

Introduction by Sam Goetz, SAM Fall 2018 students, and Gabriela Szteinberg
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#### Introduction

Dear SAM student,

Welcome to your first semester as PLTL Leader/Peer Mentor! We are extremely happy to have you here, as part of our family of General Chemistry Supplemental Programs! You are about to embark on a very unique and important journey. Throughout this semester, you will develop your style as a PLTL Leader/Peer Mentor, as you work with students and help them navigate this semester. As a resource, this SAM book will be part of your guidance throughout the journey. The SAM students from Fall 2018 worked together to compile their best advice, for you to use during this and future semesters.

The theme that the Fall 2018 SAM students chose for this book is PLTL/Peer Mentoring Family Game Night! When playing board games with other people, it is possible to form alliances and enjoy time spent with friends or family; however, feelings of frustration, competition and uncertainty may run rampant as well. These feelings are not unique to game night, PLTL/Peer Mentoring students and even leaders/mentors experience these sentiments throughout the semester as well. You are prepared, and you have time to improve—that's what SAM is here for! And in the end, it's just a game!

We start our journey with the first section: Settlers of Chem-tan. This group's essays are focused on the first few sessions of PLTL/Peer Mentoring. The Fall 2018 SAM students reassure you that you have been picked to be a PLTL Leader/Peer Mentor for a reason. Although you may be nervous, you should have confidence and know that you have all the skills needed to succeed. This section covers a variety of topics relating to the first day. Some essays cover classroom management, like how to set up desks and chairs on the first day and how to present a good first impression to your students. In relation to the first day, many essays mention ice breakers and how important they can be in leading/mentoring not just the first session, but subsequent sessions throughout the semester. Other essays present a guide to getting a substitute for a session, whether it involves finding one or being one for the first time. Lastly, two essays cover the beginning of the new Leader/Mentor experience by talking about the importance of SAM and how it can help lead to more productive, effective sessions. This section's essays will help you build the foundation of your journey as a PLTL Leader/Peer Mentor.

Moving along, we encounter "This is chess, not checkers", the second section of the SAM book. Chess is a game of strategy, just like being a PLTL Leader/Peer Mentor. As you read this section of the book, the Fall 2018 SAM students hope that you will keep in mind that strategy and creativity may be needed to succeed when leading/mentoring. Additionally, the game of chess helps emphasize that both students and Leaders/Mentors come in a wide range of shapes and sizes, each with their own unique strengths and weaknesses, just like there are different types of chess pieces (the rook, pawn, bishop, queen etc...). The hope with this book section is that, as future Leaders/Mentors, you will understand that they you will have to be cognizant of the accompanying differences that individuals bring to the table, and you will have to work with those differences in order to lead the best PLTL/Peer Mentoring session.

As it is bound to happen, students will encounter setbacks. This happens to all students, including PLTL Leaders/Peer Mentors. In the third section of this SAM book, we have "Oh Chute! Time to climb up the ladder." In this section, the Fall 2018 SAM students have essays focusing on

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how to encourage students to bounce back after a difficult first exam, setting a growth mindset foundation and implementing it through the semester (especially during midterm season), and how to promote self-care for students. This self-care includes: talking about personal and academic balance, cultivating motivation through the mid-semester slump, and other very useful strategies for everyone to climb back the ladder and continue playing in the game.

The fourth, and final, section of this SAM Book is "Gen Chem Jenga: Try to keep it together." This book section was names after Jenga because it describes the middle and end of the semester as the game continues, it becomes easier and easier to topple over completely. However, careful planning can help you keep it together and preventing the tower from tumbling down. The same is true for the semester. It becomes easy for your students to lose hope during the middle of the semester and have difficulty finding the motivation to finish the semester strong. With careful planning on your part, you can end up victorious and prevent you and your students from falling apart. This section should be used as a guide when you notice your students are as not perky as they were at the beginning of the semester, and you yourself are having issues with staying motivated as a leader.

As you read this book, we hope it complements the conversations that we'll have together in SAM. This course has a very manageable work-load, so we hope that you will be able to use this class time to engage with the topics we are discussing. Feel free to jot down good ideas so that you can implement them in your future sessions. Participate, share what you have learned and experienced with the class so that everyone can gain from your insights and help you solve problems. Finally, ask questions. Use your peers and the instructor to help you on this journey to becoming an experienced PLTL Leader/Peer Mentor.

Remember that as a PLTL Leader/Peer Mentor, you have the potential to shape not only students' General Chemistry experiences but also their WashU experience. Use your position to help students become confident in their abilities to both ask and answer questions and to make them feel like they belong to the WashU academic and social communities. We know that you will do a great job, and remember, it's about the process and not the end result—see where it takes you and enjoy the game!

Sincerely,

Sam Goetz, SAM Alum and PLTL Leader, Class of 2019

SAM Fall 2018 Students

G. Szteinberg, Ph.D., Project Coordinator for General Chemistry Supplemental Program

## **Setting Up the Board for Success**

#### By Isabel An

Congratulations on being picked for a PLTL leader/Peer Mentor! You may be nervous for your first session but remember that you were picked for a reason. Get excited and make sure you prepare for your session tomorrow. Before your first session, you should e-mail all the members of your group with an introduction, information on the session (remember that some members of your group will be freshmen so including directions to the location is helpful), and other information you may deem useful (what to bring, topics to cover, attendance policy, 10-minute policy).

I suggest arriving about 5 minutes before the start of your session. If your session starts at 1:00 PM, arrive at the room at 12:55 PM. Students will start filtering in around 1:00 PM so you need to be there beforehand to set up the classroom. Depending on what room you're in, make sure you use the physical space to your advantage. With collaborative learning strategies such as small groups or pairs, it's useful to create separate spaces in your room so that these groups can work independently. For my first semester, I was in Gregg Seminar Room which has a bunch of tables congregated in the middle to form one long table. Before my session started, I always took two tables off and put them in the opposite corner so that when I split up into small groups, I could put one group there and keep one group at the table. In academic classrooms with desks, make sure you rearrange those into a more collaborative space, such as putting all the desks in a circle.

It's also important to do icebreakers during your first session. Yes, they're awkward and nobody will be enthusiastic about doing them, but power through! Ice breakers are especially important because they help foster a more comfortable environment for all the students. If they don't know each other well, they won't speak up to ask questions or feel comfortable making mistakes. Learning other names also helps you, the facilitator, engage the students better. I'd recommend doing ice breakers for *at least* the first two sessions. Don't forget to include yourself in the ice breaker, because the students need to get to know you as well.

Finally, the last important thing to do is to set expectations. The first session is crucial as it sets expectations for the rest of the semester. Most important of all is setting expectations for the PLTL/Peer Mentoring philosophy. You want to come off as a facilitator, not a lecturer. When students ask you questions, defer them to the group. It's important to start early in letting them know that the process and approach is more important than getting the right answer. This is also important with the collaborative learning strategies. This may be unfamiliar to a lot of your students and you need to set clear expectations on how to utilize them. For example, when using scribe, make sure that the scribe doesn't talk or write things on their own or when using round robin, make sure that the students don't speak out of turn or contribute too much of an answer.

Good luck on your first session! Hopefully, you have a good grasp of what you're going to do to help you prepare for it. One last tip: it never hurts to bring them snacks!

#### **Teamwork Makes the Dream Work**

### By Jelani Deajon-Jackson

Firstly, I want to congratulate you on the huge achievement of being chosen as a PLTL leader or peer mentor. This is a huge accomplishment, but also a huge responsibility. Fret not, you don't have to bear the entire burden of PLTL/Peer Mentoring on your own; the entire PLTL/Peer Mentoring family works as a team to provide the best possible support to Gen Chem students, and this fact is at its most apparent during SAM sessions. You'll soon find that SAM is more than just a 1-hour lecture; when used correctly, SAM can be an extremely helpful resource in fostering important discussions that will significantly improve your efficacy as a leader.

It's best to treat PLTL/Peer Mentoring like a game of Mouse Trap. In the game of Mouse Trap, players take turns adding pieces to what will eventually become an intricate mouse trap. Just like no one player has to complete the entire structure alone, the beauty of PLTL/Peer Mentoring is that no one leader/mentor has to solve every issue alone. Discussions with your fellow leaders/mentors often reveal methods they've developed on their own that can be easily and effectively applied to your own sessions. In PLTL/Peer Mentoring this often plays out as discussions within SAM about everything, from the best icebreaker to the nicest way to ask students to put away their phone. In each case it will be important to realize that each leader does not have to reinvent the wheel. By applying and working on top of solutions discussed in SAM, every leader is able to achieve more than if we all struggled separately.

Getting the most out of a SAM session requires that you actively participate in discussion. This can definitely be nerve-wracking at first; it's easy to feel like issues in your session are direct reflections of your own inadequacy. However, you'll soon see that every session and every leader has issues—many of your fellow PLTL leaders/Peer Mentors are likely wrestling with the same issues you see in your own sessions! In fact, there have been many weeks in which I dejectedly recount an issue in my latest session during SAM, just to be met with two or three people who have faced the same issue and have come up with interesting solutions. These discussions allow me to quickly garner solutions to major issues without having to brainstorm my own solutions and go through an entire trial and error process. It's important to be vocal about these issues during SAM so that you can quickly put your session back on track.

PLTL/Peer Mentoring isn't just a job, it's a community. Though it's natural to feel like you have solved all of your PLTL/Peer Mentoring group's issues yourself, never forget that SAM provides you a ready-made community. Use your fellow leaders and Dr. Szteinberg as resources with which you exchange ideas and solutions.

#### **Growing in The Game of (PLTL) Life**

#### By Joey Hobaugh

By now, growth mindset may seem like the new buzz word to throw around during SAM discussions. However, the principles of growth mindset are not just important for your students, they're vital to how you lead a facilitation. The leader you are today will not be the leader at your last session. Your skills as a leader are not fixed; rather, they will grow, develop, and strengthen with each session if you maintain a mindset of self-improvement.

First, take the reflections you write in SAM seriously. Rather than dwell on a session not going as well as you would have liked, use this reflection time to focus on why the issue arose and how you can work at solving it next time. In addition, I like to read other people's discussion posts and responses to gain more insights on how my fellow leaders responded to similar issues I had. Each session serves as an opportunity to implement new facilitation methods and approaches you have learned that week. It's never too late to try something new or kick a bad habit. I encourage you to channel your energy into motivating yourself to keep developing your facilitation skills and to welcome the challenge that each session brings.

