bring what I called "participation candy." I brought a bag of Hershey Kisses and a bag of Starburst; I planned to give a piece of candy to any student who participated in any sort of way. On day one, encouraging participation is huge. Day one is where you have a blank slate; you have a huge role to play in how the group dynamic plays out for the rest of the semester.

Group dynamic is probably one of the most important aspects of these sessions. Something I want to point out is our role as *peer* mentors and *peer* leaders. We are not professors; we are peers using our knowledge to facilitate the learning of students who may not even be one year younger than us. In fact, I had a student in my session who had taken a gap year, and it came up in conversation one day that because of our birthdays she was actually a few months older than me. Weird, right? I bring this up because I want to keep stressing the importance of an effective group dynamic, and you are a key part of this group. Approaching these sessions with the attitude of a WashU student excited to get to know another group of WashU students can get you a lot farther than taking an authoritative, leadership role from day one.

On the first day, as my students trickled in I asked them their names, introduced myself, and asked them to make name cards, so that we could all learn each other's names as quickly as possible, which is really helpful for fostering a comfortable learning environment. Don't hesitate to ask them to do this for the first two or three weeks; the

sooner you can all learn each other's names the better. As they started arriving but we were still waiting on others, I just asked some of them how their weeks had been, and maybe some general questions (where do you live on campus, where are you from, etc). Once everyone had arrived and made their nametags, I introduced myself (what I'm studying, where I live on campus, where I'm from, what I'm involved in, etc.) and then proceeded to talk about the peer mentoring philosophy. It's important to stress the idea that this is a space where students can feel comfortable asking any questions; there are *no stupid questions* in peer mentoring or PLTL! The more comfortable the group is with one another, the more likely students are to get their real fundamental questions asked and answered. After that, I would suggest doing at least two, maybe three icebreakers. I chose two truths and a lie, and also just had everyone go around and say their name and hometown and dorm at WashU. I also like "rose, bud, thorn"; you say something good that happened in your week (rose), something that you're looking forward to, (bud) and something bad that happened in your week (thorn). I think this could be a great way to get students talking to one another about their day-to-day lives. I would say that all of this chatting and icebreakers should take a good 20-30 minutes. After 30 minutes, you're ready to start your actual chemistry material.

I know this all sounds like a lot of time, and maybe a bit too much socializing for an academic study group, but it really is worth it. My group made a groupme early on (which they wanted me to be in, but I declined (you probably don't want to leave yourself open to 3am Gen. Chem. questions the night before the exams)). My students used this to meet up outside of our group to help each other with problem sets, and some of them actually became real friends, which I think is great. Peer mentoring/PLTL can be a space to foster learning and collaboration, but also a space to facilitate new friendships among your students, most of whom will be first years and most likely will not yet have many real friends when you meet them.

In terms of moving onto chemistry, this is where our roles as leaders and mentors differ. PLTL leaders, you have a bit more direction; at this point you'll begin to guide your group through their very first PLTL packet. As for peer mentors, you have a lot of artistic license with how you want to structure your sessions. This can be both the scariest and the best thing about peer mentoring. For the first session, I would suggest going over Dalton's postulates, and definitely going over the three experiments in a systematic way: (how were they conducted, who conducted them, what were the conclusions, which results proved which conclusions, etc.). In preparing for my sessions, I relied a lot on my peer-mentoring notebook from freshman year because I found it to be a really great way to outline my sessions and to get an idea of how much material I could potentially fit into a two-hour session.

About halfway through your session, this is where I'd usually take a ten-minute break, chat a bit, and, for peer mentors, go over the tip sheets. This ten minute break is a great way to continue getting to know your students, allow them to air some thoughts out, and rejuvenate some new energy to get through the second half of the session. I also use this time to encourage students to ask me any random questions about WashU life; from day one I stressed the fact that while I'm there to help them succeed with chemistry I'm also there as a peer resource in the WashU community, someone they can come to with general questions or concerns. Encouraging and answering these questions honestly is

another great way to get to know your students, for them to get to know each other, and to foster their overall success as WashU students.

After this short break, you'd continue with the chemistry material, and before you know it the two hours have flown by! You've done it!! Congrats on completing your first session! I'm sure you'll do a great job, and that you'll learn something from each session that will make the next one even better. Just remember—you were chosen for a reason! You are going to make a great mentor, leader, and role model for your students!

Your Incredible First Session

By Kate Simpson

Firstly, congratulations on becoming a Peer Leader/Mentor! You made a great choice by joining this program, so look forward to a great semester working with some awesome students. As you look forward to your first session, the best advice I can give you is to make a list of everything you want to do and say at the beginning of your session. You'll have so many things to tell them, and if you're like me, you'll forget half of them once you're up in the front of the classroom talking to them. Make sure your list includes a compilation of introductory questions for your students (name, year, home town, and a good icebreaker), your favorite things about PLTL to share with them, rules for your session (bathroom breaks, phone policy), and key information on the PLTL philosophy and GenChem in general.

Then, the real fun begins as you dive into the packet and try to figure out how to facilitate all the different collaborative learning strategies. One collaborative learning strategy that can be a bit difficult to use at first is scribe. Asking students to scribe can be scary for both the peer leader and the student being asked. I always offer to take notes for my students, and once my students realized that scribing resulted in them receiving nicely organized, detailed notes written by their leader, I had a lot more volunteers to be scribe. Scribe is a great learning strategy because it gives you the chance to sit to the side and watch your students work together as a large group, but at the same time, you get to listen to every step they take and provide guidance when they get stuck. Scribe really makes you feel like a team. Just remember to let them struggle a little before you chime in; you'll be amazed by their ability to get back on track without your help.

Another important collaborative learning strategy is pairs. I remember when we were first told about the importance of carefully assigning pairs, I doubted that I was capable of such careful planning and feared that none of my assigned pairs would work out. Firstly, remember that every student in your PLTL group is very capable, so no matter what, every assigned pair will end up okay. Nevertheless, even after working through just one problem with your group, you will inevitably notice that some students seem to talk more than others and that some students seem to have a stronger conceptual grasp of the topics while others are quick at calculations. Noticing these small details is all you need to assign great pairs. Plus, you have 10 more weeks to perfect these assignments.

In short, lead with confidence and have fun – it's going to be a great semester!

Starting Your Group Off Strong

By Rinat Tal

First of all, congratulations on becoming a Peer Leader or Peer Mentor this year. You should be proud; that is a huge accomplishment!

