

April 2019



Authentic Learning Blueprint

FACILITATORS GUIDE

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Authentic Learning Blueprint

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Introduction

This blueprint is designed to guide leaders in education in decision making around the planning and implementation of authentic learning experiences for K-12 students. This blueprint also serves as a support for practicing teachers to inspire more authentic learning opportunities as apart of core course work. Linking career awareness and exploration with academic content through real-world experiences enhance learning. This drives a student-centered, personalized approach to career preparedness through core content engagement. An important principle worth noting is that every community is different and each district will adapt and implement with a model that works for them.

Want to be apart of the future drafts of the Authentic Learning Blueprint?

Please submit project summaries [here](#).

Definition

In the context of [Future Ready Iowa](#), students need to see the connection to the work they are doing in the classroom within the context of the community and future post-secondary opportunities.

Authentic Learning is: “Requiring a student-directed learning task, utilizing authentic skills and resources, resulting in an authentic product, for an authentic audience.”

Authentic Learning experiences allow for career awareness and exploration (part of the work based learning continuum) in a natural context that connects to content they are learning in class. In an authentic learning experience, students begin to see how what they are learning in school is relevant to the world beyond the classroom.

How Authentic Learning Fits

[Appendix A: Scaffolded Authentic Learning Pathways](#) is a visual of how Authentic Learning fits in a larger picture of career preparation. Students need access to experiences that allow them to make better decisions while in school. This will help them find passions and areas where they may be interested in pursuing a career because it is something the truly enjoy.

Student Benefits

- Make connections between real world expectations and the classroom
- Begin to pursue education with a greater sense of relevance, purpose, and engagement
- Interact with positive adult role models in a reduced student-adult ratio
- Understand that projects may take multiple attempts to find an acceptable solution for the business partner
- Experience enriched opportunities to learn, perform and be recognized
- Develop essential 21st-century skills (Iowa Core Universal Constructs)
 - Communication and presentation
 - Collaborating as part of a team
 - Critical thinking and problem-solving
 - Creativity and innovation
 - Flexibility and adaptability
 - Accountability and productivity
- Find out if a career or industry might be a good match before committing time and money
- Build a network of relationships in the community
- Pursue an area of interest or passion project
- Boost self-esteem and confidence
- Realize the industries and career opportunities available in Iowa
- Experience a range of opportunities not traditional for their gender, race or ethnicity

Business Benefits

- Build awareness of business's role in the community and economy
- Increase positive public relations opportunities and gain brand advocates
- Address projects and tasks that would otherwise not get attention
- Find help to fill a gap in your skillset
- Help create a pool of better-prepared and motivated potential employees
- Strengthen the leadership and supervisory skills of your current workers
- Derive value from work performed by student partners
- Learn about the knowledge and skills of tomorrow's employees by working with today's students
- Contact and observe potential future employees for part-time, summer or eventual full-time jobs in an authentic context
- Gather direct feedback about your products or services from a younger generation
- Expand views and experiences by working with different demographics through virtual connections with students statewide
- Educate young adults about the careers available to them in your company and industry

Characteristics of High-Quality Authentic Learning

The work needs to be authentic. Real tasks, where students own the work involving real research, real creation and a tangible service or product delivered to a real audience at the completion.

The following points come from Prepare Rhode Island's Workforce Guidance and delve deeper into what this work should look like:

- **Rigorous:** Skill-based, and tied to measurable outcomes. The experience should allow a student to gain measurable skills, whether those be essential skills (also known as professional skills, soft skills, or 21st century skills) or hard technical skills.
- **Relevant:** Connected to a student's interests. Projects and tasks should mirror those that exist in a real workplace.
- **Reflective:** Engages the student in reflection and analysis throughout and after the experience.
- **Interactive:** Providing multiple opportunities for students to interact with industry professionals, whether as supervisors, mentors, advisors, or collaborators.
- **Integrated:** Connected with the student's school-based curriculum. An authentic learning experience is a practical application of academic and/or technical learning and should allow the student to practice the theory learned in the classroom in a real-world setting.

The Buck Institute for Education has an [Essential Project Design Elements Checklist](#) that can be a useful resource as you review your project idea.

Additional thoughts on Authentic Learning Design:

- Centered around a challenging problem or question
- Incorporate problem-solving and critical thinking
- Involve active investigation or information seeking, more than just "looking something up"
- Research and analysis of data
- Allow students to have voice and choice in the work
- Create a public product at their conclusion

Sources for Authentic Learning Experiences:

- Re-thinking, or a fresh perspective, on an actual question or project from a company
- Design projects (websites, communications, logos, videos, etc.)
- An item towards the bottom of a business to-do list
- Meaningful work outside current capacity to address it
- Community and civic-minded projects

- Future developments in your industry that students could begin working out
- Process improvements
- Sequential projects to build student capacity
- Snowball projects: Let the original project grow and morph into something different and better each time
- Competitions and expos: Find a style that works for you and your project. To remove geographic and logistical scheduling issues, these formats can be carried out digitally as well. Maybe an internship or summer job is the prize!
 - Science fair-style showcase: Student groups display or present their finished projects. A judging committee of professionals can provide feedback and select a winner or winners.
 - “Shark Tank”-style pitchfest: Student groups have a set amount of time to present their ideas, deliver their elevator pitch and try to win over the judges.
 - Hack-a-thon: Student groups come together and are given a common challenge or problem. Then they collaborate, working non-stop, to devise and create solution.

Implementation Strategy: Course-Embedded Opportunities

Authentic projects become curriculum in order to meet core standards. Learning in the classroom is much more student-centered, and the process in solving problems and engaging in work isn’t defined, as opposed to authentic simulations, where there are often set steps in the process. Rather, students are asked to “figure out” how to do the work, in order to reach the end goals of the project and produce an artifact of learning. Often in course-embedded opportunities, the teacher serves as a facilitator for project work and strategically places content-specific learning throughout the project to meet the needs of desired learning targets.

Benefits for Course-Embedded Opportunities

- Students see how what they are learning relates to something relevant in their communities.
- Students are exposed to career fields related to the content.
- Students have more buy in to course work when they have some voice and choice in planning and project implementation.
- Offer students project choice increases engagement.
- Students are empowered to solve a problem and possibly make a difference beyond traditional course work.
- Allows for students to network and engage in positive relationships beyond the classroom.

[*See Appendix B for examples.*](#)

Implementation Strategy: Authentic Learning Programs

These programs are outside of typical courses. They are designed for students to experience authentic learning opportunities in a real-world setting. Each program is designed to engage students in Communication, Critical Thinking, Creativity, Collaboration, while developing soft skills, time management and problem solving techniques. Depending on the district, students will receive either elective or core academic credits. Students engaging in these experiences add value to the business partner projects by bringing a fresh perspective, while also exploring their passion and potential career pathway. Working in an environment where the student focus is authentic projects allows for the student to make connections to the learning, while experiencing a work environment with timelines, collaboration, and performance reviews. This is an opportunity to apply other coursework in real world scenarios.

[IowaALN](#) has a variety of [partner](#) programs from around the state. This is an ongoing and developing list of participating schools and does not include all Iowa schools offering an authentic learning program.

Sample Stories from [Iowa Digital Learning Plan](#).

Benefits for creating an Authentic Learning Program

- Programs allow for the development of teams and a specific community of learning around projects.
- Student testimonials suggest that “It doesn’t feel like school!” — allowing students to experience a professional work environment.
- Often schools build programming with more than one class period of time designated to project work so students have the time to dig deeper into project work before being moved along to the next class.
- A variety of programs provide a professional space for project work. This could be a redesigned learning environment within a school, or this could be an offsite location. Offsite locations often are derived from partnerships and shared spaces, to give students an authentic feel to world and problems outside of school.

[See Appendix C for examples.](#)

Regardless of implementation strategy, the first days of the program/course are essential. Here are a few things to keep in mind:

- Etiquette: Setting policies and expectations
- Student contract/handbook (similar to an employee contract: attendance, dress code, etc.)
- [Personality Test](#)
- Build their “portfolio” base
- Complete application
- Personal pitches
- Build student profiles for portfolios

Logistics

Look & Feel

- Goals
- Program boundaries (will/will not list)
- Grade levels
- Outlines/expectations/releases
- Student selection process ([Appendix D: Sample Pilot Survey](#))
- Who/How to promote:
 - **Create a buzz** among student body. ([Appendix E: Invite Experience](#))
 - **Send out a Partner Letter:** Sending out a letter or email explaining the new program or potential course opportunity. It is recommended that you include the business partner’s toolkit.
 - **Host a Local Lunch and Learn:** Planning a lunch and learn at your school with area partners is a great way to promote authentic learning programs and potential projects.
 - **Attend/Host an Area Business Coffee:** Many community chamber or economic development organizations host Area business coffees to help connect professionals and build partnerships. This is a great way to share the school’s vision with connecting and creating partnerships.
 - **Attend a Chamber meeting:** Many community chambers and economic development organizations host partner meetings once a month and typically can find space in the agenda for the school to share vision with connecting and creating partnerships.
 - **Plan a Think Tank:** Planning a “Think Tank” day with students and area business and community partners is a great way to get students and partners talking. The goal of this day is to open up discussion on potential projects and problems that need to be solved. It also generates interest and career awareness at the local level.
 - **Student Showcase/Expo:** Once authentic projects are completed, this is a great way to showcase student work and reconnect with area partners. Participating Partners should be invited as well as potential new partners. Potential new partners can see what this kind of partnership looks like and get ideas for potential projects.

