



# Acellus<sup>®</sup>

The Science of Learning



Classes



Progress



Messages



Attendance



Calendar



Score

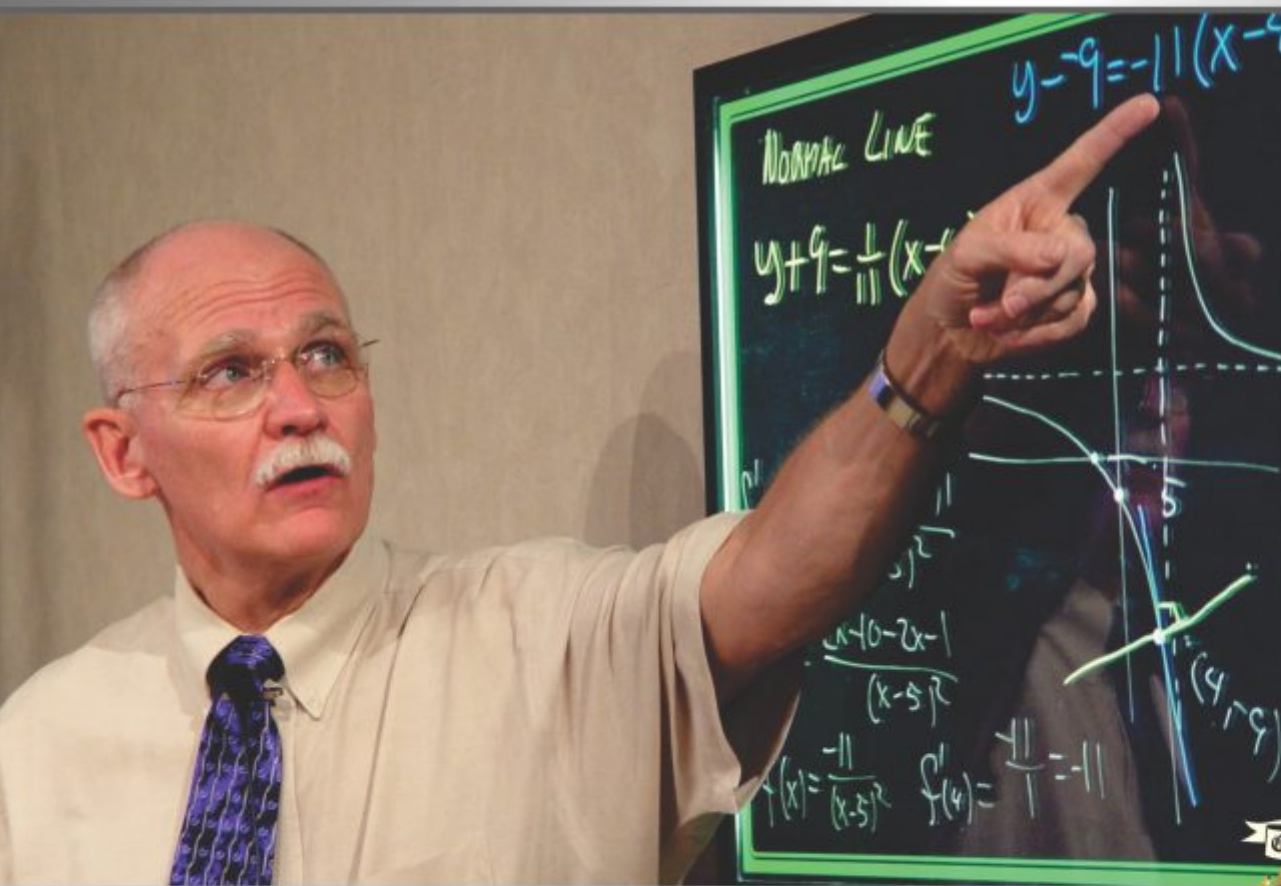


Library



Homework

Tangent and Normal Lines



INTERNATIONAL ACADEMY OF SCIENCE

# Acellus® – The Blended Learning Solution

## The Technology Behind the Success

### Why is Acellus so effective?

#### Intelligent Interaction (I<sup>2</sup>)

Acellus is a computer-based learning system that has changed online education as we know it today.

