



# Chemistry That Builds Bonds

See what's possible when you put students in their element.



**Open Learning** Initiative  
Transforming higher education through the science of learning.

**ASU** Arizona State University



## SPEAKERS



**Talitha Scott -  
Brown**

Learning Consultant

*Real Chem  
Development Team*



**Gerry Hanley,  
Ph.D.**

Executive Director,  
MERLOT

*Professor Emeritus,  
California State  
University Long Beach*

## THE PROBLEM

# DFW rates average 40% in General Chemistry.

The Roots to Student Learning Issues

REAL CHEM got to the root of the 'why'.

## Uneven Starting Points

Students enter with different skill levels, making it hard to meet them where they are.



## Students Don't See the "Why"

Students may disengage when they don't see chemistry's relevance in their lives.



## Active Learning Takes Time

Orchestrating hands-on learning requires time and planning, while adding to instructors' workloads.

## Limited Time for 1-on-1 Support

Limited time and data makes it hard to support struggling students.



## Students Can Feel Intimidated

General chemistry has a tough reputation, keeping some students from seeing their potential.

## THE PROBLEM

# DFW rates average 40% in General Chemistry.

The Roots of Institutional Issues

REAL CHEM got to the root of the 'why'.

## Low Retention Hurts

High DFW rates mean fewer students progressing in STEM, leading to lower retention and completion rates.



## Struggling Students, Declining Outcomes

Overall, institutional performance metrics are impacted when students fail STEM courses.



## Resource - Intensive Support Needs

Interventions like tutoring and remedial courses strain budgets and faculty time without addressing root causes.

## Faculty Overload and Burnout

Instructors face pressure to improve outcomes while managing large, diverse classrooms with limited support.



## STEM Pipeline Disruptions

Students give up on chemistry, fewer continue to STEM degrees, impacting workforce readiness and funding opportunities.

# Helping Instructors, Students, and Institutions

REAL CHEM provides a teaching and learning system that bridges the gap between abstract concepts and real-world understanding, helping students engage, persist, and succeed.

## Student Focused

- ✓ **Modern User Interface**  
Designed to be familiar and intuitive, the system helps students organize and navigate content, with a personalized progress page guiding them.
- ✓ **Relevance Through Cinematic Content**  
High-quality videos break down complex concepts and connect students with real voices in chemistry –empowering them to envision their own careers in STEM.
- ✓ **Targeted Support, When it's Needed**  
Immediate, fine -grained feedback that identifies and addresses knowledge gaps, along with scaffolded 'Learn by Doing' and 'Did I Get This' activities, build confidence through progressive challenges.

## Instructor Focused

- ✓ **Tools for Educator Success**  
Data-driven insights that spotlight where students need additional guidance, and course management tools that reduce administrative burden.
- ✓ **Help Students See Themselves in Science**  
Instructors are given carefully curated in - class activities, including OER resources.  
  
Guidance from curriculum experts and experienced instructors helps ensure inclusive and effective classroom integration, along with instructional resources and activities that support the implementation of effective pedagogy.

## Institution Focused

- ✓ **Improve Student Retention**  
Lower DFW rates mean more students persisting in STEM, boosting retention and graduation rates.
- ✓ **Scalable High Quality Instruction**  
Standardized, engaging courseware ensures consistency across courses and campuses without increasing faculty workload.
- ✓ **Data - Driven Insights for Better Decisions**  
Real-time analytics help institutions identify challenges early and optimize student success strategies.

Students



Instructors



Institutions





# RC Videos Showcase African American Chemists

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# RELEVANT, ENGAGING, ACTIVE LEARNING

Bridge the gap between abstract concepts and real-world understanding with **foundational content**, **focused in-class learning**, and **deliberate practice and application** for both learners and instructors.

Exploration Activities: Synthesis of knowledge in real -world context



## Pre-Class

Foundational Content Engagement

Students build confidence by exploring core concepts through stories that connect to their lived experiences.



## In-Class

Focused, In-Class Learning

Guided discussions and hands-on activities transform abstract concepts into tangible understanding.



## After Class

Deliberate Practice & Application

Students strengthen their grasp on key principles by applying their chemistry skills to challenges they care about.