[See Appendix F for additional examples of events focused on onboarding business partners.](#)

Credit Offerings

- [Licensure, Credit options \(Carnie Units versus CBE Pathways\)](#)
- [Framework of SCED for Secondary Level Courses](#): When creating new courses or offering student credit as an independent study that relates to authentic learning programs or courses at the secondary level, students still have to meet state regulations for seat time. This resource explains how carnegie units work in order to fulfil credit requirements.
- [CBE Department of Education](#) & [The Center](#): Alternatives to the Carnegie unit would be creating courses in a CBE pathway. This allows course to have determines competencies and do not depend on seat time. This approach allows for flexibility in timing of authentic learning programs or course.

Scheduling

Determining where and when to schedule an authentic learning program in your school's schedule can be a challenge (like with scheduling any new classes or programming). Things to consider when placing the program would be:

- **Facilitating Teacher:** Which teacher would be the best fit to facilitate this kind of learning environment?
- **Available space:** Will this be an onsite or offsite location? Which classrooms would make sense to invite collaborative problem solving and project management?
- What are the competing conflicts during the proposed scheduled times? What students are you trying to appeal to with this new programming?
- **Timing:** Will students be allowed to work offsite? Will students work face-to-face with partners? If students have the opportunity to visit and work with businesses or community partners onsite, having your program at the beginning of day, end of the day, or coupled with lunch might offer some buffer time for meetings. Also considering what times of day works best with partners is something to consider. This can be done with a simple survey provided at a local lunch and learn.

[Appendix G: Van Meter Example Schedule](#)

Branding

Brand your program/secure your social media - Involve students as a good way to see the level of buy-in. [First Project](#)

- Create your showcase/presence

Environments

Homebase for the students to work (on-site or off-site)

As previously mentioned, Course-Embedded Opportunities vs. Authentic Learning Programs Authentic Learning Projects can be facilitated in any style of classroom. It is recommended that students have a space to collaborate, access to internet and devices, and a way to display project work. Flexible spaces that serve as homebase for the students to work. These are often redesigned spaces within the school or an offsite location, usually a space that has been donated or shared by a local business or organization.

- [Example Redesigned Learning Environments](#)
- [GHAEA IowaALN RLE](#)

Funding

Funding for additional programming can take its toll on a school budget. Some things to consider:

- Is this a brand new addition to school programming?
- Will this replace a current program?
- How many students will this course or program serve?
- How many class periods will house this course or program?
- Will this program be facilitated or co-facilitated?

- Will authentic learning experiences and projects be embedded into a course that already lives within the school budget?
- Will this be an independent study?
- Will this be extra-curricular?
- Will this be a quarter, trimester, semester or year-long experience?
- Will all students be required to experience this course/programming?

Possible Funding Sources:

- **STEM BEST:** “The Iowa Governor’s STEM Advisory Council has awarded [50 STEM BEST® Programs](#) since 2014 with an opportunity to grow a series of community collaborations involving school+business partnerships. <https://iowastem.gov/STEMBEST>

Project Types: Internal & External

Internal Projects

Projects posed by students that require the research and review of potential partnerships beyond the classroom in order to gather information, invite to partner, seek guidance, or share resources in order to meet the goals of the project.

[See Appendix H for example.](#)

External Projects

Projects posed by businesses, organizations, or community members. External projects typically have an idea of what the end goal or deliverable product is before engaging students in project work. However, students may pose alternative deliverables when trying to solve a problem or engaging in project work.

[See Appendix I for example.](#)

A project pool is vital to the overall success of each authentic learning experience.

Here are two examples of Project Pool Forms:

- [Internal](#)
- [External](#)

FINDING EXTERNAL PROJECTS WITH EASE: IOWA’S WBL CLEARINGHOUSE

Iowa’s AEAs, Iowa Department of Education, and the Iowa Workforce Development have partnered together to create and scale the use of an online Work-Based Learning (WBL) Clearinghouse.

What is the WBL Clearinghouse?

Essentially, the WBL Clearinghouse is a searchable “project board” where educators and students can find real-world, authentic projects and other WBL experiences across the state to enhance learning opportunities in a K-12 setting.

What is the goal of the WBL Clearinghouse?

The goal of the clearinghouse is to scale opportunities and experiences to make learning relevant to our Iowa Students while in the K-12 setting and help students make real connections to various careers in our state. It is a response and one mechanism to support the Future Ready Iowa initiative.

Key Points:

- The clearinghouse supports work-based learning within the K-12 classroom itself
- It focuses on project-based learning, just one format for work-based learning that compliments other formats that the state intermediary network personnel are supporting
- It is designed to provide equity of opportunity for students that are too far away from other



work-based learning opportunities (digital access to experiences that aren't in proximity to allow students a broader variety of options, even in rural Iowa for example).

Who can use or will have access to the WBL Clearinghouse?

The clearinghouse should be a tool used by educators and stakeholders that bring WBL opportunities to students. This is a tool that teachers can use in the classroom, students can use when choosing a WBL experience, businesses and organizations can use to engage with the future workforce, and colleges can use to help make connections to various career fields.

*We want this to be a tool where all stakeholders in WBL can work together and have a uniform platform to scale opportunities to students across the state. It is not meant to be a competing entity to already-in-existence mechanisms but rather another way to reach students. WBL entities should view this as another opportunity to make connections with students and the future workforce.

When will the WBL Clearinghouse be available?

The exact date is tentative but the team involved in creating this web-based tool has a goal for July 2019.

Will there be professional development offered to support the use of the WBL Clearinghouse?

Yes, various opportunities will be offered statewide to learn how to use the WBL Clearinghouse. In person and online learning opportunities will be made available (Dates TBD). Educators will have access to resources to support the use of authentic WBL experiences in the classroom, as well as, professional development opportunities for implementation of these type of experiences.

- [Appendix J: Paper copy of Project Proposal](#)
- [Appendix K: WBL Clearinghouse One Page Summary](#)
- *Business Partner Toolkit: This is for businesses to learn about the WBL Clearinghouse. The business partner's toolkit is a great resource to give directly to potential business and community partners. Some great ways to connect with businesses are the following:*
- [Appendix L: Actual External Project on the WBL Clearinghouse](#)

Project Implementation Tools

Student Leader/Business Partner Project Flow

1. Who makes up the student team (team leader/team members)
2. Identify check-in points
3. Project parameters
4. Student reflection
5. Final grade

- [Appendix M: Sample Authentic Learning Project Process: Toyer Strategic Consultative Process](#)
- [Appendix N: Example K-8 Project Implementation Tool](#)
- [Appendix O: Example 6-12 Project Implementation Tool](#)
- [Appendix P: Example Initial Planning template](#)
- [Appendix Q: Example Standard & Project Tracking Template](#)
- [Appendix R: Example Formal Project Summary Template](#)

There are a few components to Authentic Learning that are sometimes foreign to students. Creativity, Brainstorming, and Team building are all essential to the overall success of learning in an authentic environment. [Appendix S has Creative Thinking, Brainstorming and Team Building Activities.](#)



Visualizing the Work: Scrum Board or Kanban Board

Digital or Physical
Meistertask
Google Keep
Padlet
Trello

Action Steps (Task and Subtasks) can be tracked using a scrum board/ kanban board (see Appendix O for example).

Evaluation

Evidence of Student Learning

There are many ways to elicit evidence of student learning. The Buck Institute has many [rubrics for project based learning](#). Here we will focus on three artifacts of student learning:

- 1. The Student Stand Up:** Students participate in daily or weekly stand ups to document where they are during the current cycle of their project. These stand ups are typically fifteen minutes and the focus is to answer three questions: what are you currently working on, what is something new you have experienced or accomplished, and the most important of the three questions, are there any impediments? For a project to be successful obstacles need to be identified and the stand-up allows for students to communicate barriers or roadblocks. The classroom facilitator serves as the “impediment crusher” by assuring the students have the necessary tools or guidance to complete their project within deadline. The student stand ups are not meant to bird walk on other topics, it is “time-boxed” and very focused to ensure the goals are met. If other conversations need to take place they would occur after the stand up and may not require everyone to attend. The key to this is consistency and staying on task. It is a good opportunity for the classroom facilitator to track progress and an opportunity to provide initial feedback. Both daily “stand ups” and “time boxing” are rituals within the scrum framework that have been adapted for the benefit of the authentic learning environment.
- 2. Student Portfolios:** AEA Learning Online’s [Student Personalized Learning System \(SPLS\)](#) has a feature where students can create portfolios. In this portfolio, students can introduce themselves, provide education goals and include artifacts as evidence of meeting their educational goals. These artifacts can be modules from the SPLS that are integrated into an authentic experience.
[See Appendix T for the SPLS portfolio.](#)
[See Appendix U for an example template from ILEAD.](#)
- 3. Business Partner Project Feedback:** Business partners may provide verbal or written feedback on various stages of the process as the project develops. Examples would be items such as emails or student notes from a project review or feedback from various checkpoints during the project timeline. Partners may offer specialized formats of the review process that students may engage in as well (this might be a performance review meeting and similar protocols). Artifacts collected from the process can serve as evidence of students learning and the development of various skills.



