TRANSFORMING STUDENT LEARNING

SUMMER INSTITUTE

LEARNING & RESOURCE CONTINUUM

RESOURCE COMPILATION

Taking PBL to the Next Level

2.0 GET INVESTED

New Tech High @ Zion-Benton East
Synopsis: From the whole group session, this video gives a basic description of PBL as told by the students of New Tech High.

Science Leadership Academy Powers Next Generation Learning
Synopsis: From the whole group session, this video show the Science Leadership Academy's model for PBL.

What the Heck Is Project-Based Learning? / Edutopia
Synopsis: A fun article that builds a solid understanding for PBL as a concept. Shows the idea of PBL as a "learning story."

Gold Standard PB: Project Based Teaching Practices / Buck Institute
Synopsis: This articles highlights the vital role of the teacher in PBL.

Main Course Not Dessert / Buck Institute
Synopsis: The purpose in this article is twofold: 1) distinguish "main course" Project Based Learning (PBL) from the short duration and intellectually lightweight activities and projects common to many classrooms; and 2) argue that PBL is an essential tool for preparing students to reach 21st century educational goals and succeed in the 21st century.

Project-based Learning at High Tech High
Length: 14:51
Note: the ~5:00-9:30 section is very interesting. Also, this video is not as well-produced, but describes HTH's model a little better.

3.0 BECOME KNOWLEDGABLE

Seven Essentials for Project-Based Learning / ASCD
Synopsis: This article breaks down seven essential elements for creating meaningful, well designed projects. The elements are: A need to know, a driving question, student voice/choice, 21st century skills, inquiry/innovation, feedback/revision and a publicly presented product. The authors of the article are both from the Buck Institute.

Taking PBL to the Next Level, Con't...

The PBL Process video / New Tech Network
Synopsis: This 3:00 video outlines the underpinnings/processes that guide NTN's PBL.

What Project Based Learning Isn't / High Tech High
Synopsis: Jeff Robin, art teacher at High Tech High, outlines a common misunderstanding of project-based learning.

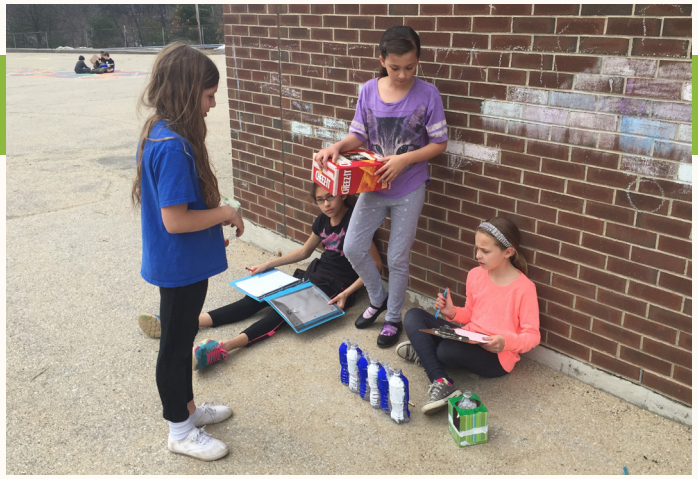
4.0 BECOME SKILLED

Project Idea Rubric / NTN
Synopsis: This rubric can be used to develop ideas into high-quality learning projects. Use the rubric to score your idea across a quality horizontal of unacceptable, acceptable and exemplary in the following areas: assessment practices, adult connections, active explorations, applied learning, academic rigor and authenticity.

Turning Student Groups into Effective Teams / Buck Institute
Synopsis: This paper is a guide to the effective design and management of student teams. Topics discussed include forming teams, helping them become effective, and using peer ratings to adjust team grades for individual performance. A FAQ section offers suggestions for dealing with several problems that commonly arise with student teams, and forms and handouts are provided to assist in team formation and management.

Project Design Rubric / Buck Institute
Synopsis: The Project Design Rubric uses the Essential Project Design Elements as criteria to evaluate projects. The rubric aligns with BIE's Gold Standard PBL model. Definitions and practical examples are used to clarify the meaning of each dimension.

Coherent, Flexible Learning



2.0 GET INVESTED

Changing Education Paradigms / Ken Robinson
Synopsis: In this TED Sir Ken Robinson lays out the link between 3 troubling trends: rising drop-out rates, schools' dwindling stake in the arts, and ADHD and why those things are happening in education today.

