What is a Pathway?
(adapted from Portfolium User Guides)

Overview
Pathways are a visual journey or learning path to chart one's course to competency and track progress on that journey.

Terminology
Let's start by clarifying the terminology that we use when we discuss Pathways.
Artifact: A work sample that demonstrates competency.
Requirement: A definition of what is necessary to show proof of competency. These are often Artifacts from projects, course assignments, co-curricular experiences, badges, or event attendance.
Milestone: A topical group of Requirements that must be completed to progress along a Pathway.
Badge: A digital badge is an officially validated indicator of accomplishment, skills, or competencies.
Pathway: The learning path comprised of milestones and requirements.

OESIS XP Pathways
XP Pathways are designed to augment faculty professional development by certifying mastery of pedagogies or universal school programs. They also help faculty members become comfortable with the concept of competency- or mastery-based education in preparation for integration in a student program.

Examples include Project-Based Learning, Competency-Based Education, Social-Emotional Learning, Student Wellness, and Global Education.
Pathways are the gateway to faculty and student competency-based assessment, credentialing, & ePortfolios

Each OESIS Pathway has four different levels, each requiring a minimum of eight hours of work. The PD experience can be more immersive if the faculty member takes a deeper dive into the content. All Pathways have submissions and multiple reviewer options. Pathways leverage our significant subject level and division specific content in OESIS-XP.

**INTRODUCTORY LEVEL PATHWAY**

This Pathway provides a series of 6-8 milestones of readings, videos and reflections that are estimated to take 8-10 hours to complete. It will provide the educator with a good understanding of the pedagogical or curricular domain including exposure to content relevant to them in their specific department or division.

**LEVEL 1 PATHWAY: PLANNING** First Year with Master Mentor

This Pathway requires the Introductory level Badge as a pre-requisite or school senior admin approval. For the teacher(s) who is ready to do the planning and preparation, this pathway provides a series of tasks as well as deeper content exploration. Akin to a Cohort, this Level 1 is done as a group of teachers with group discussions and peer review expected. It also includes live check-ins with Pathway evaluators.

**LEVEL 2 PATHWAY: PRACTITIONER** Post Year One

This Pathway is for those who have generally completed Level 1 with at least 1 year’s experience. It will require a reflection and analysis of performance and plans for improvement and change. Again akin to a Cohort this level is done as a Group with peer feedback and includes live discussion with the Pathway evaluators.

**LEVEL 3 PATHWAY: MASTER CREDENTIAL**

This Pathway is primarily a series of peer collaboration and review steps of a teacher who has two or three years experience in a domain. It includes presentation of their work, analysis and research behind practice and outcomes.

Faculty who successfully complete OESIS Network Verified Pathways will earn digital badges. 
**Cost:** $100 introductory pathway; and $150 for each Level 1, Level 2 or Level 3 Pathway.

Email joel.backon@oesisgroup.com to register.
Competency-Based Education

**Network Leader:** Tara Quigley, Princeton Day School (NJ)
The rationale for, terminology, and practices regarding the foundations and implementation of competency-based education. Specific emphasis is placed on revisiting the principles of backward design and shifting mindsets to more growth-oriented pathways for learning. The goal is for faculty and administrators to equip themselves to implement competency-based education in their schools as an incremental process over several years.

Project-Based Learning

**Network Leaders:**
- Tara Quigley, Director of Miss Fine’s Center for Interdisciplinary Education Princeton Day School (NJ) & Jeff Robin, former Founding Faculty Member, High Tech High School (CA)
The process of structuring the answers to big questions around extended and enhanced project-based work. The goal is for teaching faculty to incorporate large and small projects that lead students to an understanding instead of following a traditional scope and sequence course format. PBL is an ideal pedagogy for a CBE system.