Here is an example of a Student Stand up Meeting:

Creston CAST students in this video are performing their weekly stand up. They are in the process of opening their own school/community store, The Crossing.

Networking

Iowa STEM/Iowa Intermediaries/ Iowa AEA WBL Teams

[Crossover document](#): This document contains regional crossover of educational organization stakeholders in the area of authentic and work-based learning.

Iowa Authentic Learning Network

[Iowa ALN](#) is a network for local school districts, partnering AEAs and community partnerships. The goal of Iowa ALN is to provide resources and supports to schools that are interested in implementing an authentic project and problem-based learning framework into their curriculum, to provide students an alternative pathway to receive academic credit.

Contact:

Laura Williams, williams@aealearningonline.org
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Future Ready Iowa

- [Future Ready Iowa](#) is an initiative to build Iowa's talent pipeline.
 - Education or training beyond high school is the new minimum to earn a living wage.
 - Careers today and in the future require advanced knowledge and/or technical skills.
 - The goal of Future Ready Iowa is for 70 percent of Iowa's workforce to have education or training beyond high school by 2025.
-

Professional Development

Onsite Tours/Visits

Seeing it in action is the best way for educators to learn about this kind of learning. Students sharing their experiences is the strongest delivery method of obtaining a conceptual understanding of what this kind of learning is about and the ability to see real time effects of this learning from the student perspective.

Most STEM BEST programs are open for visits as part of their STEM BEST Agreements.

Schools to explore:

- [Iowa BIG](#)
 - [Bellevue BIG](#)
 - [Waukee APEX](#)
 - [Authentic Learning Network Partner Schools](#)
-

AEA Professional Learning Opportunities

[Appendix V: Services AEA Learning Online Provides in Support of Authentic Learning](#)

Check with your [local AEA](#) for more information.
[Link to AEA PD System](#)

Agile and Scrum Learning

- **Agile:** Agile principles offer the flexibility needed to harbor an environment where students take control of and manage their own learning. An agile mindset promotes a [growth mindset](#) for student learning and outcomes. In agile there are no set means to an end, and it promotes flexibility in problem solving and an emphasis on stakeholder collaborations throughout the entire process of the project. Learn more about Agile implementation for learning from Dr. Simon Breakspear [here](#).

IowaWORKS

[IowaWORKS](#): Centers located throughout the state provide services for individuals like unemployment and career exploration and services for businesses, like labor market information and job fairs.

- **Scrum:** Scrum is a project management framework that helps students and teachers guide the project management and a process of organizing and working on projects.

[Agile & Scrum Resources:](#)

- [Practice Scrum Slides](#) (Student and Teacher Overview Training)
 - Newboco Offers training in Agile/Scrum
 - *Contact:* Nate Adams, nate@newbo.co
 - AEA's offer training in Project Management "From Teacher to Facilitator with Agile and Scrum"
 - *Contact:* Laura Williams, lwilliams@aealearningonline.org and Stephanie Lane, slane@ghaea.org
-

University of Iowa: Jacobson Institute STEM Innovator & BIZ Innovator

- **STEM Innovator®:** Aims to widen the talent pipeline of students prepared for STEM careers and future entrepreneurial pathways -- vital to advancing our nation's economic prosperity. To be future ready, students need opportunities to work on real-world problems, engage in collaborative teams, identify and leverage resources, and design viable solutions to meet community needs.
- **BIZInnovator:** A curriculum toolkit and professional development program for high school business and marketing teachers that provides an accessible solution for innovation and entrepreneurship education. With BizInnovator, students practice the business and entrepreneurial skills they'll need to be career and college ready. Students gain knowledge in entrepreneurship and confidence in their ability to become one.

Design Thinking

- [Design Thinking Overview Slides with templates](#)
 - AEAs offer experience in Design Thinking
-

Suggested Literature

Leaving to Learn

Elliot Washor

TOPIC: Student disengagement from school and learning.

- Schools must provide more experiences for students do some of their learning outside school.
-

Students at the Center

Allison Zmuda & Bena Kallick

TOPIC: Helping students develop the intellectual and social strength of character necessary to live well in the world.

- Schools must increase the say students have in their own learning. They should focus on preparing students to navigate complexities they face both inside and beyond school.
 - Changing traditional teacher and student roles, re-examining lesson planning, assessment, and feedback practices.
-

Authentic Learning: Real-World Experiences That Build 21st-Century Skills

Todd Stanley

TOPIC: Strategies that allow educators to provide students with authentic learning experiences that they can apply to their lives in school — and beyond.

- Justification for authentic learning and how it teaches 21st-century skills.
 - Specific strategies and how they allow for authenticity.
 - Problem/Project BL, Inquiry, simulations
 - Authentic teaching in the classroom.
 - Tips for managing an authentic classroom.
 - Bringing the real-world to students.
-

Creative Thinking Activities

- [Thinkertoys](#)
 - [ThinkPack](#)
-

Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning

Laura M. Greenstein

TOPIC: Teaching and assessing student mastery of 21st century skills.

- A Framework for using authentic learning experiences and rigorous assessment strategies to engage today's students.
 - Rubrics, checklists, lesson planning templates, a step-by-step model for developing your own classroom assessments.
-

Start With Why

Simon Sinek

TOPIC: Leaders who've had the greatest influence in the world all think, act, and communicate the same way — and it's the opposite of what everyone else does.

- The Golden Circle: a framework upon which organizations can be built, movements can be led and people can be inspired.
 - It all starts with WHY.
-

Glossary

Authentic Learning

To be considered authentic learning it must include a student-directed learning task, utilizing authentic skills and resources, resulting in an authentic product, for an authentic audience.

Business/Business Partner

This could be a businesses, non-profit organization, civic organization, community group or any professional person or entity who is wanting to engage in an authentic learning experience with students.

Clearinghouse

Refers to the Iowa Clearinghouse for Work-Based Learning.

Future Ready Iowa

Is an initiative to build Iowa's talent pipeline.

Work-Based Learning

Work-based learning makes it possible for students to do real-world, in-depth projects designed by business professionals in collaboration with teachers. It is a label for an entire continuum of learning experiences. This Toolkit and the Clearinghouse focus primarily on the Authentic Projects section of the Work-Based Learning spectrum.

Acknowledgments

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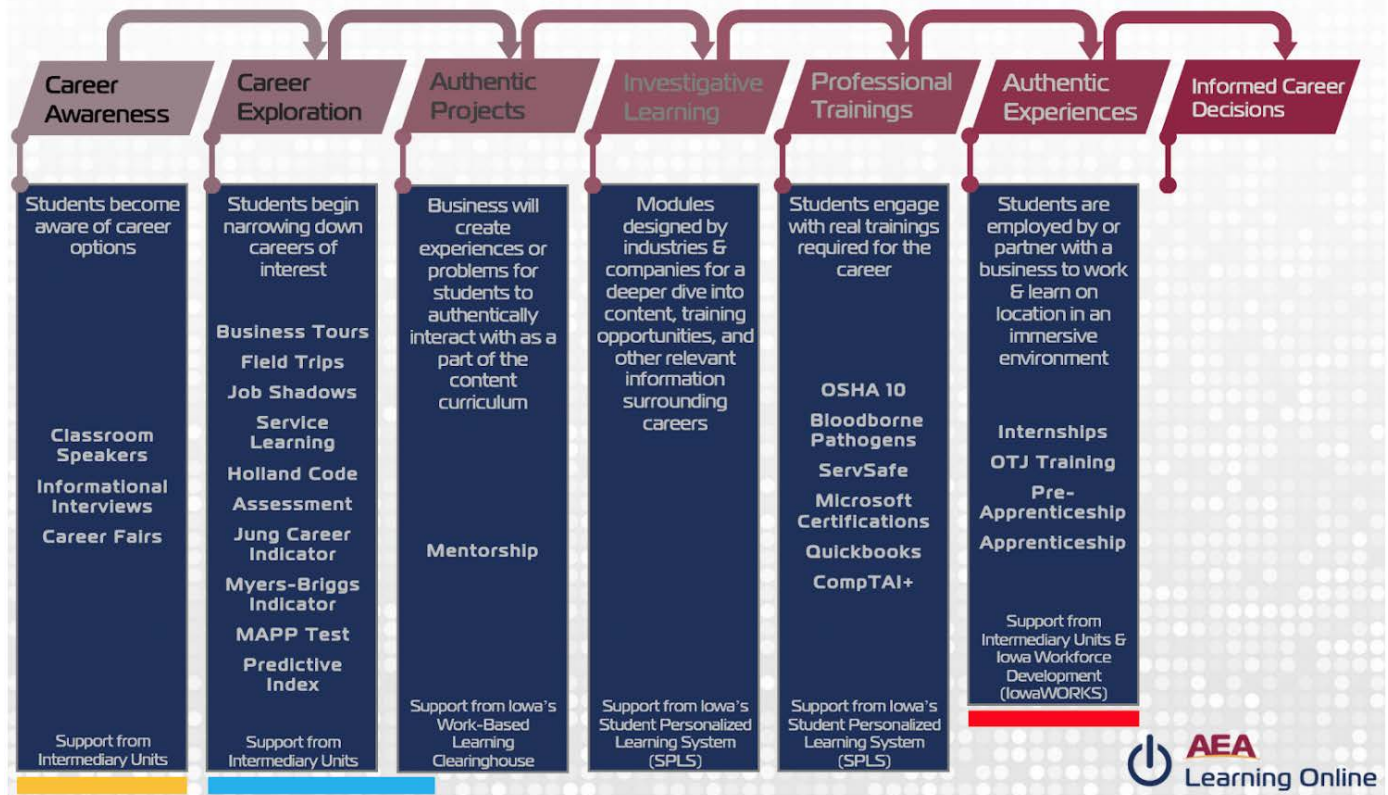
“ We want to thank all the students who contributed to this document as their voices are incredibly important and essential in implementing authentic learning in schools. ”

