

Making Your Classroom a Joyful Learning Environment

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As a chemistry teacher
I struggled with engaging my
students and sharing with them a joy
for chemistry and learning.



What I Used to do...

- Lecture from the front of the classroom
- No engagement, just cover material
 - Evident through poor body language
 - Evident in lack of teacher-student relationship
- I simply covered material and my students tried to survive

Which led
to...

- No student wanted to take my class
- My students had trouble learning
 - No engagement
 - No excitement about chemistry
- Chemistry had become WORK!
 - Students were just completing tasks to get by

Has anyone ever felt this way?

No engagement

No excitement about chemistry

So, I
became
frustrated...
as did my
students

I realized I had to do something different.

- Find solutions to engage my students and make learning fun
 - Different textbook
 - “Think outside the box”
 - Online learning platforms
- This is what I learned on my journey to become a better teacher...

On my
journey I...

Talked more with my students

- Smile more = I care about student's' success
- Display positive body language
- Show that I LOVE my work & the course material
- Show that this is not just a job
- LISTENED to THEM

On my
journey I...

Attended workshops

- We're a community of learners; my job to make sure we can all learn together

On my
journey I...

Visited with textbook author Dr. George Stanley

- Use group work in class to solve chemistry problems
- Try something different

ZOOM POLL 2

On my
journey I...

Completed ACUE Course in Effective Teaching Practices

- Greet students daily
- Online office hours
- Quick replies to student messages

What I do...

- Greet students upon entering classroom/lab room
 - Show my excitement for the class, the subject, & my students
 - Show understanding about lateness
- Learn the students' names
 - Give them validation

What I do...

- Rewards for class engagement
 - Door prizes
 - Gold stars
- Engagement through Extra Credit
 - Come by office & Meet the Professor
 - Campus Student activities (educational events) that I also attend

What I do...

- Teach around classroom
 - Surface Go
- Small group work during class

How I help students engage in chemistry...

- First Day PowerPoint for Instructor & Course Introduction
- First lab class
 - “Deep Dive” into campus & classroom technology
 - Download apps to phone & practice using them
 - Submit practice assignment in the LMS (Learning Management System)
 - Aktiv Chemistry [*previously Chem101*]
 - Labflow
- Students introduce each other
 - What’s your favorite fruit?
 - Message via Teams

Welcome to College Chemistry 1

CHM 1103

UACCB Fall 2021

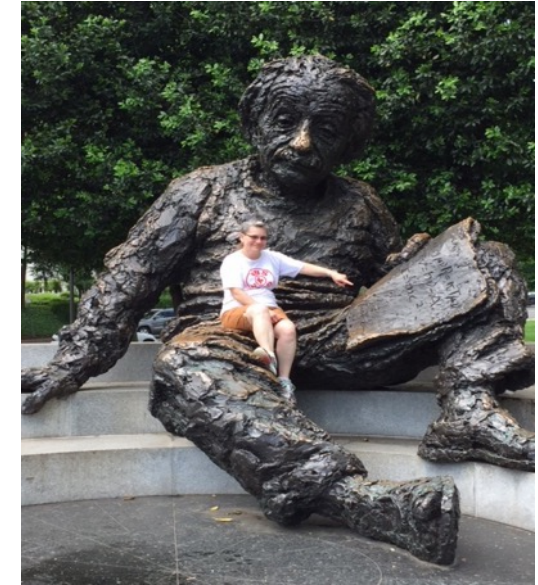
Instructor: Beverly Meinzer, M. S.

Title page of
First Day
PowerPoint
“Introduction
of Instructor
& Course”

Slide introducing instructor which helps students know I am a real person.