What is Competency Based Education / Nellie Mae Education Foundation
Synopsis: This YouTube video gives a basic description of what Competency Based Education is and the components of it.

Why Competencies? / Rose Colby
Synopsis: In this webinar from Rose Colby on InspirED platform, she addresses elements that are leading educators to design a new vision of learning and talks about the role of competencies in this new vision.

3.0 BECOME KNOWLEDGABLE

The Shift from Cohorts to Competencies / Digital Learning Now
Synopsis: This paper is a primer for understanding the framework of competency-based learning in a 21st century learning system.

Understanding the Skills in the Common Core State Standards / Acheive
Synopsis: This report identifies the types and ranges of college- and career-ready skills reflected in the Common Core State Standards (CCSS) in mathematics and English Language Arts/ Literacy, using two sets of skills statements – the Deeper Learning Standards and the Career Cluster Essential Knowledge and Skills Statements – as benchmarks.

Competency Toolkit / Building 21
Synopsis: This site currently hosts the latest versions of open source tools and resources under development to support CBE at the School District of Philadelphia.

When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning / INACOL
Synopsis: This paper provides an introduction to competency-based pathways, a necessary condition to realizing the potential of next generation learning. Significantly, this report finds that competency-based pathways are re-engineering our education system around learning – creating a system where failure is no longer an option.

Coherent, Flexible Learning, Con't...

Rich Tasks: New Hampshire Story of Transformation / NHDOE 2Rev
Synopsis: The Sanborn SD and Bow High School portions of this video provide pretty solid real-world examples what CBE is and why they switched to it.

4.0 BECOME SKILLED

Deeper Learning Skills to Common Core State Standards Crosswalk
Synopsis: This resource provides a crosswalk between deeper learning skills and the CCSS. It allows people to see where they overlap and can be used as a tool to create educational content that aligns with both.

ELA Competencies / Building 21
Synopsis: These are competencies built from ELA CCSS.

Begin with the End

2.0 GET INVESTED

Building Rigorous Projects That Are Core to Learning (Keys to PBL Series Part 2) / Edutopia
Synopsis: From the whole group session, this video shares the keys to success with PBL and gives a great introduction to how to get started and what PBL is.

UbD in a Nutshell / Jay McTighe
Synopsis: This short document gives the stages of UbD and explains what they are and the purpose.

Deeper Learning: Making Every Student & Teacher a Superhero, Every Day / Getting Smart
Synopsis: This infographic shows the basic elements of deeper learning and provides links to exemplar schools.

Beyond Knowing Facts, How Do We Get to a Deeper Level of Learning? / Mind/Shift
Synopsis: This article gives some of the basic principles of deeper learning, offering links to other resources and tips for how to get started.

Begin with the End, Con't...

Understanding by Design Framework / ASCD
Synopsis: This PDF provides a basic outline of the UbD process by providing a brief definition of UbD, the seven key tenets of the framework, the 3 stages of backwards design, and an FAQ.

3.0 BECOME KNOWLEDGABLE

Deeper Learning: Highlighting Student Work / Edutopia
Synopsis: This blog series delves into both how and why deeper learning works. A variety of educational leaders lend their voices to this Edutopia project, which highlights the best and most crucial aspects of deeper learning.

What is Deeper Learning? / Hewlett Foundation
Synopsis: From the whole group session, this webpage provides a basic definition as well as the individual components that make up deeper learning.

Deeper Learning Competencies / Hewlett
Synopsis: This short document highlights the key competencies of Deeper Learning and lists the skills and abilities involved in this approach to education.

Deeper Learning for Every Student Every Day / Getting Smart
Synopsis: This in-depth document highlights how 20 schools are working to promote Deeper Learning. Examples illustrate how these schools are leading the way with Personalized, blended and Project-Based Learning. The second half of this paper takes on common myths about deeper learning.

A Time for Deeper Learning: Preparing Students for a Changing World / Alliance for Excellent Education
Synopsis: The increasingly complex world demands much of its students. In almost every aspect of their lives, young people are being asked to learn more, process more, and produce more. Now more than ever the national's education system is being challenged by a technology driven global economy that requires a skilled and deeply literate workforce. This brief examines deeper learning—the knowledge and skills all students need to succeed in college, a career, and life—and explains its necessity and analyzes the growing body of global evidence supporting its wide scale implementation.