Organizations

- Cedar Rapids Community School District
- College Community School District
- Creston Community School District
- Danville Community School District
- Future Ready Iowa
- Great Prairie Area Education Agency
- Green Hills Area Education Agency
- Hamburg Community School District
- Iowa Authentic Learning Network
- Iowa STEM Council
- KSIB Radio
- Lenox Community School District
- Linn Mar Community School District
- Mount Pleasant Community School District
- Ottumwa Community School District
- The Center
- Van Meter Community School District
- Winfield Mount Union Community School District

Scaffolded Career Pathways

brought to you by



Appendix B

Example Course-Embedded Opportunities

Example 1: 7th Grade Social Studies

Summary

TEACHER: Mr. Brennan Williams, Mt. Pleasant Middle School

PARTNER: Bridges out of Poverty Henry County

PROJECT: Marketing/Communications regarding resources to support the community in order to end the cycles of poverty and homelessness locally.

DESCRIPTION: Students were empowered to come up with ideas of how they could promote this and engaged in research to better understand poverty at a local level. Students created fliers and shared with the partner for feedback.

DURATION: 1 Week

NARRATIVE: Amanda Sanders of Bridges of Henry County pitched a project to engage local Mt. Pleasant Middle School students in a community project as part of their social studies class. Mr. Williams piloted one of the projects housed within GPAEA 's developing regional project pool and was able to see the connection to this real project, as well as how it linked up to the new Social Studies standards. Brennan said "The new standards really put an emphasis on learning locally and engaging students in compelling questions. These questions lead them into a process of inquiry, at which we have information at our fingertips. It's what they do with that information, the application, that can start to make a difference- and in this case, a difference for our community."



7th Grade Social Studies Connecting Standards

- SS.7.13. Identify social, political and economic factors that can influence our thoughts and behavior.
- SS.7.14. Examine what causes inequalities and how they exist within a society.
- SS.7.17. Describe the roles of political, civil, and economic organizations in shaping people's lives. (21st century skills)
- SS.7.18. Explain and evaluate how economic decisions affect the wellbeing of individuals, businesses, and society.

Example 2: 5th Grade Science

Summary

TEACHER: Mr. Allsup, Danville

PARTNER: ABB Burlington, Iowa (Engineering)

PROJECT: Students were asked to create media to promote the shift towards automation and robotics in manufacturing to share with stakeholders within ABB.

DESCRIPTION: Two local engineers who work for ABB Burlington, IA (specializing in the manufacturing of switchgear) visited with 50 5th grade students and took students through a manufacturing and



design challenge, as well as, shared some information about the profession with students. At the end of the experience students were left with an authentic challenge: Creating media (in the form on a podcast using flipgrid) to promote the evolving industry to promote the use of automation and robotics in manufacturing. Students had to engage in research, work in teams to plan and implement their project, create team logos, and present their findings to an authentic audience.

DURATION: 1-2 weeks



5th Grade Connecting Standards

- 3–5–ETS1–1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost
- 3–5–ETS1–2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 5–PS2–1 Support an argument that the gravitational force exerted by Earth on objects is directed down.

Example 3: High School Communications

Summary

TEACHER: Ms. Jessen, Lenox High School

PARTNER: KSIB Radio

PROJECT: Commercial Productions

DESCRIPTION: Students cooperate with area businesses and produce 25-30 second commercials, like this. We put the commercial with a school announcement. The commercial is also finished without the announcement. The idea is that these ads are good enough that KSIB approaches the business.



DURATION: It takes a few weeks to produce a 30 second advertisement. Each student is able to make 4-5 per semester.

NARRATIVE: Chad Rieck, owner of KSIB Radio in Creston, Iowa, has partnered with Lenox High School to create digital media opportunities. As part of this partnership, students are exposed to radio broadcasting via streaming of school/community events. In the classroom, students embed digital media into their daily learning activities. Ms. Jessen, a 7-12 language arts teacher for Lenox CSD, piloted one digital media project housed within GHAEA's developing regional project pool in the Spring of 2018. Ms. Jessen was able to see the connection to this real project, as well as, how it linked to her Communications course currently offered to high school students. When asked how this project fit with the the Iowa Core Standards, Jessen replied, this class ties into many different areas. I think this is the most authentic slice of education we offer. They conduct interviews (speaking and listening), write commercials (writing), edit their work and that of their classmates (language), meet deadlines, work with others, produce quality work, adapt to schedules of others (21st Century Employability), and utilize many technologies, such as cameras, microphones, and Final Cut Pro (21st Century Technology Literacy). We have even delved into other subject area standards. We have cooperated with other teachers to produce videos like this.

Connected Standards:

- Writing
- Speaking and Listening
- Language
- 21st Century Employability
- 21st Century Technology Literacy

Appendix C

Example Authentic Learning Program

Example 1: Elementary Program — MakerSpace

Summary

WHERE: Hamburg CSD K-8

ESTABLISHED: September 2018

CURRENTLY SERVING: 150 Students

DESCRIPTION: Every Friday students participate in a K-8, multi-age program of MakerSpace. Students select four programs, with each program running for 9 Fridays. Students choose from Lasers, CNC, embroidery, quilting, TV/recording, t-shirt making, woodworking, Virtual Reality, metals, crafting, culinary arts, pottery, graphic design, and book making. Students design, make prototypes, and then create the projects each week.

CREDIT TYPE: Elective Credit

INTERESTED IN:

- Collaborating with other schools
- Partnering with other schools (collaborating on projects)
- Co-creating resources
- Onsite visits/tours

WEBSITE: <http://www.hamburgcsd.org/vnews/display.v/ART/5c17bdc9859ba>

PROGRAM CONTACT: Dr. Mike Wells, Superintendent



Example 2: High School Example — Communication & Service Technology (CAST)

Summary

WHERE: Creston Community School

ESTABLISHED: 2015

CURRENTLY SERVING: 80 High School Students (2018-2019)

DESCRIPTION: A pilot program launched in 2015 was designed to give CAST students the opportunity to solve real-world problems, as a part of their course curriculum. Students work on independent and team projects with local and statewide business partners. While each project varies in complexity, students have the opportunity to apply their high school learning while working alongside professionals in their community. This creates an environment to explore potential career pathways in a real-world setting by students taking on a leadership role for the duration of the project or partnership.



CAST students also have the opportunity to explore their individual passions through personal projects. They use that passion and drive to create a learning experience for themselves while impacting their community.

“These opportunities have helped me to interact and make connections within my community. These experiences have shown me how I can make an impact.” (Sophomore CAST Student)

Students participating in the Think Tank events held within the classroom, demonstrate their communication skills and creativity by hosting business partners and presenting solutions to their problems. Community partners serve as project managers and mentors for the program.

CAST students demonstrate employability skills, solve complex problems, develop technical skills, learn to work in teams and experience leadership as project leads. The goal of this program is to accelerate students to be future ready.

CREDIT TYPE: Elective

INTERESTED IN:

- Collaborating with other schools
- Partnering with other schools (collaborating on projects)
- Co-creating resources
- Onsite visits/tours

WEBSITE: <https://www.crestonschools.org>

SOCIAL MEDIA: @CCHSCAST

PROGRAM CONTACT: CAST Facilitator, Maggie Arnold, marnold@crestonschools.org; Superintendent, Steve McDermott, smcdermott@crestonschools.org

Example 3: High School Example – SparkTank

Summary

WHERE: Ottumwa High School

ESTABLISHED: Fall 2018 (pilot year)

CURRENTLY SERVING: 17 11th-12th Grade Students

DESCRIPTION: SparkTank is a project-based experience that connects students with local businesses and organizations. Students solve problems experienced in the real world and are provided authentic learning opportunities, while becoming immersed in a professional culture.



What sets SparkTank apart is the environment in which students learn. Project deadlines and operating in a professional manner are all part of the day-to-day learning. Projects are completed by students through collaboration and teamwork.

The culture replicates a professional work environment and students notice the difference. Expectations are high when working on technical projects for local employers. Program instructors coach students as needed, and progress is monitored through regular instructor reviews.

Students completing the SparkTank experience have learned and practiced employability skills, worked on rigorous projects, developed technical skills, and learned to work in teams. Ultimately, the SparkTank experience will guide them towards a career goal after graduation.