Past
Present
Future

Oklahoma
Arkansas
Tennessee
Arkansas



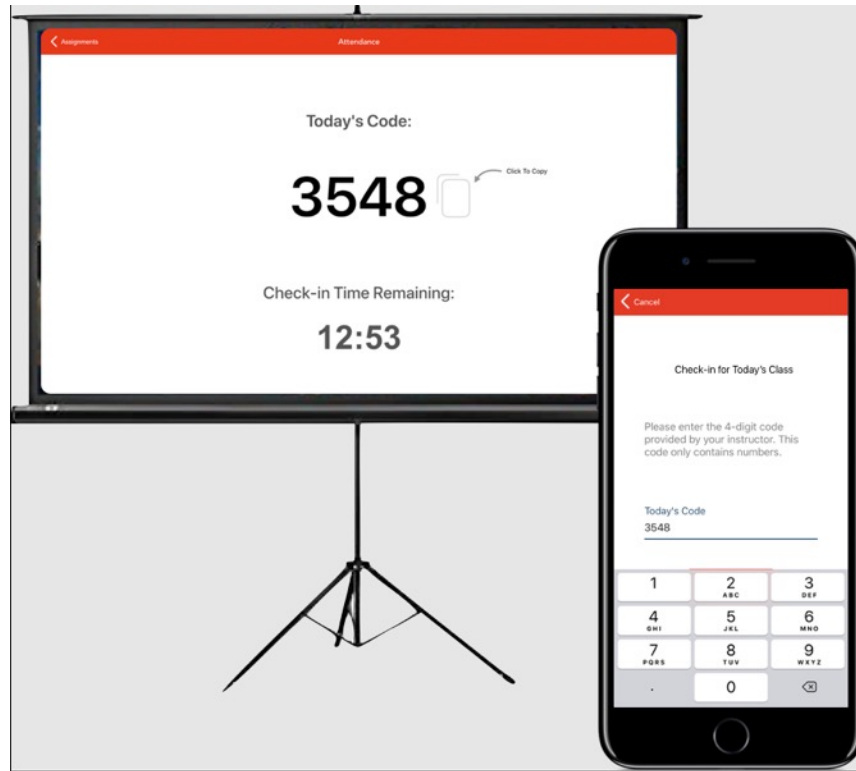
Arkansas
(Lyon)
College



I use apps
such as
Chem101...

*[now called Aktiv
Chemistry]*

Automatically records attendance which I
use to let me know when students might
be at risk.



I use apps
such as
Chem101...

*[now called Aktiv
Chemistry]*

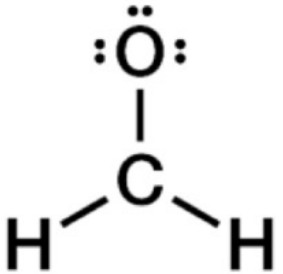
- Provides in class examples with feedback
- Delivers homework with feedback

Retry

Draw the Lewis structure of formaldehyde (H_2CO).

Incorrect, 2 attempts remaining

Your submission:



Feedback:

You have submitted an incorrect structure due to a violation of the octet rule. Carbon cannot have less than 8 valence electrons.

I use apps
such as
Chem101...

*[now called Aktiv
Chemistry]*

- Delivers exams
- Seamlessly integrates into Blackboard

The screenshot shows a Blackboard course page for '2022SP College Chemistry II (CHM-1123-001)'. The page has a top navigation bar with tabs for Content, Calendar, Discussions, Gradebook, Messages, and Analytics. A 'Student Preview' button is on the right. The left sidebar contains sections for 'Course Faculty' (listing Beverly Meinzer as the instructor), 'Details & Actions' (with links for Roster, Course Description, Course Groups, Progress Tracking, Course Image, and Course status), and 'Blackboard Collaborate'. The main 'Course Content' area lists several items: 'Thinking Paper for Exam #5' (due 5/3/22), 'OSX_AtomsFirst2e_Ch21_PPT.pptx', 'Chem101 Online Platform' (highlighted with a yellow arrow), 'OSX_AtomsFirst2e_Ch18_PPT.pptx', and 'Thinking Paper for Exam 4, Electrochemistry & Kinetics' (due 4/25/22). Each item has a visibility icon and a three-dot menu.