I'm here to hopefully help your first few sessions go as smoothly as possible and to give you tips on some of the Creative Learning Strategies you will be using throughout the semester.

Even before you arrive at your first session, I would make sure you are as prepared as you can be with the material you will actually cover for the week. This will ensure that you'll be comfortable enough with that part of the session and you'll be able to focus on getting to know your students as well.

I would recommend doing a few games or ice-breakers at the beginning of the session, followed by one that you might do at the beginning of each session for the rest of the semester. You could start with something like two truths and a lie, "I have a link," or something else to make your students laugh a little bit and get more comfortable. If you want to do something every week, you might want to think about something like "highs and lows" or "roses and thorns." Something like that would be different each week and would likely have to do with things that every student can relate to, bonding your group even more. I didn't realize the importance of getting your group comfortable with each other until a few sessions in. Not only does it make the sessions more fun for your students, but it also makes it easier for you to facilitate a group when they are willing to share their ideas. Making sure the group members are comfortable with each other is also essential to making sure that everyone understands the concepts. Students are more likely to raise their hands and admit they don't understand something on the board when they know their group members well.

Once you've gotten past the ice-breakers and started the packet, there are a few strategies you can use to facilitate the group to work in the way that they learn best. I'll talk about two of those strategies here, the first of which is "Round Robin." Round Robin is when you go around to the entire group, and each person can say one idea before the next person speaks. This can be really useful when you have a dominant student who is making it difficult for others to participate. You can also combine it with other learning strategies! You can have one person (or yourself) be the scribe, and have the group go around in a circle and tell the scribe what to write on the board. You can also have the group work in pairs, and then ask the pairs to go around and explain how they solved the problem. This way, they get to talk through the answer together, but reviewing the problem involves more than just one person summarizing what they did.

Next, having the students work in small groups is pretty much what it sounds like. Sometimes, though, "small group" problems can turn into individual work if your students don't actually talk to each other to figure out the problem. Again, this is another reason to make sure that they are familiar with each other from the beginning. One way to combat their silence, though, is to suggest not writing anything down for the first 30 seconds or a minute. They can talk through how they think they should solve the problem, and some concepts that go along with it. Then, after the time is up, they can write down their work and calculations and be more likely to keep talking to each other.

I hope these suggestions were helpful! Remember to be confident in yourself, especially on the first day. You'll be great!

Mr. Incredible: Dealing with Strong (Dominant) Students

By Pooja Belur

Congrats on being a PLTL leader! By now you're probably a few weeks into sessions and starting to get a sense of where your students are at. A large part of each session centers around the types of students in your group and how their personalities contribute to the overall dynamic. Students can fall anywhere on the range of quiet to dominant. It's important to assess the personalities of each of your students, so you can make sure that every student is equally contributing; not just the quiet or dominant ones should benefit from the learning environment.

You can use the collaborative learning strategies to your advantage to help with all the different personalities. I, personally, can attest to strategies that really helped me with my dominant students. This semester, my PLTL session was very talkative on average; there was one student though, who often dominated over the whole group. Her parents were chemists and she was an aspiring major, so her contributions were helpful. However, there were times when she worked too fast for the rest of the class.

Three collaborative strategies that really helped me maintain balance in the class were round robin, and scribe. Scribe was a particularly useful strategy—I would often have my dominant student play scribe. This way, she would give other students the chance to contribute. Conversely, when I knew a question was tricky, I would have another student play scribe, because I knew she could help guide the class through the right conceptual process.

Round robin, intuitively, is also great if you have a dominant (or quiet) student, because it ensures that all students talk. One problem that arose was that my dominant student would start sharing her entire solution when her turn came up. To minimize this, I started the round such that she was the last to participate, making sure everyone else spoke too. Another thing that I found helped keep the contributions even was mentioning at the beginning of the question that everyone could only contribute a word or short phrase.

Finally, for small groups, I would pair my dominant students together, so that they could all work through the problems together. Then, when everyone came back together, I would have them write their answers on the board and—assuming there was consensus—ask the quiet groups to explain the answers. This way, everyone felt that they had the chance to participate, but I could still have the quiet students speak.

There is no one solution that works for every group. The best advice that I can give is to observe your group dynamics and mix and match the strategies you try. You never know what strategy will click with your group!

"Go, confront the problem [student]. Fight! Win!"**By Andrea Busicescu**

As you become more comfortable with your group throughout the semester, you will quickly learn what type of student each member is – and, inevitably, there will probably be at least one “problem” student. PLTL is a program that nurtures growth and every student is welcome to take advantage of this wonderful resource, but its success depends upon the philosophy. When students don't abide by the philosophy, it becomes much more difficult to effectively facilitate a community of scholars, so it's important to be equipped with good strategies to tackle these tricky situations.

If you're not sure whether there's a challenging student in your group, consider this: is there somebody that consistently creates a negative group dynamic, violates the PLTL philosophy, and overall makes the learning environment less productive? If there is a certain person absent from the group, does the group dynamic change positively without them? If you answered yes to any of these, you've got a problem child on your hands. You may not know who this person is yet after only a few sessions, but in time it will become readily apparent and you must be prepared to handle it. Often, these students aren't intentionally disruptive, but all the same they hinder the progress of the group and this must be addressed.

Majority of the time, these kinds of students are quite dominant in the group. They talk over others to get their answers out and don't give the other members a chance to voice their thoughts. This silences the opinions of the rest of the group and leads to diminished participation from the other members, taking away a learning opportunity for everybody else. Again, this may not be intentional; some students are just so eager to show off what they know that they start speaking before you've even finished asking the question. A good strategy to overcome this is to make the challenging student the scribe and to strictly enforce the “no talking” rule. Unfortunately, if the student doesn't respect the learning strategies, they may continue to talk even when they scribe, so it is your responsibility to keep them in line, despite how uncomfortable it may be to call somebody out. One big problem I had with my student was that even after I reminded them not to talk, they would just start writing on the board on their own accord without waiting for input from the group, again discouraging everybody else from participating and taking away the necessary struggle to the answer. If this becomes the case, consider holding onto the piece of chalk until the group gives a clear, precise answer that they want on the board, and only then giving the scribe the chalk to write once more.

