



**POGIL**<sup>®</sup>

**CELEBRATING 20 YEARS OF THE POGIL PROJECT**



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## INTRODUCING THE POGIL PROJECT 2.0



**Rick Moog,**  
Executive Director  
of The POGIL Project

Dear Friends,

As we celebrate 20 years of The POGIL Project, we're grateful for how far we've come. We've grown from a National Science Foundation-supported project to an international organization with 12 national office staff members, hundreds of volunteers, and thousands of trained practitioners. We've published more than 20 activity collections, hosted hundreds of workshops, and introduced the POGIL pedagogy to countless high school and post-secondary classrooms.

After we became a 501(c)(3) in 2011, The Project dedicated itself to accomplishing the goals of its first strategic plan. It was a blueprint for beginning our existence. Our second strategic plan, finalized in 2018, was more transitional. We had established ourselves as a nonprofit, and the plan fostered a flurry of exciting, community-led activities that helped us expand.

That period of growth resulted in the ambitious programs you know and love. The National Conference to Advance POGIL

Practice is now a well-established offering. The Professional Learning Communities project, entering its third year, continues to support new practitioners. And the POGIL Podcast provides insights to community members near and far.

Recently, our Board approved our third strategic plan, which will launch us into our next phase as a mature, vibrant, and sustainable organization. Get ready to say hello to The POGIL Project 2.0.

While we still plan to offer our tried-and-true workshops, practitioners are also clamoring for new activities and avenues for growth. We're responding by developing experiences for advanced practitioners, including rich leadership offerings. We will also move beyond facilitating and writing topics to address timely career issues, beginning with a practicum on social-emotional learning in early 2024.

With so many changes afoot in The Project, it is fitting that things are changing for me personally, as well. After 37 rewarding years

in the Chemistry Department at Franklin & Marshall College, I have finally retired from teaching. This will give me more time to focus on The POGIL Project: coaching authors, writing and revising activities, and helping The Project strike off in new directions and raise even more dollars. I look forward to spending more time with all of you.

Our organization's 20-year evolution is only possible because of the generosity of our donors, our sustaining partners, and the many community members who volunteer their time and talent to make it great. The POGIL Project is here to stay, and we ask for your continued support to sustain the organization that our community loves and needs.

With gratitude,

A handwritten signature in black ink that reads "Rick Moog".

**Rick Moog**

Executive Director of The POGIL Project



# A YEAR IN THE POGIL PROJECT

## PROFESSIONAL DEVELOPMENT WORKSHOPS

In 2023, we continued to adapt to a post-COVID world with tighter travel and professional development budgets. Even so, we're proud to have reached 428 educators by offering 22 in-person and virtual workshops. We also welcomed 27 advanced practitioners to our Classroom Facilitation and Activity Writing workshops. We'll continue to search for the right mix of in-person and virtual training for our practitioners in 2024, including richer leadership offerings.

## eSERIES AND WEBINARS

We offered an exciting range of eSeries topics this year, from developing robust models for POGIL activities to creating inclusion and belonging frameworks in the POGIL classroom. And we're still buzzing from our great webinar, "The Importance of Belonging for Academic and Career Success," hosted by Margie Vela, our newest board member.

## SPUR+ GRANTS

SPUR+ grants provide up to \$2,500 of seed money for collaborations that expand The Project's strategic goals, and this year's awardees are exceptional. Congratulations to Gifty Blankson, Patrick Cafferty, and Andri Smith, who will introduce teamwork prompts into POGIL activities and measure student behavior using the ELIPSS rubric. We are also thrilled to support Joan Roque and Santiago Toledo, who will work with bilingual students to translate and evaluate the impact of POGIL classroom materials for Spanish-speaking teachers and students. Thank you for your vital contributions to The Project!

## POGIL NATIONAL MEETING

This year, we gathered together in St. Louis, MO, to develop our next strategic plan as a community. Our planning team, led by Juliette Lantz, helped The Project sort, prioritize, and provide feedback on the plan's structure and goals, with a special empha-

sis on organizational sustainability. Gail Webster delivered an informative and timely plenary talk, "A STEM Education Strategic Plan for the Nation." Now that he is officially retired, we celebrated Rick Moog's new chapter as a full-time "POGIL person." We also lauded the contributions of five very special educators: PEACH Award winners Courtney Macdonald and Joan Roque; and Impact Award winners Mare Sullivan and the team of Andy Bressette and Suzanne Ruder.