Furthermore, observing and being observed are some other important sources of self-growth. When you go to observe another leader's session, use that time as another moment of reflection. Notice what different strategies are effective that you can apply in your own sessions. Additionally, watching how another leader runs their session can serve as a mirror to your own peer-leading tendencies, good or bad. Likewise, the feedback you get from your own observations are good and honest ways to assess your performance. Don't run away from the critiques you get; knowing your weaknesses is the first step in getting better as a leader. Keep an open mind and use that knowledge as an impetus to improve the areas that you struggle in.

Finally, don't forget to be kind to yourself. The most important thing I learned this semester was in a conversation I had with Dr. Daschbach about hyper self-criticism. She asked me, "Would you ever speak to your best friend the way you speak to yourself?" We focus so much on what we are doing poorly that we forget to be proud of how much we have grown. For me personally, my biggest struggle throughout the whole semester was my tendency to lecture too much. Each week I tried my best to have my students lead the session but every time there was always room for improvement. The constant reminder of my short-comings discouraged me. But after that conversation, I began to use more forgiving language with myself and to focus on how far I've come and how far I will continue to go with hard work and perseverance.

With that, I encourage you to really embrace this mindset and all opportunities and challenges that can help you grow.

#### Guess Who? A Guide to Ice Breakers and Your First Session

### By Amy Kwan

Hey you! Yeah, you! The PLTL Leader or Peer Mentor! Congrats! The first session is right around the corner, but don't worry you're going to do great:). As students enter the classroom, many things are going to be unfamiliar to them. Many of them are first year students completely new to the school and college life in general. Some have taken AP Chemistry and think they will breeze through this semester. Others might be in Gen Chem because their advisor told them to. You will be meeting a diverse group of students for the very first time-both nerve wracking and exciting! To foster an initial sense of group dynamics, an ice breaker is essential during the first session.

Although ice breakers may personally make your eyes roll, when done effectively they serve as a great starting point for your group's dynamics on the first session. The key to an effective ice breaker is to make students comfortable with each other by connecting with each other. While name, major, and fun fact may be an easy ice breaker, this does not contribute to developing group relationships. Making initial connections and finding commonalities is what will help serve as a foundation for your group to build on. My first session ice breaker was PLTL Bingo Board. I generated a 6 by 5 table and filled it with topics that can strike up conversation around basic things in common. For example, instead of phrasing a Bingo space as "has a birthday in August," I phrased the space as "has a birthday in the same month as you." More examples include "watches the same Netflix show as you," "is in the same lecture section as you," or "lives in the same building as you." Having your Bingo spaces phrased this way facilitates conversation amongst students that allows for mutual connections to begin. No matter what ice breaker you choose to do, drawing memorable connections amongst students is essential for easing them into their first session. A list of good ice breakers for making connections is attached to this essay to help you out for this first session.

While ice breakers may seem applicable for just the first session, doing ice breakers every week does help liven up students and foster a comfortable learning environment. Some leaders like to do highs and lows of the week before every session, or rose, bud, thorn, to get students talking about their week. Although this may be awkward at first, when you repeat this at every session for the rest of the semester, students get more comfortable with each other and sharing fun details about their week, or bond over a mutually shared exam. Ice breakers in following weeks can also be connected to chemistry. One favorite is the sticky note shake off. As a review of concepts, have students write individual phrases, equations, or topics they remember on sticky notes and stick them on the board. Ask two volunteers to have sticky notes stuck on them and see who can shake them off the fastest. Ice breakers can be tailored to each session and are a great way to begin a session in a fun, casual way and uplift spirits (especially when the mid-semester slump rolls around). More ice breakers for subsequent sessions are listed on the following page!

#### How Much Does a Polar Bear Weigh...? Enough to Break the Ice!

#### GOOD ICE BREAKERS FOR FINDING THINGS IN COMMON

## PLTL/PEER MENTORING BINGO

As mentioned in the essay, a custom Bingo board is made with spaces that connect students to each other. Students sign off on each other's boards when they find things in common. The winner of Bingo reads what spaces they filled out and what people they signed off with.

Multiple winners are highly encouraged!

#### **TAKE SIDES**

Fill a bowl/hat/paper receptacle with topics that are in a "this or that" format. Examples include "traditional or modern", "Pre-med or not pre-med", "east coast or west coast or international." Fill another paper receptacle with group member's names and your name. The leader starts by drawing a topic form the topic bowl. Students will go to each side of the room based on their answer, then have them explain. For example, if you ask "east coast or west coast or international" ask each person to say where they're from. After the first round, draw a name from the name bowl, and that is the person who draws the next topic. This allows the leader to not only show off some of their own traits, but also shows that the leader is a just another peer and that students should also get used to getting up and sharing/talking.

## **BUILD A PYRAMID**

The point of this ice breaker is to fill a period based on things students may have in common. Draw a basic pyramid on the board and divide it into 5 by drawing horizontal lines from the base. On the bottom, students should find something 5 people have in common. For example, Josh, Matt, Anna, Stephanie, and Laurel all watch *The Office*, so they will write "Watches *The Office*" on the board and sign their names on the board. On the space above, something 4 students have in common and their names should go on the board, and so on and so forth. On the top space however, for 1 student, that is the leader's opportunity to put something unique about themselves on the board for the group to learn! If students are having a tough time generating things in common on their own, you can make suggestions on the board like "lives in a modern, has the same number of siblings, etc."

Settlers of Chem-tan

# ICE BREAKERS FOR SUBSEQUENT PLTL/PEER MENTORING SESSIONS

## ROSE, BUD, THORN / HIGHS AND LOWS

#### **CHEMISTRY REVIEW STICKY NOTE SHAKE OFF**

#### SHIPWRECKED/APOCALYPSE

Students are split up into small groups and are asked to find 3 things from their backpacks that are meant to help them in an apocalypse. After about 5 minutes have groups share what things from their backpack will help them to survival.

\*use this as an analogy as every chemistry student having what it takes for success in the course\*

#### M&M/SKITTLES Q AND A

Hand out bags of skittles, M&Ms or any other multi colored candy. Have students pull out one candy. Based on the color of candy have them answer different questions. Example, red is something they're looking forward to, green is something they did not understand in lecture, etc.

#### **CHEMISTRY MOVIE PITCHES**

Have students come up with a movie pitch for different topics in chemistry for the week. Draw a topic and draw a movie genre and having students in small groups come up with a basic movie pitch based on the two things drawn. For example, "photoelectric effect" and "kids movie" can be connected to goldilocks and the three bears because the amount of energy needed to eject a photon has to be "just right."

All in all, take this first session as an opportunity to spark the beginning of a great new semester. If the first session doesn't go as planned, don't worry, there's still 10 more sessions! Best of luck and have a great semester.

#### The Cousin at Game Night?

#### By Angela Lee

### Getting a sub:

Though we'd all love to be there every week for our PLTL group, things happen. And when needed, don't be afraid to reach out and contact a sub! You can send a message out through canvas, ask a PLTL leader you know, or (if your SAM class has one) send out a GroupMe message. Things do pop up at the last minute, but whenever possible, ask ahead of time so you aren't scrambling for a sub.

Once you've found a sub, make sure to contact them about which room you're in, and what the dynamics of your team are like—who the dominant students are, who the quiet students are, which students work well together, which Collaborative Learning Strategies work best for your group, etc. The more information you give your sub the better; they will be better prepared and will help the session run as smoothly as possible.

#### Being a sub:

When you see someone posting on Canvas asking for a sub, don't be scared to contact them and volunteer to help out if you can! It's a great opportunity to grow as a leader, and it'll be helpful for both you and your group. It's also a great opportunity to help out another student leader in a pinch. :)

Though you might feel a little awkward at first, as you won't know the group dynamics and the group might be very quiet around you, you can do a quick icebreaker or bring snacks for the group, and you'll find that they will warm up to you pretty quickly. Take suggestions from the group as to how the leader usually runs the group (ex. how they usually do the concept review question), but don't be afraid to add your own touch to the session, whether it's by using hybrid strategies, or other things that work well in your own sessions. You probably will not have enough time to understand the group dynamics super in depth, but with the information that the peer leader gives you and with your first impressions, you can decide which strategies you think might work best, such as using round robin for quieter groups.

After the session, be sure to send the attendance to the peer leader, and give them a few notes about how it went. Tell them about if anyone assumed the role of a dominant student, if anyone was particularly quiet, if anyone seemed a little more behind, or anything else you would want to know if someone subbed for you.

#### The bottom line:

If someone's subbing for you, your group is in good hands! Just make sure you fill in your sub to make everyone's life easier. If you're subbing, be receptive to what the group usually does, but don't be afraid to add your own touch to the session as well.

## The Spirit of the "Game"

#### By Sam Lee

Congratulations! I know it might be weird reading this in a guide for PLTL and Peer Mentoring, but it is truly an achievement to be a leader/mentor. I hope it is an experience that you will never forget. You're probably reading this as you prepare for your first session - you might be feeling some nervousness, as well as excitement, as you think about actually leading a session and that is totally fine. Take it from someone who is a constant worrier: you will make it through. There might be some awkwardness, or self-doubt, or just plain silence but all these experiences will grow you and your students. For most, everything goes smoothly and the first session is awesome, setting the tone for the rest of the semester. In hopes of offering some helpful advice, I want to focus on the spirit of PLTL/Peer Mentoring (aka the philosophy) and how you can use it to your advantage.

Ultimately, PLTL and Peer Mentoring exist as resources for students to use to succeed in General Chemistry through group problem-solving and review. As the facilitator of the group, it is our job to ensure that this philosophy is followed so that every student can benefit. To this end, I would highly encourage you to take the time dedicated to going through the philosophy in the first session seriously. For both PLTL Leaders and Peer Mentors, it is so helpful to communicate the spirit of these groups, in other words, setting expectations and guidelines so that your students know right off the bat what they are getting into. It is so much easier to prevent and deal with challenges later in the semester if you have set up these expectations based around the philosophy now. I would encourage you to prepare for specific expectations like how to communicate the no phone policy and the attendance policy as well as how you want to present the big picture of PLTL/Peer Mentoring.

Importantly, we are NOT professors. We are PEERS in a unique position to lead and mentor fellow students. While it is important for you to understand this, it is even more important for your students to know as well. Encourage questions about life outside of chemistry and relate your own struggles and accomplishments with them. These are fellow WashU students who experience many things that you have gone through, are going through, and sometimes even will go through. I cannot tell you how awesome of an opportunity that this is to invest in fellow students and build relationships with peers. The first session can go a long way towards initiating this type of environment for the rest of the semester.