Social-Emotional Learning

**Network Leader:** Tara Quigley, Princeton Day School (NJ) in partnership with Six Seconds: The Emotional Intelligence Network
We now understand that success in school, relationships, and careers is highly dependent on social-emotional learning (SEL). The goal is to understand the principles of SEL, how to utilize those principles in everyday life, and to integrate them into our curriculum. A combination of purposeful integration and “teachable moments” is the ultimate method of helping students appreciate the power of SEL.
Coming in 2020:

Integrating Cultural Competency into the Program
Network Leader: Tara Quigley, Princeton Day School (NJ)

How do we best understand the complexities of multiple cultures in our curriculum and school community? The goal of this Pathway is to challenge the “Western Canon” that represents a single cultural heritage of white European males and to celebrate the cultural differences on campus. There is a specific emphasis on the notion of “whiteness” as a social construct that is equivalent to any other cultural construct. Curriculum integration is key to the successful completion of this Pathway.

Grading for Transparency and Opportunity
Jared Colley, The Oakridge School (TX) & Nick Dressler, De Smet Jesuit High School (MO)

Most experienced teachers understand the limitations of grading systems, but many of the limitations of grading have been created by schools themselves as they incorporated more aspects of student behavior and performance into grades, thereby challenging the fundamental notion of equity. This erosion of grading systems has led some to call for the elimination of grades. Our society, however, is demanding that we be able to draw comparisons between students and other competitive activities. The goal of this Pathway is to develop more transparent and productive methods of grading that can grow mindset, enable teacher intervention and capture growth.

Leveraging Social Media for Learning
Network Leaders: Alan Katzman, Social Assurity, & Nate Green, Flint Hill School (VA)

The explosion of social media in schools created new challenges for teachers and administrators. After a period of trying to refocus students away from their social media devices, schools began to ban such devices in classrooms and sometimes on public campus spaces. By doing so, the social-emotional states of students began to interfere with attention and learning, leaving schools with unanswered questions. The goal of this Pathway is to fashion integrated lessons that utilize social media in constructive ways to create positive learning experiences. In doing so, overall social media use will be viewed with a more critical eye by students.

School Ed Tech & Data Ecosystems
Network Leaders: TBD

There are several productivity ecosystems available to schools to manage the daily work in which most faculty and students engage. Data ecosystems have been more elusive due to the number of different departmental solutions available and a lack of standards for data exchange. As schools become more interested in comprehensive credentials for their students, the need for an ecosystem that defines and provides the conduits for data exchange is increased. Reporting, whether in the form of a formal transcript or periodic and ad hoc reports about student learning outcomes, is essential to the future success of schools. The goal of this Pathway is to educate schools regarding the existing and developing data exchange standards, and how they can be used to improve information regarding student growth and success.
Integrating STEAM into the Program
Network Leaders: Simon Huss, Windward School (CA) & Aidyl S. Gonzalez-Serricchio, Buckley School (CA)

Some describe STEAM as another “flash in the pan” trend, but the real power of STEAM is both the integration of quantitative and creative disciplines and the development of skills that are useful across the curriculum. The goal of this Pathway is to introduce one to the components of STEAM and then allow participants to select one component and do a deep dive into the process of integrating that component into a curriculum. Those components will initially include design thinking, engineering and applied science (including robotics), making, design and sustainability. Participants may return to the Level I Pathway and select an additional component of STEAM after the successful completion of the first.

Critical Thinking & Argumentation
Network Leader: Nathan Otey, Harvard Fellow, Lead Instructor at ThinkerAnalytix

Critical thinking is the most frequently mentioned competency in almost every education forum. It is striking that most people can’t even define critical thinking. Very simply, this Pathway focuses on critical thinking as the analysis of facts to form a judgment. Argumentation uses critical thinking skills to defend a position on a given issue. The absence of critical thinking results in blind attachments to positions that often cannot be supported. The goal of this Pathway is to provide a practical guide for teachers to teach critical thinking in their coursework, develop students’ argumentation skills, and learn how to approach students who have beliefs that are not supported by critical thinking. Lessons and units can be incorporated into any academic discipline, making this competency critical for student academic success.
Before we begin on this journey of introducing PBL to our classrooms, it is important to understand what Project-Based Learning is and what it is not. The selections in this Milestone will provide background about the definition of Project-Based learning, its purpose and intent, its advantages, and its uses. What is the difference between Project-Based Learning and Project-Oriented Learning? How might PBL transform our classrooms into more student-centered ones, and allow students to go deeper into their learning and understanding about a topic?

