Take the Leap!

We’ve redesigned formal science class for ages 13-20. Change is much easier when you use a flexible, tested, comprehensive model as a launchpad. Join us.
Welcome, 
Brave Innovators

Our journey began with a love of learning, a bit of daring, ambitious determination and a willingness to live with uncertainty. We also knew about real-world classrooms and what teachers and students need to thrive. After nearly a decade working inside schools to teach, design and lead teams of teachers in the creation of interdisciplinary models, I founded EduChange in 2000 to design instruction and assessment systems for secondary schools. Blaming 'the system' is not useful because, well, it isn't actually a system! So we began to take apart the cobbled-together policies, past precedents, graduation requirements and standards and engineer real systems from the ground up. It is funny to think about the early days—before Smart Phones, BYOD models, Facebook, and iTunes—trying to explain an ‘internet curriculum’ that integrates all disciplines, replaces textbooks in high school science, tracks and assesses skills along with content, and trusts both teachers and students as content creators. I got puzzled looks and empty stares. No one was having it. I learned that real innovation starts in a very lonely place.

Two decades later, I’m proud to report that vision matters. We were fortunate to begin our journey with a small group of dedicated teachers, students, researchers, scientists, administrators, and instructional designers who were willing to see differently. I am forever grateful to those who shared our vision and laughed with us along the way. It is so important to feel connected and supported when you are trying something new—truly new. We have taken great care, over twelve years of small-scale implementation, to develop right-sized models and four possible progressions to ensure the best possible fit. Our designs make teachers and students successful. You need to be brave, but we won’t let you be lonely. That is what a real professional learning community is all about. Join us. We continue to map new territory every day, and we never stop learning.

Catherine Saldutti
President & Founder
Designs for 21st-Century Learning

3EduChange, Inc.

5 Strands
2 Levels
35+ Modules
2-4 Year Options
No Additional Textbook Required
Integration has many connotations. Our main objective with integration was to break down disciplinary silos in science; add substantive math, engineering and technology learning; utilize modern, inquiry-based pedagogies; and drive content organization through real-world, real-time issues that impact individuals, local communities and the world. While many courses and pathways inside the school can benefit from similar approaches, we selected a single multi-year pathway—science class—as a leadership site. We did this to make transitions easier for schools, which has proven wise. Non-science teachers can join the PD. Teacher-driven expansions and student-driven projects evolve from here.
The Information Age is not organized like textbook chapters or siloed courses. It is essential that students learn content inside real-world contexts, particularly those prioritized by leading STEM researchers and global organizations. We trusted that teachers and students would find the same issues compelling, and it proved true. And guess what? All of the textbook content that students need to learn fits into these real-world issues, as long as you have a multivariate architecture supporting the back-end design! Students deepen their understandings as natural phenomena connect in different contexts. These connections will ultimately steer humanity toward more effective innovations. All of our content has been reviewed for accuracy and relevance by practicing STEM professionals.

### Microbiomes
- Global Land Use & Soil Degradation
- Global Air Quality
- Antimicrobial Resistance

### Strength, Flexibility & Cardio
- Sports & Fitness at Depth or Elevation
- Ocean Acidification
- Satellite Pollution

### Coral Bleaching
- The Evolution of Flight: Birds & Planes

### Photovoltaics
- Big Data & Genomics
- Climate Science

### Sustainable Palm Oil Solutions
- Environmental Resilience & Conservation

### Puberty & Aging
- Adriodental Health & Safe Driving Behaviors

### Biofuels
- Harmful Algal Blooms & Nutrient Pollution
- Medical Diagnostics

### Clean Water Access
- The Promise & Peril of Hydropower

### Childhood Asthma
- Added Sugar & Ultra-processed Foods
- Eco-friendly Sunscreens & Cosmetics
The Sustainable Development Goals were crafted by the United Nations in 2015 as a framework for global action. These 17 goals highlight the social, environmental, industrial, informational, educational and medical realms that must be addressed as a global society if we are to sustain a healthy planet. And wouldn’t you know? Those 17 SDGs fit snugly into our transdisciplinary learning model! With help from a team of global STEM experts, we have unveiled a layer of explicit work with the SDGs, including possibilities for student-run projects. The SDGs are far more complex than the friendly icons imply. We help students learn about systems, perspective-taking and action-oriented citizenship!

See the Video:
https://educhange.com/teachsdgs/

THE GLOBAL GOALS
For Sustainable Development

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice and Strong Institutions
17. Partnerships for the Goals
We’ve been pioneers in Open Education Resources (OER) since 2002, delivering materials to classrooms that not only can be modified, but are intentionally designed to invite user-generated content. We now know that OER is insufficient. In an ever-evolving Information Age, OER must go far beyond basic maintenance. We have developed Sustainable Open Education Resources (SOER) as a solution to this problem. We curate just-right resources, design 15% new material annually, and build new threads when needed (AR/VR is on deck). This supports ongoing PD for teachers! **Students LOVE the relevance & knowledge creation.**
Teachers clamor for concrete examples of innovative learning models, and we go one step further. We immerse classrooms in a comprehensive one. Our program began as an immersive professional development experience that used instructional materials and assessment systems to build ongoing dialogue between individual teachers and coaches. The time lag between traditional PD workshop and classroom implementation is too long, and largely unreliable (that’s the truth). Maybe you can apply a new tech tool to an old mode of teaching, but to understand a truly innovative learning model, you need to feel it in your bones. And for a little while, you agree to let us help you.