Acellus is the only online learning system that utilizes I<sup>2</sup> (Intelligent Interaction), which technology enables it to cater the educational content to the individual skill set of each student through customized personal instruction.



The end result is that students who were struggling and at risk of dropping out are gaining back the confidence needed to succeed in school, the workforce, and life.

## Features of Acellus

**Research-Based Data Driven Instruction** – Acellus utilizes statistical data on how students learn to customize the learning process to the individual needs of each student.

**Dynamic Course Updates** – Student responses are analyzed and course enhancements are made, further improving the effectiveness of Acellus courses. Courses are updated daily.

**Comprehensive Curriculum** – Acellus courses cover all core content areas K-12, as well as courses for Advanced Placement (AP), Exceptional Education, Career & Technical Education, & Exam Preparation.

**Multi-platform Support** – Acellus supports iOS and Android devices and is compatible with Windows & Mac OS X.

**Universally Internet Accessible** – Acellus uses the newest standards in web applications and video streaming to deliver the ultimate learning experience – at school or at home. Students can login anywhere Internet is available, and Acellus picks up right where they left off.

### Swiss Cheese Problems

In Acellus, special problems are created for the purpose of identifying where students have holes in their background knowledge that are making it hard for them to learn a particular concept. This special kind of problem in Acellus is called a "Swiss Cheese Problem" because it helps find holes in the students' understanding.



Often a significant percentage of students will give the same wrong answer to a problem, indicating they have the same hole. A specialized video lesson is created for this specific subset of students. The next time that specific wrong answer is entered by a student, the customized video comes up – directly targeting the hole in their understanding.

## What makes Acellus Courses so engaging?

### Master Teachers

Acellus courses are taught by teachers that have expertise in conveying knowledge through video instruction. Through the combination of excellent instruction and immediate feedback, students are quickly able to start experiencing success within their coursework.

### Five Star Courses



Acellus has launched a new initiative to create courses that are "five star" in the way that they help students grasp and master concepts. The lessons are filmed in a diversity of locations with only the best and most qualified instructors, keeping them fun and exciting so that both students and onsite teachers will rate the courses as 5 stars.

### Specialized Help Videos



Special help videos are integrated into the course content for concepts students have difficulty with. These videos not only help the student master the content, but provide the student with "real world" scenarios, creating a meaningful context for obscure concepts.

## Why is Acellus the most affordable learning system?

Acellus courses are developed by the International Academy of Science – a not-for-profit, 501c3 organization. The International Academy of Science is able to utilize master teachers to develop the Acellus courses through grants and other funding sources.

## Acellus Deployment

### How Schools are Using Acellus

Acellus is helping students achieve their academic goals in a wide range of learning applications.

Uses for Acellus include:

- Mainstream Instruction
- Supplemental Instruction
- Blended Learning
- Remediation
- Credit Recovery
- Special Education
- Advanced Placement (AP) Classes
- SAT/ACT Preparation
- Response to Intervention (RTI)
- Summer & After School Programs
- GED & Adult Programs
- Career and Technical Training Programs
- ESL Programs
- Homebound Students

Its wide range of courses and its ability to customize learning to each student's level and pace make Acellus ideal for challenged as well as gifted students.

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*"Acellus allows us to meet the needs of our special education population, talented and gifted students, those in need of credit recovery, or those who simply want a non-traditional approach to their education. We consider Acellus an important aspect of our educational program."*

**Jerry Peacock – Director**  
Baker Technical Institute, OR



# The Student Experience

## The Acellus Student Interface

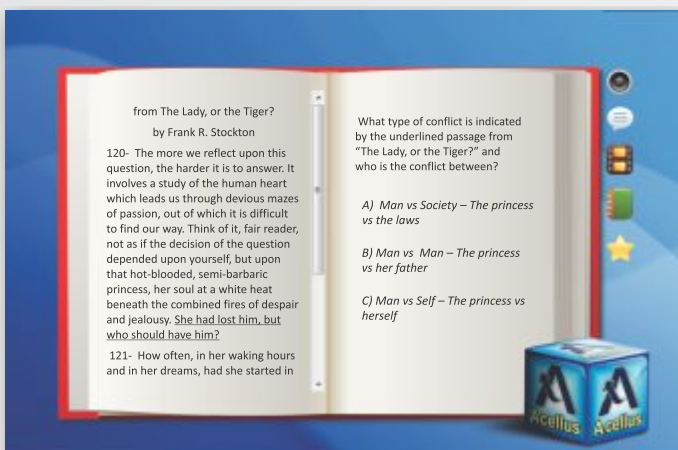
Students are able to access Acellus® courses through the intuitive Acellus Student Interface. After students log into Acellus, they select a class from the list of classes they have been enrolled in. Acellus takes them right to their current position in the course and automatically marks their attendance.