Hybrid learning strategies can also be a helpful tactic in these situations. Often, there isn't just one learning strategy that works well for a given problem, so it's okay to combine multiple strategies into one! In context of the difficult student, a good strategy is Round Robin/Scribe where you have each student come up to the board and write something or you have a traditional scribe, but rather than large group discussion, you have each member participate. This forces everybody to contribute and ensures that there will be equal discussion among the stronger and weaker group members. Another good one is Small Group/Scribe where you have students break into small groups and you take away their writing utensils. The students then discuss in their small groups and once they've come to a consensus, they send somebody to write it up on the board. This may be annoying for them, but as Dr. Szteinberg says, “it's so good for them!” Again, this forces collaboration among the group members and ensures that nobody is working ahead of the

rest of the group.

Overall, challenging students can make it hard to effectively lead your group, but if you tackle this problem early on, the group dynamic won't suffer at all. You just have to remember that while it's hard having to call people out, it's a necessary responsibility as a leader if it means improving the quality of your session. And remember, that no matter how difficult these situations can get, you are *incredible*, and you have the capacity to be a super leader/mentor!

Deal with the special ones in a less obvious way**By Michael Liu**

First of all, I want to congratulate you on completing your first few PLTL/Peer Mentoring sessions as a peer leader/mentor! This is just the beginning of an exciting and rewarding journey. That being said, it is perfectly normal for peer leaders/mentors (even for returning leaders like me) to face challenges that could arise at certain times in a semester. In this essay, I want to give you some insight on a common issue encountered by many new peer leaders/mentors.

By now you have probably started to notice that some students in your group are more active (or dominant as we usually call it) or quieter than others. The quiet students may feel uncomfortable speaking up if the dominant students are contributing too much. We sometimes have to use certain strategies when facilitating the session so that the group dynamics don't fall apart because of different personalities of the students. Remember, you have the power and flexibility to let the collaborative learning strategies cater to the group dynamics in your own sessions. To ensure equal participation from dominant and quiet students, you could try to have the dominant students to act as scribe so that they are not participating in the discussion, for example. You could also pair the dominant students together when splitting the students into pairs or small groups. Both strategies could leave more space for quiet students to express their ideas.

However, since there may be only a few dominant students in your group, always having the dominant students to act as scribe or always pairing these dominant students together may seem too obvious and the dominant students might feel singled out. This is when we need some "less obvious" strategies to deal with the dominant and quiet students. One possible way is to combine pairs with round robin. Before beginning a round robin, you could first have the students discuss the problem in pairs without writing anything down (ask them to put their pencils on the desk). You can then start the traditional round robin. This method could help even out the unequal participation in a traditional round robin problem because having some time to talk about the problem with their neighbor before speaking up in front of the large group could prevent embarrassing the quiet students and turning them away from the process.

Another good way to "tame" the dominant students without being too obvious is to use the round robin strategy in a clever way – start the round robin at the side of the table that is not where the dominant student is, so that the dominant student has no opportunity to speak until the very end. If the dominant students speak up before their turn, you are not going against them by stopping them because you are simply enforcing the rules of the round robin strategy. Also, feel free to use any of the strategies above during concepts review before each question to prevent the dominant students from going straight through the answer of the problem (it could happen!).

Hopefully my advice gives you some inspiration on how to resolve the issue of unequal participation in your group. Dealing with dominant and quiet students could be awkward sometimes, but remember what you do is for the greater good of the whole group. In the end everyone should feel comfortable to contribute regardless of their personalities.

We get there when we get there!**By Helene Miles**

Are you feeling pumped after your first peer mentoring session? Are you feeling a little overwhelmed because there were so many different personalities in the room? Are you unable to even describe how you're feeling because at this point your first session was such a daze that you can't even remember what you were talking about in the front of the classroom? Well, have no fear! No matter how good or how not so good you're feeling about how your first few sessions went, rest assured knowing that finding your groove takes its time and that this will vary from mentor to mentor and leader to leader.

One of the most beneficial things that you can do during your first few sessions is beginning to take note of which students are dominant or quiet, which ones willingly participate, which ones are quiet but know what they're doing and so on and so forth. I found it super helpful to keep an ongoing document on my computer that I'd fill out after each session to describe how the group did that day and noting which students seemed prepared and those who seemed to be struggling a bit more. This way, as the semester went on, I was able to pick up on patterns and trends amongst my group members and better prepare for my sessions by knowing which students I'd put together during small groups or who I'd choose as the scribe.

Mixing up the collaborative learning strategies definitely helps keep the students more engaged, and although they sometimes seem more useful for PLTL sessions, there are some great ways to incorporate them into peer mentoring as well. One strategy I really liked was putting my students in pairs before beginning a problem and having them take two minutes to talk out how they were going to approach the problem without writing anything down. I found it useful in that it gave the dominant students the chance to vocalize their thinking, which is a great way to reinforce material, while also giving quieter students the chance to participate without putting them on the spot. Another strategy that worked well for my session was a combination of small groups and scribe. I would split the room into two groups, let them work for an appropriate amount of time, and then have one member from each group write out their work on the board while another member from each would then explain what the group did to solve the problem. Often times the two groups would solve the same problem in two different ways, so not only did this strategy display both methods for all the students to see, but it was also very collaborative and helped involve multiple students at once.

No matter what, remember that learning how to become the best peer mentor or PLTL leader that you can be takes time, but if you stick with it and adapt to your group, the sooner you will feel like you have the hang of it! The more I shared personal stories from my experience in Chem 111 or general stories from my time at WashU, the more my group members were willing to share about how they were doing and the more they bonded with each other. In the end, it is super rewarding to see your group come together – it was definitely the highlight of my first peer mentoring experience.

Not all heroes wear capes: Navigating the different types of “heroes” in your Group**By: Tess Nienaltow**

By now, you have probably gotten a feel for your group's dynamic. You have noticed that some students are much more outgoing, contribute much more frequently, and command a certain type of presence when addressing the group. You have also noticed that other students are more reserved, will not speak unless addressed directly, and do not ask questions, even when they are clearly confused. This is all normal. Most groups have a range of different types of students, and in order to maximize each student's learning potential, the leader must learn how to effectively navigate their session so as to address every student's needs. I will talk about a few methods you can enact during your session in order to create a better balance between the contributions of the dominant students and the contributions of the quieter ones.

