Classroom Practices That Support Student Success

You can implement a number of practices in your classroom to help facilitate your students' success. Use this checklist to determine the areas in which you are already implementing student success strategies and in which areas you might make adjustments.

1. Clearly Communicate Your Expectations

___ I have created detailed guidelines for all assignments by which I communicate my expectations for students' assignment submissions.

___ All assignments, due dates, and assessment dates are listed on the syllabus with a clear indication of how each factors into students' grades.

___ In class, I articulate and reiterate my expectations by directing students to the syllabus and assignment guidelines and by answering students' questions.

2. Focus on Learning

___ When students are completing activities and assignments, I explain to them what the intended learning outcomes are and what skills they will develop.

3. Ensure Assignments and Activities Prepare Students

___ I have checked the level of difficulty of homework, in-class activities, nongraded assignments, and other formative assessments to ensure that it is equal to the level of difficulty of my summative assessments.

4. Encourage Student-to-Student Support

___ I have included the experiences of my past students—by having past students be part of a panel or create advice cards to offer guidance to new students—in my course(s) so students receive support from their peers who know what it takes to succeed in my course(s).

5. Connect Study Habits and Performance

___ After the first assessment is returned, I ask students to take an inventory or survey about their study habits to show them how study behaviors are related to their course performance.

___ Throughout the semester, I regularly remind students about the connection between their study habits and course performance.

Grading Practices That Support Student Success

You can use a number of grading practices to help facilitate your students' success. Use this checklist to determine the areas in which you are already implementing grading strategies that promote student success and in which areas you might make adjustments.

1. Share Exemplars

___ When assigning papers, projects, and presentations, I provide students with examples of 'A,' 'C,' and 'F' work from students who have previously taken my course, so they are able to clearly understand my expectations.

2. Assess Students Early

___ I give the first assignment or assessment within the first 2 weeks of the semester, so students have a "data point" that can signal to them what adjustments they may need to make to be successful.

3. Provide Multiple Opportunities for Students to Earn Course Points

___ I give students multiple opportunities to recover from low grades that they earned early in the course.

___ My course includes multiple and varied assessment types to accommodate different learning strengths and provide opportunities for students to improve throughout the semester.

___ I assign a greater weight to later exams than early exams.

___ My grading system is designed so that one low score on an assessment does not severely impact students' final grades.

4. Provide Opportunities for Students to Use Feedback

___ I allow students to revise certain assignments after I offer feedback, so they are able to see learning as a process and can apply my comments to improve their work.

___ I allow students to revise certain assignments after they receive feedback from peers, teaching assistants, tutors, or writing center consultants.

Performance Prognosis Inventory for Analytical Chemistry

Introduction

Dr. Saundra Y. McGuire
Director, Center for Academic Success
Adj. Professor Department of Chemistry
B-31 Coates Hall
Louisiana State University
Baton Rouge, LA 70803

Behavior

The inventory below lists behaviors that you should exhibit in order to excel in analytical chemistry. Circle "true" or "false" beside each of the following statements describing the way you will study in this class. The scoring scale is on the next page.

1. I will always read the lecture material before I go to lecture.	True	False
2. I will go over my lecture notes as soon as possible after lecture to rework them and mark problem areas.	True	False
3. I will learn the relevant concepts from General Chemistry so that I have the background necessary to understand the material in Analytical Chemistry.	True	False
4. I will try to work on the homework problems without looking at the example problems or my notes from class.	True	False
5. I will go to office hours or tutoring regularly to discuss problems on the homework.	True	False
6. I will rework all of the homework problems before the test or quiz.	True	False
7. I will spend some time studying analytical chemistry at least five days per week (outside of class time).	True	False
8. I will "teach" concepts to friends, myself in the mirror, stuffed animals, imaginary students, etc.	True	False
9. I will make flashcards and use mnemonics for myself to help remember facts and equations.	True	False
10. I will make diagrams or draw mental pictures of the concepts, experimental procedures, and instruments discussed in class.	True	False
11. I will actively participate in my study group where we will discuss homework problems and quiz ourselves on the material.	True	False
12. I will rework all of the quiz and test items I have missed before the next class session.	True	False
13. I know that I can make an A in this class, and will put forth the effort to do so.	True	False

Results

The predicted grade for your performance this semester is provided below:

Number of "True" Responses	Predicted Grade
10–13	A
6–9	B
4–5	C
2–3	D
Fewer than 2	F

Note that you can change your predicted grade at any point by changing your behavior such that more of the statements are "true."