**OESIS-XP PBL Content By Subject**

- ART
- ENGLISH
- HISTORY & SOCIAL STUDIES
- MATH
- SCIENCE
- WORLD LANGUAGES
- ELEMENTARY

**Milestone 1: What is PBL?**

**Milestone 2: Why PBL?**

**Milestone 3: Goals of the PBL**

**Milestone 4: Performance Tasks**

**Milestone 5: The Role of a Driving Question**

**Milestone 6: Planning the PBL & Formative Assessment**
1. Introductory Readings

Read the following article and then comment using the prompts provided.
- What advantages do you see to using PBL in your classroom?
- Where can you see an advantage to using this process, and where do you think you might start?

1:11 What the Heck is Project-Based Learning / Heather Wolpert-Gawron (5 minutes)
Discussion

2. Background Videos

Watch the following videos and post a comment.
- Think about how PBL is different than "doing" a project.

1:29 What is PBL? / Jeff Robin (1.5 minutes)

3. Digging Deeper Readings

Read the following article and then comment using the prompt:

1:31 Project-Based Learning: Start Here / Jennifer Gonzalez (15 minutes)

- This article, from Jennifer Gonzalez’s website, Cult of Pedagogy, provides an excellent overview and introduction to PBL, including several videos and additional links to other resources.

Discussion

4. Inspiration Videos

Watch the following video and post a comment about what ideas you have for using PBL in your classroom.
- Comment on how your thinking has changed about PBL.
- What ideas do you now have about how you might use it in your classes?

4:41 Developing Inspiration and Getting Ideas for Great PBL Projects / Mike Gwaltney, Rocky Hill School (52.08 minutes)

5. Assignment

Think about the articles and videos with which you have interacted during this step. Then please write a reflection responding to the following prompts.
- What is your understanding of the purpose and process of Project-Based Learning after interacting with this step?
- Is there a difference between PBL and “doing a project?”
- How can you see yourself using PBL in your classroom?
- What roadblocks or constraints are a concern for you as you consider PBL in your classroom?
- What examples or ideas for PBL inspired you as you read the articles and watched the videos?
- What next steps do you see for yourself?

Milestone 2: Why PBL?
Milestone 1: What is the Difference between Grades & Assessment?

Milestone 2: What Are Competencies?

Milestone 3: Choosing and Articulating Competencies

Milestone 4: Aligning Competencies with Your Course

Milestone 5: Assessment Grading, Rubrics and Feedback

Milestone 6: Reflect

Please read the following articles, and then write a response using the prompts below.

- What do your grades measure?
- What do they communicate about each student?

1.1.1 How Accurate are your Grades? (10 minutes)

- “When constructing assignments, assessments, and grading policies, every teacher makes dozens of small decisions that determine how much a grade reflects a student’s academic work and how much it reflects a mishmash of other factors. Those quantities are different for every teacher and every assignment. Despite that, we tend to treat grades as if they mean the same thing all the time.” Great questions to ask and consider about your grading policies and practices.

1.1.2 One School’s Approach to Equitable Grading (15 minutes)

- “After studying the research about grading and learning about research-supported grading practices that are more accurate, more bias-resistant, and develop intrinsic motivation in students, the pilot group of middle school faculty members was excited to start using them. These more equitable practices included using alternatives to the 0–100 scale, not including behavior in the grade, ending extra credit, using rubrics, and developing a culture of retakes and redos.” Using more equitable and approachable grading practices to encourage learning and growth.

Discussion
1. Introductory Readings

Please read the following articles, and then write a response using the prompts below.

- What do your grades measure?
- What do they communicate about each student?