PLTL and Peer Mentoring are definitely not games in the sense of competition, but rather in the sense that we have a common goal of success and learning. Especially with the first session, as your students are "learning the rules" and "preparing their strategy," you have the opportunity to emphasize the spirit of PLTL and Peer Mentoring, cultivating an inclusive environment from the start. I know you will do great and hope you enjoy yourself in the process! Game on!

#### Wait & Win!

## By Danealle Parchment

Firstly, congratulations on being chosen to become a PLTL Leader or a Peer Mentor! This is no small feat you've accomplished and it's incredibly important that you remember you were chosen for a reason; that reason being you're a perfect fit for the PLTL/Peer Mentoring Family and that many believe current General Chemistry students can learn a lot of valuable things from you! That being said, one of the most essential lessons you can give your students will be instilling the importance of having a growth mindset. Many students may have heard these words before but to others this may be a completely new concept; one that is better learned sooner rather than later. This is something that many students will be using well into their adult lives and they will be grateful they learned it when they did.

To learn and conceptualize about a growth mindset is one thing but it's a completely different thing to actually put it into practice and that's where you come in! PLTL/Peer Mentoring is the perfect place to facilitate using a growth mindset as another tool in every student's General Chemistry toolbox. You will most likely find yourself having this conversation during a particularly difficult packet, or after the first exam, a time when many students might begin to question their ability to succeed in the course. Growth mindset is all about resiliency, consistency in self-confidence and how one reacts to a challenging situation that places them outside of their comfort zone. If your students begin to feel discouraged about the material, it's crucial that you acknowledge their emotions and talk about your experience with this specific topic or the class in general. Try to stray away from phrases like 'easy' or 'hard', that may make it seem like you're 'calling out' students who are doing fine or who are struggling; strive towards talking about your approach to certain concepts (if you found it easy, what tips do you have to breakdown the problem, if you found it difficult, what steps did you take to overcome it?). You've gone through the course before and thus have a lot of knowledge and advice to show for it, so don't be afraid to use it!

Something that is often forgotten is that the growth mindset doesn't only apply to students who are struggling with the material. It can be dangerous if a student decides to become lax and not put forth constant effort towards staying on top of the material. It's incredibly vital that you convey the message that if you feel extremely comfortable with the material, that is excellent but there is always something to improve upon. There will always be a type of question a student hasn't come across or a more efficient way to solve a problem or new connections to be made. In other words, every student has more growing to do in some department.

It's extremely important that you remind them why they're in PLTL/Peer Mentoring in the first place; to grasp a deep, conceptual understanding of the material not to simply master it on the first attempt. "If at first you don't succeed, try and try again"; this is one of my favorite quotes and really grasps the cornerstone of the growth mindset. Throughout the semester, it's really reassuring to the students if you emphasize that one bad grade on an exam doesn't mean they cannot or will not do great in the long run. Overall, the best way to instill the concept of a growth mindset without having to actually say "growth mindset" is to show that it's okay to make mistakes and that making mistakes is a key part of the learning process. I wish you the best of luck in your mentoring endeavors and have no doubt you will be great!

#### Monopoly: Setting Up Your Boardwalk and Park Place in the Classroom

#### By Lucy Summer

Hello! If you haven't heard this enough, congrats on getting picked to be a PLTL leader or a Peer Mentor! You are the reason why this program is so successful, and we are so glad to welcome you to the fam. Before you begin your first session, there may be a lot of questions about how things should be structured and presented; hopefully, this will clear up a few of those questions and give some new suggestions to implement.

One of the most important things you can do before beginning your session is "casing" the room and looking at how you want to set things up. For example, you may be in a seminar room, where the tables are already arranged like you want them, or you may be in a lecture classroom, with the really long rectangular tables that are awkward and difficult to move around. Wherever you are, it's important to consider the sort of environment and classroom learning that you want to foster, so that your organization of the classroom can help you (and your group) succeed. The goal of PLTL and Peer Mentoring is to help grow collaboration and teamwork, whether that's through working on a packet together (PLTL) or solving problems in groups (Peer Mentoring) and the physical appearance and organization of the classroom can help you with this! If the tables are organized in such a way that maybe students are all sitting together in one big circle, it can be much easier for them to work together on problems vs if they are all sitting in a straight line at a table and trying to work on a problem together. This might seem like something inconsequential, but in this case, physical appearances are everything. Humans are creatures of habit, so however you decide to setup the classroom is how the students will expect to see it. This means utilizing the space and the resources that you've been given to the fullest potential and making sure you organize those tables properly!

Not only is it important to set up the tables and chairs properly within a classroom, but it is equally as important to be consistent in the methods and structure in the session. Something that I find helpful is giving each student the chance to make their own name tag, then collecting the name tags at the end of the session and randomly placing them in different spots for the next session. This way, the students will have the opportunity to interact with others in their group, not just those who are always next to them when they sit down. Using name tags also allows everyone in the group to become more familiar with each other, so that they won't be embarrassed if one student forgets another's name, and they will also help you bring structure to the session and save you the trouble of moving students around when assigning groups, especially if they're already sitting in a different location.

Finally, remember that you're in control. It may feel like things are spiraling out of your control and nothing is going the way you want it to, but never be afraid to start over next session or manage the classroom differently. This is your domain, and it is up to you to structure and organize it how you see fit, regardless of what the students think. You're the master builder, the expert strategist, so don't be afraid to move things around as you see fit, and all the best to you as you begin this year!

#### You Are the One to Define Your Session

#### By Jane Zha

Hi new PLTL leaders and Peer Mentors! Congratulations and welcome to the family! You have done an incredible job in your study and you are now changing into a new role. I have done some things that have been helpful and there are also some things that I wish I could have done. I just want to share all those with you, and hopefully, you can have a smooth and wonderful start of this semester.

First of all, when you start with your very first session, I really suggest that you arrive at least 10 minutes before the session time. It is the first time for you to get to the classroom and you probably need to rearrange the seats, put out the packets, write some welcome sentences on the blackboard or the whiteboard. It is also a nice time to review the names before the session starts. I always have a hard time remembering people's names, so I feel it would be helpful if you can know the faces and their names before the session start. Knowing all their faces and names is also helpful for you to calm down and get less nervous about the upcoming session. On the first day, some students may want to make sure if this is the correct classroom, so this will also help you to recognize them immediately.

It is also very necessary to do icebreaker games. Most of the students are first-year students who are new to the session, new to the course and new to the school. It helps a lot for them to feel that they belong to the group, to feel comfortable talking and making mistakes in the group and more importantly, belonging to general chemistry. I brought a doll to the class for them to do the "round robin" style self-introduction. I also let them throw the dolls around, and whoever gets the doll has to tell the name of the person who passes the doll to him. It is also a helpful tool to maintain the round robin rule later in your session. Students sometimes get very active and may talk over people later in the semester when they are more comfortable with the peers. The doll may be a helpful tool to remind them that only the person who holds the doll can talk.

There are a lot of different kinds of ice-breaking games, and you can choose whatever you like. I just find it is more helpful if you can choose some games that let people stand up and have some moves, instead of just sitting in the chair. Some snacks may also be helpful! I bring snacks every week and I think my students really enjoy that.

The first few sessions are also good and crucial times for setting up what you want your session to be like. You can have your own "acceptable" and "unacceptable". It is your choice now! I would prefer students not to use phones during the sessions, because it may not only cause the distraction to them, it may also cause the distraction to other students and maybe you as a leader as well. It can also bring a rather bad influence in the group, when all other students start to take out their phones as well. You can state what you want for the session at the very beginning in a polite way, so your students are very clear about what to expect. (It is also when they are most willing to follow the instructions!)

You need to know that it is possible that students' personalities may appear to change. I have one very dominant student in the first session that talked less and less as times goes on. I also have another two students who were more and more open. It is important to pay attention to all students and their changes. Talking more does not necessarily mean they know the material better and being quiet is not the sign of knowing nothing. One thing that I hope I have done is to check on students when they show big changes in their personalities and attitudes towards the session. You

can feel free to send emails to ask them, even weekly! It is helpful to know how your students feel.

Another thing you really need to handle is the silence. Dr. Daschbach's counting of "seven Mississippi" is a helpful way. It is important to hold back more before giving them more clues, so they know they have to think hard instead of just being silent and waiting for more clues from you.

Last but not least! Trust yourself and be confident! You are in the right position and you are chosen for a reason! Good luck with your first session!

## This is Chess, not Checkers: Working with the Quiet Students

## By Abena Boateng

Congratulations on leading your first session! The most stressful part of this new process is out of the way. By now, you have probably determined how you want to structure your sessions, so it is time to start observing what types of students you have in your group to be as effective as possible. Having a strong group dynamic is a critical part of how well your sessions will go throughout the semester. Because every group is different, you need to find the best way to facilitate depending on the type of students in your group. Some groups will be filled with dominant students, some will have a good mix of quiet and dominant students, and others may be all quiet students. While dominant students require certain tactics to have the best facilitation, quiet students present a particular challenge, especially since PLTL/Peer Mentoring is heavily reliant on the participation of all students in a group. Using unique facilitation techniques and collaborative learning strategies, you will be able to develop a great group dynamic with quiet students.

At the beginning of the semester because your students do not know each other sessions may be fairly quiet; this is exacerbated when there are no dominant students to speak out. Rather than over-leading, you must learn to be comfortable with the silence, and create an environment where your quiet group will feel more prompted to participate. One way I liked to get students comfortable with one another was by doing a quick little ice-breaker at the start of each session. These ice-breakers do not need to be ground-breaking, something as simple as going around the group and stating the best and worst part of the week will show your students that they have things in common with one another, making their peers more relatable. Although this is not going to suddenly make your group louder, it will allow them to feel more comfortable with one another throughout the session. This will eventually show whether it be through improved collaboration during pairs/small group activities or your students feeling more secure and openly sharing their ideas or asking questions in the larger group. It can also be helpful for you to bring more energy and excitement than you normally would; the energy you bring can spread and make your students more energetic. This will prove helpful no matter what type of group you have; quiet and dominant students alike will benefit from a leader's positive energy.