## NATIONAL CONFERENCE TO ADVANCE POGIL PRACTICE (NCAPP)

Held in Salt Lake City, UT, our biannual conference by and for POGIL practitioners had more than 100 attendees. With 70 plenaries, workshops, and informal conversation sessions to attend, practitioners found exciting ways to share their insights with one another. As if that weren't enough, practitioners were also serenaded by The Project's house band, Mar-Lie & The Moogtones.



## POGIL STORY

# How Innovative Educators Bring Out the Best in Their Students

**B**efore he became a chemistry professor at Rider University and a fixture in The POGIL Project, **Alex Grushow** was an undergraduate student notorious for falling asleep over his notebook in statistical thermodynamics.

Needless to say, the notebook itself isn't the most helpful record of his college studies. "You can see me working out a physical chemistry derivation, and then it sort of trails off," said Grushow of the notes, which he saved as a memento. "Then I wrote something else coherent when I woke up, like 10 minutes later," he joked.

Now, decades later, Grushow uses POGIL in his own classroom to prevent the kind of confusion and disinterest he experienced as a college student. "In my first year of teaching, I found that students were really good court stenographers,"

he said. "They would write down everything that I put on the board but come into my office and say, 'I can't do problem two.' They didn't know how to process what was going on in class because they were too busy copying everything down."

Adopting POGIL methods as a new teacher wasn't an easy or straightforward solution to this problem, Grushow recalled—especially in the early days of The Project. In the late 1990s, Jim Spencer, a mentor and former chemistry professor at Franklin & Marshall College, sent Grushow a box of newly developed physical chemistry activities. Grushow had no idea what to do with them.

"Near the end of my first year of teaching, I drove out to Lancaster to have dinner with my parents," he said. "I sat in on one of Rick Moog's classes where he was doing a

kinetics activity in general chemistry. And, in watching that, I was like, 'Now I get it.'"

When he returned to Rider in the fall, Grushow went to work adapting Jim Spencer's activities for his own classroom. "I was very fortunate to land at Rider with colleagues who were okay with me doing what I was doing in the classroom," said Grushow. "Our promotion and tenure criteria indicated that lectures must be well-organized, and students must be able to follow along. Early observations from my department noted that 'It seems like Grushow knows what he's doing. And it seems like the students are following along. But it really looks chaotic,'" he added.

Since those early days of POGIL implementation, Grushow has given back to The Project tenfold. He partnered with Tricia Shepherd to write physical chemistry activities for pub-

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**IT'S NOT ABOUT THE PROCESS—IT'S ABOUT THE PEOPLE.**

—ALEX GRUSHOW

lication. He co-founded the PChem Lab group with Sally Hunnicutt and Rob Whitnell. (The group was awarded two National Science Foundation grants to develop and disseminate POGIL lab activities through workshops.) Grushow is also one of the hosts of The POGIL Podcast, which is entering its fourth season.

None of this would be possible without the continued growth and organization of The Project, said Grushow—or the people involved in it. "We all come from different backgrounds. We teach in different environments. And yet, we are all really interested in student outcomes," he explained.

“And not just student learning outcomes,” he added, “but students becoming better people, becoming more thoughtful about what they’re doing, and more interested in what they’re learning. It’s not just about the process—it’s about the people.” ☺

### THE POGIL PODCAST

In season 3 of the POGIL Podcast, we examined how educators could innovate in their classroom using POGIL. In Season 4, which launched this fall, we will take a deep dive into the classroom with a series of conversations about teaching practices. We will also take a peek behind the scenes with short updates from The POGIL Project. Tune in wherever you listen to podcasts.





## POGIL STORY

# How Two Educators Transformed Their Classrooms with POGIL

**B**efore Melissa Reeves, professor of chemistry at Tuskegee University, discovered POGIL, her physical chemistry students scored low—very low—on exams.