Content

101 Chem101

+

app.101edu.co

myUACCBBlackboard Learn101 Chem101Labflow - LoginChemistry: Atoms Fi...Home Page of Gary...Physical Science infoFuture Meetings - ...Course Catalog - U...SN Science News | The...

Chem101

ASSIGNMENTSCLASSQUESTIONS

Assignments

2022SP College Chemistry II (CHM-1123-001) (Spring 2022)

Download Grades

IN-CLASSHWQUIZPRACTICE

New FolderCopy To...Download GradesDelete

Uncategorized

New Attendance

New Activity

New Poll

COMPLETED

Attendance

March 30, 2022

Time Limit: 15 minutes 0 seconds

Session Length: 1 hour 15 minutes

CODE: 5271

Edit

Mark All Present

Delete

COMPLETED

Attendance

March 28, 2022

Time Limit: 15 minutes 0 seconds

Session Length: 1 hour 15 minutes

CODE: 2430

Edit

Mark All Present

Delete

COMPLETED

Attendance

CODE: 8508

Edit

Former students

“I miss your class...”

“Would you write a letter of recommendation for me to...”

“All that work with me on my lab reports has really paid off. I and my fellow UACCB alumni were the only students in Organic Chemistry 1 who did not have to rewrite their lab report. Thank you.”

“I really got a good foundation at UACCB in your class and in my other science classes.”

Current Students

Some of the Online PHS students Q&A after an in-person lab session.



Students say...

“...the excitement from you makes me enjoy learning. I appreciate how you care for your students and their learning. I love how welcoming you are at the beginning of class!”

“...helped me engage in chemistry because you make it sound super exciting!...”

“...I love that you walk around the room and ask questions, and explain the questions that are asked. It really helps me understand things and I get excited to learn!”

Students say...

“Do you teach
Biology?”

“...I like that you walk
around class and ask
us questions...I believe
that you posting class
examples also help.”

“You getting excited about
chemistry helps me get excited
as well. I really enjoy being in
your class and learning.”

Students say...

“...I really like Labflow and Chem 101 as well, the extra practice questions we have access to make it so much easier to learn...having it online and having us download the app on our phones in class while you helped was super important...I probably would not have done that and now anytime I have free time I can just click on and go through a few problems or check due dates without taking any time at all.”

“... You are always available to help...”

Life with students...