Other features of the Acellus Student Interface allow students to readily view their progress, grade, attendance, daily homework assignments, and the school calendar. The built-in messaging system allows students to ask and receive answers to their questions.



## How Acellus Works

Acellus delivers short video lessons taught by some of our nation's greatest teachers. After each lesson, students receive practice problems to reinforce their understanding of the concepts. Acellus uses Deficiency Diagnostics (DD) to assess any areas of weakness in their knowledge and give more help and practice in these areas. By recognizing deficiencies and personalizing the learning process, Acellus is able to fill in holes in students' understanding for a strong academic foundation.



**Problems** — After the short video lesson, problems are presented to assess understanding of the concept presented.



**A Flexible Teaching Tool** — Students may take Acellus Courses on a wide range of subjects and academic levels – from Preschool to Career and Technical Education Courses.

# The Teacher Experience

## Empowering Teachers

The key to an effective Acellus program is Super Teachers. Acellus provides teachers with the tools they need to spend more time doing what they do best...helping students learn.



### The Acellus Teacher Portal

The Acellus Teacher Portal gives teachers the ability to track progress, identify problems, and provide real-time assistance. With Acellus data available securely over the Internet, teachers can view their reports, update classes, and monitor students – from the classroom or at home.



### Acellus Gradebook

Keeping grades is easy with the Acellus Gradebook. As students work through their individual Acellus Courses, the Gradebook keeps track of student grades on every lesson and exam. Whether your school provides daily, weekly, or monthly grades – the Acellus Gradebook can handle it. Teachers can also input their own assignment grades and adjust the weighting curve.



### On-Site Lessons

On-site lessons are resources provided to the classroom teacher for use in a blended learning environment. These are content-specific activities (group discussions, writing assignments, classroom activities, laboratory experiments, etc.) that can be used to enrich and enhance the learning experience.



### Live Class Monitor

Teachers are able to monitor their students' progress in Acellus using the Live Class Monitor. The monitor shows the teacher which students are signed into Acellus and their current status in their coursework.