CREDIT TYPE: Elective & Dual Credit

INTERESTED IN:

- Collaborating with other schools
- Partnering with other schools (collaborating on projects)

- Co-creating resources
- Onsite visits/tours

WEBSITE: <https://www.ottumwaschools.com/highschool/sparktank>

SOCIAL MEDIA:

- (Facebook)
- @ottumwasparktank (Twitter)
- @spark_tank (Instagram)
- @ottumwasparktank (YouTube)

PROGRAM CONTACT: Jeff Kirby, jeff.kirby@ottumwaschools.com

Example 4: Iowa BIG

Summary

WHERE: Cedar Rapids, Linn Mar, & College Community

ESTABLISHED: 2012

CURRENTLY SERVING: 200 Students

ABOUT: Our mission is to unleash human potential and our model and paradigm are squarely learner-centered. We provide core academic standards and credits through authentic projects in the community (biz, non-profit, government). Learners pursue projects aligned to their passions and interests. They solve real community issues while learning content-in-context.

CREDIT TYPE: Core and Elective Credit

INTERESTED IN:

- Collaborating with other schools
- Partnering with other schools (collaborating on projects)
- Onsite visits/tours

WEBSITE: www.iowabig.org

SOCIAL MEDIA: #iowabig @iowabig

PROGRAM CONTACT: Trace Pickering, tpickering@iowabig.org



Iowa BIG Student working at Shive Hattery - Photo provided by Trace Pickering

Appendix D

Sample Pilot Survey

[View example](#)

Full name:	Email address:
School:	Graduating year:
I understand that this type of learning takes a lot of self motivation and responsibility. <input type="radio"/> Agree <input type="radio"/> I'm not sure <input type="radio"/> Disagree	
I know I will be responsible for organizing my own transportation to and from ILEAD and various local businesses. <input type="radio"/> Yes <input type="radio"/> No	
What do you think you will be doing during your time at ILEAD?	
What are three qualities or skills you would like to see in yourself through this program? 1. 2. 3.	
Please describe a project or an idea for a new project that interests you below.	
Are you a hunter or a gatherer? Explain your answer.	
You are a new addition to a crayon box. What color would you be and why?	
Describe a situation where you were highly collaborative and/or depended on a team to accomplish a task. Explain your role and the other people's role in this situation.	
Why do you want to join this program?	

Appendix E

Invite Experience

[View article](#)

Iowa City Hawk Eye News Article

By Michaele Niehaus

DANVILLE — Fifteen sophomores and juniors at Danville and New London high schools will have the opportunity to participate in a new learner-driven, initiative-based program next year as the districts adopt Iowa BIG Southeast into their curriculums.

Two students from Cedar Rapids -- Hannah Bertram, a senior at Jefferson High School, and Jemar Lee, a junior at Prairie High School -- presented information about Iowa BIG, which began four years ago in Cedar Rapids, Tuesday at each of the schools.

Danville Superintendent Gary DeLacy has visited the Iowa BIG school in Cedar Rapids several times and contacted Great Prairie Area Education Agency 21st Century Learning Coordinator Laura Wood about introducing it to southeast Iowa. DeLacy has been looking to bring Iowa BIG to his district for more than a year. He believes it will help students and the districts build stronger business partnerships. Wood has been following Iowa BIG since it began and thinks it's "the epitome of where we should be" with education.

Through Iowa BIG Southeast, the two schools and Great Prairie AEA in Burlington will form partnerships with area businesses, organizations, nonprofits and government agencies. Those partnerships will allow students to carry out projects the aforementioned entities either don't have time or money to accomplish, benefitting the students with experience and social networking and the partners with assistance. Students in Iowa BIG Southeast will convene at least once per week in the afternoons in the AEA's 21st Century Classroom. Outside of the meetings, students will be encouraged to complete their projects in whatever place they believe works best for them.

The program will be worth up to three credits per semester in science, technology, engineering and/or mathematics, depending on the projects students pursue. Bertram and Lee said students needn't worry about which subjects a project will encompass, as it will even out in the end. Instead, students should choose projects based on their interests.

"You just do what looks interesting to you, and it will all work out," Bertram said. Wood, who will spearhead the program, must approve the project pool from which students will choose their assignments. She already has one in mind: marketing design and social media presence and networking for Great Prairie AEA.

Among Iowa BIG projects are FungID, an app helping identify unknown mushroom species by sending a picture and GPS tag to a professor at the University of Iowa; Minnow Tank, an offshoot of the TV show "Shark Tank" in which Girl Scouts present their ideas before a panel; redesign of Bever Park; creating an edible landscape in which students planted a fruit orchard available for anyone from the community to enjoy at no charge; and an aquaponics system allowing lettuce to grow without soil. There are 83 options in the Cedar Rapids project pool.

Bertram, an architecture enthusiast, is working with other Iowa BIG students to create a 3D model of a proposed 600-foot pedestrian bridge to replace the Rock Island Railroad Bridge that collapsed during the 2008 flood. He said the group will present the model to the city near the end of next month.

Iowa BIG partnered with the Cedar Rapids Gazette when it started. Thanks to that partnership, students are in the process of publishing a magazine, as well.

“Pick a project you’re passionate about,” Lee said, explaining students won’t be doing themselves or their partners any favors by sticking with something about which they’re not excited. Lee and Bertram said the program isn’t for everyone, and traditional learning works for some people, though it didn’t work for Lee, who has raised his grade-point average from an about 2.0 to a 3.5 since enrolling in Iowa BIG.

Wood said technology has changed educational needs and methods, and more and more research has been supporting project-based learning methods.

“I think kids are going to demand it,” she said.

Only 15 students will be accepted in Iowa BIG Southeast’s first year. DeLacy said if enough students show interest, an application process will have to be implemented. Applicants will be accepted on the basis of creativity rather than grades.

Iowa BIG began with fewer than a dozen students and now caters to about 130.

Appendix F

Example Events

1. Example onboarding letter
2. Example Lunch and Learns/Coffees
3. Example Think Tank (Advertisement, Guiding Questions and Agenda)
4. Another Example Think Tank (Invite and Agenda)
5. Templates to plan your own Think Tank day
6. Think Tank Day with Immersion experience Example
7. Example Student Expo

1. Example Onboarding Letter

Hy-Vee

Dear Business Partner,

I'm reaching out to you on behalf of a new education program starting this upcoming 2017-2018 school year. Danville and New London Community School Districts are partnering with Great Prairie AEA to create a progressive program "ILEAD" part of the Iowa Authentic Learning Network.

This is a hands on program that allows students to meet their core coursework needs by partnering with local business and community members to work on real projects that benefit both the business or community partner and the student's educational program.

Projects can be things like marketing and social media - web and app, design, coding, programming, problem solving, etc. The goal is that students will get a variety of experience while exploring different career pathways by working on these real projects. It's a win-win for students and the local partners. I also believe it will bring positive publicity to our partners.

My goal is to create a project pool before the students start in the fall. I am wondering if there would be any area where students may be able to assist you in your work. Whether it's helping to plan a nutrition event or Hy-vee store promotion or promoting healthy lifestyles targeting teens, no project is too big or too small. We have some freedom to be as creative and innovative as needed. This would be a great connection to the healthcare field for our students (plus you would be a fun mentor to work with!).

Please let me know if find this program of interest. I would love to meet and talk in depth with you and your supervisor if needed and answer any questions you might have. If you have any questions or concerns, please don't hesitate to contact me at _____.

2. Example Lunch and Learns/Coffees



3. Example Think Tank (Advertisement, Guiding Questions and Agenda)



YOU ARE INVITED

STUDENT & PARTNER
PROJECT THINK TANK

Thank you for being part of this new program for Southeastern Iowa!
Join local students to brainstorm and discuss projects for your business.

WHEN:
Thursday, May 4, 2017
Noon - 3:00 PM

WHERE:
Great Prairie AEA - Room 21C
3601 West Avenue, Burlington, IA





RSVP at <http://bit.ly/2p5KUh5>

Guiding Questions

- What are the goals of your business or organization?
- How do you currently reach these goals?
- How do you promote your business or organization?
- Who are your clients/ customers?
- What is something you'd like to change or do differently in your business or organization?
- Is your business or organization future ready?
- What are some obstacles that you foresee in the future?
- What is a project that you would like to see accomplished in your business to which you just haven't had the time or resources to devote?

Welcome to the ILEAD Think Tank Day!
May 4, 2017
Burlington GPAEA
12:00 p.m.-3:00 p.m.
Agenda

12:00-1:00 Lunch and Program Overview

- Introductions - General Overview
- Sharing experiences from Iowa BIG --> ILEAD & Danville Vision
- New London Vision
- Students- Vision on ILEAD
- Teachers- Bellevue model Share out
- AEA Vision and developing Partnerships for SE Iowa --> State Project pool

1:00-1:10 Q and A from Partners

1:10-1:20 Partner's Introduction

- Name, Company/Organization, Job Description

1:20-1:25 Break

1:25-1:50 Break out Rotation 1*

1:50- 2:15 Break out Rotation 2*

2:15- 2:45 Break out Rotation 3*

2:45-3:00 Reflections and Partners Project Sign up and Student Group Reflection

*Breakouts should include at least one partner, educator, and a student/students. Click [here](#) for guided questions for breakouts.