Overview of UbD & the Design Template / Grant Wiggins
Synopsis: This PDF takes readers step by step through the UbD design process.

Begin with the End, Con't...

4.0 BECOME SKILLED

Inspiring Excellence Video Series: Part 1 / Expeditionary Learning
Synopsis: This short video shows a 2nd grade class study of snakes. It highlights the steps the students took to write their own E-book based on research they carried out about snakes.

Deeper Learning: The Planning Guide / Monica Martinez
Synopsis: This in-depth planning guide offers resources to teachers in all stages of carrying out Deeper Learning. It helps to identify a school-wide vision and provides tools for creating and implementing that.

Introduction to Ratios and Proportional Relationships / Teaching Channel
Synopsis: This video of a 6th grade math class is a good example of deeper learning. It shows all the components of the lesson with the teacher narrating to give explanations of why each element is important in deeper learning.

Our Presumpscot School Community - Illuminating Standards / Expeditionary Learning
Synopsis: From the whole group session, this video demonstrates how Common Core literacy standards can come to life naturally, thoughtfully and joyfully for kindergartners, who engage in real-world research in their own school.

UbD Framework
Synopsis: This basic framework will allow teachers to design their own content/course using UbD principles.

Authentic, Rigorous Assessment

2.0 GET INVESTED

Criteria for Effective Assessment in Project-Based Learning / Edutopia
Synopsis: From the whole group session, this article discusses the criteria needed to ensure that PBL projects demand high expectations that are aligned to standards and assessed properly.

Authentic Assessment / YouTube
Synopsis: From the whole group session, this video provides a solid foundation for the what and why of authentic assessment.

What is "Authentic" Assessment?
Synopsis: From the whole group session, after a brief description of School of the Future, this video provides an overview of authentic assessment.

Student Engagement: New Hampshire Story of Transformation / NHDOE 2Rev
Synopsis: This video shows how PBL empowers students to take control over their learning and engages their community to create a richer learning experience. The Surry Village Charter section is particularly compelling.

The Case for Authentic Assessment / Grant Wiggins
Synopsis: This article provides an excellent explanation of the What and Why of authentic assessment.

3.0 BECOME KNOWLEDGABLE

Project-Based Math: Beyond the Textbook / ConnectED
Synopsis: From the whole group session, this video is about how a middle school used an i3 grant to redesign their math program to be project-based and the results that have occurred since making the switch.

From Worms to Wall Street: Projects Prompt Active, Authentic Learning / Edutopia
Synopsis: From the whole group session, students at Newsome Park Elementary School perform in-depth investigations and real-world application with PBL. The video shows how PBL is engaging students and their community to create a more authentic, connected learning experience.

PBL: What Does It Take for a Project to Be "Authentic"? / Edutopia
Synopsis: This article takes readers through the difference between not authentic, somewhat authentic, and fully authentic projects.

Authentic, Rigorous Assessment, Con't...

Five Standards of Authentic Instruction / ASCD
Synopsis: This article unpacks five standards of authentic instruction: higher-order thinking, depth of knowledge, connections to the world beyond the classroom, substantive conversation, and social support for student achievement.

College and Career Ready Competencies aligned with Common Core State Standards / NH Dept of Ed
Synopsis: The NH State Board of Education approved competencies in mathematics and English language arts aligned to the Common Core College and Career Ready Standards for statewide use.

Understanding by Design Stage 2 / Jay McTighe
Synopsis: The PDF is a 30-page deep dive into UbD Stage 2.

How Do You Create Authentic Assessments? / Jon Mueller
Synopsis: This website takes readers through the steps of creating an authentic assessment. At the bottom of the page, there are links that further unpack each step.

Criteria for Effective Assessment in Project-Based Learning / Edutopia
Synopsis: This article discusses the criteria needed to ensure that PBL projects demand high expectations that are aligned to standards and assessed properly.

4.0 BECOME SKILLED

Authentic Assessment Toolbox / Jon Mueller
Synopsis: From the whole group session, this webpage houses examples of Authentic Assessment for a wide range of subject areas and grade levels.

Tasks, Units, and Student Work / NYC Department of Education
Synopsis: From the whole group session, this webpage allows you to search a growing assortment of Common Core-aligned tasks, units and student work by keyword, grade level, subject area and Common Core Learning Standard.

