Helping teachers inspire kids to love science and engineering
Only 1 in 3 students proficient in Science

Percentage of students at or above Proficient in 2015

- Grade 4: 38%
- Grade 8: 34%
- Grade 12: 22%

Statistics: NAEP and BLS 2016
US Economy is Increasingly Innovation and Tech Based

Figure 1. Recent and Projected Growth in STEM and Non-STEM Employment

<table>
<thead>
<tr>
<th></th>
<th>2000-2010 Growth</th>
<th>2008-2018 Projected Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM Employment</td>
<td>7.9%</td>
<td>17%</td>
</tr>
<tr>
<td>Non-STEM Employment</td>
<td>2.6%</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Great careers in engineering and tech... But will we have a skilled labor force?

By 2018, it is projected that 2.4 million STEM jobs will go unfilled.
Our students need a better science education

Only 1 in 3 students proficient in science

Innovation-based economy

Great careers in engineering and tech

Statistics: NAEP and BLS 2016
The Problem: Lack of Curriculum
Teachers have the Wrong Tools

✗ Textbooks are not the solution

✗ Technology is not the solution – too much screen time, not enough collaboration
We thought:

What if

SCIENCE CLASS

were more like

SCIENCE CAMP?
How: Make planning easier for teachers

Impact Science Education provides
great lesson plans so teachers can teach great lessons

✓ Easy to use
✓ Accessible
✓ Affordable
Students can learn science, engineering, innovation, and teamwork

... with projects such as:

- Make polymers and crystals
- Design a solar cooker
- Plan a program to reduce carbon footprint, use data to gauge success
- Invent a toy based on scientific principles
Perfect Timing

- New science standards adopted: 2013
- Districts have textbook money to spend: $$
- The missing piece: Curriculum: ???
- New State Science Test will launch: 2019
Impact Science Education has the 3 critical skill sets necessary to create effective STEM curriculum.
The Right Team

Co-Founders

Ladie Malek
President

Robin Cooper
Chief Academic Ofc.

Sharon Parker
CSET Associate
Stanford University

 ✓ BS Engineering
 ✓ MA Education
 ✓ 8 years as a teacher
 ✓ 16 years developing STEM education products

 ✓ BS Biology
 ✓ 21 years as a teacher
 ✓ science dept. chair
 ✓ mentor, supervising teacher

 ✓ Curriculum design expert
 ✓ Instructional coach, expert in science teaching and assessment
The Right Experience

Highlights from Ladie Malek’s Product Development portfolio

**Project STEM** (Pearson Education)

**Living by Chemistry** (Macmillan, now in 3rd edition)

**Discovering Geometry** (Kendall Hunt, now in 5th edition)

**Pearson System of Courses, Math** (Pearson Education)
Accomplished so far: 60% complete Grades 6<sup>th</sup>–8<sup>th</sup>

Goal: 100% complete by December 2017
Science Teachers are Enthusiastic!

I'm looking forward to starting on Cells. These are well-crafted units! - Tanicia P., CA

My students and I are really enjoying this new microscope unit [of study]! Thanks!! - Sara B., CA

I have a very good feeling about this unit. Our design day was a hit! - Michael M., CA

Had so much fun teaching the engineering cycle today~ - Joanna P., CA
# The Competition

<table>
<thead>
<tr>
<th></th>
<th>Active and engaging</th>
<th>Engineering and Design focus</th>
<th>Device not needed for student</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td>x</td>
<td>x</td>
<td>v</td>
<td>$$$</td>
</tr>
<tr>
<td><strong>Amplify</strong></td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>$$$$$$</td>
</tr>
<tr>
<td><strong>Impact Science</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>$$</td>
</tr>
</tbody>
</table>

* $ = approximately $64 per 8-year cycle. A typical science textbook costs $90-100
Affordable for Districts

Charge for 8-year license based on enrollment

Typical school district has 3000 middle school students@$64/student = $192,000/district

Districts can use textbook budget to buy

Less than cost of a textbook purchase
Optimum Format and Delivery System

**PDF files are the most versatile format**

1. Easily accessible---anyone can download, print or project

2. Does not rely on software platform, no updates, patches, or network conflicts

3. No warehousing and shipping, or onsite tracking costs for school---Simple delivery via emailed link to Online folder
Current users, early interest, and market penetration

Albany Middle School
(beta test group)

Two Paying Customers already
Brentwood re-signed for 2nd year

30 Districts across CA Actively piloting:
Palo Alto, Brentwood, San Ramon, Mt. Diablo, Pleasanton, Martinez, Los Angeles, Mojave...

8 Districts in Negotiations to Purchase
20+ more districts interested in piloting
Market Size: $1.3 billion*
Our price: $64/student for a 8-year license

<table>
<thead>
<tr>
<th>West Coast</th>
<th>US</th>
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</thead>
<tbody>
<tr>
<td>2 million middle school students</td>
<td>13 million middle school students</td>
</tr>
<tr>
<td>x 5% marketshare **</td>
<td>x 5% marketshare</td>
</tr>
<tr>
<td>x $64/student =</td>
<td>x $64/student =</td>
</tr>
<tr>
<td>$6.4 M/year</td>
<td>$41.6 M/year</td>
</tr>
</tbody>
</table>

**Ladie’s previous published works garnered minimum 5% market share

* 13 million multiplied by $100 textbook purchase
Expenses and Revenue

Expense and Revenue (in Millions of $)

1st full year sales
Sales based on state approved list in July
6.4m
Bulk of Prod Dev complete
Start Sales and Marketing
2.4m
Expanding into other states
7.7m

25% Complete Start District Pilots
2016 2017 2018 2019 2020

0.15m
Expenses and Revenue

Expense and Revenue (in Millions of $)

Growing Profits

2016: Expense $0.2m, Revenue $0.1m
2017: Expense $0.3m, Revenue $0.1m
2018: Expense $1.4m, Revenue $2.4m
2019: Expense $2.4m, Revenue $6.4m
2020: Expense $6.4m, Revenue $7.7m

Expenses remain flat

Break even point
Projected Return on Investment

- 2018 Adoption to State Approved List in November—selling 1 year licenses

2018 2.4 million in sales - 1 million overhead = 1.4 million \times 1\% = \$14,000 dividend

- 2019 is first full year of sales with 8 year licenses

2019 6.4 million - 1.2 million overhead = 5.2 million \times 1\% = \$52,000 dividend
Timeline and Milestones

Finish Curriculum for all three grades by Q4 2017, Sales $100k and Prepare for State List submission by Q4

- Raise Funds, Staff up, Increase pace of development
- Sell 8 year licenses after State adoption
- Sell Licenses in other states
- Sell One Year Licenses
- Adjust for Other states
- New standardized State Exam

- All of 6th Grade complete
- Grades 7 and 8 are Complete
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http://impactscience.co/index.html

ImpactScience.Co