Another way to encourage participation from quiet students is to utilize the collaborative learning strategies in a way that is specific to your group. Hybrid learning strategies can be particularly effective in getting quieter students involved. Along with small icebreakers, I found it useful to start the packet with a strategy that involved students working together right off the bat. For example, when the first question in a packet called for a scribe problem, I would make it a pairs/scribe hybrid. Students would work together in their small group to solve a problem and one person from each group would write their answer on the board. When we reconvened, I would ask the student who did not write on the board to explain their problem-solving process to the group. This type of hybrid strategy ensured that everyone was participating and getting the most out of the problem. For quieter groups, a scribe/round-robin strategy also proves to be beneficial. It provides a structure that allows each student to contribute in an orderly manner; one student won't be able to dictate to the scribe how to solve the problem; everyone is given a chance to participate. These are just a few examples of hybrid strategies, and you as a leader have the power to manipulate the basic collaboration strategies to fit your group's dynamics.

Gen. Chem.: The Bohr-d Game Edition

All in all, working with quiet students can be challenging but with patience, hybrid learning strategies, and different facilitation techniques, you should still be able to effectively lead a group with quieter students. In addition to these tactics, occasionally take the time to speak with your students about things outside of chemistry and find out who they are. Understanding the personalities of your students will give you insight on how to lead your group and work with different individuals. Finally, sometimes it will be necessary to call out individual students during the session. When you do this, ask how they would attempt to solve the problem and not for a specific answer. Often times through this you will find that quieter students who do not say anything have some of the most valuable contributions, great for the whole group!

#### Not all Chess Pieces are the Same!

## By Brandon Campbell

Congratulations on becoming a PLTL Leader/Peer Mentor! Now that you have a couple of sessions under your belt, you should start to see that each student has their own, unique personality type. Do you have a student who does not participate much, even though they have valuable input? Is there someone who tends to speak more on average than the rest of the group? What about someone who gives the entire answer when you only asked for one part?

You probably have students in your group who fit into one of these categories. In early sessions, the very talkative students, otherwise known as the dominant students, may not seem problematic because they ensure that the group is never quiet when you ask a question. But, in subsequent sessions, it is important that you ensure that everyone is participating in equal amounts. For one, PLTL and Peer mentoring stress the importance of group learning and cohesiveness and everyone participating will help the group be successful in that regard. Second, participation is good for students at an individual level too.

Collaborative learning strategies are a great way to successfully get equal levels of participation from everyone. My personal favorite CLS is round robin. Round robin is a fantastic way to work step by step through a problem while everyone is contributing. Sometimes, a dominant student will give more than just a single step during round robin. A good way to combat this is to simply start the rotation strategically such that the dominant student goes last. That way, everyone has a chance to talk before the problem is over. Another modification you can make is a sort of "quick-fire" round robin where you move faster than usual around the circle. This works well for certain non-calculation heavy problems and it's effective as it keeps students on their toes and guarantees that students will not say more than 1 step on their turn.

Another potential point of conflict in a group is when certain students tend to move faster when doing problems as compared to the rest of the group. These students also tend to be the more dominant students when it comes to participation. There are multiple ways to make sure these students are working and learning while simultaneously making sure that everyone remains caught up to each other. One way I found particularly useful was when I would notice a student finished a problem before everyone else, I would have them start to put their work up on the board. That way, the student still had something to do while everyone else caught up. Then, I could have others explain the work once they were finished. Another useful strategy is to have the group work in pairs, and stress the fact that partners should collaborate with each other. This way everyone is working together and discussing the problem as they go instead of people moving at vastly different paces.

If you want to even out participation in your group, keep these strategies in mind! Also, always be looking for new ways to facilitate your sessions. There are many other PLTL Leaders/Peer Mentors that would be happy to describe what has worked for them, and it is good practice to experiment with new strategies until you find a couple that work really well for your specific group.

Lastly, good luck for the rest of the semester! You'll do great!

## Gen. Chem.: The Bohr-d Game Edition

#### Take a Risk: Improving Facilitation

## By Vinay Chandrasekaran

Congratulations on being selected as a PLTL Leader or Peer Mentor! By now, you have experienced being on the other end of the student-teacher, or rather the student-facilitator, relationship. Now that you have a bit of a feel for how your session is supposed to go, it's time to think about reaching for even greater heights as a facilitator. There are a few things you can do right off the bat that will make improving much easier. Be sure to fill in the "notes" section when taking student attendance. This is one way to record how your previous sessions went as well as student dynamics so that you can prepare for future sessions. Also, when you have to write student evaluations later on in the semester, these notes become a valuable resource for you. Another thing you can do is take extra time to prepare for your sessions. There's no shame in needing a little extra review before your session, after all it has been a year since you've seen the material. Some leaders may need to take extra time outside of PAM to prepare while others may not need to at all, everyone is different and that's ok! The amount of time you need to prepare for sessions from week to week may vary as well. However, having a good grasp of the week's material is a necessity when it comes to facilitating effectively.

When it comes to facilitating a group of ten or so students, there's never a clear cut answer as to what strategy will work best for facilitating your own group. Of course, the traditional collaborative learning strategies have their merits. For example, round robin is great for giving opportunities to those quieter students who don't participate as much, and pairs allows students to collaborate with one another while attempting a problem. However, every group is unique and it may be worth it to try hybrid or modified learning strategies. If your small groups are having stagnant discussions, you could make students rotate between groups for different parts of a problem. Or, as another leader suggested to me, you could do something completely silly like make everyone put a Kleenex on their head during round robin, and only after you talk may you take your Kleenex off. You can combine scribe and round robin to make sure everyone is helping the scribe through the problem. If you have a small group that finishes incredibly fast, you could dissolve their small group and have them split up and help the other small groups. The point is, there is a lot of freedom as a facilitator and a ton of different ways you can keep your group engaged and productive, so don't be afraid to try a hybrid or modified strategy to help things along in your own sessions.

Always remember that learning how to be the best peer mentor or peer leader you can be takes time. Making mistakes is definitely ok, and you can build off of those mistakes in the future. If you think something unconventional might work with your own unique group, don't be afraid to try it.

## **Puzzles: Making the Best of Different Personalities**

## By Olivia Fehrmann

At this point in the semester, you are probably starting to get closer with your students, and are getting a better sense of how each individual contributes to the group as a whole. You might notice that the distribution of participation by your students could be a bit skewed toward more dominant students, or even find that altogether, your students' personalities don't quite fit into the simple "dominant" or "quiet" dichotomy. It's okay! While you may understand collaborative learning strategies largely in the context of problem-solving and helping your group understand the material more thoroughly, the way you group your students in CLS's can also be highly beneficial to improving the group dynamic and allowing the atmosphere to be more open and comfortable in your sessions.

I have noticed that in a group with a broad range of personalities: dominant and quiet students who are very familiar with the material, dominant and quiet students who may not be familiar with that week's topic, and anyone in between, the way that these students are grouped together in small groups or pairs can actually make a significant difference in the overall group dynamic! One type of strategic pairing that can be very helpful is pairing a student who seems to have a strong understanding of the topic, but maybe lacks the confidence to participate frequently in the group, with a student who may not know the topics as thoroughly, thus prompting that student to take the role of an "explainer". In my experience, not only has this has helped less confident students become much more comfortable in phrasing their thoughts cohesively and sharing their knowledge, but in the broader context of the group, I found that using this type of pairing has made the large group conversations much more inclusive and has helped students with quieter personalities bloom and feel more comfortable in getting to know the group better as well.

Additionally, there may be times where students are not participating due to lack of understanding, lack of confidence, or even just lack of focus. This could be due to students' personalities, or just the way their week went. Either way, it is important to read the situation and decide the best way to address the issue. For some students, if it seems they haven't talked in a while or are being distracted by their phone, for example, they might be fine with you calling on them in front of the group to ask them a question. However, not all students are like that, and depending on some personalities, doing so would cause them to further refrain from participating, and it might be more effective to pull them aside after the session and tell them you would like to hear more from them. This is just another example of the importance of understanding each student's personality in your group in order to make the most cohesive and positive learning experience possible.

When putting together a puzzle, it is important to understand how each unique piece interacts with those surrounding it, and realize the importance of finding the right pieces to group together in order to complete the beautiful picture. It takes time to put together a complicated puzzle, so don't feel worried if the dynamic of your group isn't perfect yet. Just be attentive and put in effort to get to know your group, and soon the puzzle will be complete!

# **Establishing Group Dynamics Based On...Guess Who? (Your Students!)**

## By Nicole Guenthner

Welcome to the PLTL/Peer Mentoring family! By now you have started to get familiar with your students and have grown more comfortable with leading sessions. You have made a good first impression on your group, but now it is time to establish the tone of your sessions and develop a good group dynamic.

As the group leader, you have the ability to decide what balance of work and play is best for your group. Do you want your students to come into your session fully focused on working through the packet? Do you want your session to be more social and laid-back? As long as students are utilizing PLTL/Peer Mentoring strategies to develop their understanding of chemistry, there really is no right or wrong way to run your sessions. Also, keep in mind that different groups will have a different balance of work and play that work best for them. For example, groups with more extroverted students may find that they need to incorporate some breaks into their sessions. This gives students an outlet to be sociable rather than having them get off track while you work on the packet. Other groups may prefer to skip breaks so they can focus on finish the packet during the session. Either way, it is important to consider what you want the tone of your session to be based on the personalities in your group. It is possible that your work/play balance may need to shift as morale goes down due to the midterm slump, so don't be afraid to adjust the group dynamic as needed.

If you are unsure of how to implement your ideal group dynamic, you are not alone! This can be a difficult thing to figure out, but I have some tips that can help you get on the right track. First, note that what you do aside from working through the packet makes a big impact on your group's behavior. This is one reason why the use of icebreakers is so important—it sends a message to your students about how you expect your sessions to go. If you incorporate a fun icebreaker into your sessions every week, students can get to know each other on a more personal level. This can result in a more inclusive work environment when you move onto the packet problems, but in excess it could encourage distracted socialization depending on the students you have. For more quiet and focused groups, icebreakers like highs/lows or rose/bud/thorn are ideal because they are efficient, but still allow students to grow comfortable with each other. For more energetic groups, consider starting off with an interactive game like Chemistry Pictionary or Gen Chem-based "Heads Up". Again, this will give energetic students an outlet for socializing while also transitioning them into topics relevant to the packet. Don't be afraid to mix and match your icebreakers if you are not sure which work better for your group. You can base your future sessions off of student reactions to past sessions, which will significantly help you improve your group's dynamic.

You should also consider how you communicate with students outside of your 2-hour session. It is never too late to suggest starting a group chat (via GroupMe, Facebook, etc.) for students who want to connect outside of PLTL/Peer Mentoring. How students respond to this suggestion, whether they are opposed, indifferent, or excited, may also be a helpful indicator in determining what types of students are in your group so you can adjust group dynamic strategies accordingly. Weekly emails to your students can be a useful tool as well. Not only will your students appreciate reminders of what to bring/what topics will be covered, but the way in which

you format emails can also be used to shape your session's tone. The use of gifs or puns will lighten up the mood, while bolding/underlining key information keeps your message direct and concise.