PBL: What Does It Take for a Project to Be "Authentic"? / Edutopia
Synopsis: From the whole group session, this article takes readers through the difference between not authentic, somewhat authentic, and fully authentic projects.

Authentic, Rigorous Assessment, Con't...

PBL: Depth of Knowledge / Karin Hess
Synopsis: From the whole group session, this Matrix cross-references Bloom's Taxonomy with Webb's DoK Levels providing Curricular examples at most levels.

PBL: Original Physics Experiments: Illuminating Standards Video / Expeditionary Learning
Synopsis: From the whole group session, this film celebrates the results of 1st graders physics investigations and their reflection on that 7 years later. It inspires science teachers to create more authentic learning experiences for students of any age.

Using Webb's DoK to Increase Rigor / Edutopia
Synopsis: This blog post gives clear steps around how to use Webb's DoK to increase rigor to design better instruction.

Practical PBL Series: Design an Instructional Unit in Seven Phases / Edutopia
Synopsis: This article explains what the author considers to be the seven phases of a project cycle, taking readers from developing the driving question all the way through summative assessment.

Work That Matters: The Teacher's Guide to Project-based Learning / Innovation Unit
Synopsis: Developed by the Learning Futures project in partnership with High Tech High, this guide offers step-by-step advice on planning and managing extended, interdisciplinary projects, as well as useful protocols for critique sessions, templates for important documents such as project plans, and examples of high-impact projects.

Criteria for Effective Assessment in Project-Based Learning / Edutopia
Synopsis: This article discusses the criteria needed to ensure that PBL projects demand high expectations that are aligned to standards and assessed properly.

Assessing Deeper Learning: A Survey of Performance Assessment and Mastery Tracking Tools / Getting Smart
Synopsis: This report reviews, evaluates and identifies tools and technology that make Deeper Learning student assessment systems efficient and effective for networks, districts, schools and teachers.

Defining & Norming Excellence

2.0 GET INVESTED

Rubrics: An Introduction / eLearning Centralia
Synopsis: This youtube video gives a very basic and broken down explanation of what rubrics are and how they function in assessing something.

Using Rubrics with Students / Massachusetts ESE
Synopsis: This video with insights from Jay McTighe of UbD, highlights the use of rubrics in the classroom to bring focus and clarity about expectations for students' performance.

SDW Bethesda Elementary Students Teach Board Members to Build a Rubric / School District of Waukesha
Synopsis: This youtube video shows 4th grade students teaching School Board Members how to create a rubric. The teacher explains that engaging the students in creating the rubrics gives them a deeper understanding of the performance criteria and what and why they are learning and giving them chances to self-reflect.

Drive: The Surprising Truth About What Motivates Us / Dan Pink
Synopsis: This youtube video clarifies common misconceptions about human motivation and addresses how to change the structures of the workplace to get at what really motivates people.

Development of Performance Criteria / Portland State University
Synopsis: This short document explains what performance criteria are and how to create them offering charts with applicable verbs and descriptions.

The Relationship Between a Competency and its Assessment / InspirED
Synopsis: This graphic depicts the relationship between a competency statement, its performance indicators, and the performance task created to measure proficiency.

3.0 BECOME KNOWLEDGABLE

How do Rubrics Help? / Edutopia
Synopsis: A basic explanation of rubrics and how they can be useful in student success. Also provides many links to sample rubrics and tips for creating rubrics.

Project Rubric / Manor New Technology High School
Synopsis: This rubric was used by teachers at Manor New Technology High School to assess student performance on a personal response essay and group presentation associated with a team-taught project.

Defining & Norming Excellence, Con't...

Designing & Assessing Educational Objectives: Applying the New Taxonomy (Marzano) / RSU18.org
Synopsis: This 4 page document provides examples of language and examples for designing rubrics based on Marzano's Taxonomy.

Editable Rubric / Edutopia
Synopsis: This easy-to-use Microsoft Word rubric template -- created by Cait Camarata, Edutopia's visual designer -- can be modified to suit your own needs.

Assessment Using Rubrics / GMCTE UofS
Synopsis: This Youtube video provides an indepth look at rubrics and how they impact student learning.

4.0 BECOME SKILLED

Progress and Proficiency: Redesigning Grading for Competency Education / Competency Works
Synopsis: An in-depth explanation of designing a grading system for Competency Based Learning. Offering insights from the field and suggestions for the future, this 41-page paper details how competency grading can look and provides the key elements for getting started.