“I felt like I had perfected the PowerPoints and the lectures and the examples I was using,” Reeves recalled. “Students looked so rapt and excited. But when I gave my first exam, I had an 82, a 72, and everyone else scored below 20. I said, ‘You know what? I guess I’m not gonna lecture anymore because it’s not working.’”

Reeves found her way to POGIL through the POGIL Physical Chemistry Lab (PCL) Group in 2012. “I don’t know how to describe how that changed everything for me because so many things changed,” said Reeves.

“I started writing experiments

that were in the POGIL-PCL style. It changed how I thought lab was supposed to be” she added.

The approach transformed Reeves’ classroom, including how comfortable students felt using the new tools she gave them to solve problems and communicate with one another.

“When I first start out with a cohort of students in a new class, it takes them a while to figure out how to talk to each other to move forward with an activity,” said Reeves. “But somewhere pretty late in the semester, they start saying, ‘Can we put this on the board?’ Watching students go from passive learners to taking control and running activities—that’s extremely gratifying.”

Other veteran practitioners, like **Patrick Brown**, associate professor of health sciences at East Tennessee State University, have had remark-

ably similar trajectories. In his first year of teaching anatomy and physiology, about 20% of Brown’s students earned Ds and Fs. “I believe A&P is right behind organic chemistry in failing grades nationwide,” he explained. “So it was not good. I was very frustrated.”

With a nudge from his wife, a chemist, Brown attended his first three-day POGIL workshop. “I just absolutely fell in love,” said Brown. “I can remember the moment when I got it. Halfway through, I

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**IT’S THE BEST VERSION OF WORK, WHERE YOU GET TO DO EXACTLY WHAT YOU WERE HOPING TO DO, AND YOU GET TO WORK WITH PEOPLE WHO ARE SO SUPPORTIVE.**

—MELISSA REEVES

thought, ‘Oh my God, I am learning the concept of what an element is, and what makes an atom be in this element and not in that element, and no one’s used the word atomic number yet.’ I was floored. I was just absolutely flabbergasted.”

What’s most striking about listening to these two veteran educators discuss how POGIL has shaped their careers is how each, independently, recognized that changing their own classrooms meant they could help others do the same. In addition to her work with POGIL-PCL, Reeves has also worked on the POGIL Activity Clearinghouse (PAC) and currently serves on The Project’s Steering Committee.

Like Reeves, Brown started writing his own POGIL activities and ultimately published them in 2015’s *Anatomy and Physiology: A Guided Inquiry*. He was also a part of the very

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**JUST ABOUT EVERY CAREER MILESTONE I'VE EVER HAD, I'VE HAD BECAUSE OF THE POGIL PROJECT. IF THERE'S ONE THING POGIL DOES REALLY WELL, BESIDES HELPING PEOPLE LEARN, IT'S BUILDING RELATIONSHIPS AMONGST TEACHERS.**

—PATRICK BROWN

first group of educators to attend POGIL facilitation training.

“Just about every career milestone I’ve ever had, I’ve had because of The POGIL Project,” said Brown, ticking off half a dozen opportunities, from publications to job offers. “There have been a lot of other NSF-funded initiatives that didn’t make it a month past the end of their funding,” he added. “If there’s one thing POGIL does really well, besides helping people learn, it’s building relationships amongst teachers.” 20



## BEHIND THE SCENES AT THE POGIL PROJECT

### Working Groups Move The Project Forward

At this year's POGIL National Meeting, nine working groups continued their progress toward meeting the goals of the strategic plan.

Practitioners met in themed groups dedicated to:

- ▶ creating a DEI framework for The Project
- ▶ strengthening practitioner networks by holding social hours throughout the year and launching affinity groups on Discord
- ▶ designing new workshops and other professional development activities for advanced practitioners
- ▶ assessing the effectiveness of The Project's professional development offerings, which will lead to the development of a new assessment tool

**As we wrap up these activities and prepare for the next strategic plan, we would like to express our gratitude to all the volunteers working hard to move The Project forward. We can't wait to see what the next strategic plan will bring!**

## SUPPORTING THE PROFESSIONAL DEVELOPMENT OF EDUCATORS

### TWO OF THE PROJECT'S NATIONAL SCIENCE FOUNDATION GRANTS COME TO A CLOSE THIS FALL

#### Building Capacity in STEM Education Research (DBER)

This two-year project, led by **Chris Bauer** and **Suzanne Ruder**, supported 15 community members as they developed knowledge about discipline-based education research. Members then implemented four successful, team-based, research projects and presented their findings at NCAPP. Several teams are planning to continue their research in the coming years.