**Active** – Student is successfully progressing through the course.

**Inactive** – Student is signed in, but has not been actively working.

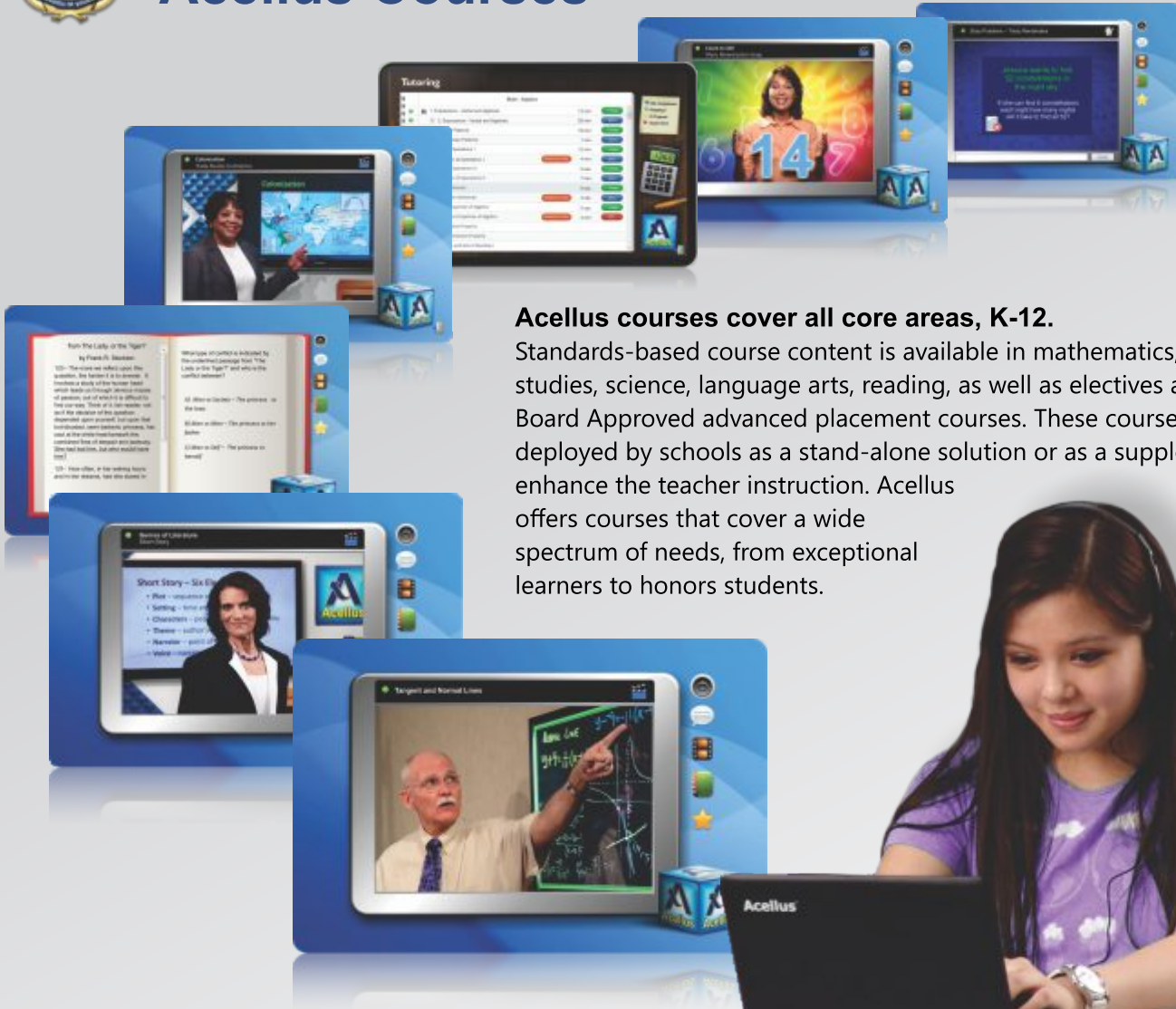
**Extra Help Video** – Student is receiving additional instruction for a concept.

**Wrong Limit** – Student is continuing to struggle with the concept after multiple levels of additional instruction.

By monitoring the current status of each student, teachers are able to help the students who need it most while the others can continue to progress through their courses.



International Academy of Science  
**Acellus Courses**



**Acellus courses cover all core areas, K-12.**

Standards-based course content is available in mathematics, social studies, science, language arts, reading, as well as electives and College Board Approved advanced placement courses. These courses can be deployed by schools as a stand-alone solution or as a supplement to enhance the teacher instruction. Acellus offers courses that cover a wide spectrum of needs, from exceptional learners to honors students.



**PRESCHOOL COURSES**

- Developing Preschool Skills 1
- Developing Preschool Skills 2

**ELEMENTARY SCHOOL COURSES**

GRADE K

- Grade K Math Plus
- Grade K Math
- Grade K Language Arts/Reading Plus
- Grade K Language Arts
- Grade K Reading
- Grade K Science
- Grade K Social Studies

GRADE 1

- Grade 1 Math Plus
- Grade 1 Math
- Grade 1 Language Arts/Reading Plus
- Grade 1 Language Arts
- Grade 1 Reading
- Grade 1 Science
- Grade 1 Social Studies

GRADE 2

- Grade 2 Math Plus
- Grade 2 Math
- Grade 2 Reading/Language Arts
- Grade 2 Science
- Grade 2 Social Studies

GRADE 3

- Grade 3 Math Plus
- Grade 3 Math
- Grade 3 Reading/Language Arts Plus
- Grade 3 Language Arts
- Grade 3 Reading
- Grade 3 Science
- Grade 3 Social Studies

GRADE 4

- Grade 4 Math Plus
- Grade 4 Math
- Grade 4 Language Arts/Reading Plus
- Grade 4 Language Arts/Reading
- Grade 4 Science
- Grade 4 Social Studies