4. Think Tank Day with Immersion Experience Example (Invite and Agenda)

Hosting a Think Tank with an immersion is a way for stakeholders to understand how the process works. It is an opportunity for students and partners to build relationships and preview expectations. This experience is a great follow-up experience from an initial Think Tank, as well. Below is a sample experience.



THINK TANK

WHERE:
The CAST Classroom at
Creston High School

WHEN:
Wednesday, November 7th
11:30am-3:00pm

LUNCH PROVIDED

The Lead UC Youth Leadership Group and the Creston CAST (Communication and Service Technology) students invite you to partner with us to create an authentic learning experience to provide local students with the opportunity to help solve real world experiences.

We hope you will join us and give the students an opportunity to work together and present some creative solutions for authentic challenges within a local business.



Agenda
Lead UC/IowaALN Think Tank Day!
November 7, 2018
11:30 a.m.-3:00 p.m.

Agenda

12:00-12:15 Welcome/Introductions

12:15-12:45 Overview

- IowaALN Overview
- Learner Overview
- What is CAST?
- KSIB Partner - Today & Tomorrow
- Work Based Learning Clearinghouse

12:45-1:00 - Q and A from Partners

1:00 - 3:00 - Your Problems Are Our Projects!!

- Partner Share
- Think Tank Scenarios
- Work Groups

3:00-3:15 Reflections/Next Steps

Team Scenarios

Group 1: County Engineer - Why Wind?

The Wind Team will work with County Engineer to determine the benefits of wind energy for their County. They will explore various aspects of a wind project. What has already been done in preparation for this project and what work is still to be done. Team Wind will identify direct economic impact and indirect impact for their County.

Group 2: Store Manager - HyVee Refresh

Team Refresh will explore some of the challenges local HyVee's are faced with and what decisions are made locally as opposed to corporate decisions. Examples: parking lot layout, inventory (what goes on the shelf), store layout, local marketing, community awareness, etc...

Group 3: Community Council - Internet Space

The city organization has proposed a space on the square to provide an internet cafe for residents. Team Connect will work with a city representative to determine a timeline and

needs for the internet cafe. They will share the projected location and the city's perspective.

Group 4: Manager - Fiber Connectivity

Update uptown team will determine the difference between cable and fiber connectivity while defining what types of services community customers may need. The Update Uptown team will design the preliminary marketing campaign for Omnitel Communications.

Givens:

- Teams proposals will be December 5, from 9 a.m.-12 p.m.
- Teams will be responsible for organizing meetings after today's think tank if needed to complete presentations.
- If additional guidance is needed from your business partner teams will obtain contact information.
- Teams are tasked with determining the necessary resources and making arrangements accordingly.

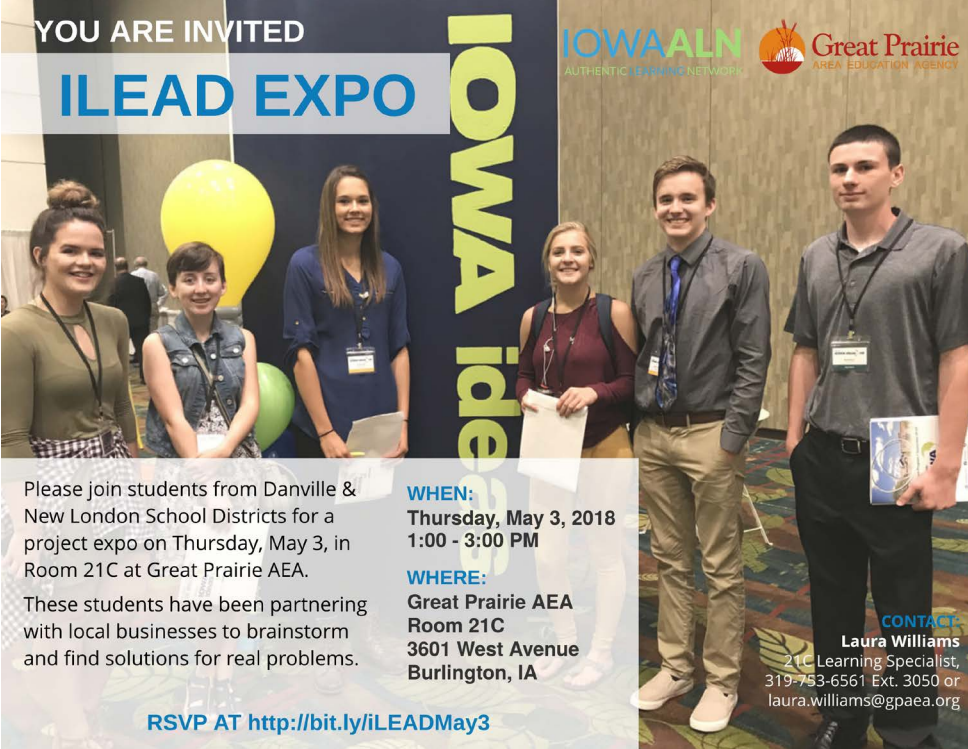
The Challenge	The Work
Done	The Criteria (How will you know you were successful?)

5. Templates to Plan Your Own Think Tank Day

- Sample Invite
- Sample Agenda
- RSVP Sample
- Flow for the Day

6. Student Expos

Great time to showcase student work, onboard new partners, expose and inspire leaders and educators in this kind of learning.



YOU ARE INVITED
ILEAD EXPO

IOWAALN
AUTHENTIC LEARNING NETWORK

Great Prairie
AREA EDUCATION AGENCY

IOWA ide

Please join students from Danville & New London School Districts for a project expo on Thursday, May 3, in Room 21C at Great Prairie AEA.

These students have been partnering with local businesses to brainstorm and find solutions for real problems.

WHEN:
Thursday, May 3, 2018
1:00 - 3:00 PM

WHERE:
Great Prairie AEA
Room 21C
3601 West Avenue
Burlington, IA

CONTACT:
Laura Williams
21C Learning Specialist,
319-763-6561 Ext. 3050 or
laura.williams@gpaea.org

RSVP AT <http://bit.ly/iLEADMay3>

Appendix G

Van Meter Example Schedule

Van Meter Community School District

Van Meter CSD has a flexible schedules that allow for more time to engage in project work. It also allows students to engage in more interdisciplinary work, while collaborating with experts in multiple domains. For future explanation contact Jennifer Sigrist, Van Meter CSD Director of Personalized Learning and Innovation, jennifer.sigrist@vmbulldogs.com.

Time	MOD	MON	TUES	WED	THURS	FRI
8:15-8:40	1	Sr High Choir	Chemistry	Sr High Choir	Sr High Choir	ILT
8:43-9:08	2	Sr High Choir	Chemistry	Sr High Choir	Sr High Choir	Chemistry
9:11-9:36	3	Sr High Choir	Home Maintenance	Chemistry	ILT	Chemistry
9:39-10:04	4	Home Maintenance	Home Maintenance	Chemistry	Weight Training	Weight Training
10:04-10:29	5	Home Maintenance	Home Maintenance	Chemistry	Weight Training	Weight Training
10:32-10:57	6	Weight Training	Weight Training	Home Maintenance	ILT	Creative Writ
11:00-11:25	7	Weight Training	Creative Writ	Home Maintenance	ILT	Creative Writ
11:28-11:53	8	Adv Math	Creative Writ	Creative Writ	Adv Math	Adv Math
11:53-12:05	9	Adv Math	Creative Writ	Creative Writ	Adv Math	Adv Math
12:05-12:35	10	Seminar	Seminar	Seminar	Seminar	Seminar
12:35-1:05	11	Lunch	Lunch	Lunch	Lunch	Lunch
1:08-1:33	12	Creative Writ	ILT	ILT	Spanish 3	Seminar
1:36-2:01	13	Spanish 3	Spanish 3	Adv Math	Spanish 3	
2:04-2:29	14	Spanish 3	Spanish 3	Adv Math	English 3	
2:32-2:57	15	English 3	English 3	Spanish 3	English 3	
3:00-3:25	16	English 3	English 3	ILT	English 3	