Settling in on the ideal group dynamic will require some trial and error, but with your hard work and dedication to the program, you will find your group's balance. Enjoy the rest of your semester, it goes by fast!

#### **Being Your Best**

#### By Irene Hamlin

Hey Peer Mentor/ Peer Leader!

Congratulations on doing so well in Gen Chem last year and being selected for this job. It is such an incredible position to be chosen for. I was so excited to be a peer leader, but during my first few sessions as a peer leader I was so nervous because I really wanted my sessions to go perfectly. I wanted my students to like me, like our group, and always leave with a solid understanding of the material. I think these are reasonable goals to set, but sometimes they can feel overwhelming because you feel that, as a peer leader, you always have to be on your game and be an expert on anything that could come up.

There will be some bumps in the road when a session doesn't go as you hoped. Sometimes, you might have an off day where the dynamic between you and your group just isn't where you'd like it to be or you are struggling to get your group to adhere to the CLS. It's important to remember as a leader that one session that doesn't go well is not the end of the world. Your students are not going to think less of you. It's important to remember how the growth mindset that we emphasize to our students applies to us too. The ability to lead a PLTL/Peer Mentoring session effectively improves over time, just as our ability to learn does. In order for students to actually see how a growth mindset positively impacts the learning environment, you must model it yourself. This is especially important with the first exam coming up, as you will also likely have several exams coming up. Stay positive and remind students that grades are not everything and that it's all about working hard and trying your best.

For me, I had a document where I typed notes after every session. In these notes I would say a few things I thought I did well, a few things I did not do well, and something I wanted to change or implement for next time. I would do this right after my sessions while it was still fresh in my mind. This helped me reflect on my sessions many days later and recognize all the things I had done right and wrong. Additionally, I would also recommend taking advantage of SAM whenever you struggle with anything in your group because odds are that another leader has as the same issue and may have a great solution to it that you never thought of. If you want to be the best PLTL leader/Peer Mentor you can be, all you have to do is work at it and take SAM seriously. Working at it being the best leader you can be also means taking care of yourself in any way you need. Don't forget that!! Dr. Szteinberg and Dr. Daschbach care about you so much and will help you in any way you need. Your students definitely will notice how hard you work to be a great leader for them and it will pay off. By demonstrating this attitude and desire to improve each week, it will model to your students how to truly adopt a growth mindset.

#### Chess is a Game of Strategy: Hybrid Collaborative Learning Strategies

## By Delanie Ludmir

Before delving into the topic of collaborative learning strategies and how you could use them to your advantage, I wanted to first congratulate all of you for being here. This is a HUGE accomplishment and you should be extremely proud of yourselves. I have no doubt that all of you have all the ingredients to be a great PLTL leader/Peer Mentor but using the collaborative learning strategies and combining them in new and creative ways can get you from being a great leader to a fantastic leader!

As you all probably know by now, the four strategies we are taught are: round robin, scribe, pairs, and small group. These different facilitating strategies help target different aspects of learning and make the whole process a lot more dynamic and fun. For instance, round robin ensures that you get to hear everyone from your group speak, even if it is only a minor contribution or a question. Coming into WashU can be quite scary and taking general chemistry right off the bat can make the transition even harder. So, these collaborative learning strategies are very useful in helping your students put themselves out there and participate while alleviating some of the pressure.

You will soon come to realize that your group often doesn't always just break down into quiet and dominant students. Sometimes, because your group is so dynamic, the four strategies alone may not help you get everyone to participate as much as you would like. Once you start reaching more difficult concepts especially, the participation may start dwindling and before you know it, you're playing the silent game, praying that somebody will speak up. Fear not, though because there is a solution— hybrid collaborative learning strategies.

Hybrid collaborative learning strategies are just creative combinations of the four strategies I mentioned above. My favorite one by far has been pairs (or small group)/scribe. In this one, you break your group into pairs to discuss and work on the problem. Once they are done, you assign one person from each group to put part of the solution up on the board, and then have the other person in the group explain their process to the group. This hybrid strategy allows students who may be quieter to contribute a lot since they are working in a small group which may be more comforting. It can also be used to prevent your dominant student from participating too much by making them put up the solution on the board for their group so other students who tend to be more reserved have a chance to speak up. Another helpful hybrid strategy is small group/round robin. In this facilitating strategy, you break off your group into small groups or pairs and give them two minutes to discuss the problem with no writing allowed. Once the two minutes are up, you bring the group back together and facilitate a regular round robin. The only difference with this hybrid strategy is that initial two minute talking period to help get your group more comfortable with the question. That way students who are not as comfortable with a concept can discuss it and not feel as though they are put on the spot during round robin.

The two hybrid strategies I discussed really help get your entire group participating and actively learning, while also making sure you are creating a comfortable environment. These are just a few ideas of creative combinations you can use during your session. Be creative because at the end of the day, your PLTL/Peer Mentoring sessions, like chess, are a game of strategy!

#### When the Game of Life Gets You Down, Spin Again! The Growth Mindset and Your Students

## By Kendall Schwartz

First and foremost, congratulations on becoming a PLTL leader/Peer Mentor and embarking on this crazy, fun, chemistry-filled journey that I can guarantee you will get more out of than you ever expected! Now, close your eyes and go back to when you took Chem 111 over a year ago now (wow, has it really been that long?) and remember the anxiety of picking up your first exam after having no clue whatsoever how it would go, wondering if you did well enough, wondering how to bounce back from it if you didn't. Now put yourself in your student's shoes because they are going through that Exact. Same. Thing.

Walking in to your session after the first exam or even after the first couple quizzes can be a little nerve-wracking knowing it will be discussed and not wanting your students to get discouraged, so thankfully we have a nice little concept called growth mindset to help you and your students stay positive throughout the semester. The most important thing to remind them is that by no means does any exam or grade define them and also does not define whether they are "good" or not at chemistry. Speaking from your own experience can also be a really great way to give insight and remind your students that despite common belief, you may have also struggled at first as well and still made it to be a PLTL leader/Peer Mentor!! Also, it can be especially important to throw in a fun little icebreaker or have food at this session for a post-exam pick up.

Something that is so important to let your students know is how this exam can also be a reflection of nerves as it is often many first-years first college exam and to emphasize reflecting on it, then moving forward. At this point in the semester, almost all of the points are still on the table so evaluating what works best for each student individually in terms of studying is a good discussion to have in a round robin on what students did and would do differently to prepare for the next exam. I always shared a couple of my favorite study tips touching on the fact that some I tried failed, but the best reaction is to grow from it. Improving further after having success is just as important to recognize and that continuing to work hard after having done well and pushing yourself even further is key to growth.

Lastly, be their cheerleader! You are your kids biggest fan and being there to support them is just as (if not more important) than facilitating their learning of chemistry. If you notice a student seeming unusually quiet or upset, help them pick themselves up! When a student seems unsure about answering something they know is right in PLTL/Peer Mentoring for fear of being wrong, instill that confidence in them they need to thrive outside of their comfort zone. PLTL/Peer Mentoring is a great place for growth mindset to start, especially in the beginning weeks with becoming comfortable with potentially being wrong and learning the answer isn't the most important part: it's the active learning which involves making mistakes. Reminding your kids of this philosophy and creating a community in which mistakes are welcomed is essential to making growth mindset central to your sessions. Keep up the good work!

#### **How to Make a Comeback**

## By Ashton Barber

Chances are by now you've started to get the hang of how you run your sessions. You've identified the kinds of students you're working with, you've learned how your group works best, and you've discovered what kind of leader you are. You've truly lived up the potential that Dr. Daschbach, Dr. Szteinberg, and Dr. Luo saw in you during the application process to become a PLTL leader/peer mentor. You should be proud of yourself; you've come a long way from where you were at the beginning of the semester.

And oh boy, it really does feel like you've come a long way.

With all the midterms piling up, you've probably noticed a plethora of changes in your students. They all look exhausted from lack of sleep and the amount of cramming they've had to do. Some may seem like they've lost their confidence based on how they carry themselves or how they answer questions. They probably seem less energetic and enthusiastic overall. Some students may have stopped coming to your sessions as frequently. Don't take any of these changes personally—they're perfectly normal. Your students are just trying to navigate the stress that each wave of midterms brings, and it's crucial that you give them the tools to keep their heads above water.

What I've found is that my students always appreciate honesty and transparency about my own experience in Chem 111 as well as how I'm doing with my current classes. Just like you've learned so much about your students, they've learned quite a bit about you. They can tell when you're having an off week, and it's ok to be off every now and then. In fact, it's comforting to your students to know that even you still struggle with managing your academic responsibilities. Misery loves company, and sometimes it's nice for your students to hear that they're not the only ones feeling overwhelmed.

That being said, emphasizing the growth mindset is extremely important in order to combat any sort of discouragement or disappointment that they're feeling. I try to put everything in perspective and remind my students that the reason why they're taking this course is to learn chemistry, and as long as they keep learning new things and keep improving upon their own abilities as students, then they will have gained the most important things they could hope to gain from the course. Explain to your students that each quiz or exam is a learning opportunity, and even if they didn't do as well as they were hoping, they should use the experience as a tool to improve upon their study skills. It shouldn't matter to them how the other people in the class are doing as long as they're doing the best they can do.

It may take time for this mindset to sink in, but hopefully you'll see that your students are becoming better equipped to handle their academic responsibilities as the semester progresses. Continue to emphasize growth mindset throughout the rest of the semester, and offer words of encouragement when you can. It may seem like you're preaching to the choir, but what you say to your students really does carry a lot of weight. I have complete faith that you'll be able to guide your students through this mid-semester slump. I wish you the best of luck!

## What to Do When You're in Jail: A Guide to Bouncing Back and Growth Mindset

#### By Jacob Blum

At this point in the semester, you've got several PLTL/Peer Mentoring sessions under your belt. Students' names have started to become more familiar, group and individual dynamics are becoming more clear, and the role of PLTL leader/Peer Mentor does not seem as scary as it used to be. Everything is going great, and then, everything changes when the first midterm hits. Students are blown away by the difference in difficulty between Chem 105/111 and their high school courses. Group dynamics change while strong students become quieter and quiet students just seem to disappear. After finally feeling comfortable, you now have no clue what's going on. But don't worry, that's what this book is for!