#### Bridging to STEM Excellence (BTSE)

Over the past three years, a consortium of five professional development organizations (BioQUEST/QUBES, The National Association of Geoscience Teachers, the National Center for Science and Civic Engagement, The POGIL Project, and National Institute

for Scientific Teaching) helped to address identified challenges in undergraduate STEM education at Bakersfield College, California State University, Chico, University of Richmond, Georgia State University, and the University of Texas at Austin. The project provided more than 100 faculty members with dedicated support.

### A THIRD NSF GRANT COMPLETES ITS FIRST YEAR

#### Studying the Impacts of a Web-Based Guided Inquiry Learning Tool on Teaching and Learning (STIGIL)

This three-year project, led by **Clif Kussmaul**, examines how delivering POGIL activities through an electronic platform impacts instructor facilitation, student behavior, and learning. The first year involved five instructors teaching large classes of introductory computer science or general chemistry at three different institutions.

### FUNDING RESEARCH INTO STUDENT ENGAGEMENT AND BELONGING

We're proud to announce the recipients of our new Research Award, which provides up to \$50,000 in support of projects that study student engagement in classrooms that use the POGIL pedagogy, or that provide insights regarding issues of inclusiveness, belonging, and student diversity within team-based learning.

**Stanley Lo**, teaching professor in the department of cell and developmental biology at University of California, San Diego and **Joan Roque**, assistant professor in the department of chemistry at University of Puerto Rico, Cayey received \$50,000 for their project, "Hispanic and Latine student experience with POGIL activities in English and Spanish in General Chemistry at a Hispanic-Serving Institution."

**CONGRATULATIONS, STANLEY AND JOAN!**

## IN THE SPOTLIGHT



Congratulations to **LAURA TROUT** for receiving the James Bryant Conant Award from the American Chemical Society. Each year, the award recognizes an outstanding teacher of high school chemistry at the national level. Well done, Laura!

**CLIF KUSSMAUL** and **RICK MOOG** have been invited to participate in the second round of the National Science Foundation's VITAL Prize Challenge, which is awarded to teams developing innovative learning technologies for K-12 students.

**RENEE COLE**, **JULIETTE LANTZ** and **SUZANNE RUDER** were named recipients of the 2023 James Flack Norris Award, given by the Northeastern Section of the American Chemical Society. The trio was recognized for their work on the Enhancing Learning by Improving Process Skills in STEM (ELIPSS) Project.



## THE PROJECT HONORS POGIL PEACH RECIPIENTS

*L-R: Courtney Macdonald, Joan Roque, and Siobhan Julian (2022 PEACH winner).*

Here's to our 2023 POGIL PEACH honorees! The PEACH award recognizes significant and enthusiastic contributions to The Project by secondary and post-secondary practitioners.



### **COURTNEY MACDONALD, POGIL ENTHUSIAST**

Courtney is a former chemistry teacher who became deeply involved in The Project through facilitator training, volunteering with the Networks and Video working groups, and joining the High School Activity Revisions team.

### **JOAN ROQUE, UNIVERSITY OF PUERTO RICO - CAYEY**

Joan is actively involved in diversity, equity, inclusion, and justice efforts at The Project and wants to increase the diversity of educators who utilize POGIL practices in their classrooms. She is co-chair of the Addressing Equity: Targeted Recruitment working group.

# 20 YEARS OF ACTIVE LEARNING

As we celebrate The Project's 20th Anniversary, we're grateful for the many milestones you've helped us to achieve. Here's to 20 more years of transforming teaching and learning!