**1-1.1 How Accurate are your Grades?** (10 minutes)

- “When constructing assignments, assessments, and grading policies, every teacher makes dozens of small decisions that determine how much a grade reflects a student’s academic work and how much it reflects a mishmash of other factors. Those quantities are different for every teacher and every assignment. Despite that, we tend to treat grades as if they mean the same thing all the time.” Great questions to ask and consider about your grading policies and practices.

**1-1.2 One School’s Approach to Equitable Grading** (45 minutes)

- “After studying the research, I became more bias-resistant, and decided to start using them. I felt excited in the grade, end-of-term, and approachable grading period.”

**Discussion**

3. Digging Deeper Readings

Please read the following articles and then respond using the prompts below.

- What problems do you see with the current system of assessing students' work and understanding?
- What might I be able to do in my classroom if I did not have to give grades?

**3-5.1 A Video Traditional Classroom Punish Mistakes In Learning** (12 minutes)

- Ten points to think about in terms of how traditional classrooms don’t encourage students to take risks to learn. How grades don’t provide an accurate reflection of student learning and growth.

**3-5.2 Habits of Mind: Considerations** (5 minutes) Excerpt from "Learning and Leading with Habits of Mind."

- This book excerpt is about the 16 attributes that human beings display when they behave intelligently. In this book, we refer to them as Habits of Mind. They are the characteristics of what intelligent people do when they are confronted with problems, to which they respond in a particular way. These attributes are described in detail in the book at the link below.

4. Inspiration Videos

Watch the following video and comment, reflect, and what you can take away.

**1-4.1 Skills, Habits & Mindsets: Roadmap for Teachers**

The Six Habits


- 5. Learn from Setbacks. Persist through challenges and identify strategies for improving. Develop a growth mindset, the belief that you always have more to learn and are capable of changing and improving.

- 6. Live an Integrated Life. Draw on resources from one area of your life to help you in another. Tell your friends and family about what you do in school, showcase your work, and collaborate with local and global communities.

5. Assignment

Using the prompts provided below, please write and submit a reflection. Be sure to think back on the articles you have read and the videos you have watched.

- What do I think is important for my students to be able to know and do, apply or transfer?
- How might I more effectively measure what my students know and can do?
- What ideas do I have now about how I might best measure my students understanding and growth?
- After watching the TED talk by Sal Khan, what do you think about how we measure understanding and growth in schools today?
OESIS SEL Pathway

in collaboration with

sixseconds
THE EMOTIONAL INTELLIGENCE NETWORK

SEL Content By Subject

ART   ENGLISH   HISTORY & SOCIAL STUDIES   MATH   SCIENCE   WORLD LANGUAGES   ELEMENTARY

Milestone 1: The Case for SEL
Milestone 2: EQ for You
Milestone 3: Managing Your Time
Milestone 4: Optimism for Resilience
Milestone 1: The Case for SEL

Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

According to CASEL's national survey, 97% of us were trained in it.

THINK: Describe a situation where you had to use the skills of SEL to address a problem.

2. Activate

Research, Exemplars, Planning

Read at least two of the following articles, and then post a response to the discussion:

- Social Exemplar...

3. Reflect

Assignment Submission

Submit to this assignment your video completed during the Try This portion.

Then, using the prompts provided below, please write and submit a reflection. Be sure to think back on the articles you have read and the videos you have watched.

Think about the following prompts, but do not feel compelled to respond to all six:

1. What is YOUR Vision of Education?
2. Where does Social Emotional Learning (SEL) fit into that vision?
3. Are people with better social and emotional skills more likely to succeed in school and life?
4. Can social and emotional skills be taught?
5. Will children be better prepared for college and life if we teach social, emotional, and academic skills?
6. How can we help families teach social and emotional skills effectively?