For me, the first midterm drastically changed the student dynamics within my PLTL/Peer Mentoring session. The week before the midterm all of the students in my session were kind of bubbling with excitement and anticipation. Sure, they had heard that Chem exams were difficult, but how bad could it be compared to AP chemistry and their other high school classes. Well, they found out shortly after and the next week they were all dumbstruck. I felt like I spent the next several weeks slowly rebuilding the confidence of my students by pushing several key ideas revolving around growth mindset and bouncing back from a tough exam.

Primarily, I was worried about how my students would be feeling internally about their own capabilities to do well in college and in their academic careers. I made sure to remind them that everyone gets to drop exams and that in college we as students are meant to make mistakes, it's how we learn. I even told them how my first exam did not go as I had hoped and that I was still able to become a PLTL leader/Peer Mentor and end up feeling confident in my chemistry abilities. But, I also felt like this was not enough for some of my students who seemed to not focus on the encouraging platitudes I provided. So, I set out to rebuild my PLTL/Peer Mentoring session atmosphere into an environment that encouraged and fostered a growth mindset.

I achieved my goal in several ways. Primarily, I tried to have more fun with my students as we went through questions. If the question was round-robin, I wrote word-for-word what was said by each student and nothing else on the board. While this strategy definitely received some groans of complaint, I could tell that the students in my session enjoyed watching these very convoluted phrases turn into well thought out and complete answers. I also tried to make my sessions feel more relaxed. Instead of focusing solely on chemistry, I made sure to ask each student about how their weeks were going and to bring up some fun, unrelated news or gossip I had heard throughout the week. These strategies got my students talking, even if it was not about chemistry, and ultimately resulted in my sessions bouncing back and become more engaging for all of my students.

I also stressed the importance of personal health to my students. As we went through the packet and discussed chemistry, I made sure to discuss different test taking techniques, the proper amount of sleep to get, and how to organize and plan studying habits. While not every student needs these tips, I definitely think that incorporating these discussions into my PLTL/Peer Mentoring session helped my students feel more prepared as the went into the second midterm because they had a stronger understanding of what it means to study for a college STEM course. In fact, I felt like the session after the second midterm was probably the best session I had since the

beginning of the school year. My students felt accomplished and as if they had overcome an obstacle that had beaten them before. And even if some of your students don't feel like they have done as well as they wanted to, the best thing to do is to simply help them stand back up and try again.

# Your Ship Was Sunk, But You Can Still Win the Game!

## By Mallory Kallish

It is very likely that you will see a change in morale and group dynamics in the first session after the first midterm. All the students who come to WashU have strong academic backgrounds, so they are used to leaving an exam feeling confident that they knew most of the material. The first GenChem exam is different though, and your students may return demoralized and unsure of their future in chemistry. This is the best time to bring up the growth mindset. You can use their disappointment from the first exam to motivate them to be more invested in PLTL/Peer Mentoring and pay more attention in lecture. I always like to remind my students after the first midterm that they only have 10/400+ points earned for the semester because they can drop one midterm and 2 quizzes. It is especially important to remind students that this one exam doesn't define them, nor predict their future success in GenChem or WashU. Many students at this point in the semester may start to have "Imposter Syndrome", where they doubt their accomplishments and have a fear of being exposed as a "fraud" or not belonging here. Many students at this point in the semester may feel as if they have somehow "tricked" the admissions office into getting into WashU. It is very important to remind students that they do belong here and that one exam is not representative of what they can achieve.

The session after the first exam, I talked with my students about my own struggles and feelings after the first GenChem exam. I made sure to emphasize how my score after the first exam motivated me to work harder and reminded them that you can still do well in GenChem even after a poor first exam score. During that session, I also saw the dynamics between my students shift. A student who was really dominant in the beginning began not to participate as much, and all my students started to turn towards the student who felt that they did well on the exam for answers. It is more important than ever to use the collaborative learning strategies and have all students participate. One of my favorite hybrid strategies to use is a combination of pairs and round robin. After we read the question, I tell give my students a few minutes to talk to the person next to them about how they would solve the problem. I do not let them write anything down, they are only allowed to talk how to solve the problem, not actually start solving anything. After this brief discussion, we begin to answer the question together as a large group. I like letting students discuss the problem first so that everyone has an idea of what they are doing and don't feel so put on the spot during round robin if they don't know what to do. I found this strategy particularly important right after the first midterm because many students felt unsure of themselves, so I didn't want to make them further doubt themselves by putting them on the spot in front of a large group.

Overall, the session after the first midterm is filled with feelings of student doubt, and it is important for you as a peer leader/mentor to remind students that they still belong in GenChem and help them regain their confidence by utilizing collaborative learning strategies.

#### Succeeding at the Game of Life

## By Michael Moore

Congratulations on becoming a PLTL Leader or a Peer Mentor! You have managed your way through the "board game" of General Chemistry with tremendous success. Sure, you may have encountered some rough patches – a "go to jail without passing go", a few chutes, and a couple of unlucky dice rolls – but you persevered through it all. You earned your position in the PLTL/Peer Mentoring program through hard work and by growing from all of your experiences.

The growth mindset talked about in SAM is critical to your success, not only in Gen Chem but also in all of your future experiences. This is an important topic to discuss with your students in depth. Whether the issue is failing a quiz or they didn't do as well as they would have liked on a recent exam, it is important for you as a peer who has been in the same position to work with your students on developing a growth mindset. The surveys from our STEM classes as well as our professors sometimes reveal a low exam class average that can leave us feeling defeated. How can we use growth mindset to encourage our students and what does it really mean? It isn't thinking to yourself, "I have to do better on the next exam otherwise my GPA will suffer", which is unfortunately too often the mindset of some students. Improving grades is a good thing, however, developing a growth mindset requires looking past extrinsic motivation, and examining what you did well and not so well because the goal is to learn from these experiences and improve oneself. Unlike a board game where success is essentially pure luck, you are able to achieve your goals by acknowledging your faults and working to improve them. Some of your students may need a reminder that intelligence isn't up to luck of the draw. It all comes back to the growth mindset and the classic saying, "you get out what you put in". It is equally important to your facilitation of students learning that you mentor and support your students, reminding them to seek improvement and persevere.

It is also very important for you to remind your students of how necessary it is that they take care of themselves. Regular and substantial sleeping, eating, social interaction, etc. are all important factors to having a healthy lifestyle, and in turn, success. Your students may need a reminder that more important than grades is the fact that they do what it takes to take care of their own mental and physical health. If a student appears to be struggling more than the usual, don't hesitate to reach out and ask if they are managing and if they need some extra help. It can be awkward to do this and sometimes you may not know how to go about it, but remember you have Dr. Daschbach and Dr. Szteinberg who would likely be more than happy to help you word an email or give tips on how to have one of these difficult conversations. You can also bring it up in a group discussion as to not single any individuals out that there are various resources for all different situations whether it is RPM hours or help sessions for course related struggles, or Uncle Joe's and SHS for non-course related issues. Whatever it may be, it is important that both you and your students remember to take care of yourselves.

One of the most fulfilling parts of being in the PLTL/peer mentoring program is that it provides you the opportunity to support your students in more than General Chemistry. Hopefully some of this helps as you learn for yourself the best way you can be there and encourage your students. Good luck during the rest of the semester and remember that you have earned your place in this program!

# Bouncing Back: You May Have Fell Down a Chute but There's Always Another Ladder in Sight

## By Jake Muilenburg

So, here we are in the middle of the semester and things are really picking up. Midterm season has only just begun and everything seems to be converging all at once. And maybe you're just now realizing that taking 18 credit-hours the same semester that you decided to become a PLTL leader/Peer Mentor while also to taking on leadership positions in your other groups on campus isn't quite as easy as you may have thought. And suddenly you have to worry about meal points too, even though we're barely halfway through the semester, and the beast that is housing for next year is starting to enter your peripherals and, for the love of god, why does St. Louis not understand that 80-degree weather is not suitable for October?

Okay, take a breath. This is about the time when things start to really pick up and, if you're not careful, it's easy to feel overwhelmed in the heat of it all. The mid-semester slump is real, and we all experience it, but it's important to take a breather and put things in perspective every once in a while. In PLTL/Peer Mentoring, we constantly stress the concept of a growth mindset to our students, but it's so important to remember that the concept applies to us as leaders too. Nobody expects you to have everything figured out, and it's okay to still be learning how to manage things. It's all a part of the process.

This point in the semester is a good time to analyze how you're managing your time and compare it to the beginning of the semester. We often make all these goals and study plans at the beginning of the year that work out gloriously for all of two weeks, but as enthusiasm dies down and classes get more rigorous, it becomes more difficult to keep up with those plans. And that's perfectly fine because things are meant to change, but the issue is that many of us (myself included) decide that, instead of adapting those plans to work more effectively, it would be better to throw them out entirely. In the moment, it can feel like the easier option is to abandon a plan that's no longer working, but going back to square one only creates more work for yourself. And who would want that?

So, I encourage you to revisit those study plans that seemed so perfect at the beginning of the year and amend them to be more suitable for where you're at right now. Don't just discard them as failed efforts, but instead make adjustments according to what you've learned in the past 2 months of classes. Maybe you found that coming back to the forty to do your work at night was effective in the beginning of the semester, but now that things have picked up it's better to stay on main campus for longer. Or maybe you've realized that working in groups isn't the best strategy for your classes this semester, even though group work is what got you through last semester. Or maybe you just need to switch up your go-to study spot and give yourself a change of scene. Whatever it may be, it's important to realize that the circumstances of our lives change, and it's perfectly okay to change how we deal with them.

Adopting a growth mindset goes far beyond GenChem: it applies to all of life. Managing college life is something that takes time get the hang of, so remember to treat each semester as a learning experience and remember that there's always time to pull things together. Just keep calm, keep your head held high, and remember that you've earned your place and deserve to be here—both as a PLTL leader/Peer Mentor and within the greater WashU community. There's always room to get better, and it's never too late to bounce back. Good Luck!

#### The Game of Life: Self Care

## Sophia TumSuden

Congrats on being selected as a PLTL leader or a Peer Mentor! Remember that this is a huge achievement in and of itself and you should be proud. The role of a peer leader is so much more than simply facilitating conversation. Peer leaders are meant to be a support for their students, many of who are first years learning to navigate college. This being said, the first round of exams can be an overwhelming experience for a first year student. It is important to acknowledge this milestone and to give your students the opportunity to discuss study strategies, ask questions, and plan their studying. Additionally, you will also have upperclassmen in your session that can be a great resource to utilize in advising your first years about exams. This prevents upperclassmen students from feeling alienated by the conversation since it is pointed at first years.