First, very simply, when doing round robin, you can start with a student sitting on the opposite end of the dominant student so that the dominant student isn't the first person to speak, ensuring that others get a chance to contribute. Secondly, something I like to do very frequently is, after the entire group has made their way through a problem, I ask a specific student (typically a quieter student who hadn't contributed much while we were actually tackling the problem) to summarize what the group did and how we got to the final answer. Having the student verbalize all of the information that was just presented to them helps to ensure that they fully comprehend the problem, gives them the opportunity to ask questions to the group, and also allows the entire group to very briefly go through the problem once more before moving on. Thirdly, I tend to combine the scribe and round robin problem-solving strategies. Typically, scribe leads to the dominant student telling the scribe what to write on the board while everyone else sits in silence, or, multiple dominant students are speaking at once, and it can become quite chaotic. In this combination of collaborative learning strategies, you still assign a scribe, but instead of answering the question as a whole group, you use the round-robin strategy in order to ensure that everyone's voice is heard. Lastly, I also tend to combine round robin with pairs. I give each pair about 30 seconds, pencils down, to talk about how they might approach the problem before going around in the circle for round robin. This helps to diminish the anxieties associated with round robin, and helps the quieter students prep before having to speak in front of the entire group.

I think that by observing and analyzing your group's dynamic, you can choose to implement some new, combined collaborative-learning strategies that will engage all members of your group. Being hyper-aware of each student in your group and knowing how they best learn will help you create a safe and productive learning environment for all.

Why Am I in Charge, Again?

Special Case: Two Dominant Students

By Maddy Yaggi

First off, I wanted to congratulate you on making it through your first session as a PLTL leader! It is an amazing and well-earned privilege to be a part of the program. If you are anything like me, its likely that your first session consisted of trying to remember everyone's names, multiple ice breakers, and groans from confused students who just found out you can't tell them the answers. Now that the first week jitters are over, it is time to settle into your new role as a leader rather than a participant and learn about all the different types of students and collaborative learning strategies. By now, you have likely been introduced to the types of students and collaborative learning strategies either through this book or through SAM. Because of that, this essay will focus on the how to deal with a special case that deviates from the regular PLTL session model, that is having more than one dominant student in your group.

During the first couple sessions, it may seem like a relief to have dominant students in your group. The sessions start quietly and no one really knows each other so the group ends up being thankful that someone is talking. However, as the sessions progress it will soon become clear that dominant students may accidentally highjack the session if given enough agency. Although dealing with a single dominant student is complicated enough on its own, the issues that arise only increase with the presence of more than one dominant student. During the beginning sessions while you are still figuring who works well together it can be helpful to mix up seating arrangements. If your multiple dominant students fight with each other or talk too much when sitting next to each other, "randomly" mix up the seating arrangements of the room to maximize the distance between the dominant students. That way you maintain control of the situation while still appearing as though you are merely going with the flow.

During the beginning sessions, I also found it extremely helpful to follow the collaborative learning strategies exactly. Being sort of strict during the beginning sessions helps to both reinforce the PLTL philosophy and show the students what is expected of them during the session. You can always become more lenient as the sessions progress. It is harder, however, to become stricter. Alternating between dominant students as scribes and enforcing that the scribe cannot participate helps to give other students a chance to participate without making it seem as though you are picking on one student. As well, during round robin I found it helpful to enforce that every person must talk once before someone can talk twice. I did this at the start of my sessions with a stuffed animal that was passed around the group. Other leaders have done similar things with napkins or pencils. Enforcing this again helps to encourage participation from other students who may get looked over when the dominant students begin talking. You can also manipulate small group and pairs problems to help encourage equal participation from everyone. If your dominant students get along, paring them together effectively ensures they will not dominate other students' conversations. If you choose to do this, it is helpful to have probing questions prepared in case the dominant students finish the problem early. You could also have the dominant students write their work on the board if they finish early. If your dominant students do not get along and you have to pair them with quieter students, it can be helpful to have a quieter student summarize the method of solving the problem or write the group's work on the board to ensure they are participating as

well.

I hope you found at least some of this advice helpful. I know that leading a PLTL session can be overwhelming at first. It important to remember you were specially selected for this job and you deserve to be a leader. Good luck with the rest of your sessions!

"Never Look Back, Darling. It Distracts from the Now."**By Emily Carnes**

Congratulations on being chosen to become a PLTL leader! You have successfully made it through two semesters of General Chemistry with flying colors, and have gained a large amount of experience to show for it. With that being said, don't be afraid to share that. See to it that your students begin to love chemistry just as much as you do! Both you and your students will find this enriching and it will make PLTL more enjoyable for everyone.

Throughout the semester, you may find that your students are not completely motivated every time they come to PLTL. They may be bummed from a previous chemistry exam, tired from a busy week, stressed about other exams, or even just plain old distracted. One way that you could fix this is to remind your students of the benefit of a growth mindset and why they are participating in PLTL in the first place. Growth mindset is all about resilience; the way a student thinks affects how they react and how they improve after an evaluation (in this case, an evaluation by you, the PLTL leader!). Whereas a fixed mindset does not allow for intellectual growth, a growth mindset allows the mind to flourish and stay hungry to learn more.

Facilitating the growth mindset within your students is where you come in, and what you say to them directly affects how they think. Make sure you emphasize to your students at some point (or often, if needed) throughout the semester that the goal every week at PLTL is supposed to be to make progress and improve, rather than master every single detail. Encourage them to believe that there is always room for improvement in study habits even when it doesn't seem so, and that it's up to them to utilize resources like you, RPM's, help sessions, etc., to capitalize on that. Help them to remain confident in their abilities however you can—be it cookies, nice words, a warm hug, whatever—and make sure they realize that perseverance is the key to a successful experience. The reason your students signed up for PLTL is to learn new ways to solve problems and to learn problem-solving thinking, not to obtain specific answers for specific questions. It was helpful for me to constantly express this because it gave my group some added perspective on the program (which helped them truly appreciate why they were there, even if they didn't understand it in the first place). Hopefully it helps you too!

Eventually, your students will begin to follow along the more you emphasize this and they will begin to care more about concepts as a whole and how to go about thinking of them as opposed to demanding specific answers. Most importantly, make sure you and your students are enjoying your time together in PLTL, since the more you enjoy it, the more everyone will get out of it. Good luck the rest of the semester!

Keep on Being Incredible

By Sam Grillo

Hey! First of all, congrats on becoming a PLTL leader. You've probably heard this plenty of times by now, but being selected for a PLTL leader/Peer Mentor position is no small thing. It shows that you not only have a good understanding of General Chemistry, it also shows that you're capable of working with and helping other students learn and grow during their time in Chemistry 111. One of the best ways to help your students is by using the growth mindset when leading your sessions. No doubt you've heard about growth mindset a lot too, but this technique can be surprisingly effective for all types of students.