REGULAR DAY SCHEDULE									
MONDAY - THURSDAY		Mod	MON	TUES	WED	THURS	FRI	FRIDAY	
8:15 AM	8:38 AM	1	P1	P1	P1	P1-Flex	P1	8:15 AM	8:50 AM
8:41 AM	9:04 AM	2	P1-Flex	P1	P1	P1	P2	8:53 AM	9:28 AM
9:07 AM	9:30 AM	3	P2-Flex	P2	P2	P2	P3	9:31 AM	10:06 AM
9:33 AM	9:56 AM	4	P2	P2	P2-Flex	P2	P4	10:09 AM	10:44 AM
9:59 AM	10:22 AM	5	P3	P3	P3-Flex	P3	P5	10:47 AM	11:22 AM
10:25 AM	10:48 AM	6	P3	P3-Flex	P3	P3	P6	11:25 AM	11:59 AM
10:51 AM	11:14 AM	7	P4	P4-Flex	P4	P4	P7	12:02 PM	12:36 PM
11:17 AM	11:40 AM	8	P4	P4	P4	P4-Flex	P8	12:39 PM	1:13 PM
11:43 AM	12:06 PM	9	P5	P5	P5	P5-Flex	Lunch	1:13 PM	1:30 PM
12:09 PM	12:32 PM	10	P5-Flex	P5	P5	P5	Mods marked with "Flex" typically meet with the period shown (e.g., 3rd period meets during P3-Flex). Sometimes, a different period will meet during this mod (e.g., 4th period will start during P3-Flex and continue through the next two mods). Teachers will let you know ahead of time if this is the case.		
12:35 PM	12:51 PM	11	Lunch	Lunch	Lunch	Lunch			
12:54 PM	1:17 PM	12	P6-Flex	P6	P6	P6			
1:20 PM	1:44 PM	13	P6	P6	P6-Flex	P6			
1:47 PM	2:11 PM	14	P7	P7	P7-Flex	P7			
2:14 PM	2:37 PM	15	P7	P7-Flex	P7	P7			
2:40 PM	3:04 PM	16	P8	P8-Flex	P8	P8			
3:07 PM	3:30 PM	17	P8	P8	P8	P8-Flex			

DO NOT EDIT INSIDE THIS BOX

ILT - Earned through demonstration of proficiency

MTSS/SLT - We will support all students - They will be grouped flexible based on need as part of universal core instruction (not for every student)

Data will be used to determine how we support students

1:1/Small Group - Utilizing time to meet 1:1 or in small groups with students - Re-teaching, Reassessing

11/12 Grade should be viewed like a "college schedule"

Appendix H

Internal Project Example

LGBTQ Documentary Project Danville ILEAD

Summary

Students in the Danville ILEAD program wanted to educate others on pertinent information and social norms for students in the LGBTQ community. Their goal was to shed a light on bullying and provide resources and ideas to teachers in how to support students within the LGBTQ community. This project was completely generated out of student interest and passion around social justice and equality for all students.

Partnership Extension

Students working on this project reached out to the local chapter of PFLAG for advice and need to knows in creating a documentary around this topic. PFLAG provided a plethora of facts and legal advice in moving the project forward. Other partnerships were created throughout the project as students decided to film other students from other local community school districts and gain perspective about how each school operates their GSA groups. This eventually lead to the creation of Danville CSD GSA.



Appendix I

External Project Example

Danville Telecom Fiber Optic Project

Summary

Project was pitched by Tim Fencel from Danville Telecom to students in the Danville ILEAD program. The challenge of deployment was for students to figure out and create a potential plan for laying fiber optics in the town of Wever, Iowa. The goal was to lay the least amount of fiber but reach the most amount of clients.

Partnership Extension

Tim Fencel served as a project mentor and guided students in the need to know of laying fiber (including cost, how fiber works, the internet of things, logistics, laws/ordinances etc...)



Appendix J

WBL Project Submission



PROJECT COLLECTION FORM

ORGANIZATION INFORMATION

Organization Name:

Address:

City:

Zip:

Contact Name:

Title / Role:

Email:

Phone:

Description:

Website:

Type: ☐ Business ☐ School

OPPORTUNITY INFORMATION

Project Name:

Contact Person (if different than above):

Date to Start Listing:

Date to Stop Listing:

☐ No end to listing/Always Available

Type:

☐ No business partner involvement

☐ Business partner involvement at the business

☐ Business partner involvement at the school

☐ Business partner involvement occurs virtually

Description:

Hours Commitment: ☐ A few hours ☐ A few days ☐ A few weeks ☐ A few months Other: _____

Ideal Grade Level of Student: ☐ Primary ☐ Intermediate ☐ Middle School ☐ High School ☐ Any

Ideal Team Size: ☐ Individual work ☐ Student group work ☐ Any size Other: _____

Deliverables:

Business Partner Resources:

School Resources:

Business Involvement:

Is this a competition project? ☐ Yes ☐ No

Describe if Yes:

Interested in any other WBL areas:

☐ Job Shadowing ☐ In-Person Interview ☐ Digital Interview ☐ Internship ☐ Guest Speaker ☐ Business Site Tour

AEA area:

Intermediary Unit area:

Career Cluster:

- | | |
|---|---|
| <input type="radio"/> Agriculture | <input type="radio"/> Food and Natural Resources |
| <input type="radio"/> Architecture and Construction | <input type="radio"/> Arts, Audio/Video Technology, and Communication |
| <input type="radio"/> Business, Management and Administration | <input type="radio"/> Education and Training |
| <input type="radio"/> Finance | <input type="radio"/> Government and Public Administration |
| <input type="radio"/> Health Science | <input type="radio"/> Hospitality and Tourism |
| <input type="radio"/> Human Services | <input type="radio"/> Informational Technology |
| <input type="radio"/> Law, Public Safety, Corrections, and Security | <input type="radio"/> Manufacturing |
| <input type="radio"/> Marketing, Sales, and Service | <input type="radio"/> Science, Technology, Engineering and Math |
| <input type="radio"/> Transportation, Distribution, and Logistics | |

Academic Domain:

- | | |
|--|--|
| <input type="radio"/> Career & Technical Education | <input type="radio"/> Computer Science |
| <input type="radio"/> Counseling & Guidance | <input type="radio"/> Fine Arts |
| <input type="radio"/> Language Arts | <input type="radio"/> Math |
| <input type="radio"/> PE/Health | <input type="radio"/> Science |
| <input type="radio"/> Social Studies | <input type="radio"/> World Languages |

Integrations:

- | | |
|---|--|
| <input type="radio"/> Civic Literacy | <input type="radio"/> Employability Skills |
| <input type="radio"/> Financial Literacy | <input type="radio"/> Health Literacy |
| <input type="radio"/> Technology Literacy | |

NOTES

Appendix K

WBL Clearinghouse One-Pager



CLEARINGHOUSE FOR WORK-BASED LEARNING

Educating Iowa students for the knowledge economy requires connecting them to future careers through hands-on projects designed by employers and educators.

The Iowa Clearinghouse for Work-Based Learning is a virtual space where business partners will post projects for Iowa K-12 students to gain in-depth work experience, bringing real-world application into the schools. The clearinghouse will launch by July 1.



ABOUT WORK-BASED LEARNING

Work-based learning helps students develop new skills and connections through projects, internships and even apprenticeships that are embedded into classwork. This sets the stage for great job opportunities for young people and builds a pipeline of skilled workers for employers.

The clearinghouse supports the Future Ready Iowa goal of 70 percent of Iowa's workforce having education or training beyond high school by 2025.

OPPORTUNITIES AND ACCESS

The clearinghouse will make work-based learning opportunities more accessible to more Iowa K-12 students, especially in rural areas.

The clearinghouse will focus on high-demand careers, including those in STEM fields (science, technology, engineering and mathematics).

BENEFITS OF WORK-BASED LEARNING

FOR STUDENTS

- Understand how the classroom and workplace connect
- Build job-specific knowledge and soft skills
- Develop awareness of career options and skills needed
- Find networking opportunities and mentors

FOR BUSINESSES

- Grow and develop potential employees
- Gain fresh perspectives from the next generation
- Build brand awareness
- Tackle projects and tasks on the backburner
- Build relationships with schools and communities

Appendix L

Actual External Project in WBL Clearinghouse

(You can do this right now with your students!)

Why our Town?

[Explanation Video](#)

Our Town (Insert Town Name) Chamber of Commerce/Economic Development invites local students to participate in a “Why Our Town” video documentary project. The project will consist of engaging students with various businesses and local partnerships to learn more about “why our town” in order to create a 2-5 minute video highlighting all the great things about our town and our community. The student groups whose video is selected will be showcased on our social media page and website. See below for a sample video.

Video Guidelines:

- 2-5 minutes in length
- Include a minimum of 3 local businesses or organizations
- Offer perspectives and voice (kids, parents, partners etc...)

