Let’s Rise to the Challenge in 2018
We want to invite you to imagine how Guided Pathways can become Smart Pathways—and a sustainable effort.
Guided Pathways

Four Pillars of Guided Pathways

1. Create clear curricular pathways to employment and further education.
2. Help students choose and enter their pathway.
3. Help students stay on their path.
4. Ensure that learning is happening with intentional outcomes.
Guided Pathways will require a **Solid Foundation** for Student Success
Let’s Look at This Picture Together
Curriculum is Intentional

Backwards Design is Forward Thinking

From multi-dimensional workforce competencies to accreditation demands at both program and institutional level, we’ve never seen more complex curriculum design requirements.

eLumen supports course and pathway design against these unlike any other vendor.
Assessment Cannot be an Autopsy

Assessment is Course-Embedded & Operational

Whether in the LMS, your Portfolio, or an evaluation in a student services context, you need to be able to know how what you contribute helps your students become what they hope to be.

Your effectiveness measures need to be based on multiple dimensions of effectiveness: institutional, workforce, student.
Curriculum and Assessment Management

We’re redefining two categories into a single new one: curriculum and assessment make no sense as independent categories, and course-embedded assessment should work seamlessly with the LMS. That’s why we worked with IMS Global to create the Competency and Academic Standard Exchange (CASE) interoperability standard.

With eLumen and CASE, schools can get real-time continuous improvement data and know how every student is progressing on their pathway from course and competency perspective.
“Doing SLOs” will need to become “Measuring Learning Mastery”
The 4 Practices of Guided Pathways

Specific Implementations Vary, But This is AACCs

I. Mapping Pathways to Student End Goals
   - Recommended Sequences; Service Alignment; Employment Opportunities

II. Helping Students Choose & Enter a Program Pathway
   - Meta-Majors; Co-Remediation; Portfolio Development

III. Keeping Students On Their Path
   - Degree Audit; Co-Remediation; Badging & Gamification

IV. Ensuring That Students are Learning
   - Learning Outcomes Assessment; Extended Transcript; Continuous Improvement

You need REAL-TIME DATA, data that understands both your curricular pathways AND your students’ LEARNING MASTERY to make these truly addressable.
We Enhance & Extend the LMS

CBE Use Case One: CBE Configuration of LMS

Competency Service
- Curriculum
  - Course Outline
  - Objectives & Outcomes
  - Assessment Standards

LMS
- Learning Activity
- Assessment
- Course Outcomes
- Course Analytics

Rubric Service

AMS
- Outcomes Management
- Program Review
- Accreditation

CBE Result

Brands:
- canvas
- D2L
- Blackboard
- eLumen
Movie to show Canvas Integration
Succeeding on Purpose

When students understand their pathways, and institutions can track progress by course or competency, a clear picture of success emerges.
Pillar 1: Clarify the Path with Catalog
eLumen Catalog

Extending Curriculum; Integrating Students

Catalog
• Build templates for course, program, and content areas
• Automatically populate with course/program data for catalog year
• Catalog also supports “Public View of Curriculum” for CA CCs
• Extracts for InDesign (or other print) Workflows

Student
• Explore Jobs as part of Program Explorer
• Find Program based on Multiple Measures
• Make Sample Ed Plan from Program Pathways
Our Mission

All students are creative and all students need to succeed. Ogdenville Community College respects the individual needs of students; fosters a caring and creative environment; and emphasizes the social, emotional, physical, intellectual development of each student.

Commitment to Excellence
The quality of a person’s life is in direct proportion to their commitment to excellence.

Letter From The President
Welcome to the 2017-2018 academic year, we here at Ogdenville
Computer Science

This course of study will give the student sufficient knowledge to enter the job market as a programmer. In addition, it will provide the student with a sound foundation in courses which are commonly the core of baccalaureate programs in computer science and will enable the student to transfer to a four-year institution.

Pre-Computer Science Major

The following courses transfer to 4-year institutions. Courses in bold are required core courses for the computer science major.

<table>
<thead>
<tr>
<th>Liberal Arts</th>
<th>Course</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 100</td>
<td>Fundamentals of Computers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CSCI 101</td>
<td>Introduction to Computing Problem Solving</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Why Choose Computer Science?

Every industry uses computers so naturally computer scientists can work in any. Problems in science, engineering, health care, and so many other areas can be solved by computers. It’s up to the computer scientist to figure out how, and design the software to apply the solution.

What Can I Learn?

- Computer science programs include topics such as:
  - Computer theory
  - Computer system design
  - Computer development and programming
  - Computer applications

Careers In Computer Science

From games developer to manager of IT and communications services, computer science graduates have a range of opportunities open to them.