Growth mindset is one of the best methods for helping out students who are becoming discouraged with the material, or who have otherwise convinced themselves that they'll just never be good at chemistry. However, growth mindset is often just as effective at helping the students who manage to stay on top of the material. One of the main tenants of growth mindset is that students tend to learn best when they're pushed beyond their normal comfort zone. This means that even when a student is doing just fine on the problem set, it's usually a good idea to try and push them even further in their answer. Ask them about the underlying reasoning behind the answer, or ask a probing question which wasn't directly asked in the problem set. The students may at first be worried by this extra line of questioning, but they'll probably be grateful for it when the time comes for them to take the test. After all, the tests generally like to ask complex questions which require a deeper understanding of the material than is addressed in the problem sets.

Growth mindset can do more than just help your students to do well on the tests. Applying growth mindset to your group can even make your sessions run more smoothly in the long run. No doubt you've begun to identify students who are somewhat quieter than the rest of the group. Often, these students understand the material exceptionally well, yet they're simply too nervous to share their answers. If this seems to be the case with any of your students, be sure to prompt them with further questions. Answering these additional questions directly is almost certain to boost their confidence, which can lead to them speaking up even more during the sessions without the additional prompting. If participation or attendance do drop off during the mid-semester slump, having another student willing to contribute to your session will certainly be welcome. Even better, as your students grow in confidence, they'll be more willing to make mistakes. This is actually great, as mistakes highlight areas where your students still need help, and it can provide an opportunity for other students to jump in and help their peers. Overall, using growth mindset to push students out of their comfort zones can definitely help your students and your sessions.

The Incredible Growth Mindset

By Jiayi Hu

The growth mindset isn't only meant for your students; it's meant for you too! Even if you feel like you've come to understand your group dynamic and gotten a hang for being a leader by now, there are still immense opportunities for growth available.

First, make sure you take full advantage of SAM. All the discussions, essays, and in-class activities aren't meant to busy you with work; they're meant to facilitate reflection and give you the tools you need to improve your sessions. For starters, try looking through other discussion posts besides your own—oftentimes, other leaders are experiencing many of the same problems you are, and reading a variety of responses can provide you with a large pool of ideas to try. Another good idea is to take full advantage of in-class discussions and activities by jotting down the ideas that stand out to you. Taking notes will not only help you stay more engaged, but it will also provide you with more ideas to add to your pool. Trust me, it may seem like you won't forget a discussion while you're in the middle of it, but in a couple weeks, you'll wish you had written down the best ideas.

Second, make the most out of your interactions with fellow leaders and with instructors. Whether you interact with them in a more formal setting, such as during a SAM discussion panel, or in a casual setting outside of PLTL, you'll find that they have a lot of useful tips and advice that come from personal experience. One of the greatest improvements I made during my first semester of peer leading was inspired by a panel of senior leaders and involved stopping my habit of carrying my peer leader packet while checking in on small groups and instead walking around emptyhanded. By doing so, I was not only able to focus more on my students and how they were doing, but I was also able to model to my students what not focusing on the answer looks like. After implementing this change, I noticed a dramatic decrease in the number of times my students would ask for the answer, all thanks to that one panel. Another great tool for fostering a growth mindset was one that I picked up from my year's SAM book: asking students "what do you think?" rather than answering their question or having another student answer their question immediately. By asking this simple question, students are encouraged to think for themselves and become more invested and interested in chemistry, important components of developing a growth mindset.

Third, observations are a great source of growth. Whether you're the one doing the observing or the one being observed, there is so much to be learned. When you're observing others, you have the opportunity to see how other peer leaders foster a growth mindset, handle difficult situations, encourage their group members to work together, and run their sessions. You also have the opportunity to generate ideas that you can implement in your own sessions and improve them. Similarly, the feedback that is generated from observations of you also provide areas you can grow in and ways that you can improve your sessions. New ideas and sources of growth are everywhere—you just have to keep your eye out for them!

For me, one of the toughest parts of being a peer leader was enforcing the PLTL program rules regarding attendance. One week in the middle of the semester, one of my students brought a friend who could no longer make their own sessions, and I agreed to let them join my group. However, after realizing that it was unfair to other students who didn't receive similar accommodations, I had to tell the student that they could no longer attend my sessions. It might

be difficult to play this role and perhaps be seen as mean, but remember that you were chosen out of hundreds of students for this job and that the PLTL rules and philosophies work best when everyone adheres to them. Embracing the growth mindset isn't always easy, but it's always worth it!

We're Dead! We're Dead! We Survived, but We're Dead!**By Nikki Menis**

Your students just took their first gen chem exam, and their angst is tangible. You can see it in the way they arrived ~just on time~ to your session, in the way they picked up this week's packet, and obviously in the way they talk about their exam. If the session after your students' first exam goes anything like mine, many of your students will not be particularly pleased, and they will probably want to talk about the exam with the other students. The famous statement of "but last's years exam was SO much easier!" will probably be thrown around a few times.

While you should not minimize their experience and you should definitely empathize with their concerns, it is crucial for you as their peer leader to redirect this negative energy. You can let them talk about the exam for a bit amongst themselves, but at some point, you should jump in and emphasize the growth mindset. A lot of students catastrophize the situation, and they falsely believe that if they do not do well on this exam, that they do not belong in the class. They may further spiral, believing that because they did not do how they wanted to, that they will not be successful in the class. In order to combat this type of thinking, it is important to show your students that you indeed can bounce back from a hard test, and they still have the potential to do amazing in the class. It may be a good idea to remind your students that the class is out of over four-hundred points; at this point in the semester, they will have taken around three quizzes, so if they drop the first exam and two of the three quizzes, only ten points have been accounted for. Therefore, nearly all of the points in the class would still be up for grabs!

When I led this session, what I think helped the most with changing my students' perspective on the first exam was sharing my personal experience with them. A lot of your students will incorrectly assume that just because you are a PLTL leader, you must have gotten an A on every single exam, which is very rarely the case. After they talked about the exam for a couple of minutes, I told them that I dropped the first exam as it did not exactly go how I wanted it to go, and I really used the first exam to learn how to study more effectively for the second exam. I looked at what kinds of questions I struggled with, and where I went wrong while studying; thus, when the next exam came, I was much more prepared and confident.