*Achievement: Preference: Skills needed

4. Going Further

Inspiration and Additional Research and Exemplars

Emotional intelligence is a learnable, measurable, scientifically validated skillset that predicts better effectiveness, relationships, well-being, and quality of life — for adults & children. Once people thought that cognition and emotion were the opposite, but actually, the newest neuroscience shows it’s just not the case. Our brains are both rational and emotional — at once. (Daniel Kahneman)

SEL may be conceptualized as a series of three nested rings:

- individual, teachable EQ competencies for youth and adults in schools (Milestones 2 and 3 in this Pathway)
- classroom strategies for teachers and counselors to create safe, nurturing, inclusive, brain-friendly, and challenging classrooms (Milestone 4 in this Pathway)
- integration of SEL as part of the climate and culture of the school’s community (SEL Level 1 Pathway)

Successful students develop outcomes associated with SEL competencies, such as resilience, empathy, and academic mindset. Researchers at Six Seconds have shown that students who are successful in terms of scores for good health, relationship quality, and personal achievement are those who value SEL (Frederick, 2012).

Six Seconds has identified 20 EQ competencies that are essential for students to develop:
Joel Backon joined OESIS July 2019 as Vice President. He partners with progressive independent schools in our network to develop programs and resources to foster school academic and co-curricular achievements, as well as faculty professional development.

Joel comes from Choate Rosemary Hall (CT) where he has held key roles in Information Technology, Academic Technology, as classroom teacher; curriculum designer; and in academic and student life advising for 27 years. He has been an OESIS Network Leader since 2015.

A teacher since 1991, Tara Quigley has been serving as the Director of Miss Fine’s Center for Interdisciplinary Studies since 2014. She is dedicated to educating and empowering teachers to try new pedagogical practices and strategies, including: design thinking, PBL, inquiry research, Visible Thinking, and teaching towards mastery of skills and competencies. She is also a co-chair of the Academic Affairs Committee at Princeton Day School where she has been for 18 years. As an OESIS Network Leader and PBL cohort facilitator, Tara frequently shares her process and experiences with her colleagues at peer schools and at national conferences.

OESIS Network Leaders: Designing, Advising & Assessing Pathways

**History**
- Debbie Ayers, Upper School Arzt, Dean of Academics and History Teacher, Flint Hill School (VA)

**Modeling & Science**
- Megan Bartley, formerly Science Department Chair, Milken School (CA); now Science Teacher in Michigan Public Schools

**Wellness**
- Sheila Bauer, Founder, Imago Dei Foundation

**World Languages**
- Matt Bavone, U.S. Classics Teacher, Technology Integrator, St. Luke’s School (CT)

**English**
- Jared Colley, English Department Chair, Oakridge School (TX)

**Computer Science**
- Nick Dressler, English Teacher, De Smet Jesuit High School (MO)

**PBL & History**
- Mike Gwaltney, Head of Upper School, Rocky Hill School (RI)

**STEM**
- Simon Huss, STEAM Director, Windward School (CA)

**SEL**
- Cheryl Leet, Assistant Director of Student Life, Six Seconds

**Science**
- Graig Marx, Science Department Chair, Shanghai American School (China)

**PBL & History**
- Andrew Miller, Instructional Coach, Shanghai American School (China)

**Math**
- Marcus Muster, Pre-Calculus Teacher, Kiski School (PA)

**Elementary**
- Matt Dressler, Upper School Dean of Academics, Rocky Hill School (RI)

**World Languages**
- Matt Bavone, English Department Chair, Oakridge School (TX)

**Computer Science**
- Nick Dressler, English Teacher, De Smet Jesuit High School (MO)

**PBL & Art**
- Mike Gwaltney, Head of Upper School, Rocky Hill School (RI)

**Global Education**
- Matt Nink, Executive Director, Global Youth Leadership & Stuart Center, Lake Forest Academy (IL)

**Math**
- Jon Shee, World Languages Department Chair, St. Luke’s School (CT)

**SEL & Wellness**
- Priya Singhvi, Director of Health & Wellness, Rye Country Day School (NY)

**World Languages**
- Guy Vandenbrouke, World Languages, Crossroads School (CA)

**Elementary**
- Ashley Read, Founding Faculty Member, High Tech High (CA)

**STEM**
- Jeff Robin, Founder, Six Seconds

**Math**
- Jim Wysocki, Math Department Chair, Catlin Gabel School (OR)