How to get High-Quality Student work in PBL / Edutopia
Synopsis: Larmer gives critical advice for ensure that students not only produce high quality work in a PBL project, but also ensure that the work shows high quality learning.

Developing Rubrics / Central New Mexico Community College
Synopsis: This Powerpoint Presentation takes you through how to decide what type of rubric to use, how to break down standards or competencies into performance criteria as well as how to determine performance levels.

The Art & Science of Designing Competencies / CompetencyWorks
Synopsis: This report, published by CompetencyWorks, is part of an ongoing discussion that explores both the creation and development of competencies, as well as the difficulties of making them function well within different learning environments. The author maintains that effective competencies must include both learning objectives and clear performance measures, along effective rubrics to assist students as they monitor their progress.

Assessment FOR Learning

2.0 GET INVESTED

Unpacking Formative Assessment / YouTube
Synopsis: Dylan Wiliam unpacks formative assessment, discussing the five strategies that make up a smart formative assessment strategy: setting learning intentions, questioning, feedback, activating self, and activating peers.

Assessment for Learning Defined / Rick Stiggins
Synopsis: A brief (2-page) article that provides a quick definition of Assessment for Learning.

Using Common Formative Assessments to Improve Teaching and Learning / The Teaching Channel
Synopsis: This video shows how one school is using CFAs to improve teaching and learning.

Assessment Through the Student's Eyes / Rick Stiggins (ASCD)
Synopsis: This article provides an explanation for why traditional assessment systems, those that essentially separate students into "winners" and "losers", hinder student learning. It also describes an assessment system that enhances learning and sets up all students for success.

3.0 BECOME KNOWLEDGABLE

Five Keys to Comprehensive Assessment / Linda Darling-Hammond
Synopsis: Stanford professor Linda Darling-Hammond shares how using well-crafted formative and performance assessments, setting meaningful goals, and giving students ownership over the process can powerfully affect teaching and learning.

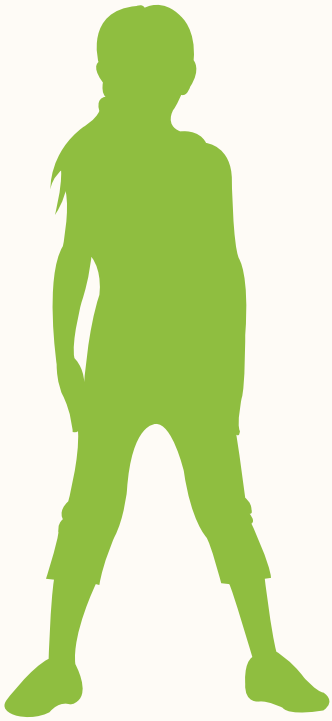
Top Ten Tips for Assessing Project-based Learning
Synopsis: This resource goes in-depth on 10 strategies for assessing PBL.

Assessment for learning / YouTube
Synopsis: This ~6:00 minute video describes five key strategies for assessing for learning and provides examples for implementing these strategies.

4.0 BECOME SKILLED

Rubrics / Buck Institute
Synopsis: SA library of rubrics designed to help both the PBL project mapping process and structuring assessment and feedback.

Assessment FOR Learning, Con't...



How to develop thinking and assessment for learning in the classroom / Department for Children, Education, Lifelong Learning and Skills, Welsh Assembly Government
Synopsis: This booklet is part of a series of guidance materials to support practitioners in implementing higher-quality teaching and learning by focusing on developing thinking and assessment for learning.

Learning for All: A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade 12 / Ontario Ministry of Education
Synopsis: This resource is a guide that outlines an integrated process of assessment and instruction for elementary and secondary school educators and designed to help raise the bar and close the gap in achievement for all students.

Shape the Path

2.0 GET INVESTED

Embedding the Assessment throughout the Project / Edutopia
Synopsis: Assessment can be integrated seamlessly into project-based learning. This video shares different strategies and explains how they support deeper learning.

Facilitating Learning in a Student-Driven Environment / Edutopia
Synopsis: This video shows how student-driven education supports scaffolding student learning.

3.0 BECOME KNOWLEDGABLE

Reassessment and Retakes / Competency Works
Synopsis: This short blog explains for reassessment and retakes support student learning.