Providing Support Outside of Class

You can provide students with academic support to help them gain a deeper understanding of your course content outside of class time. By planning and creating course-specific resources, you can help students gain a deeper understanding of complex concepts, develop the skills necessary to achieve success in your course, and better prepare for the work they will do during class time. It is also helpful to make sure that students know about the campus support that is available to them.

What resources can I provide?
- *Video resources.* On your course website or learning management system, provide video resources that students can use to review information or learn in conjunction with your classroom activities. Videos could include:
  - Web videos of experts or other instructors explaining concepts covered in your course,
  - Self-made recordings or screencasts of you or your teaching assistants explaining difficult concepts or working through problems, or
  - With students' permission, recordings of past students explaining difficult concepts or working through problems.
- *Guided solutions.* Posted to your course site or distributed as handouts, guided solutions can take students through solving problems one step at a time. Be sure to clearly write the steps in order and to clearly annotate any steps that include multiple parts. You might also record videos that include guided solutions, with the steps written on screen to reinforce important points articulated in a voiceover.
- *Practice exercises.* Since some students may enter your course less knowledgeable about the subject than their peers, it is helpful to offer students a series of assignments that allows them to assess their current knowledge, practice remedial skills, and identify any gaps or misunderstandings they have about content that is foundational to your course. If students share the results of these exercises with you, it can also give you a better sense of the knowledge that students are equipped with at the beginning of your course.

What resources can I provide for students to receive academic support in person?
- *Office hours.* Include on your syllabus the days and times that you are available to meet with students. Remind students that if they are having trouble, they can schedule time to meet with you or visit you during your office hours.
- *Optional tutorial hours.* Separate from office hours, you can designate time to review a specific course concept. Specify the topic you will be covering ahead of time, so students can plan whether they would like to attend the session. You can also incentivize students to attend by offering extra credit points on an assignment that

they previously completed on the same concept (S. D. Brookfield, personal communication, January 25, 2016).

- *Campus resources.* Ensure that students are aware of the academic support services on campus, such as the writing center, library research support, and any tutoring centers. You can list these resources on your syllabus and regularly remind and encourage students throughout the semester to use them. To help students feel more comfortable using on-campus services, you might consider scheduling time to walk students to a support center, having a representative from one of the centers visit your class, and/or sharing testimonials from past students about how a specific center helped them to be successful in your course.

Encouraging Student-to-Student Support

Your former students can serve as invaluable resources for students who are currently enrolled in your course. There is a major difference between offering advice to students as an instructor and students receiving guidance from their peers. Students who have previously taken your course are able to pass along key strategies that enabled them to be successful in your course and, in turn, can lead current students toward a path of success.

Here are two strategies you can use to include former students in your course:

1. **Form a panel.**

On the first or second week of the semester, invite a group of three or four former students to your class to serve on a panel. Provide these students with a list of questions prior to attending your class. Some questions might include:

- How many hours per week did you spend studying and/or completing homework assignments?
- What types of strategies did you use to take notes on the readings?
- What study methods did you use to prepare for exams?
- What instructor-provided or campus resources were most helpful to you?

Have your former students on the panel respond to these questions during class, and then allow your current students to ask them any additional questions.

2. **Use advice cards.**

At the end of the semester, distribute blank index cards to students in your course. Ask them to write down advice for students who will be taking the same course in the future. You can provide students with the panel questions listed above to help them brainstorm ideas. Collect the index cards and read them to familiarize yourself with the kinds of advice your students are offering and to identify patterns among responses.

At the start of the next semester, distribute the cards to students who are taking the same course. You can give one card to each student or have students form small groups and distribute multiple cards to each group. After students read the cards, ask them to share the advice on their cards with the full class. Engage students in a discussion about how they can be successful in your course and use this as an opportunity to direct students to useful resources.

The Best Ways to Learn

MAKE THE MOST OF YOUR NOTES
Review your notes as soon as possible after class. Fill in any missing information by consulting your text or asking classmates or your instructor for clarification. Spend time organizing your notes and making connections with content you have previously covered. Create flashcards for key vocabulary, facts, and content.

PUT IT IN YOUR OWN WORDS
Shortly after completing assigned readings or after reviewing your notes from class, take a few minutes to put the concepts studied in your own words. It can be very helpful to "teach" or explain the content to someone else. You can even pretend to teach others if your friends are not that interested in learning more about physics!