395 BCE  
Socrates invents the Socratic method.



2002  
POGIL acronym is coined.

2008  
The High School POGIL Initiative launches with a grant from the Toyota Foundation.

2011  
We hold our first facilitator training workshop.



2015  
We establish The POGIL PEACH award to recognize contributions of new practitioners.



1990s

2000s

2010s

2015

1996  
Wiley publishes preliminary edition of *Chemistry: A Guided Inquiry*.



2003  
The Project receives its first National Science Foundation grant.



2008  
713 College Avenue becomes new home for the National Office.

2011  
We're official! The Project receives its 501(c)(3) designation.

2013  
We launch our first strategic plan.

2014  
The Project publishes *Calculus: A Guided Inquiry*.



2015  
We receive a Community of Transformation designation from researchers at the University of Southern California.

**2017**  
The Project holds its very first NCAPP event.



**2020**  
The Spencer Fund is established to sustain educators as they receive community training and support.



**2020**  
The POGIL Activity Clearinghouse formalizes its review process & debuts a new website.

**2021**  
We establish Impact Awards to honor outstanding contributions to The Project.



**2021**  
We establish a formal endorsement process for POGIL activities.

**2023**  
The Project publishes its first Spanish translation of materials.

2017

2020

2021

2023

**2018**  
We debut our eSeries and webinar offerings.



**2020**  
The Project holds its first virtual workshop.



**2021**  
Learning Communities welcomes its first cohort of new practitioners.



**2023**  
At last! Rick Moog assumes the full-time executive director position of The POGIL Project.

**2019**  
The Project publishes its first middle school activities, as well as *POGIL: An Introduction to Process Oriented Guided Inquiry Learning*.



**2020**  
We launch our podcast, sharing teaching insights across the airwaves.

## CELEBRATING PRACTITIONERS WHO'VE MADE AN IMPACT



This year, our Impact Awards went to three practitioners who've achieved extraordinary outcomes related to The POGIL Project's strategic plan.



**ANDY BRESSETTE**, Berry College, and  
**SUZANNE RUDER**, Virginia Commonwealth University

Andy and Suzanne co-developed The POGIL Project's facilitator training workshops, in addition to their many individual contributions to the community.



**MARE SULLIVAN**, Seattle Pacific University

Mare's contributions to The Project are innumerable. Stretching beyond her STEM training, she has most recently co-authored a collection of POGIL secondary level art activities and is co-authoring a collection of college level microeconomics activities.



## POGIL STORY

# Developing the Next Generation of POGIL Project Leaders

In 2011, **Andy Bressette** and **Suzanne Ruder** were tasked with the seemingly impossible: design a brand-new workshop to standardize The Project’s facilitator experience and train new practitioners. Then run it. In a matter of weeks.

It was “three months from dream to launch,” recalled Bressette, associate professor of chemistry and vice president for enrollment management at Berry College. By the end of the first planning session, Bressette and Ruder knew that the workshop had to be structured like a POGIL activity in order to work. They also wanted to create opportunities for participants to both practice their facilitation and receive feedback on their facilitation skills.

Throughout the workshop, explained Bressette, participants grew by watching one another. “They learned or observed something that they could use either in their own

classrooms or as a facilitator down the road,” he said.

The workshops took off. Over the past 10 years, 90 people have attended. According to Ruder, who is associate chair and professor of chemistry at Virginia Commonwealth University, facilitator training workshops may have started as a way to “make sure that facilitators were all on the same page,” but they quickly became something much bigger.

With so many interested educators now trained in facilitation, the workshop also offered unexpected pathways to leadership in The Project. For instance, 9 out of 10 recipients of the PEACH award for early achievement have attended a facilitator training workshop—a fact that tickles both Bressette and Ruder.

“It really has propelled people into leadership roles,” said Bressette. “It’s

given them a deeper understanding of POGIL and a sense of purpose within The Project, and it has created some very strong bonds and relationships.”

As The Project creates more professional development opportunities for educators in an era of dwindling funding, facilitator training will shift yet again. Ruder, who currently serves on a working group dedicated to developing advanced practitioner experiences, said The Project will hopefully integrate facilitator training with other three-day workshops. This should give advanced practitioners more flexibility, as well as a chance to develop community with other workshop participants.