Top Five Jobs

**Software Developer**

- Employed: 82,500
- Annual Openings: 3,290
- Average Salary: $106,860

**Computer Systems Analysts**

- Employed: 75,000
- Annual Openings: 3,640
- Average Salary: $87,220

**Computer Network Architects**

- Employed: 75,500
- Annual Openings: 550
- Average Salary: $101,210
What year did you graduate from highschool?

Graduation Year
2015

☐ I am a G.E.D. holder

What is the last math course you've taken?

Highest Math Level
Algebra 2

Is English your native language?

☐ Yes  ☐ No

Submit
Create An Ed Plan


**Term**

Fall 2017

**Course Block**

Recommended Sequence

---

**Computer Science, AS Recommended Sequence**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG110</td>
<td>3 Credits</td>
</tr>
<tr>
<td>MATH101</td>
<td>3 Credits</td>
</tr>
<tr>
<td>PSY101</td>
<td>3 Credits</td>
</tr>
<tr>
<td>CAR100</td>
<td>3 Credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS10</td>
<td>3 Credits</td>
</tr>
<tr>
<td>COMPSCI102</td>
<td>3 Credits</td>
</tr>
<tr>
<td>CHEM100</td>
<td>4 Credits</td>
</tr>
</tbody>
</table>
Pillar II: Enter the Path with Degree Planner & Portfolio
eLumen operationalizes Curriculum, Outcomes Assessment, and Program Evaluation as Student Program Planning, Badge-Based Pathways, Co-Remediation, and Extended Transcript.
Students Play a Key Role in Their Success

Ed Plan/Audit

Students should make decisions based on what they need to graduate—and about who they’ll become.

Portfolio

Signature assessments can be embedded in pathways with portfolios; then portfolios used to get jobs.

Badging & Transcript

Representation should take many forms: and they should be designed by learners, informed by institutions.
Welcome
Terry Glover

Program:
Nursing, ADN

Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Percentage</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC 001 - Writing Center</td>
<td>50%</td>
<td>Passed</td>
</tr>
<tr>
<td>2016-12-1 in Writing Tutoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH101 - College Algebra</td>
<td>50%</td>
<td>Passed</td>
</tr>
<tr>
<td>2016-01-01-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS257 - Intermediate Nursing Skills Lab</td>
<td>100%</td>
<td>Passed</td>
</tr>
<tr>
<td>2016-01-06-058-001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Career Progress

- Courses Completed: 10%
- Mastery Achieved: 76%

Recent Badges

- Meets expectations: Introduced, Reinforced
- 71.4%: Reinforced
- 83.3%: Reinforced
- 47.1%
- 95.8%
## Computer Science, AS

### Terms

#### Fall 2017

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Applies to Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH251 - Analytic Geometry and Calculus II</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COMPSCI108 - Computer Organization I</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COMPSCI105 - Introduction to Java Programming</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**CSLO**

- **COMPSCI105 SLO1**: Demonstrate how an Object Oriented (OOP) functions.  
  - Mastery Achieved: Not scored

- **COMPSCI105 SLO2**: Student will identify the different Java applet properties.  
  - Mastery Achieved: Not scored

- **COMPSCI105 SLO3**: Demonstrate the different types of rendering methods when creating graphic elements  
  - Mastery Achieved: Not scored

You have not enrolled in this course yet.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Applies to Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPSCI103 - Advanced Programming</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COMPSCI104 - Structures of Data</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Career Goals -

> Your portfolios

**Career Goals**

Introduction

Professional Development

RN Coursework Related Credentials

Create new Portfolio

---

I would like to start by working as a floor nurse to gain valuable skills and experience and once I am confident in my abilities, I eventually want to be the CNS of the department supporting the department's care of patients and helping determine protocols and policies that we provide.

Relatively close to the bedside. Above all else I love directly caring for patients and I chose the CNS pathway because it would keep me in different places as nursing has so many opportunities. I specialized in adult acute care so I would like to stay within that area of focus on developing my skills and abilities as a nurse and to provide excellent bedside care. I also am focusing on developing my skills that will eventually transition into the CNS role.

---

MATH101 Default CSLO Assessment

Fall 2015

Snapshot of progress to date.

College Algebra

Maritenna Padilla

---

NURS057 Default CSLO Assessment

Spring 2015

Excelling in patient care in non-life threatening situations

Beginning Nursing Skills Lab

Allison Glover

---

NURS057 Default CSLO Assessment

Fall 2014

Mastery of fundamental nursing lab skills that are a prerequisite to higher care skills.