Despite your best efforts to prepare your students, it is inevitable that every exam may not go well. Many students are coming from high schools where they were top of their class and aced every exam. It is important to take time to talk with your students about how to deal with this disappointment. Emphasize the growth mindset! They can either see this exam as a failure, or they can see it as a growth opportunity. Tell students to take time to think about how they prepared for the exam, what they felt was helpful, and what they want to change for the next exam. Remind students of the immense amount of opportunities for help they have at their fingertips (RPM hours, help sessions, office hours, etc.). Finally, remind students that one bad exam does not mean they can't succeed in general chemistry. This is why exams and quizzes allow for drops.

Additionally, many students may feel generally overwhelmed in the WashU environment. It is easy to look around at WashU and feel as though everyone is involved in more than you, doing better in their classes and has their life planned out. However, it is important to remember that not everyone is as put together as they seem and feeling stressed is normal and something that everyone experiences.

Lastly, make sure students are taking time for themselves to experience the endless opportunities life of a college student offers. At the end of the day, health and happiness is what is most important, so make sure your students don't let school and exams take over their lives. It is important to take mental breaks and spend some time every day doing something that makes you happy, whether that is exercising, getting involved in campus clubs, hanging out with friends or even just watching Netflix. It is important that students get in the habit of practicing self-care as they begin their college experience.

#### Hi There, Peer Mentor or PLTL Leader! You are Great. Thanks for Being Here.

## **By Abby Wong**

One of the most important moments of support for students is when they feel that they haven't done as well as they hoped for. It's wonderful to experience your student's highs but when it comes to lows, it is both more challenging and much more important to be present for your student who is struggling. In my experience, the crux of the struggle comes less from the fact that it was one, droppable exam but more of a matter of identity and crisis in identity.

I've had students tell me that it's the first time they've actually had to really truly study in order to do well – to some of us, that may seem odd now that we have been in college for a few years. But it is a mindset shift that some of us may relate to, and with that shift, comes the need to set a growth mindset foundation. What happens when we study hard but don't get the results we want? How do we bounce back? How can we stay motivated?

One of the ways I've been able to connect with students is chatting one-on-one. Whether it is a quick coffee grab outside of hours or just before/after hours begin, it's always a crucial time to connect and usually has been the time when students have opened up to me about feeling behind in the course while everyone seems to be doing okay.

A couple tips for chatting one-on-one about bouncing back... the first thing is just to listen and let them work through what they are saying as well. Ask a few probing questions about what they think is the central issue and perhaps a solution for the next exam or challenge. The second is to stress that sometimes it isn't about studying harder and really about studying smarter. How are you using your time? Maybe it's time to abandon the good ole memorization for a couple practice problems in full. This change is usually an uncomfortable switch – affirm that because a lot of the time, trying something new never has a guarantee. But taking the practice exam to solidify concepts just might be worth the try. The last tip I have is to tell them that they are more than numbers. This is a tricky one – it has both worked beautifully one-on-one and also sounded cheesy in a big group. But it's true. We are more than numbers. When I say that, I hope they know that their effort and dedication to the work is what I see and value – regardless of whether they are an A, B, C, D, or E student.

In the end, our Chem kids are also our peers and reflecting on how you felt supported through GenChem is always a great start to how to support your kids as well. Wishing you all the best for the rest of the semester and to paraphrase the young Zac Efron, we're all in this [game] together – Player 1, Player 2.

#### Winning Isn't Everything

#### By Laura Goh

You've made it to the final leg of your first semester as a Peer Leader/Mentor! That's something worth celebrating and reflecting on, especially since it can be difficult to see how much you've grown since the start of the year (and you have grown, I promise).

No doubt by now, the phrases "growth mindset" and "fixed mindset" have been burned into your brain, but they're more than just some catchy buzzwords. A growth mindset is critical to your students' success as well as your own. Let me give you an example. In one session late in the semester, the stress of midterms and extracurriculars dampened everyone's energy including, my own. It was tempting to just give out an answer and explanation under the guise of "helping the discussion". Though subtle, I put the result ahead of the process. All that did was test a student's ability to copy down an answer and downplay the benefits of encountering failure. I let a fixed mindset govern my sessions.

It's easy to tell students to have a growth mindset about Chemistry, but it's just talk unless you personally practice it. Having a growth mindset is all about regarding intelligence as a malleable ability that everyone has the potential to expand. Prioritize the learning process first by letting students struggle with a problem before you jump in with a probing question. Encourage them not to shy away from a confusing concept. Avoid statements that glorify a fixed mindset, even if they're meant kindly. Phrases such as "you're really good at Chemistry" or "you wouldn't be at WashU if you weren't smart" may seem supportive, but they actually give the impression that a student's self-worth lies in their lack of failure.

You don't have to directly quote growth mindset studies if you think it too impersonal. Rather, as you continually strengthen your own mindset, you better equip yourself to inspire a growth mindset in your students.

# Oh No, Mid-Semester and Things Are Getting Dicey!

## By Amanda Karl

So you've made it to the middle of the semester. The weeks seem to drag on, and deadlines are piling up for both you and your students. It probably seems like you are playing your own version of Whack-a-Mole with your classes- frantically trying to keep tabs on all of the projects, essays, and midterms that continue popping up. When you walk into your session, the stress and sleep deprivation is obvious in the faces of the students. They may seem less eager to participate, or are even dozing off in the middle of the session. This can be fairly demoralizing as a leader, especially when you are also worn down by the various stresses of the semester. However, there are ways to combat this mid semester slump, and I'll tell some things I found helpful!

First and foremost, I think one of the best things you can do is to just empathize with you students. At the beginning of the session, ask them about how their weeks have been going, and give them a little time to vent. This could be in the form of an activity like "rose, bud, thorn", but it can also just be an unstructured question about how life is going. I would always give my students a few minutes at the beginning of the session to chat about their weeks, and I think this helped to get people engaged. I would also throw in a few of my own anecdotes or grievances with my classes, which I think they appreciated. It is always nice to know there are other people in the same boat as you are, especially when it's a really tough week!

Another way to boost morale is to have food. I know this sounds superficial, but really I found a big difference between weeks with food and weeks without food! This doesn't mean that you have to bring or make food for your group every week (although they would like it if you did), but on weeks leading up to an exam, or weeks that I knew would be particularly draining, like the last week of classes, I would bring some sort of small snack to pass out during PLTL/Peer Mentoring. The possibility of having food functioned both as a motivating factor for them to keep showing up to the session, and a way to keep them awake during the sessions. Another option that I have heard of people doing is having their students switch off bringing food for the group. This is also really successful and the group is more willing than you may think to contribute to the cause of having something to snack on! Also, this makes it so you don't have to spend too many meal points in Paws!

Finally, I think it is important to be flexible in how you are running your session as you get farther and farther into the semester. Some weeks you may have fewer students than others (week before Thanksgiving, week before a Calc 2 test, etc.) and it is important to keep the number of students in mind when deciding which problem solving strategies you will use. If it is a smaller group, it is often better to do more Round Robin, or other full group activities since there aren't enough people to really split up into even smaller groups. Also, as stress starts to build, it is not uncommon for students to come to PLTL/Peer Mentoring less comfortable with the material, because they haven't been keeping up as well with course content videos or lecture content. When this is the case, I found that activities in pairs or small groups only made them more frustrated, if many groups didn't know how to start a question on their own. Therefore, if the group seemed especially worn out one week, I would have them get the question started in Round Robin or a full group discussion before breaking up, or just do the whole question as a large group in a scribe or Round Robin format.

I hope some of these strategies will help with keeping your group motivated through the

mid-semester slump. Remember to stay positive and remind your group to do the same, you are almost there! Good luck, you've got this!

#### Gen. Chem.: The Bohr-d Game Edition

# Rebuilding the Tower: Getting Over the Mid-Semester Slump

#### By Lena Khanolkar

Congratulations on being chosen as a Peer Mentor or PLTL Leader and making it through half of the semester! By now your students have probably taken their first chemistry exam, and it seems like all the life has been sucked out of them. The mid-semester slump has probably hit you and your kids HARD. This is a perfect moment to incorporate growth mindset to help them bounce back and feel rejuvenated to finish off the semester strong. Sometimes talking about growth mindset can feel like a drag, so here are some tips to address growth mindset without explicitly mentioning it to your students.

In general, the best advice I can give is to provide personal experience as much as possible. Mentioning how you learned certain problems or approached difficult concepts gives your students a concrete example of how someone can be successful in the course. As a peer mentor, I found that it was especially important that you talk about your experiences as a Gen Chem student both before and after the exam. This helps get your students into the right mindset before they even step into their first exam. I found it helpful to emphasize that it is okay if they do not do super well on this exam. I told them that the chemistry professors recognize that many of them are transitioning to college, and so their first exam is a learning experience for future exams. I found that mentioning this and giving personal examples of how the first exam doesn't determine your grade in the course really helped my students de-stress before the exam and made them feel less upset after their first exam was over.

After they receive their exam scores, definitely empathize with what they are feeling. Take some time for them to feel comfortable about expressing their anger, frustration, disappointment, etc. At the same time, you should try to use their experience to encourage them to use the first exam as a learning experience. You definitely don't want your students to feel hopeless and lose motivation. I told my students that part of their struggle was not because of their lack of knowledge regarding the material, but rather because they were unfamiliar with the format of the exams and the time crunch that is associated with Gen Chem exams. After all, they have never taken a Gen Chem exam before, and many of them have never taken even a college exam before. It is important for you to emphasize that a bad exam score, especially a first exam score, is in no way a reflection of their ability to do well in the course or their knowledge on the subject. I also gave them concrete ways to improve on their study skills by telling them ways I changed my study habits between exams.

Lastly, work on your students' confidence in themselves. This is something you could work on throughout the semester. It's easy for your students to feel as if there is no hope for them in this class. By incorporating sayings like "good job" or "you're on the right track" throughout the semester, I noticed my students felt a lot more confident in answering my questions and their answers to practice problems. This confidence can help change their attitudes toward their abilities in the course as a whole. These little boosts of confidence on a weekly basis really can go a long way when it comes to building up resilience during midterms. If you notice your students feel especially down, don't be afraid to refer them to someone other than yourself such as the course instructors themselves or the study skills workshops that are held during the semester.