**Teachers & students attend an orientation workshop**

**Teachers attend individual, scheduled, virtual meetings with EduChange coaches**

**Build a learner-centered classroom from go**

**Unpack the multi-layered design as *you* experience it**
It’s amazing how heavy a load you can pull when your wagon is built properly! Quite simply, we used STEAM principles to design for STEAM learning. Our program has iterated through over 115 iterative design cycles and has been implemented with schools in 5 countries, with students representing over 60 nationalities, to include English Language Learners and Special Needs students. The program meets a variety of standards and government regulations, and ensures that students are ready for advanced coursework in the final years of high school. Or, have students join our 4th year of independent project launchpads and publishing a STEM paper in a free, age-appropriate journal managed by Ph.D. candidates!
If we want to instill a disposition for lifelong learning in our students, we must change the way we assess at the secondary levels. In 2008 we made a bold design move: we decoupled assessments of mastery from an “end-of-unit” timeline to liberate teachers and students from a one-and-done assessment model forever. Students are assessed in every one of our modules, but they build toward solid proficiency in ~70 competencies over a variety of contexts and through increasing rigor. Assessment feedback truly informs growth and all assessments are performance-based, requiring students to write or draw their answers after thinking critically. The results are inspiring: 100% of learners have demonstrated growth across all four realms of our competencies, shown below. (We help you translate this growth to letter grades, if needed.)
Select Your Size

It is possible to implement with groups of different sizes—as small as a single classroom! The costs of implementation are associated with the size of it. We strongly recommend a grassroots approach—if a few teachers are interested, that is a great beginning. Forcing people to implement before they are ready, or against their desires, doesn't work. Let’s stop pretending it does. In larger settings, consider establishing an opt-in approach, perhaps a “STEAM Academy” where students and parents choose to participate with willing teachers. We have parent education materials to help you build trust and community.

**Classroom**: 1 class section, 1 location

**Small School**: Multiple class sections, 1 location
<75 total students per grade level

**Mid-size School**: Multiple class sections, 1 location
75-200 total students per grade level

**Larger Setting**: Multiple class sections or multiple locations with >200 students total per grade level
Our program interleaves content and competencies from various STEM disciplines and the Arts, with a robust literacy focus. This curricular architecture fosters deep conceptual understanding and multiple opportunities for practice. It is a lab-based program, designed to be implemented during science class time. We have four possible progressions spanning 2, 3 or 4 years. The earliest possible starting level is Grade 8. However, many schools choose to begin in later years. And we can customize for Community College & Polytechnic Schools. This kind of flexibility took years to design—and you’re worth it!

All participants commit to a minimum of 2 years.

See our progressions:  
https://educhange.com/intsciimplement

View this screencast for guidance:  
https://vimeo.com/channels/1315106/241802706
Eligibility

Digital Delivery
This program is delivered digitally. We can deliver the OER on any platform, LMS or CMS currently in use. Many schools choose Microsoft Office or Google Classroom file formats, which EduChange prepares and then delivers directly onto their system. Students should have basic digital proficiency with the type of docs you request. Teachers should be comfortable with the platform and docs you request to use. OER is shared directly with teachers, not students. Schools must have a password-protected platform & all participants must abide by our Academic Honesty Policy.

Devices & Connectivity
All students must have access to their own laptop, tablet or Chromebook for each and every class period. Students also must have access to a device (need not be the same device) to complete homework. It is okay if students complete homework in school, but if they must work remotely they need their own wireless-ready device. Schools need high-speed internet connectivity that is relatively reliable. We understand occasional outages, but this program is designed for ongoing access. Equity is critical.

Literacy Levels
Students who enter our program need to be ready to read our texts autonomously. We give teachers the opportunity to run a trial with some of our materials in order to ensure this is the case. English Language Learners and Special Needs students are welcome, and have proven successful in our program. Students can begin at any grade level from Grade 8 (Age 13) onwards.

Lab Supplies
Schools must provide standard laboratory equipment. Most schools already implementing a lab-based program already have what they need. We provide schools with complete supply lists as part of the review process and recommend that you conduct an inventory to ensure that additional costs are accounted for prior to committing.
Timeline for 2021-2022 Cohort

With over 12 years of implementation we have this process down to a science! We provide custom pacing guides, supply lists, and implementation models for participating schools. Time gets away from all of us, so review this timeline for schools in the northern hemisphere and engage with us to begin the process at your school. **Note: Southern hemisphere schools follow a similar, but date-adjusted, timeline. Please contact us.**

- **March - August 2020:** Learn about the program on our website, invite us to present during summer PD & request a 30-minute informational webinar.

- **September - December 2020:** Contact EduChange to review materials, supply lists, eligibility requirements, and progressions.

- **January - March 2021:** Launch materials review, identify participating teachers/administrators, and educate parents (we have support for this!)

- **Spring 2021:** Make your final decision in May!
  We have some customization to do...

- **Summer 2021:** Conduct Orientation PD for teachers, and arrange student trainings, for Summer 2021 and as school launches for the new year.

- **August - September 2021:** Ready, set, launch! Virtual PD begins for teachers & leaders. Parent education continues.
Our website contains more, and different, information

https://educhange.com/intscioverview
Let's Talk!

We'd love to meet with you for 30 minutes and answer questions specific to your needs.

We can begin the conversation with one or just a few key stakeholders.

This is how we move forward.

Materials review will follow if you remain interested.

Click below

Email info@educhange.com with a preferred date & time
Contact

- info@educhange.com
- @EduChange
- https://educhange.com