GRADE 5

- Grade 5 Math Plus
- Grade 5 Math
- Grade 5 Language Arts/Reading Plus
- Grade 5 Language Arts/Reading
- Grade 5 Science
- Grade 5 Social Studies
- Missouri History

English Language

- Discover English – Elementary School Part 1
- Discover English – Elementary School Part 2
- Discover English – Elementary School Part 3

Foreign Languages

- Discover Spanish – Part 1
- Discover Spanish – Part 2
- Discover German
- Discover French

## MIDDLE SCHOOL COURSES

### Math

Grade 5 Math Plus  
Grade 5 Math  
Grade 6 Math Plus  
Grade 7 Math Plus  
Grade 7 Math  
FUNMath – Pre-Algebra  
FUNMath – Pre Algebra  
(Spanish)  
Algebra 1  
Algebra 1 – Advanced  
Algebra  
Algebra (Spanish)  
Basic Math I  
Basic Math II

### Language Arts/Reading

Grade 5 Language Arts/Reading Plus  
Grade 5 Language Arts/Reading Plus  
Grade 6 Language Arts/Reading Plus  
Grade 7 Language Arts/Reading Plus  
Grade 7 Language Arts/Reading Plus  
Grade 8 Language Arts/Reading Plus  
Grade 8 Language Arts/Reading Plus  
Basic Reading I  
Basic Reading II

### Science

Grade 5 Science  
Life Science  
Earth Science  
Physical Science  
General Biology

### Social Studies

Grade 5 Social Studies  
Missouri History  
Ancient Civilizations  
Middle School American History  
Middle School Geography  
Middle School Personal Finance  
U.S. History I

### English Language

Discover English – MS Part 1  
Discover English – MS Part 2  
Discover English – MS Part 3

### Foreign Languages

Discover Spanish – Part 1  
Discover Spanish – Part 2  
Discover German  
Discover French

### Health

Middle School Health

## HIGH SCHOOL COURSES

### Math

High School Remedial Math I  
High School Remedial Math II  
FUNMath  
FUNMath Spanish  
Algebra 1 – Advanced  
Algebra  
Algebra Spanish  
Geometry Plus  
Geometry  
Algebra II Plus  
Algebra II  
Trigonometry  
Pre-Calculus  
AP Calculus AB  
AP Calculus AB Exam Prep  
AP Calculus BC  
AP Computer Science A  
AP Statistics  
College Entrance Exam Math Prep (SAT/ACT)

### Language Arts/Reading

Basic Reading II  
High School English I  
High School English II  
Survey of American Lit. – English III  
College Prep – English IV  
AP English Language  
AP English Literature

### Science

Physical Science  
General Biology  
Honors Biology  
General Chemistry  
Honors Chemistry  
General Physics (Algebra-based)  
Honors Physics (Algebra-based)  
AP Biology  
AP Chemistry  
AP Environmental Science  
AP Physics C: Electricity & Magnetism  
AP Physics C: Mechanics

### Social Studies

U.S. History I  
U.S. History II  
World History I  
World History II  
World History II Plus  
U.S. Government  
Geography  
Psychology  
Economics  
Personal Finance  
AP U.S. History  
AP World History

### Technology

C++ Programming Language  
Computer Science 1  
Mastering Microsoft Excel

## HIGH SCHOOL COURSES (continued)

### English Language

Discover English – High School Part 1  
Discover English – High School Part 2  
Discover English – High School Part 3

### Foreign Languages

Discover Spanish – Part 1  
Discover Spanish – Part 2  
Discover German  
Discover French

### Health

High School Health

### Fine Arts

Music Appreciation

### High School Equivalency Exam

Preparation  
Math Exam Prep  
Social Studies Exam Prep  
Reading/Language Arts Exam Prep  
Science Exam Prep

## CAREER AND TECHNICAL EDUCATION COURSES

### General

Investigating Careers  
College and Career Readiness

### Architecture & Construction Career Cluster

Electrical I  
Electrical II  
HVAC & Refrigeration I  
HVAC & Refrigeration II  
Plumbing I  
Plumbing II

### Business Management & Administration

Principles of Business, Marketing  
and Finance  
Business Information Management I  
Business Information Management II  
Business Management