BE AN ACTIVE READER
Stop every few pages and ask yourself questions about what you just read. Turn section headings into questions and answer them in your own words. Make connections between what you read and what you have already learned. Create quiz questions that may appear on a test and write them on note cards for later use.

SCHEDULE STUDY SESSIONS
Set aside a few times each week to study for each course. Study your notes from the current class and then restudy notes from prior classes. Use your practice test questions and flash cards. Keep quizzing yourself until you can reliably recall the information, and then take the cards out of weekly rotation. Add them back in prior to any final assessment.

MIX DIFFERENT TYPES OF PROBLEMS
When you practice two or more concepts at the same time, retrieval is harder but produces longer lasting learning and lets you apply what you are learning. For example, practicing different types of math problems makes you more skilled than working on a set of common problems.

Supporting Student Study Skills

IDENTIFY CORE CONCEPTS

Clearly define the core concepts your students will need to learn to be successful in your course. Explain how these concepts will help them in their future studies and/or careers. Refer to them often and connect your assessments and assignments to them. Help your students track their progress in mastering them. Expect your students to apply the concepts in higher order thinking exercises.

BUILD A GROWTH MINDSET

Research shows that students with a growth mindset are more resilient and are able to overcome challenges. Show students that effort equals learning. Have them track their progress so they can see their improvement over time. Help them understand how learning works by explaining the importance of practicing retrieval of key concepts to arrest forgetting and to strengthen retrieval routes.

PROVIDE PRACTICE TESTS

Share typical test questions in the same format they can expect to see on your exams. Show a few throughout the class and have students record their responses. Revisit them at the end of class and discuss the correct answers. Have students create their own possible test questions from their notes and readings. Build retrieval practice into courses by providing a brief quiz over the important concepts from the current as well as prior classes at the end of class.

USE SPACED PRACTICE

Spaced practice is a schedule of practice that revisits concepts over a period of time. It works because retrieving knowledge from memory is more beneficial when practice sessions are spaced out so that some forgetting occurs before you try to retrieve again. The added effort required to recall the information makes learning stronger. For spacing within the class, revisit important concepts from the class at the end of the class. For spacing across classes, revisit important concepts from earlier classes at the beginning of the next class. Both are helpful but the longer interval between classes will help with long term retention.

CONTINUE TO REVISIT CORE CONCEPTS

Revisit content from previous classes on a regular basis. Require students to continue to use skills and content already covered. Include questions from prior units of study on current exams. Help students make connections between current and past content.

Gauging Student Readiness for Online Learning

At the beginning of your course, ask students to complete an online self-assessment to help gauge their readiness for online class work. This self-evaluation will help them better understand the behaviors and skills they will need to succeed in an online course and identify areas where they might need to focus additional efforts. Results of the self-evaluation will help you to identify areas where students may need additional support. Below are some examples of questions you might include in an online self-assessment.

- **Time management**
  - Do deadlines cause you stress, or do they motivate you?
  - Do you have at least 12 hours a week to devote to the online course?
  - Do you keep an organized calendar to track due dates for course work?

- **Persistence in overcoming obstacles**
  - Do you know where to go for additional help or for support with understanding course content?
  - Do you know where to go for additional technical help or support?

- **Independence**
  - Are you adept at setting and meeting goals?

- **Communication style**
  - Do you enjoy communicating via email, by text, and with other technology?
  - Are you comfortable having an honest and respectful online discussion with people that you have not met face-to-face?

- **Comfort level with technology**
  - Do you feel comfortable installing or updating software?
  - Do you feel comfortable searching the internet, bookmarking sites, downloading files, and uploading files?
  - Do you know how to access technical support?

- **Study skills**
  - Do you have a place to work that is free from distractions?
  - Do you like to learn through podcasts, videos, and other online resources?

For an additional resource for online readiness assessments, visit Online Readiness Assessment by Vicki Williams and The Pennsylvania State University.

An effective way both to use the information gleaned from these self-assessments and to help students feel more comfortable reaching out to you is to schedule one-on-one meetings with them. Use the time to discuss students' assessments and to identify ways you can support them, as well as ways they can work to develop the skills they need to succeed in the online course. For example, since time management is a critical skill for online learning, instructors should provide a customizable weekly schedule to help students stay on track and meet course expectations. You may also want to ask students to share their study schedule with you so that you can help them to determine if they have allotted enough time for specific tasks.