Beginning Nursing Skills Lab

Allison Glover

---

Clinical Skills Assessment

Spring 2015

Exhibited proficiency of critical fundamental skills

Beginning Nursing Skills Lab

Allison Glover

---

Nursing Theory and Practice Essay and Presentation

Spring 2015

Received class recognition for my perspectives on personal care giving in a professional setting.

Fundamentals of Nursing

Sonia McLean

---
Pillar 3: Stay on the Path with targeted Co-Remediation
Sustainable Co-Remediation

Curriculum & Assessment Make DLAs Work

Challenges
• Faculty can’t remember 100s of Supplemental Materials
• Student Services & Advising need to be aware of Demand
• Students Need to Follow Through on Mastery

Solutions
• Design DLAs into the Curriculum
• Make Assessment “DLA-aware” and Provisioning Mechanism
• Connect Students Directly Across the Curriculum
Enlarging the Funnel
Co-Remediation Will Help Us Get More Students to Completion

Too Many Stuck in Basic Ed

- We know that 30% of students in Basic Ed could pass for-credit already
- We know that co-remediation is effective
- We know that teaching integrated curriculum is more engaging for students

Program Design Not Aligned to Work

- Competencies/SLOs not well-aligned to recognizable workplace skills
- Assessments Not Scaffolded to Mastery (or connected to Student Services)
- Data must be able to tell whether struggle is for student(s)—or a failure of course/program design

THE PROBLEM

1. Students stuck—and dollars spent—here restrict flow of students to credentials
2. Shrinking the funnel and increasing time to acquire job-ready skills
3. Making it harder to attain workforce-certified skills
4. Putting out-of-reach necessary credentials

CURRENT BASIC-ED CUT-OFF
20 CR “SKILLS BUILDER” (AKA “THE DROP-OUT”)
35 CR “CURRENT CERT”
60 CR “CURRENT AS/AAS”

We currently spend too much money on basic education/remedial education—and place too much emphasis on long-running measures of attainment. By moving to competency-based approaches of both program design and student assessment, we can grow the funnel and shrink time to workforce-validated credential.
Making it Work

This has to be faculty-driven and system-supported

Courses, Workforce, and Basic Skills

- Entrance skills, Workforce Requirements, and Course Competencies are often locked up in paper processes
- Co-Remediation needs real-time delivery, not another trip to the portal for a PDF

Deliver What’s Needed, When Needed

- Assessment that is “Curriculum Aware” makes “filling the gaps” possible
- CA CC’s “DLA” Model is Key Element of Delivery
- Workforce can help align basic skills to CTE Curriculum at job-specific competency clusters
eLumen Can Do the Math

There’s some science to all this…

More than Curriculum Map Required

• Course Learning Outcomes need to be mapped to PSLO/ISLO and to Workforce Competencies and Basic Skills
• Should be able to articulate things like Assessment Level (Intro, Journeyman, Master) and Attainment Benchmarks/Rules (First, Last, Average | “3 Course Level Activities at Journeyman or Better”)

Data Science Needed to “Follow the Map”

• Faculty should be able to use a variety of assignments and rubrics, with varying scales per activity
• These need to be harmonized against Institutional Mastery Levels as they “follow the curriculum map”
• Institutional Reporting needs different data model than Student Performance (data about a course is different than the current state of Jimmy’s learning).
Guided Pathways Become Smart Pathways

Guided Pathways and Co-Remediation enabled by eLumen make the path to success more assured; more transparent; more flexible.

By integrating Gen Ed and Basic Skills DIRECTLY into Curriculum & Assessment, you can catch gaps between where a student IS and where they’re SUPPOSED TO BE (or CAN GO).
Pillar 4: Ensure Learning with Intentional Curriculum & Information Radiators
## Curriculum Map

### Computer Science Competencies

<table>
<thead>
<tr>
<th>Courses</th>
<th>Demonstrate analytical and critical thinking skills.</th>
<th>Demonstrate research, and technology skills required for advanced study or employment...</th>
<th>Demonstrate the knowledge and skills to apply techniques, methodologies, tools and skills to build high-quality computer-based systems that...</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Categories</td>
<td>Students will be able to apply analytical methods to model real-world processes and objects.</td>
<td>Students will be provided with the skills to perform information gathering to solve data related problems related to computing.</td>
<td>Students will have the ability to adapt to evolving methodologies of computing.</td>
</tr>
</tbody>
</table>