Help session



Remote Learning

ME

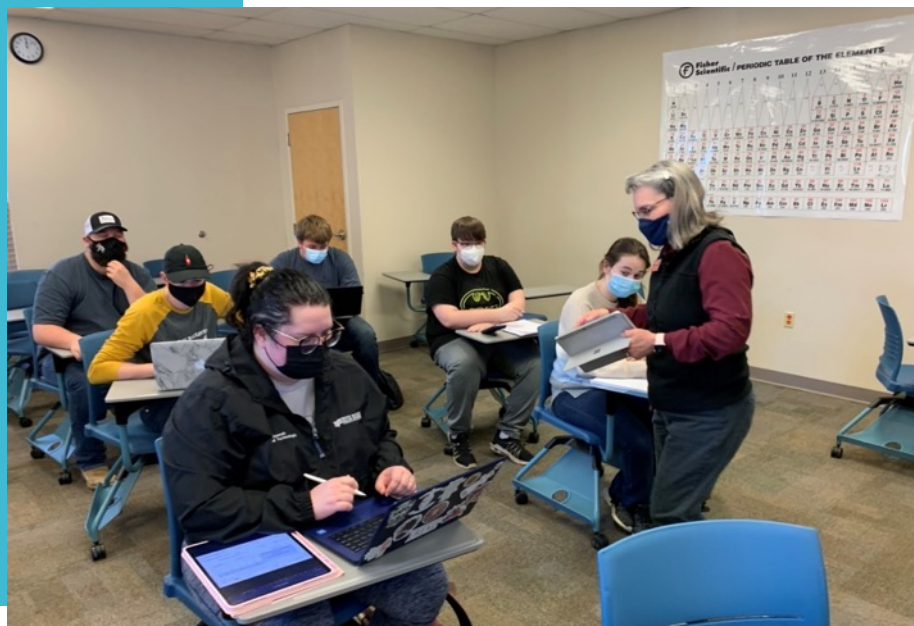
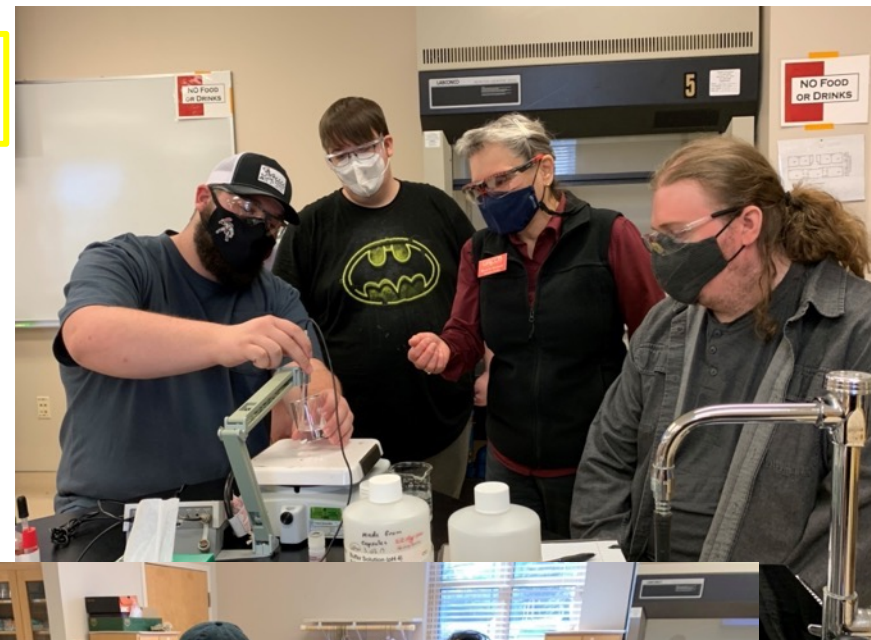


Lecture Hall

Life with students...



ME



Chem lecture



Chem Lab

Working via Teams

Time's Up! Sub

Consider the equilibrium system described by the chemical reaction below. Calculate the value of Q_c for the initial set reaction conditions in 4.00 L container:
26.4 g CO, 6.35 g H_2 , and 22.1 g CH_3OH .

$$CO(g) + 2 H_2(g) \rightleftharpoons CH_3OH(g)$$

Based on the given data, set up the expression for Q_c . Each reaction participant must be represented by one tile. Do not combine terms.

Once the expression is constructed, solve for Q_c .