### Health Science Career Cluster

Medical Terminology

### Information Technology Career Cluster

Computer Programming I

## EXCEPTIONAL EDUCATION COURSES

### Special Learning

Preschool - K Special Learning 1  
Grade 1 - 2 Special Learning 2

### Math

Grade 3 Math Plus  
Grade 3 Math  
Grade 4 Math Plus  
Grade 4 Math  
Grade 5 Math Plus  
Grade 5 Math  
Grade 6 Math Plus  
Grade 7 Math Plus  
Grade 7 Math  
Grade 8 Math Plus  
Grade 8 Math  
Essential Math Plus  
Pre-Algebra Plus  
Pre-Algebra  
Algebra Plus  
Algebra  
Geometry Plus  
Geometry  
Algebra II Plus

### Reading/Language Arts

Basic Reading I  
Basic Reading II  
Grade 3 Reading/Language Arts Plus  
Grade 3 Language Arts  
Grade 3 Reading  
Grade 4 Language Arts/Reading Plus  
Grade 4 Reading/Language Arts  
Grade 5 Language Arts/Reading Plus  
Grade 5 Language Arts/Reading  
Grade 6 Language Arts/Reading  
Grade 7 Language Arts/Reading Plus  
Grade 7 Language Arts/Reading  
Grade 8 Language Arts/Reading Plus  
Grade 8 Language Arts/Reading  
High School English I  
High School English II

### Science

Grade 3 Science  
Grade 4 Science  
Grade 5 Science  
Life Science  
Earth Science  
Physical Science  
Biology

### Social Studies

Grade 3 Social Studies  
Grade 4 Social Studies  
Grade 5 Social Studies  
Ancient Civilizations  
Middle School American History  
Middle School Geography  
US History  
World History

# Acellus Works

## What Schools Are Saying About Acellus

“Since we’ve begun using Acellus our graduation rate has steadily increased. Three years ago our graduation rate was below 75%. This year our graduation rate is 90.1%. I can honestly say that a huge part of this success can be attributed to the Acellus program. Acellus has my highest endorsement.”

Otis Brown – Principal  
Plainfield High School, NJ

Acellus has had a wonderful impact on our school. At risk students who would not graduate have felt the success of daily accomplishments as well as the experience of walking across the stage at graduation.

Venus Bishop – Instructor  
Derby High School, KS

Acellus offers a more visually engaging curriculum than other programs we have found. For students who prefer learning through audio/visual methods, this format has proven to be very successful. Students who struggle with reading benefit from the flexibility of online education through the video-based instructional programs of Acellus. This type of online learning is rare in the K-12 digital content market.

Dr. Daniel Huld, Director  
Baker Web Academy, OR

“I want to let you know how pleased I am with the Acellus program. This past summer we had 60 out of 74 students who had failed one or more classes, recover all of their credits through the wide range of Acellus courses available to them. The Acellus program truly helps students stay on track so they can graduate on time!”

Jim Christenson – Principal  
Crosby-Ironton Schools, MN

### Educational Grants

Grants for the Acellus Learning System are available to qualifying schools through the International Academy of Science. For more information visit: [www.science.edu/now](http://www.science.edu/now) or call 816-229-3800.



“Acellus has become a powerful resource for the students at Telegraph. Acellus gives our educators the ability to meet the individual needs of each and every student. From At-Risk students to Gifted and Talented, Special Education and the regular classroom setting, we have witnessed positive growth in reading, mathematics, and science. Our students are more cognitively engaged, our behavior referrals have declined, and our students are becoming more and more confident in their academic abilities each day”.

Gabriel R. Cervantes, Principal  
Telegraph Intermediate School, MO

Using Acellus in our K-12 Special Education program has provided our school district a powerful tool to support the diverse learning needs of our students. Acellus gives schools individualized core instruction adaptable at each student's learning level while providing built-in specialized resources through differentiation, customized note taking, and progress monitoring. Our teachers use Acellus at varying levels of support ranging from full independent study courses to sheltered whole group, small group as well as targeted interventions. Acellus accompanied by specially designed support for each student is a recipe for success!

Kelly Kronbauer, Special Program Director  
Lake Chelan School District, WA

### Secured by GoldKey

Acellus utilizes GoldKey® security technology to keep Acellus data secure, even when accessed over the Internet.



## International Academy of Science

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