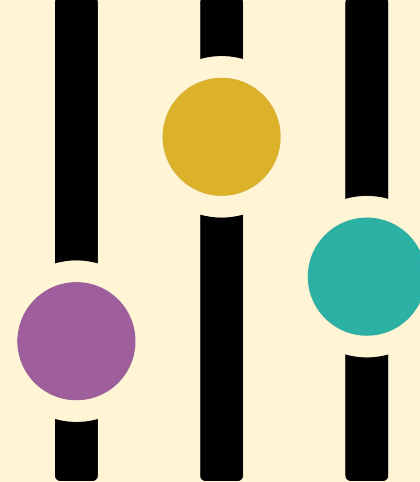
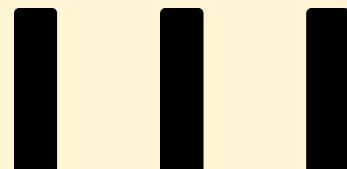


DATA
VISUALIZATION
SOCIETY



Advice from the VIPER Council

Date: Nov 27, 2021
Delivered by: Erica Gunn



What is VIPER?

- A group of inorganic chemistry professors who wanted to create better resources for teaching and learning inorganic chemistry
- Has been hosting NSF-funded workshops to develop teaching materials and build a community of researchers since 2010
- Thousands of community-contributed “learning objects” ready for use in classrooms
- A community for collaborating, sharing knowledge, and advancing the field of inorganic chemistry

Why is this relevant to the DVS?

Use case

- Inorganic chemistry is a broad, interdisciplinary field
- It's a small field, and people tend to be “the only one” in their university or department
- There is no clear corpus of teaching materials, because the definitions of the field are so diffuse, and there's so much that “doesn't fit” into standard curricula

Model

- Highly successful at engaging academic faculty in creating high-quality teaching resources while developing their own professional credentials
- Volunteer-led organization
- Long-term, stable grants and funding from the NSF, and others

Why is it called VIPER?



VIPER

VIRTUAL INORGANIC PEDAGOGICAL
ELECTRONIC RESOURCE: A COMMUNITY
FOR TEACHERS AND STUDENTS OF
INORGANIC CHEMISTRY

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Virtual Inorganic Pedagogical Electronic Resource

Looking for Remote Teaching Resources? Check out [this BITes](#) post or join the IONiC community conversation on [Discord](#).



Active Discussions

An editable Review Jeopardy game via a Macro Powerpoint

Inorganic Chemistry for Geochemistry and Environmental Sciences Fundamentals and Applications by George W. Luther III

Cobalt-Ammine complexes and theories of bonding in metals

Toward the Design of Phosphorescent Emitters of Cyclometalated Earth-Abundant Nickel(II) and Their Supramolecular Study (Yam)

Spectroscopy Uv-Vis

Because chemists like to spell things with the periodic table!

First Question They Asked:

“Tell me about how you communicate and work together as a board.”

- Focused on tools to facilitate collaboration and communication
- Key item is how we work together
- They use Discord as a community platform; important to have multiple levels of access control within that space, to create separate areas for specific projects.
- Having a community archive is essential
- At the beginning (1st 2 y), the core team focused on putting content on the website daily, even if it was just a forum post. Needed to have activity every day.

Insight #1: Community Built

We are building a *community*, not a website with stuff on it (or an organization)

- All resources are community-submitted
- Create a small team for each project, with their own channel. Board pipes in occasionally, but generally the team does the work.
- We provide:
 - Ways for people to contribute authored material, so that they can be recognized for their work.
 - Voting and other mechanisms to allow things to bubble up.
 - A space for people to share/talk about Learning Objects (LOs). Let the community help each other. Don't curate; allow the group to highlight the things that work.

“We build the community, and the rest happens”

Insight #2: Lower the Bar for Participation

Anyone should be able to contribute, even if they don't have any time

- Identify things that are really easy to do, but that would be useful to someone who's just starting out: share a cool website, or post a syllabus
- Make bite-sized projects to build momentum
- Has to take no time
- Organize so that people can work on things individually, but coordinate as a group
- Make room for non-participating allies:

“We still have very little buy-in from R1s; our rewards are not meaningful in that context. Have friends there - they love us, they give us money, they help us with events, but they don't contribute themselves, because it's not part of their core job”

Insight #3: Everything is a Project

Nobody communicates to communicate. Everything we do is a series of projects. No matter what we do, we always turn it into a project with a deadline.

- People need a reason to talk/communicate.
- Create a small team for each project, with their own channel.
- Specifically design activities that encourage people to bond.
- Look at the collection of things that people are adding; if something is missing, plan next summer's workshop around that area.

Insight #4: It Has to Provide Value

Primary question is always: how can we make this *count*

- First you need to bring people in. Then, you need to engage them by providing some value.
 - Social recognition: channel for research collaborations in Discord where people can chat & recognize each other's work
 - Work on a project, we write recommendation letter at the end
 - Put it on your CV as a non-peer reviewed publication or “service to the profession”
 - Press/publicity for your work or research findings
 - Individual authorship is key
- Recognize individual contributions to what the *community* is building: it's not about the org

Takeaways

Here's what I think we should do:

- Build a member resources space to facilitate collaboration and exchange of member-authored materials.
- Focus less on what we are building for our members, and more on helping them to share what *they* are building — in a durable and indexed way.
- Create opportunities for conversation and connection as our core value creation, rather than specific artifacts.

The Details

Here's what I think it will take:

- Tag and curate existing DVS content (first draft complete through Nov 2021)
- Build a content management website to enable searchable indexing and community-contributed materials. (VIPER uses Drupal, and pays a company to maintain it for them.)
- Seed the space with DVS resources, then open up for community contribution.
- Create community activities to facilitate exchange and generate excitement.