In case you have any students that are still feeling incredibly discouraged or defeated, it would be best to offer to talk to any students that still have concerns once you have completed the packet. For students that feel as though they are incapable of improving, refer them to one (or more!) of the many resources available for this course. Cornerstone is definitely an option, but another great option is referring that student to Dr. Daschbach, as she meets with students looking to improve study skills specifically for Chem 111. There are also study skills workshops that are proven to raise exam grades!

At the end of the day, it's okay for your students to feel a little disappointed, but it's your job as a peer leader to try your best to convince them that they have so much potential for growth.

P.S. It never hurts to bring cookies or other good snacks this day to brighten the mood!

Do the Best that You Can Do

By Andy Xu

At this point in the semester, you should have a good idea of your group's dynamics and each of your students' individual personalities, strengths, and weaknesses. You might have students who are more or less on top of the material and are doing very well in your sessions. They may or may not be the dominant students of your group, but either way they will consistently demonstrate their knowledge by making good contributions to the problem solving process and helping the other students in the group overcome tough questions. Though these students may sometimes feel that they don't have much room to grow in PLTL, the growth mindset philosophy applies to these students just as much as it does to those who are struggling.

The philosophy of the growth mindset is very important to instill in students who are succeeding in PLTL, as they may start to fall into fixed mindset patterns of thought, where they may believe that they should be able to get all of the answers without putting in much effort, and that their natural abilities determine their success in school. Students who develop this mindset will avoid challenging themselves and will give up easily if they encounter problems that they cannot immediately solve. As a result, by making sure that strong students learn about and adopt a growth mindset, you can promote in all your students a point of view where challenges and failures are seen as important in developing greater success and knowledge.

When students do well in PLTL, remember to emphasize the thought process and effort involved problem solving instead of just the outcomes. Be mindful of what you say when you respond to students who give correct answers and good responses, as though they may seem inconsequential, they can affect how your students view PLTL and chemistry in the long run. When a student or a group is able to figure out a difficult problem after multiple attempts and a lot of thought, make sure they learn that they were able to succeed because of the work that they put in to solving a hard question. By saying things like, "Nice work" and "Good effort" instead of things like, "You're really smart," you'll foster a sense of accomplishment in your students for making continual progress and persevering in the face of difficulty rather than only feeling good about learning when they can easily get the right answers.

Don't forget to continue challenging your students by asking probing questions to solidify their understanding and making sure not to reveal hints too quickly while students are working out problems. If your group gets stuck or has to refer back to their notes and is discouraged, remind them that running into a tough question is an opportunity to develop new problem solving strategies and synthesize knowledge that is far more beneficial than just getting an answer to a PLTL question, which in itself is meaningless without the understanding of how it was obtained. Keep on pushing your group, and if you do have students who breeze through the packet, try to ask some harder probing questions to keep them thinking and putting in effort. By concentrating on the process of problem solving as well as continuing to push students to work with their own mental resources, you'll be able to develop a drive for learning and growth, not just results, in your most confident students and your group as a whole.

You are the Greatest Good

By Gaby Altman

One of the most important parts of this job, which is often overlooked, is making sure that you have the emotional support you need. At this point in the semester, as your students start having work piling up, you probably do too. It is really important to make sure you take care of yourself so that you can perform this job properly. To be a good PLTL Leader/Peer Mentor you need to come to PAM prepared and make sure that you are present at your sessions. During your session, your students should be your highest priority. Without the right self-care, you will not be able to prepare properly for PAM or be completely present for your students.

One way to support yourself is to ensure that you are keeping up to date with all of your classes and are not getting behind. Try not to let your work build up because then you will not have enough time to prepare properly for your session. If you are struggling in a class, that can cause you distress so don't be afraid to seek out academic resources to alleviate that stress. Cornerstone provides help for many other classes. Don't be afraid to reach out to your professor if you don't know what resources there are for that class.

If you have a lot on your mind, during your session you will not be able to focus on the material and you will be distracted. If you're distracted, you are not able to provide the best experience for your students. If you feel like this is happening to you, there are resources on campus such as SHS and Uncle Joe's which are available for emotional support. Many people need extra support so don't feel ashamed needing to use those resources.

You may also have students in your group that come to you about their own personal issues. While you are not responsible for solving their personal problems, try to be a good listener and suggest ways they can get proper help for that issue. Just like your mental health is important for teaching chemistry, your students' mental health is important for them to perform well in the class. Try to emphasize to your students the same principles I have explained to you here.

Lastly, if you are distressed by events in your session, don't worry. Luckily you have the time during SAM to ask Dr. Szteinberg, your instructor's assistant and your fellow peer leaders and peer mentors about how to handle the issue. It has been really comforting to have a great community of fellow leaders and mentors if I have an issues.

In conclusion, just like Frozone's wife, you are the greatest good, and don't forget it!

You Are Incredible

By Mindy Bernstein

School is tough. Especially at WashU, where everyone is constantly studying while trying to balance their 18-credit schedules and figuring out what job or research or classes they want to do over the summer, it's a really hard environment to constantly be around. Sometimes it can feel like we are living in a pressure cooker, and it is extremely important to realize that it is completely okay to take a break or ask for help.

As a PLTL leader, you are a role model and a source of support for your students. Gen Chem is a challenging and nerve-racking course, and a lot of students have a hard time. This is especially true for those first-year students, as they are just getting to learn how to be a college student, and a WashU student nonetheless. Therefore, it is so important to remind them that one bad exam grade is not the end of the world, and really emphasizing the growth mindset is very helpful for students. The first time that I really saw and felt my students having a hard time was after the first exam. I recall seeing some of my students on their walk back from the first exam, and even my most dominant and confident students looked so upset. This really struck me and brought me back to my first year when I took Gen Chem and how hard it was to transition my mindset from being happy with a score of a 94% to a score of a 75%. So, after the first exam, I reminded my students that they can drop one exam and that they should reflect on how they studied so they can improve their skills for future exams. I also found it very helpful to use a personal anecdote about how I, truthfully, did very poorly on the first exam in Gen Chem. However, instead of feeling like a failure and that I should give up, I pushed myself to do better and now look where I am! I'm a PLTL leader! This really helped them understand that one exam score does not determine your life's path. I used similar anecdotes of not understanding materials or doing poorly on quizzes throughout the semester to remind my students of this message that you should not compare yourselves to others and you do not need a perfect A+ to be proud of yourself.