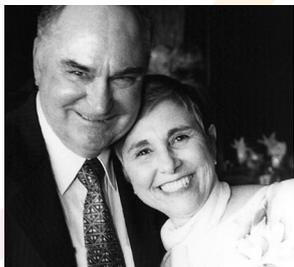
Most important, said Ruder, the new training will be held in person. That way, practitioners will have more opportunities for socializing, like sharing a meal or having informal conversations. “If you’re just on

Zoom, you don’t get that same kind of one-on-one interaction,” said Ruder. “We feel that the workshop we’re developing needs to have the same factors that were really critical to the success of facilitator training.”

Bressette agreed. “Hearing so many participants talk about facilitator training as a transformational moment for them—that just really connected them or propelled them or got them excited about POGIL—I think, for me, that’s most important,” he said.

“As I look at the next generation of leadership in The Project, it includes many of the people who attended facilitation training. Because you just get excited being around people who want to make a difference in their students’ lives.” 

## SPOTLIGHT ON THE SPENCER FUND



**JIM AND KATHY  
SPENCER**

Established in 2020, The Jim and Kathy Spencer Fund to Advance POGIL Practice is a scholarship dedicated to supporting educators who wish to attend the National Conference to Advance POGIL Practice.

As we continue to build this fund, we know that reaching our \$100,000 goal will have a major impact on educators in a climate of shrinking professional devel-

opment resources. Scholarships from the Spencer Fund sustain educators as they receive community training and support to bring effective active-learning strategies back to their classrooms.

Thank you to everyone who has contributed to the Spencer Fund. We're so proud to carry out the vision of Jim and Kathy Spencer through our work!

"A teacher's job can be isolating during the school year. The days are filled with teaching, grading, and lesson preparation, with little time left for sharing ideas with colleagues. Further, many POGIL educators are the only instructors using POGIL at their institutions.

"Attending NCAPP demonstrated how important gathering like-minded educators together can be. It provided powerful opportunities for me to connect with other educators, share ideas, and encourage others—in ways that video conferencing or written communication don't allow." —[Kristy Jurchen](#)

**\$78,509**

RAISED TOWARD  
\$100,000 GOAL

**21**

**SCHOLARSHIPS  
AWARDED  
IN 2023**





## WAYS TO GIVE

The POGIL Project trains secondary and post-secondary educators to provide active learning instruction that helps students construct and retain knowledge, all while developing crucial process skills such as communication and collaboration.

Your gift, of any amount, helps bring POGIL to new educators and classrooms every year. Thank you for helping us to make learner-centered instruction the norm!

### Online

Visit [www.pogil.org/donate](http://www.pogil.org/donate)

- ▶ One-time gift
- ▶ Monthly gift

*Become a POGIL Sustaining Partner by joining our monthly giving program.*

### By Mail

Please send your check to:  
 The POGIL Project  
 P.O. Box 3003  
 Lancaster, PA 17604-3003

### Donor-Advised Funds

Recommend a gift to The POGIL Project (EIN# 27-3451654) through your Donor-Advised Fund.

### Publicly Traded Securities

Visit [www.pogil.org/donate](http://www.pogil.org/donate) for more information.

### Matching Gifts

If your company or organization participates in matching gifts and you would like to make a contribution, please call us at 717-358-3837.

The official registration and financial information of The POGIL Project may be obtained from the Pennsylvania Department of State by calling toll free, within Pennsylvania, 1(800) 732-0999. Registration does not imply endorsement. The POGIL Project is a 501(c)(3) nonprofit organization.



## POGIL STORY

# How a Veteran Educator Mentors Across Disciplines

**D**an Libby, former professor of organic chemistry at Moravian College, has a knack for supporting new POGIL practitioners. Since his appointment to The POGIL Project's very first Steering Committee in 2006, he has devoted much of his time to formal and informal mentorship activities.

From joining the POGIL in Computer Science (CS-POGIL) grant as a co-principal investigator to reviewing activities for the POGIL Activity Clearinghouse (PAC), Libby excels at serving as a sounding board—no matter what discipline practitioners happen to be in.