### COMPSCI101 - Computer Literacy

<table>
<thead>
<tr>
<th>SLO</th>
<th>Description</th>
<th>Asmt Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrate an understanding of computers and how they are used in the everyday environment.</td>
<td>(I)</td>
</tr>
<tr>
<td>2</td>
<td>Perform various tasks associated with the use of software for word processing, spreadsheet, and presentation...</td>
<td>(I)</td>
</tr>
<tr>
<td>3</td>
<td>Interpret information security standards and social media pitfalls that individuals may encounter.</td>
<td>(I)</td>
</tr>
<tr>
<td>4</td>
<td>Analyze and identify the hardware on most computers.</td>
<td>(R)</td>
</tr>
<tr>
<td>5</td>
<td>Perform a keyword search on the Internet.</td>
<td>(M)</td>
</tr>
</tbody>
</table>

### COMPSCI102 - Introduction to Programming
## Competency/SLO Attainment Rules

### SLO Listing

<table>
<thead>
<tr>
<th>Badge</th>
<th>Name</th>
<th>SLO</th>
<th>Mastery Levels</th>
<th>Assessment Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students will identify with the computer science environment and prepare to function in the world-at-large as productive and ethical professionals and as responsible citizens.</td>
<td>3</td>
<td>Meets expectations</td>
<td>Mastered</td>
</tr>
</tbody>
</table>

**Admin: Nancy Dodd**

*Data Steward* in **Computer Science**

**Strategic Planning**

**SLOs & Assessments**

**Curriculum**

**Org Management**

**Reports**

**System Settings**

*Inbox*  
*Account Settings*  
*Support*  
*Log Out*
Nursing, ADN
The Associate of Science Degree in Nursing (ADN) prepares entry-level Registered Nurses (RN) as providers of care across the health/illness continuum and as members within the profession. Upon successful completion of program requirements, graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN), and are guaranteed transfer to the university BSN program.
# Extended Transcript

## Unofficial Transcript
Please contact Academic Staff to request an official transcript.

### Nursing, ADN

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Mastery</th>
<th>Progress</th>
<th>Evaluator</th>
<th>Term</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### General Education

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Mastery</th>
<th>Progress</th>
<th>Evaluator</th>
<th>Term</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Thinking</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies strategies</td>
<td>Meets expectations</td>
<td>100.00%</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td>06/29/2015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NURS057 SLO 2: Student performs a basic nursing physical assessment for a patient with a non-life threatening condition.</th>
<th>Meets expectations</th>
<th>Madeleine Quinn</th>
<th>Spring 2015</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO101 SLO 3: Presents and interprets graphs and tables using statistics and scientific analysis</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
</tr>
<tr>
<td>BIO100 SLO 1: Apply the scientific method in the discipline of biology and demonstrating this comprehension by completing a single experiment.</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
</tr>
<tr>
<td>ART101 SLO 2: Describe the process of artistic creation in order to explore humanistic concerns.</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
</tr>
<tr>
<td>LRC 001 SLO 3: Students will demonstrate problem solving/creative thinking ability by identifying the main points of discussion raised during the tutorial session to plan next steps in the writing process.</td>
<td>Meets expectations</td>
<td>Tran Vo</td>
<td>Spring 2016</td>
<td></td>
</tr>
<tr>
<td>BIO100 SLO 3: Interpret, use, analyze and express ideas through equations, graphs, and diagrams</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
</tr>
<tr>
<td>ENGO268 SLO 3: Uses appropriate terminology through the critical analysis of films with a focus on their structure and related meaning.</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Fall 2014</td>
<td></td>
</tr>
<tr>
<td>Generate reasoned, well-organized arguments and/or conclusions.</td>
<td>Meets expectations</td>
<td>47.06%</td>
<td>Madeleine Quinn</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>Analyze perspectives, arguments, or data.</td>
<td>Meets expectations</td>
<td>60.00%</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
</tr>
</tbody>
</table>
Students CAN Succeed on Purpose

Co-Remediation

Problem
Screening for basic skills can work—but can sometimes screen out students who would benefit from Co-Remediation.

Co-Remediation
Adapting Competency-Based assessments into curriculum allows you to do early formative assessments of core skills such as writing and math while also engaging students in the skills development they'll need in their program.

With student's ability to score individual students, map skills from course to program and Grad Ed outcomes, as well as track demographics, you can send a set of remedial students to the Writing Center and another to ESL Mentoring.

Problem
Specific skills can be a challenge over time, even if a student is progressing through their program.

Retention
Competency-based offerings allow you to build alternative offerings that address specific skills gaps or skills emphases.

Retaining allows you to define alternative assessment strategies, as well as track both individuals and cohorts over time. This combination of variable strategic initiative and individual student tracking can change what the game for assessment.

Skills-Ready
Accreditor demands, Program Review, and other academic process supports are reasons enough to do some form of outcomes modeling and assessment.

But the real reason—the reason elumus was formed as a company—that by paying attention to student skills, by designing courses and programs to deliver those skills, we do better by our students, enabling them to live the lives they have imagined.
Let’s Make This Work Together