Throughout the semester, I also saw my students struggle on a more personal level. I received some emails from various students throughout the semester that they would not be coming to PLTL but also provided specific and sometimes very personal reasons. I would also always begin my sessions by asking about their weekends or other things going on and sometimes my students' answers would mention some troubling things such as not sleeping at all or staying in their rooms the whole weekend. I was glad they felt comfortable enough to share these things with me, but there were also some things mentioned that made it evident they were becoming victims to the WashU pressure cooker that I mentioned before. Therefore, in order to help them stay healthy and happy, I would encourage them to attend events on campus, make plans with their friends, or even just try to get outside and maybe go to Forest Park. I think it is extremely important to convey that college is so much more than receiving education. In addition, I reminded myself to take my own advice and recognize when I myself needed a break, because although I am a peer leader, I am also still a student and need to take care of myself.

I find that practicing self-care and recognizing that college is more than just school are necessary for making the most of one's WashU experience, and I tried my best to remind both myself and my students of this in order to have the best semester possible.

We Can't Be Incredible All the Time

By Clara Henkes

Once fall break has come and gone, the semester often seems to drag on and on. Midterms are frequent and stress levels are at a nearly constant high. Both you and your students are likely sleep-deprived and counting down to Thanksgiving break already. However, it is important not to let the infamous Mid-Semester Slump dim your enthusiasm!

Your students will be able to tell if you aren't putting your best effort into PLTL/Peer Mentoring and are stressing out about other work or distracted during your sessions. Don't let your other work keep you from preparing well for each session. It helped me to think of PLTL as a break from my other work, so that I was fully present during my sessions and not thinking about the bio exam coming up that week. Don't forget that your students also have a lot of other work, and likely find it tempting to pass on PLTL/Peer Mentoring in order to have two more hours to study for another class or catch up on sleep. I think it is important to remind your students that PLTL/Peer Mentoring helps keep them on track and that by focusing during the two hours of PLTL/Peer Mentoring they will get the most out of their time.

During your sessions, you can try bringing food to boost morale or playing music during the first ten minutes while everyone is walking in to create a stress-free environment. If many of your students are all stressing about an upcoming Calc exam, it can be helpful to let them talk about the exam in the beginning of the session so they can let off some steam before the session begins and aren't distracted by it later.

If you notice that your students are losing focus during the sessions, I have found that related problems to exam material/questions usually perks everyone up. Once students remember that these questions are similar to those on the exam, they almost always become more focused. Also, remind your students where there have been struggles overall on past exams (usually on the justification questions) so that they put more effort into practicing those types of questions in the packet. By relating the packet to practicing for the next exam, students often feel better about spending two hours of their weekend focused on chemistry when they have a million other things they need to do.

Lastly, be understanding and empathetic toward your students! Make sure to tell your students about your own struggles with staying motivated throughout the semester. Your students will look up to you and will likely listen to any insights or advice you have from your experience so far at Wash U. Best of luck and don't let the Mid-Semester Slump get you down!

Your Dead Students that Survived but Are Still Dead

By James Jin

The honeymoon phase of the semester has come to an abrupt ending with midterms. At this point, your students probably have taken their first midterm and are looking ahead to next ones. You may notice your students are not as lively as they used to be, or you may just see some changes in the personalities of the students. Either way, the first exam can be a humbling experience for all and they will be more willing to listen to you. The shift in group dynamics compounded with all the commitments you have may seem incredibly overwhelming, like Dash in the middle of the sea, but you ought to keep in mind that you have made it through a semester before, and you can do this.

Before you focus on your group, be sure you have your life together first. It is ok not to have everything figured out at times; nobody has everything figured out. Still, you need to have your own head above water before saving anybody else. Be sure to do self-care. Go out with your friends, go for a jog in Forest Park, whatever makes you happy and be sure to share what works with you to your group!

Now how about some special cases you may or may not encounter during your mission as a peer leader or mentor. When students edge closer to getting burned-out, you may notice that they become less productive, or check their phone more often, or even fall asleep. That's right, face down on the table, out cold. I hope this does not happen to you, but if it does, just know, it has little to nothing to do with you. The student may have had three papers to do the day before or is dealing with a personal issue. Regardless of the cause, try not to call the student out or scold the student. Try to give your group a break towards the middle of the session because the average attention span is far less than two hours. I can barely make it through a 50 minute lecture. Also, you should check in with the student and simply show your concern and that you care. Suggest to the student to use an absence if the student feels incredibly awful and get some rest. The packets will always be posted to Blackboard following the sessions. If not, give some time management tips. Suggest a planner and tips towards using the daytime hours more effectively.

There are going to be times students approach you personally after a session. They may ask for clarification for a question or concept, or they will ask something more general. You will learn about how to direct student concerns in SAM, but sometimes a student will come up to you with something along the lines of this. "I've gone to all the office hours, seen my RPM every session, and done all the practice, and I am still not doing as well as I would like." The rehearsed responses you have may not apply. In this case, you should examine the student's study habits. What worked for rote-memorizing in high school may not work on Gen-Chem. Suggest some active-learning tips that stray away from memorizing problems and more towards understanding the general concepts and the story of the electron. If Dr. Daschbach still does her skills workshop, suggest that. Emphasize a growth mindset and do not let your students lose hope. They need to believe that they can do it.

Pulling Yourself (and your students) Together

By Kate Wasden

Mid-semester slump, the time of the semester where everyone feels overwhelmed, unable to focus, and generally stressed. Students may stop coming to PLTL, preparation levels might go down due to lots of work in other courses, and energy levels in the session might decrease dramatically. This is a difficult time to manage as a leader, but you can pull your group together and get through it all in one piece.

One major issue you may run into is students coming unprepared to sessions. They may be confused on the material and progress through the packet might be slow, and it is not until the last thirty minutes of the session you learn that no one has watched the course content videos for the week. It can be very easy for students to fall behind during this time in the semester when doing the ungraded problem sets and watching course content videos may simply seem like superfluous work, but these resources are crucial for their success. At this point in the semester, I would recommend sending out weekly emails reminding students of the importance of doing the problems and watching the course content videos. You may even have to have a talk about how PLTL really works best when students are prepared, and if no one is prepared it is a waste of two precious hours for everyone. This will hopefully get your students in the mindset of being more prepared for session so they can be as helpful as possible.