“Dan was a mentor as a faculty member,” said **Clif Kussmaul**, former associate professor of computer science at Muhlenberg College. Kussmaul started working with Libby at Moravian College in the late '90s.

“He was also an advocate more broadly for all of the faculty in the science departments at Moravian, which I really admired,” Kussmaul added. “Too often, faculty worry about their own issues or their own department, but Dan was always one to jump into the middle of everything.”

Kussmaul's experiences prompted him to ask Libby to mentor new computer science faculty as part of a CS-POGIL grant funded by the National Science Foundation. “I did a lot of listening,” Libby recalled of his time in the CS-POGIL Project. “Getting new faculty members to talk to each other, I think, was the most valuable thing.”

Throughout the 40-year trajectory of his career, Libby has remained open to—and excited by—new ways of thinking about teaching and fa-

cilitation. This is especially apparent in his work providing feedback on activities via the PAC.

“It's kind of interesting that without being an expert in the field, you can be helpful to people,” said Libby. “With writing activities, it always comes down to what is it you really want to do and how do you see whether what you're doing is working?”

“I've learned as much from people who teach English as I have from any other discipline,” he added. “Language is important, but you can do it in an active, exploratory way. I think that's the exciting thing—to see how broadly the approach can spread.”

For Libby, the POGIL approach is rooted in process skills, including problem solving and communication. “Over my career, I really have

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**OVER MY CAREER, I REALLY HAVE COME TO BELIEVE THAT'S WHAT WE'RE TEACHING: PROCESS. THE SUBJECT AND THE CONTENT ARE THE MATERIALS THAT YOU PROCESS—BUT IF YOU DON'T KNOW HOW TO PROCESS IT, THEN YOU DON'T UNDERSTAND THE MATERIAL.**

—DAN LIBBY

come to believe that's what we're teaching: process. The subject and the content are the materials that you process—but if you don't know how to process it, then you don't understand the material.”

Eight years after retiring from

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## I STILL HAVE IDEAS TO SHARE.

—DAN LIBBY

Moravian, Libby remains actively involved in The Project and is once again on the Steering Committee. Next year, he'll lead a cohort for the Learning Communities working group, where he will take an active role in mentoring new practitioners.

“I'm really committed to making sure that this organization continues to move forward for the foreseeable future—or even the unforeseeable future,” Libby said.

And although he's no longer in the classroom, his passion for writing great activities remains high. “I'm still working on activities that I wrote over the last 25 or 30 years and used 25 or 30 times,” he said. “Every time you look at them, they're a little different.”

“I think that's why I'm still involved in The Project,” Libby said, at last. “I still have ideas to share.” ☺

## SPANNING THE DISCIPLINES

We're excited to announce the publication of:

- ▶ **Life Sciences** (Spanish language), our first Spanish translation of *POGIL Life Sciences Activities Designed to Support the NGSS*

Four new activity collections are also on the horizon, including:

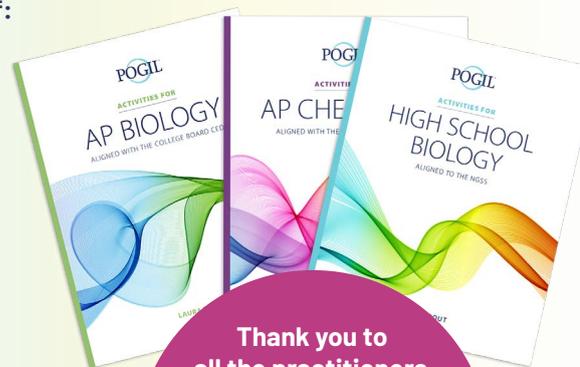
- ▶ **AP Chemistry** (new edition)
- ▶ **Anatomy & Physiology** (new edition)
- ▶ **Introductory Art**
- ▶ **SPIRAL collection** (laboratory activities for General Chemistry)

We are also eagerly following the endorsement process for:

- ▶ **High School Biology**
- ▶ **AP Biology**
- ▶ **High School Chemistry**

Last but not least, a hearty congratulations to the authors of *Economics* and *AP Environmental Science* for moving into the classroom testing phase.