Create an Online Buddy System to Encourage Student-to-Student Support

Requiring students to collaborate or team up with other students can create a support system that is helpful to all students and can be critical for students who need additional support, particularly in an online environment (Roper, 2007). One way to create a support system is to set up a buddy system for the first few weeks of a course (Cost, 2012). Buddy systems can continue throughout the course; however, working in different teams or groups can also provide the support needed. Below is a suggested process for setting up a buddy system.

Step 1: Create the buddy teams. Two strategies for creating buddy teams are outlined below. Three is an effective number for buddy teams, because it is small enough to organize communications easily, while at the same time it provides flexibility in case one team member drops the class, or other issues arise and new groups need to be formed.

> **Random groups.** You can create random groups of students by organizing students alphabetically or counting off by three down the roster.

> **Strategic groups.** You can create strategic groups based on similarities or differences that might be relevant to the course or for convenience. For example, it might be helpful to group students who have similar schedules or majors. If there is enough variance, you can group students who have more online learning experience with those who have less. You may also want to form groups based on demographic differences. You can gather information at the beginning of the course by asking students to fill in a survey that includes their major, career interests and experience, communication preferences, experience with online learning, digital skills, demographics, and scheduling availability. If you gather this information using SurveyMonkey or Qualtrics, you can download it into a spreadsheet to make it easy to sort and utilize.

Step 2: Post the buddy system process. Create a document that lists the groups of students who will be buddies for the duration of the course. Post the listing on the announcements page, or send an email with the following instructions.

> *You have been assigned to a buddy group for the duration of the course. This means that you now have a small group of peers to reach out to if you are uncertain about something, you need some help, you are struggling, or you need some words of encouragement. Your job is to help each other succeed in this course. Please establish your support system by midnight on Tuesday by doing the following.*

> 1. You will need to contact each other by the method of your choosing and set up a time to meet one another either virtually or in-person.

> 2. At that meeting, you will need to figure out the best times and methods to hold weekly check-ins with each other for the first four weeks. You may want to continue meeting after the initial four weeks; that will be for your group to decide. If the

group agrees to continue meeting, you are expected to be available for each other for the remainder of the course.

3. The group needs to decide the best way to communicate (e.g., chat, phone, text) outside of the weekly check-ins in the event that one of you needs help or has a question.

4. Elect one person in your group to send an email to me with your buddy system process by Wednesday at midnight. Please notify me if any issues arise with your buddy (e.g., your schedules do not align, your buddy is unresponsive, etc.). I will try to resolve the issue or assign you to a new buddy team.

    Note: If a question arises during this process that you are not able to answer, please post it to the Open Discussions and Questions Forum (found on the course entry page) since other students likely have a similar question. I will respond to your question, and other students can benefit from the response.

Monitor Student Activity and Take Quick Action

Ongoing monitoring of students' online activity will help you identify students who may not be participating as regularly as they need to in order to succeed in your online course. Your learning management system's (LMS) gradebook function likely provides a quick overview of which students are not completing assignments and/posting late to discussions. In addition, most LMSs provide an analytics function that allows you to monitor the time students spend online—their level of activity in discussions, their time spent on quizzes, the amount of time they interact with other students, and the number of missing or late assignments. It is particularly important to monitor students' online activity and their completion of assignments during the first few weeks since students who fall behind at the beginning of a course often struggle to catch up or complete the course (Boettcher & Conrad, 2016).

Research indicates that there are many reasons why students fall behind or struggle to effectively engage with online courses, including

- technical difficulties,
- problems in their personal life or their work,
- feeling disconnected from the instructor or other students,
- lack of preparation for the material,
- lack of comprehension of the material, and
- falling behind and then getting overwhelmed (Jaggars, 2011).

It is important to reach out to students as soon as you recognize they are not participating at the levels needed to be successful in the course. When you reach out to a student, try to avoid making assumptions about low participation or missing assignments. Ask them how they are doing, listen to them, and let them know that you are interested in helping them succeed in the course and in helping to get them back on track. In addition, make sure they are aware of your virtual office hours and the campus support services for online students; and offer assistance in connecting them with those supports.