Once in sessions, energy and focus levels can be a huge struggle. I have had students come in and lay their head down on the desk, get distracted, and not participate at all. One way to help with this is for you to be enthusiastic as well! If you come prepared and excited about the material (which can be difficult if none of your students are energetic that week), at least some of that energy and enthusiasm will translate to your students. Another recommendation is to mix up your collaborative learning strategies. This can especially be helpful if your group is smaller than normal. I have found that one way to ensure students work together and stay focused is to assign people roles during small group or pairs, where one person will write the group's answer on the board and someone else will explain their answer. This will ensure every student participates and it is different from the "normal" CLSs. Another fun activity, recommended by an older peer leader, is to have each student put a napkin on their head during round robin, so once they have spoken, they can take the napkin off and only once everyone is without a napkin can people participate without an order. These two iterations are only a few of many, but switching up the learning strategies is a way to help students engage more as a group.

While the words of Edna Mode may be a little harsh (I would not recommend you yell "pull yourself together!" at your students), getting through mid-semester slump is difficult. With some enthusiasm and preparation, you and your students will be able to make the most of the session and make it through the slump!

Flying (in your cape) to the end of the Semester**By Max Hershey**

As the semester comes to a close, it is important to get over the mid-semester slump and also get your students out of this. I remind my students that there are still many points that can be gained after Thanksgiving, as Dr. Daschbach reminds us. This makes the students who are successful so far in the class continue to work hard and gives the students who may be struggling more hope!

As a Peer Mentor, I always take some time at the beginning of the session to try and motivate the students and make them more enthusiastic about the material. Even sharing a Chemistry fun fact or something along these lines can make them more interested, therefore leading to a more productive session.

In my experience so far, I have had extremely low attendance at my sessions. Peer Mentoring groups are generally half the size of a PLTL group and by the end of the semester, many students in my group either never showed up, moved sessions, or even dropped Chemistry. Having a very small group makes it more difficult to use the Collaborative Learning Strategies. One thing that I did in Peer Mentoring, which is pretty easy to do with very few people, is give a problem and have them come up to the blackboard and race. This seemed to motivate the students more (as they at least seemed to enjoy it) and also gave them a time pressure somewhat similar to an exam situation. Overall, having very few students in my session was great, as I got to know each of them very well and they felt comfortable amongst each other.

Good luck in your last few weeks as a Peer Leader or Peer Mentor and be sure to give students and yourself breaks throughout the sessions.

CONGRATS Dash You Did It!**By Sam Margolis**

WOW! You can see the light at the end of the tunnel and trust me so can your students. You got through the awkward first couple weeks, you 'dashed' through the midsemester slump when it seemed like the last thing your students wanted to do was study, and now you are here. Although it may feel like the semester is moving faster than Dash, you and your students are in a great mood and enjoy it. First congratulations, I am sure that you have probably read that hundreds of times already but genuinely being chosen as a PLTL leader ~20/800 is an honor and you are your group cruising is extraordinary, and you should be proud. While all of this is true and there is much to be proud of there is also a few things you can do to allow your group and the overall chemistry PLTL program continue to run smoothly through the end of the semester.

First, subbing is essential to allowing the PLTL program to run efficiently. I know its scary. But I am also sure it was scary for Elastigirl when the missiles were heading for the plane, and she had to grab her children and turn into a parachute to save them too. She did it for the overall good, and I believe that you will do the same for the PLTL program by subbing. You may have seen the emails flooding in with other leaders needing subs and often the end of the semester is most vital as many seniors and juniors may have interviews and the semester gets busy in general. Take them up. Be bold. Email back and sub. Next step after to have agreed to sub is to email the current leader and ask about group dynamics. This is vital. This will allow you to walk into the group and know what to expect from the students. After that subbing for a session is like your own. If you prepare well and have some fun with it, I believe that you will do great.

Second, you are going to need to start preparing more for these later sessions than you did at the start of the semester. Some of these topics are quite complex and to keep the group running smoothly and effectively with probing questions you need to understand the concepts of a deeper level. This goes along with your students need to put in more prep time. This may be hard because their assignments and exams are piling up, but the group dynamic works best when every student is most prepared. I recommend sending your group an email on Friday right after PAM that includes what they should review: CC videos, lectures and sheets, and any concepts you found challenging that you think they need to go more in depth on. This guidance goes a long way how your students prepare.

In summary, congrats on doing such a great job and keep up the amazing work I am sure you have been doing. Consider helping the program by subbing and make sure you and your students are on top of their work. Good luck and get ready to 'dash' on to Chemistry 112.

It's Showtime

By Megana Vasu

Congratulations, you've made it to the home stretch! You've grown so much as a leader, learned to deal with a variety of students, and instilled the growth mindset in your students. Getting through the difficulty of the mid-semester slump has helped you learn some new strategies in getting your students to work together, but sometimes, the challenge of group dynamics can continue. These final few PLTL sessions are the time to keep your students engaged in chemistry so that they stay focused and can close out the year with a bang.

One way to keep students interested during sessions is to combine collaborative learning strategies. This can also be particularly useful when the group sizes vary from week to week. A technique I found helpful when groups were small was combining small group and round robin. This way both dominant and quiet students can be placed into the same group and can contribute. When group size restraints cause it to be difficult to separate quiet and dominant student, this combination on collaborative learning strategies can allow both types of students to share their ideas towards solving the problem. Another way to engage all students, particularly when topics are challenging, is to combine pairs with round robin. If they are having difficulty coming up with ideas for getting the problem started, talking in pairs for a few minutes can give them a few ideas to contribute to the round robin circle. A final useful modification of collaborative strategies is you, the leader, acting as a scribe. This way, if the group has very few members, they can all contribute. Additionally, you can have the group add onto the problem in a round robin like manner if the dominant student is taking over. Using these modified strategies can help when group dynamics are inconsistent, so that students can effectively solve the problems.

Additionally, these last few sessions are the ideal time to remind students to not give up and continue having a growth mindset. With the last midterm and the final left, students can still drastically improve in the class and can learn from their difficulties on previous midterms to do well on the final. If you as a leader can continue to be excited about the material, students will also be more motivated to finish off the year strong.

I hope these strategies can help you through the final few sessions. PLTL is about adapting to new situations, and getting creative with collaborative learning strategies so that students can get the most out of their time, and are motivated to learn and love gen chem as much as you do! Good luck with the rest of the semester!