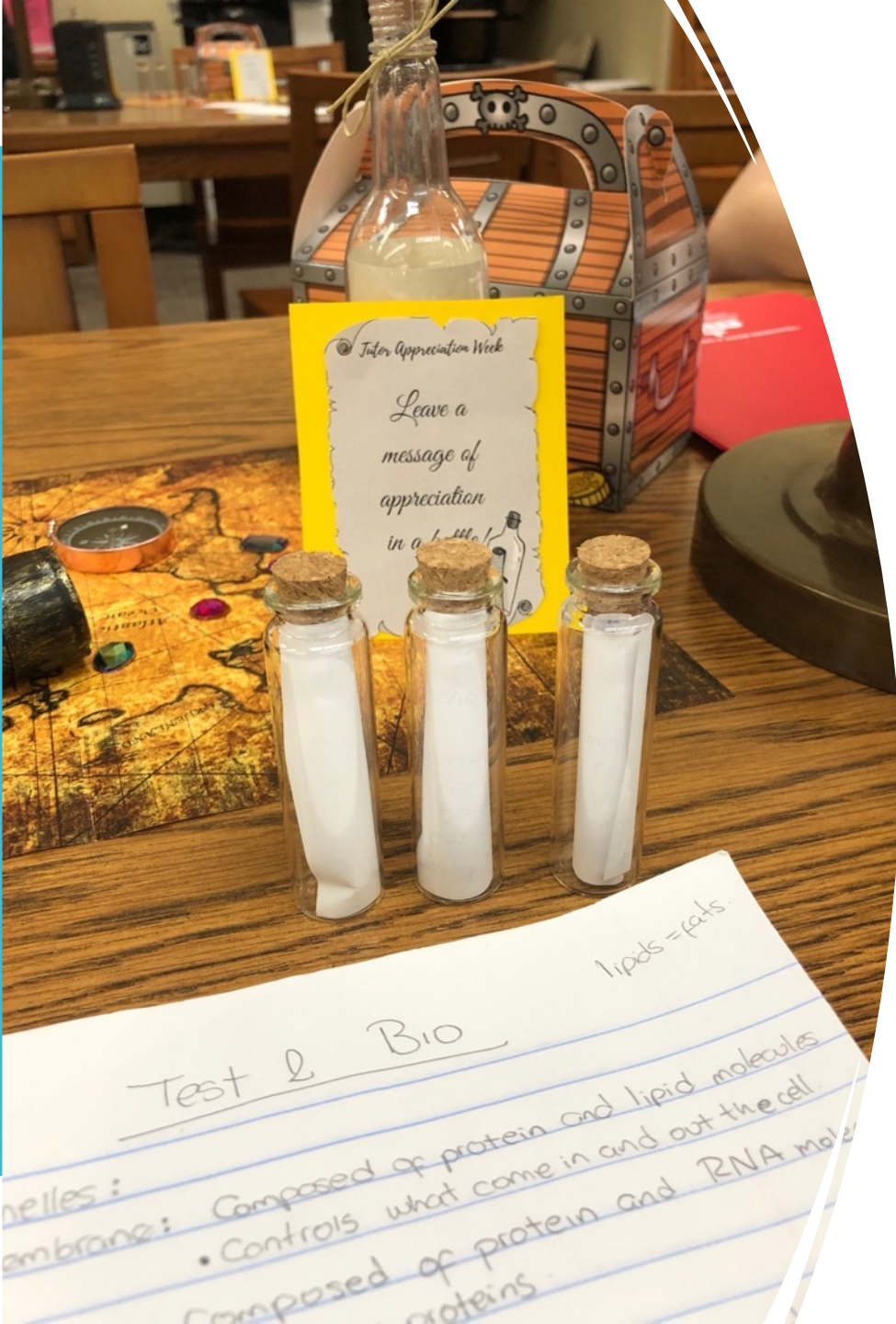
$Q_c = \frac{\text{[]}}{\text{[]}} = \text{[]}$

RESET

[0.236] [0.786]² [0.172] [0.786] [3.14] [1.57] [0.943] [0.690]