Example message:

> *Hi Jennifer! I've noticed that you have not been posting in our discussion forum for the past two weeks, so I'm wondering if everything is okay. Are you having any trouble with the material? Please let me know if there is anything I should know or any help I can offer. Also, here is a link to a list of support resources that might be of help. I look forward to hearing from you and helping in any way I can!*

Use Rubrics for Student Self-Reflection

Creating high-quality grading rubrics for course assignments will help students better understand your expectations and therefore be better able to meet them. Require students to reflect on the rubric requirements to determine if their work meets the rubric criteria. This will ensure they obtain the full benefit of the rubric. The reflection process can help students identify areas where they need to improve and can help faculty better understand how to support students' learning and development. In addition, this process helps students build the important lifelong skill of self-reflection (Palloff & Pratt, 2007).

Since effective communication is important in life and as a career skill, having students reflect on their participation in discussion forums and in peer review teams can be particularly helpful.

When including a rubric for student self-reflection on an assignment, keep the following in mind.

- Provide students with a Word document version of your online grading rubric. Add a new column in which students are to complete a self-reflection.

- When you introduce the assignment and the rubric, point out the additional requirement that students thoughtfully and honestly assess themselves in the student notes column before handing in the assignment.

- Offer students an appropriate number of points for completing the reflection activity.

Example Instructions to Students:

> *Providing effective peer review is a key life and career skill. Reflecting on the peer review you provided is an effective way to develop this skill further. Please read the peer review rubric, and reflect on the extent to which you met the specified criteria. This will help you identify areas where you are meeting expectations as well as areas where you can work towards improvement.*

Example: Peer Review Rubric with Student Self-Reflection

Complete (5 points)	Developing (4 points)	Beginning (3 points)	Insufficient (1 point)	Student Self-Reflection Notes
Identified two to three specific examples of peer's assignment, met the assignment expectations, and offered two to three specific ways their work could be strengthened.	Identified two to three general examples of how peer's assignment met the assignment expectations and two to three general ways their work could be strengthened.	Identified one general example of how peer's assignment met the assignment expectations and one general way their work could be strengthened.	Identified one area how peer's assignment met assignment expectations or one area where the work could be strengthened.	*I think I provided some helpful feedback, but it may not have been as specific as I could have offered. I wasn't sure how to explain my ideas.*

Example Instructions to Students:

Effective participation in our online discussions is critical to your own learning as well as that of your peers. By reflecting on your participation, you can identify areas where you are meeting expectations as well as areas where you can work towards improvement. Please read the discussion forum participation rubric, and reflect on the extent to which you met the specified criteria.

Example: Discussion Forum Rubric with Student Notes

Criteria	Distinguished (3 points)	Proficient (2 points)	Basic (1 point)	Student Self-Reflection Notes
Timely participation	The initial response was posted before due date.	The initial response was posted by the due date.	The initial response was posted after the due date.	*I posted my initial response right before the due date.*
Active Participation	Posted, replied, and asked questions more than four times throughout the week.	Posted, replied, and asked questions three times throughout the week.	Posted, replied, or asked questions one to two times throughout the week.	*I was not able to keep up with the discussion after the second day, so I only posted two times.*
Thoughtful and complete responses to question(s)	Post fully responded to the question(s) and was supported by connections to the module reading(s) and specific examples from real life.	Post fully responded to the question(s) and was supported by connections to the reading(s) or specific examples from real life.	Post partially responded to the question(s) and was supported by vague or incomplete connections to the reading and/or real-life examples.	*I am keeping up with the readings, and I try to discuss and connect to them in my post, but I could not come up with specific examples from real life.*
Thoughtful contributions to community learning	Posted thoughtful questions or novel ideas to peers, which generated new ideas and group discussion.	Posted thoughtful questions or ideas to peers which generated a single peer's response.	Posted minimal or vague responses to peers (e.g., "I agree with you, Sherry!").	*I forgot to check back and reply to people who asked me questions or commented on my post.*

Help Connect Online Students to Support Services

Support services are critical to student success and persistence in online learning environments (Bailey & Brown, 2016). To help connect your students to services, start by familiarizing yourself with all the support services available from your institution. Below are some common types of student services.

- Academic advising

- Academic support services

- Writing center

- Disability services

- Mentoring or networking programs

- Technical support

- Library services

- Financial assistance

- Mental health services or hotlines

Contact the various offices or centers. Find out specifics about the services they offer and the best way to refer students, so you can effectively inform and encourage students to seek the help they need. Ensure that your students are aware of the support services available to them by

- including a list of support services on your syllabus,

- providing links to services and resources on your course site,

- explaining the types of support provided from each area, and

- regularly encouraging students to make use of these resources.