If your students seem generally tired and you notice attendance drop, it is also very likely that your students are stressed and exhausted from their other classes; it may not be chemistry-

Gen. Chem.: The Bohr-d Game Edition

related at all! Once midterms started coming around, I made sure to ask my students what exams they had that week to help me understand what else is going on in their lives. Once again, talking about your experience as a freshman can be helpful regarding how you navigated midterms or other classes if you also took some of the same classes that your students are taking. Taking breaks, especially when they are stressing out about other exams and papers, can be helpful. This was something I did not incorporate until late into the semester, and I definitely noticed my students felt a lot less tired after we took a break. Additionally, if you notice that your students aren't coming to the sessions anymore or seem out of it during your session, be sure to contact them through email to see if they are doing okay. This is a good way to help them de-stress but also a good way for you to emphasize the importance of regularly attending.

I hope these tips work out for you, and remember it's totally natural for your students to get hit by the mid-semester slump! It's in no way a reflection of you as a Peer Mentor or PLTL Leader ©

## Don't Monopolize your Flow: How to Persevere through the Mid-Semester Slump

## By Dahlia Lehman

Being a PLTL leader/Peer Mentor is an undoubtedly challenging job, and one of the hardest parts of it is navigating the mid-semester slump when both you and your students are low in energy. But even despite a group of students that is more reluctant to speak up during PLTL/Peer Mentoring or shuffles in late complaining about their multiple midterms each week, there are ways that you as a leader can heighten the energy in the room and keep everybody on track to have the best PLTL/Peer Mentoring experience possible.

One way to help combat the mid semester slump is to vary the typical structure of your session. For example, if your group typically doesn't take any breaks, add in one or two breaks into the routine of your session. Another great way to do this is to combine learning strategies together into hybrids, like round robin scribe or small group round robin, which will create a different learning environment for your students to solve problems.

Probably the most useful piece of advice that I received this past year about the mid-semester slump was to play music during breaks. I started doing this about halfway through the semester and it truly transformed the dynamic of our group; suddenly, there was much more conversation during our break halfway through the session, which led to a much more open dynamic for discussion while solving the chemistry problems.

Another dimension to the music idea that could help even further elevate your session would be to implement music during breaks at the beginning of the semester and to assign each student one week where they will get to choose the music. Not only does this reflect the PLTL/Peer Mentoring values of inclusion and student-driven sessions, but it could be a nice incentive for attendance as the semester dwindles and students become more busy -- you could include the name of the person whose turn it is to choose the music in your weekly reminder email!

One last thing to keep in mind when approaching the mid semester slump is that your students, especially during the busier times in the semester, can gain so much from participating in PLTL/Peer Mentoring. It is important to keep reminding your students of the crucial ways that PLTL/Peer Mentoring can help them better conceptualize the course material; one great way to do this is to provide them with additional tidbits of conceptual guidance on certain topics, even if it means taking a quick break from solving a problem. For example, in my session this year I took a break during one session to open up discussion for my students to decide a good general structure for writing justifications. The students came up with a 5-step structure that they could follow if they ever got stuck or use to check any justifications they had written. As a veteran Chem 111 student, you know what specific conceptual skills will lead to success in the course (e.g. justifications!). Use this to your advantage to help steer your students to think about those specific things, and they in turn will be reminded of the multitude of benefits to attending and participating in PLTL/Peer Mentoring even as they get busier.

Always remember that as the leader you have agency to make minor changes in the structure of your session when need-be, so definitely use that to your advantage when your students become sluggish or overly stressed during the mid-semester slump! Good luck as you tackle one of the most challenging parts of being a Peer Mentor or PLTL Leader; you can do it!

# A Beginner's Guide to Subbing

## By Rachel Novick

So you have finally gotten a hold on your own group, you are feeling comfortable as a leader and feel like you know your students well. Your students trust you, maybe they even think you are "cool", and it feels pretty nice to not show up to your sessions anymore stressed about if everyone will think the ice breaker is dorky, or stump you with a chemistry question and make you feel like a fraud. So yeah, things are going well, nothing can phase you, you are a seasoned PLTL Leader/Peer Mentor, until BAM! You agree to sub for another group, and realize that you are starting from square one and diving head first into a new situation. What if they do things differently from you? What if the students don't feel comfortable around you and are nervous to participate? What if they have totally different personalities from your own students and you have trouble figuring out how to facilitate? Fear not capable peer leader, your trepidations are totally normal, but I guarantee you will be just fine.

First thing is first: the way to anyone's heart is through food, so maybe bring snacks to make an extra stellar first impression. Of course confirm with whoever you are subbing for about food allergies, the last thing you want is an EST fiasco on your hands. The main thing to remember is to trust yourself, you were chosen to be a PLTL leader/Peer Mentor for a reason, and you could have gotten assigned to any group. You are capable of working with all sorts of students, and do not hesitate to reach out to the usual leader for any specific tips they may have for you pertaining to their group in particular. Ask if the group usually has trouble with timing, how the desks should be set up in the room, if there are any pairings of students that do not mesh well for certain collaborative learning strategies. You are not without help, whoever you are subbing for will be happy to answer questions and make sure you go into the session feeling prepared.

It is probably a good idea to play an ice breaker, because even though the students in the group all already know each other, it is really important that you at least try your best to learn names. Calling someone by their first name makes a big difference in creating a comfortable environment, and it is a good step towards clicking with the new group. And besides, who doesn't love a good ice breaker every now and again?

You may want to ask how they do the warm up question, because that is pretty varied from leader to leader, and different methods work well for different groups. The first time I subbed I jumped right in with the usual round robin scribe method my group and I typically use for the warm up question, and a couple minutes in I was stopped by one of the students who just asked flat out if we could do the warm up question the "normal way." I was a little bit thrown off and felt like an outsider in the group, but once they explained how they went through the concept review, it actually made a lot of sense for the group dynamic, and I even started implementing a combination of their way and my way with my group in the coming weeks. While it may be a little intimidating in the middle of the semester to lead an already established group, you can learn a lot from being exposed to new ways of doing things.

Though, let's be honest, you may just have agreed to sub in to take the extra pay for the week, take the opportunity to grow as a PLTL leader/Peer Mentor, and you can even treat it as a practice run for when you meet your new group next semester. Hopefully you feel more confident than when you walked into your very first session. You already have experience, so trust that everything will go smoothly!

#### It's Okay to Be Falling Apart

## By Michelle Roh

I want to start by saying that you should be so proud of yourself. There's a reason why you were chosen to be a Peer Mentor or PLTL Leader, and don't forget that you are more than worthy of this role. That being said, you can definitely be both an amazing peer mentor and a struggling student at the same time. We've all been there. You may think that by this year you should be getting the hang of balancing the constant stream of schoolwork, extracurriculars, and personal life problems, but I've realized that that's rarely the case.

Personally, I know I had the tendency to forget to take the time to take care of myself in the times where I needed it most. I thought that, by being in a leadership role, I had to fulfill some expectation that I didn't need self-care in order to be emotionally okay and academically successful. I thought to myself, "I don't need to go to Orgo office hours, I'm a Chem peer mentor!" and "I can handle all of this, I should be good at college by now". However, this is the worst mindset that you could possibly have as a peer mentor or PLTL leader. If we don't admit we need self-care, how can we recommend it to our students? The best way we can mentor our students to take care of themselves is by modelling the practice ourselves.

Be vocal about the ways in which you continue to seek out resources and self-care past your freshman year. In the breaks incorporated into your session, join their discussion when they talk about their struggles in college and be active in sharing about your experience. Talk about how you go to office hours when you're completely lost in a class, or how you set aside time for yourself to decompress in the massage chairs at the AC, or how you take naps to recharge, or how none of the above work sometimes. Be honest in the ways in which you struggle and aim to take care of yourself in that struggle. This will help your students see how even successful mentors can have a hard time in college and it's okay to be working through that even after freshman year.

Don't see your struggle as a weakness; see it as another opportunity to relate to and mentor your students on how to care for yourself in this struggle.

#### **Bring in the Closer**

#### By Mark Sfreddo

As you get to the end of the semester, you might find that work has started to pile up, and it becomes harder to find time to prepare for your sessions. The last units are hard, so do your best to fit some Gen Chem review into your week. Remember that your students are busy too, and they may start skipping PLTL/Peer Mentoring to catch up on sleep or study for other exams. As a PLTL leader/Peer Mentor, it's important to stay enthusiastic and look for new ways to motivate your students.

In my last few sessions, I try to create a relaxed vibe while reminding my students of the importance of coming to session. There are still a lot of points up for grabs in the last midterm and the final exam, so PLTL/Peer Mentoring is just as important as ever. One good way to keep your group on track is to send reminder emails after PAM each Friday, telling your students what topics will be covered in the upcoming session so that they know how to prepare. A brief email shows that you care about your students' learning, and at the very least will remind them to let you know if they will be absent.

Additionally, the last few sessions are a great time to try out fun new approaches, such as playing music during the session or adding a short break. Breaks are very helpful towards the end of the semester, as I found students can feel overwhelmed by the hard material in the last few units. By now, your students should be fairly familiar with the PLTL/Peer Mentoring philosophy and the collaborative learning strategies, so putting out your laptop with YouTube or Spotify can make your session more fun without interrupting the flow of the class. I like to start off with some songs from my own playlist, then I let students make requests for what they would like to hear. Music is also a fun, non-academic thing for your group to bond over, as long as it doesn't create too many side conversations.

There are also some new issues that may arise towards the end of the semester, such as phone use. Now that your students are comfortable with you, they may figure you'll be lenient if they use their phones. In this situation, it is a good idea to restate the expectations of PLTL/Peer Mentoring – don't be afraid to tell your class to put phones away! Another issue could be low attendance and small classes. Maybe a couple kids dropped, and some students skipped that week, so now you have a group of four or five. While it can be hard to use the collaborative learning strategies without a full group, this situation is actually a good opportunity to get to know your students better and devote more time to their individual needs and questions. When I have a very small group, I try to make the session more fun and informal so that my students feel rewarded for coming to session when other people skipped. Try to be extra attentive to student's questions, and consider spending a bit more time on the topics your students are struggling with. After class, it is a good idea to reach out to whoever missed and let them know you'd love to have them back next week.

Being a good PLTL leader/Peer Mentor means adapting to new challenges while staying true to the PLTL/Peer Mentoring philosophy. Now that it's the end of the semester, you have one big advantage – you know your students. So, use that knowledge to tailor your session to what works best for your group. The last session is just as important as the first one, so stay enthusiastic, go the extra mile for your students, and finish strong!