Differentiation and Scaffolding in PBL / Everyday PB
Synopsis: This humorous blog-post provides strategies for scaffolding and differentiation in PBL.

Shape the Path, Con't...

Managing the Chaos of PBL / Paul Curtis of New Tech Network
Synopsis: This slide deck goes over the elements of PBL and how to manage the "chaos" through scaffolding. It provides an explanation of what scaffolding is and when and how to use it in a PBL context.

Project Management - The Devil is in the Differentiation! / BIE
Synopsis: This blog post gives insights into how to manage project work, highlighting the importance of meeting with students individually and in groups.

4.0 BECOME SKILLED

Supporting ELLs in PBL Projects / Edutopia
Synopsis: This article gives strategies for working with ELL students in PBL.

Scaffolding and Benchmarks (Project) / Everyday PBL
Synopsis: This webpage provides templates and guidance for how to plan making sure to allow time for scaffolding, reflection, and re-takes in PBL.

Managing Project Based Learning: Principles From the Field / BIE
Synopsis: This article is a study of Project Management in PBL, interviewing expert PBL Teachers. The authors found from their studies and observations that these elements of managing PBL work emerged: Time Management, Getting Started, Establishing a Culture that Stresses Student Self Management, Managing Student Groups, Working with Others Outside the Classroom, Getting The Most Out of Technological Resources, and Assessing Students and Evaluating Projects.

Project Plan & Benchmarks / Everyday PBL
Synopsis: This video goes through how to plan for formative assessment in your design of a PBL experience.

Oh, the Places You'll Go

2.0 GET INVESTED

The power of student-driven learning: Shelley Wright at TEDxWestVancouverED
Synopsis: In this video, a teacher discusses how she began to transform her teaching toward being student-centered, and the amazing results it produced.

Teacher-centered vs. Learner-centered paradigms / UConn
Synopsis: This table succinctly describes the difference between teacher-centered and student-centered learning.

Five Characteristics of Learner-Centered Teaching / Faculty Focus
Synopsis: This brief article describes five central characteristics of student-centered learning.

Connected Learning Infographic / Connected Learning
Synopsis: This infographic shares the basic principles (the what) of connected learning in an easy to digest format.

5 Ways to Make Your Classroom Student-Centered / EdWeek
Synopsis: This article highlights five questions that can help develop and refine the teacher strengths needed for creating a student-centered classroom.

What Happens When Students Control Their Own Education? / The Atlantic
Synopsis: This article tells the story of Pittsfield (NH) School District transformation toward student-centered learning and the impact that it has had on the community.

3.0 BECOME KNOWLEDGABLE

Connected Learning: Real-world Engagement / Connected Learning Alliance
Synopsis: This film introduces the thinking behind connected learning, which builds on the basics to make learning more relevant. It connects learning to people's interests, to real life, real work, real communities, and to the demands and opportunities of the digital age.The film asks: 'What might be the consequence of reframing education around the experience of the student?'; 'Might curiosity have always sat at the heart of an extraordinary education?'; and 'How might our imagination bring the experience of education to life?'

How to Bring Self-Organized Learning Environments to Your Community / Sugata Mitra
Synopsis: This toolkit is an online resource designed to help educators and parents support kids (8-12 years old) as they tap into their innate sense of wonder and engage in child-driven learning.

Oh, the Places You'll Go, Con't...

Can Student-Driven Learning Happen Under Common Core? / MindShift
Synopsis: This article discusses the different ways in which CCSS is compatible with student-centered learning.

Designing Learning Experiences: Start with the Student and Co-Create / Edutopia
Synopsis: This article provides a description for how to make a history class student-centered, but the lessons are applicable across subjects.

4.0 BECOME SKILLED

6 Design Principles of Connected Learning / TeachThought
Synopsis: This article lists and unpacks the 6 design principles that underpin a connected learning.

Student-centered Assessment Resources / Students at the Center
Synopsis: The Students at the Center project has produced the following suite of resources as part of a continued effort to help make the research papers and books come alive and be more applicable to those wishing to implement more student-centered approaches in the classroom, school, district, or beyond.

So You Think You Want to Innovate? / 2Revolutions
Synopsis: This document provides an analysis of what innovation culture means within an education context; describe why it's essential that we get better at building it; introduce a new framework that defines the factors that influence a robust and healthy culture of innovation; and share a self-assessment tool that educational leaders can use on their path to building innovation culture.