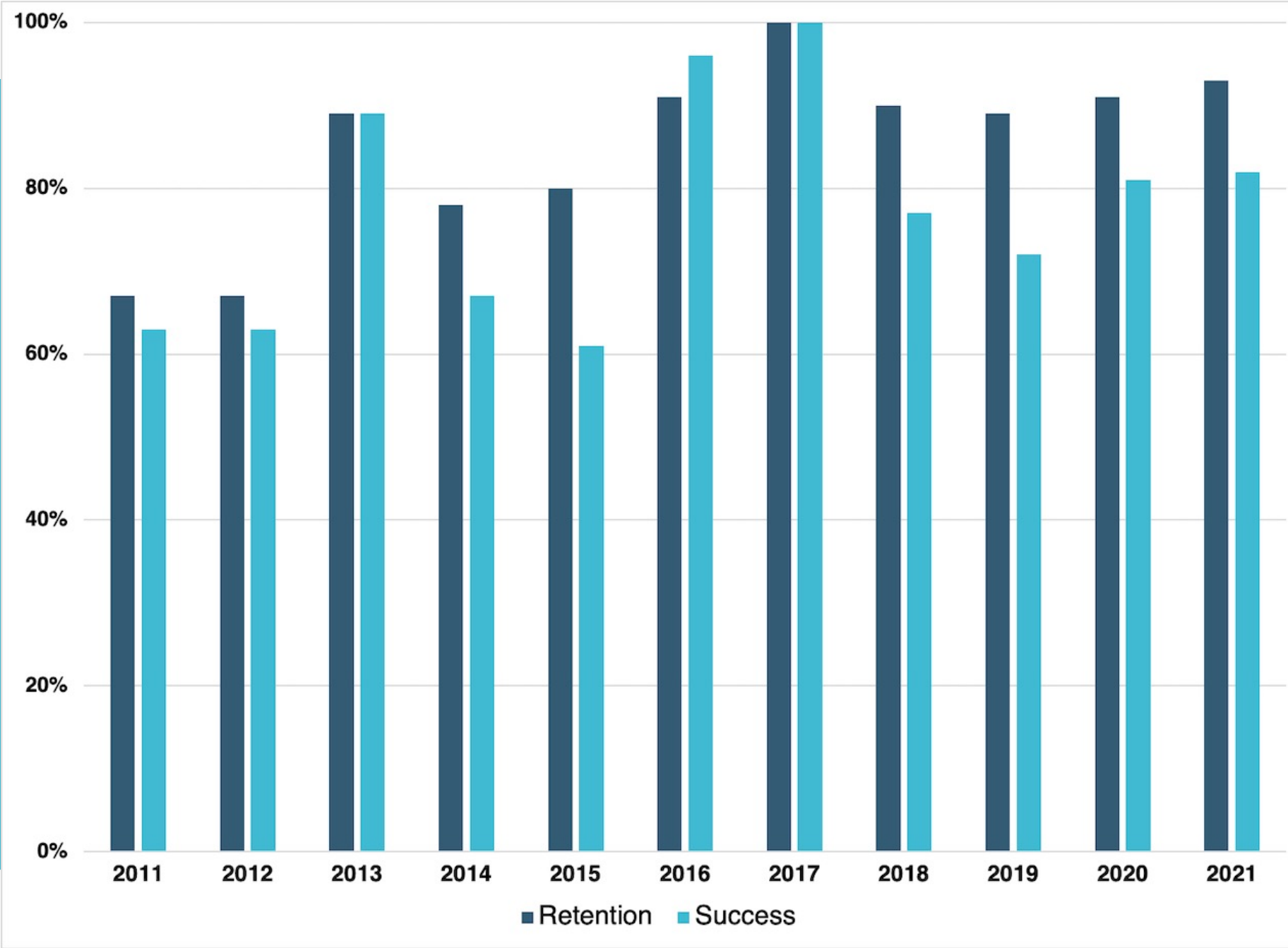
Type here to search 3:42 PM 2/24/2022 31°F

Student portion of Aktiv Chemistry
[Chem101] screen



- Students earn extra credit if they visit the Student Success Center (free tutoring) and report to me which tutor they worked with.
- “I worked in the Student Success Center with [name removed] and in TRIO with a student tutor named [name removed] on our second lab, the one that I had so much trouble with.”

All this change
in my teaching
has created
better retention
and success
among my
students



What's next?

- Keep sharing my joy of chemistry & learning with my students
- Keep improving my ability to use apps such as Chem101 [*now called Aktiv Chemistry*] to engage my students
- Keep developing relationships with my students which begins by learning their names
- Keep learning how to be a better teacher
 - Attend seminars
 - Take the Quality Matters (QM) course
 - Observe other great teachers
- Share what I have learned with others