For more information or to submit activities for endorsement, please visit <https://pogil.org/authoring-materials>.



Thank you to all the practitioners who work so hard to develop, test, and review these activities, so we can publish the best possible collections for our community!

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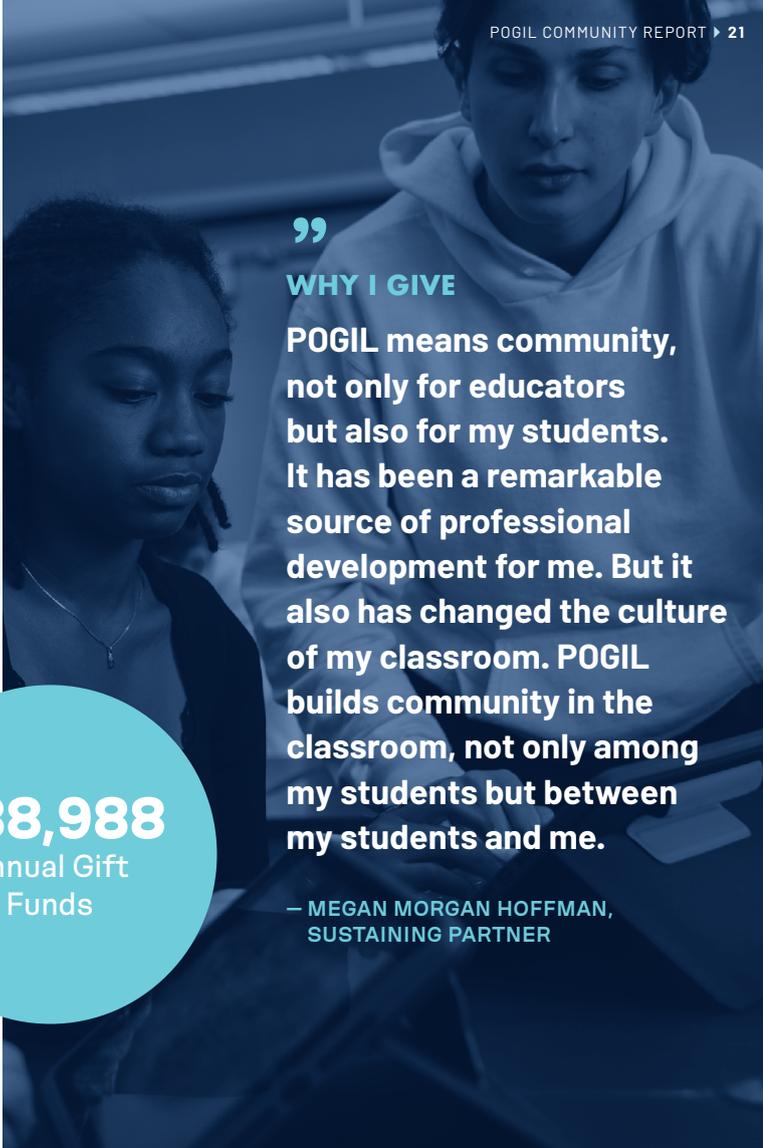
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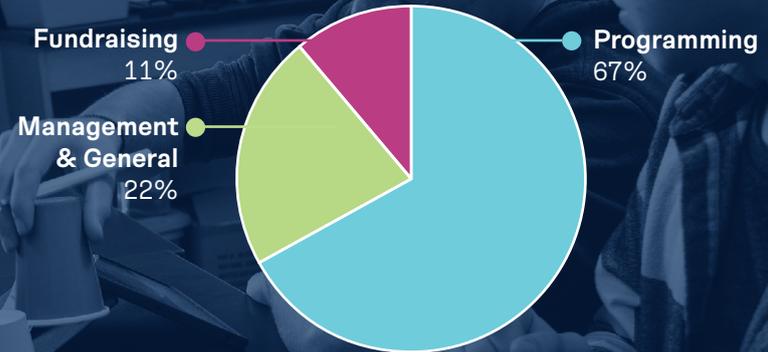
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## REVENUE SOURCES



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