## AI Integrations

Students ask DOT (Digital Online Tutor) on-demand questions and receive clear summaries, guidance, and relevant links to content within the platform to reinforce learning, available anytime.



# REAL Results\*

REAL CHEM isn't just engaging—it delivers measurable improvements in student success.



**92% Course Retention**

REAL CHEM improved student retention rates from 75% to 92%



**19% Score Increase**

Students using REAL CHEM scored two letter grades higher on exams, with scores rising from 42% to 61%.



*Studies validated across four community colleges show consistent rates across student populations, regardless of preparation.*

[See the Evidence](#)

"REAL CHEM enables students to build individual relationships with the content, even in large classes of 500 ...robust resources let students engage effectively at their own pace."

- **Josh Hartman, Instructor UC Riverside**

"With REAL CHEM, especially when there were videos paired with the modules, it helped me from outsourcing when trying to learn... I didn't really have to look further, and I really liked that"

- **Student at University of Hawaii**

"It helped me look at chemistry as a way to inspect the world around you... unit 3 explorations helped me analyze pollution in the air, and the food that we eat."

- **Student at the University of Connecticut**



# Our Partners & Current Users 7,000+ Students

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REALCHEM





# Features & Benefits

Engaging content, interactive tools,  
and personalized feedback—all  
designed for deeper learning.



## Cinematic Videos

Chemistry comes to life through stunning real -world storytelling.



## Active Exploration

Students learn by doing, not by memorizing.



## Formative Feedback

Ensures progress and builds confidence.



## Collaborative Learning

Foster discussions and peer engagement.



## Progress Insights

Identify struggling students before they fall behind.



## Integrations

Connect to your LMS for automatic grade syncing.



# Integrations and Set-Up

Engaging content, interactive tools, and AI -powered guidance—all designed for deeper learning.



## Fits Your Course, So You Can Teach Your Way

No disruptions to work flow as you integrate with your LMS for automatic grade syncing.  
Transfer grades for Checkpoints and Explorations.



### Seamless LMS Integration

Compatible with Canvas,  
Blackboard, and more



### Minimal Set Up Required

Get started quickly and easily  
with ready-made assignments  
and modules



+more



# GET FUNDING TO SUPPORT YOUR ADOPTION AND RESEARCH



## **INDIVIDUAL STIPEND for INDIVIDUAL ADOPTION**



## **MINI-GRANT & STIPENDS for GROUP/Dept ADOPTION**

- Overview Today
- Interested In Funding? CHECK THE BOX in Brief Survey
- We want to give you the money!!!!



# INDIVIDUAL STIPEND for INDIVIDUAL ADOPTION



## Fall 2025 Adoption

- \$1,000 stipend to you
- 100 or more students using RC (multiple sections, summer+fall)
- Students purchase \$35
- Join “onboarding” webinars for success
- Tell your story- blog, video, etc.





# MINIGRANT and STIPENDS for GROUP/Dept ADOPTIONS



## Fall 2025 –Spring 2026 Adoption

### APLU Grant

- \$8,000 institutional minigrant.
- Cross institutional community of practice for departments and faculty.
- Guidance in developing a scalable flexible learning environment to support institutional strategic goals
- Coaching from a faculty subject matter expert who has experience with REAL CHEM

### Digital Promise

- \$1,000 individual faculty stipend each term (up to \$3,000)
- \$5,000 institutional minigrant
- Digital Promise pays for student access.
- Course must be taught synchronously.
- Research activities: online survey; online student survey and statistics assessment; use of a TeachFx mobile app.

YOUR CHOICE!

# Select your grant option here

Access more details and survey on the [MERLOT Innovation Project Website](#)

To learn more please contact:

✉ [talitha@partnerinpublishing.com](mailto:talitha@partnerinpublishing.com)

## Individual Adoption

- 1:1 meeting with Partner in Publishing & MERLOT
- Review commitments
- PIP & MERLOT make selections

## Group/Dent Adoption

- Attend webinar by Digital Promise and APLU
- Review commitments
- Apply for mini grant and stipends
- Digital Promise and APLU make selections



# Let's Connect

Have questions? Want to learn more? We're here to help.

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