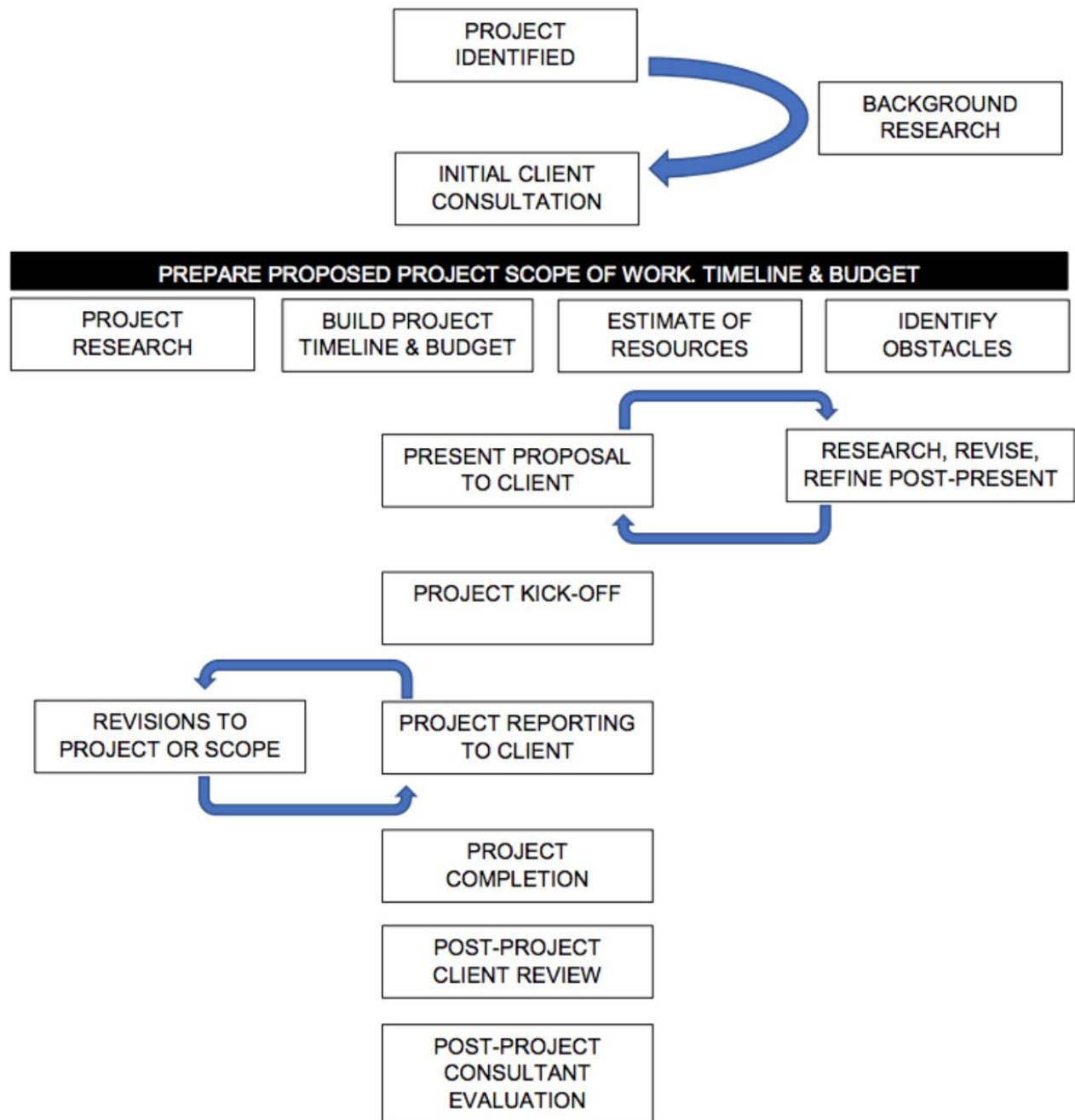
[Sample Video](#) (Union County, Iowa)

THE WHY OF “WHY OUR TOWN” PROJECT:

- PASSION-DRIVEN LEARNING
- ESSENTIAL 21ST CENTURY SKILLS
 - COMMUNICATION, COLLABORATION, CRITICAL THINKING, & CREATIVITY
- COMMUNITY & CIVIC ENGAGEMENT
- CAREER EXPLORATION
- BUILDING A NETWORK IN & OUTSIDE OF SCHOOL
- FORMING A COMMUNITY OF PRACTICE
- SOCIAL & EMOTIONAL GROWTH

Sample Authentic Learning Plan Project Process

Toyer Strategic Consultative Process



Appendix N

K-8 Example Project Implementation

K-8 Project Workflow Student Organizer

[K-8 Project Workflow Template](#)

Project Title:	
Team Name:	
Group Member Names:	
Goal: <i>Create an artifact to...</i>	Personal Goal: 1. 2.
Outside Audience:	Team Goals: 1. 2.
Possible Expert:	Team Social Goal: 1.
In order to be successful we need to: <i>(As a team create a to do list for your project and decide who is responsible for this task.)</i>	
Task	Team Member
1.	
2.	
3.	
4.	
5.	
6.	
Think Tank your ideas here: <i>(Draw, Doodle, word web, list, write, etc...)</i>	

Pick a Creation Tool (insert appropriate options):

Flyer or Poster:

- ☐ [Canva](#)
- ☐ [Smore](#)
- ☐ Google Docs, Drawing, Slides

Digital Music & Creation

- ☐ Garage Band (Apple)
- ☐ [Soundtrap](#)
- ☐ [Soundzabound](#) (scroll down to choose Soundzabound)

Podcast

- ☐ Flipgrid
- ☐ Youtube
- ☐ iTunes or QuickTime

General Toolkit

- ☐ SeeSaw
- ☐ [Adobe Spark](#) (Webpage, poster, video)

EBooks

- ☐ Book Creator
- ☐ Storybird

Team Reflection:

What went well in your group? How did it help you to be successful?

What could have gone better?

What did you contribute to the group?

If you struggled to work well with your group, what would make it easier to participate? What will you try to do better next time?

Appendix O

6-12 Example Project Implementation

6-12 Project Planning Guide: Workflow

[6-12 Project Workflow Template](#)

Project Title:	
Partner/Mentor:	
Team Members:	
Phase	Notes/Comments
Initial Individual Planning and Visioning	Name: Goal: Value Added: Why does this matter and to who? What is the timeline or due date?
Think Tank Brainstorm possible ideas/solutions/products Creativity Techniques: <ul style="list-style-type: none">• The Phoenix: Helps identify contexts of challenges.• Circle of Opportunity: Helps to make creative connections and generate/ideate solutions.• Clevor Trevor: Collaborative exposure – all people have different background knowledge and can give us insight to creative solutions	<p>https://www.youtube.com/watch?v=a7sEoEvT8l8</p>

<p>Consensus</p> <p>A. Which ideas will include most if not all your success criteria? Which of them are the most feasible in your timeline?</p>	<p>As team we plan to (action step) in order to (goal) so that (benefit).</p> <p>As team we plan to_____ in order to_____ so that _____.</p>
<p>B. Partner/Mentor Teacher</p> <p>Check in: Share/present your tentative plan to the partner. Receive feedback and revise plan as needed.</p>	<p>Partner/Mentor Teacher Feedback Notes:</p>
<p>Actions Steps and Implementation</p> <ul style="list-style-type: none"> • Meistertask 	<p>Action Steps Document or SCRUM Board</p>

Appendix P

Example Initial Planning Template

Initial Planning Template

Team Lead: _____

Team Members: _____

Action Steps (Task/To do)	Point Person	Deadline	Notes

Appendix Q

Example Standard & Project Tracking Template

Student Name: _____

Project and Description: Link Project Workflow Document	Potential Course Credit	Standards/ Learning Targets: Brainstorm with Mentor Teacher	Partners Needs and Feedback

Appendix R

Example Formal Project Summary Template

Student Name: _____

Mentor Teacher: _____

Project Title:				
Project Summary:				
Student Name:				
Project Member Names:				
COMMUNITY/BUSINESS PARTNER INFORMATION				
Name	Contact Number		Contact Email	
ACADEMIC STANDARDS & LEARNING TARGETS				
Course	Attainable Standards	Student Signature	Teacher of Record Signature	Partner Signature
<i>Elective</i>				
<i>English</i>				
<i>History</i>				
<i>Math</i>				
<i>Science</i>				

Appendix S

Creative Brainstorming & Thinking Ideas

The Phoenix Template

TECHNIQUE: Questions

PROFILE: How to use a checklist of problem-solving questions to guide thinking.

CREDITS: Michael Michalko

PROCESS:

- Write your challenge.
 - Use the Phoenix checklist to dissect the challenge into as many different ways as you can.
 - Why is it necessary to solve the problem?
 - What benefits will you gain by solving the problem?
 - What is the unknown?
 - What is it you don't yet understand?
 - What is the information you have?
 - What isn't the problem?
 - Is the information sufficient? Insufficient? Redundant? Contradictory?
 - Should you draw a diagram of the problem? A figure?
 - Where are the boundaries of the problem?
 - Can you separate the various parts of the problem? Can you write them down? What are the relationships of the various parts of the problem?
 - What are the constants (things that can't be changed) of the problem?
-

“Circle of Opportunity”

TECHNIQUE: Forced connection

PROFILE: Generates ideas by forcing a connective link between common attributes and your challenge.

PROCESS: State the challenge you want to solve; draw a circle and number it like a clock (1 to 12); select any 12 common attributes (aspects) specific to your challenge; throw a die to choose the first attribute to focus on; throw two dice to choose the second attribute; consider the attributes both separately and combined; free-associate (start with your first idea and keep making connections until another idea is triggered) about the individual attributes and the connection; search for a link between your associations and your challenge.

CREDITS: Michael Michalko

MINDMAP: <https://www.draw.io/>

DIGITAL DICE: <https://www.online-stopwatch.com/random/dice>

Team Building Activities

- [Team building Toolkit](#) by Mindtools
- [Playmeo Free Download](#): provides activities to help build and develop teams
- Video ideas:
 - [Paper Challenge](#)
 - [Come to my Party](#)

Appendix T

SPLS Portfolio

Student information

District:
Building:
Homeroom:
Graduating year: 2019

Introduction

Describe yourself

update ►

Educational goal

Share your thoughts on how you will achieve success as a student

update ►

Artifacts

title

reflection

URL

no file attached ▼

add artifact ►

Appendix U

Example Student Portfolio

ILEAD Student EPortfolio Sample (Google Sheets)

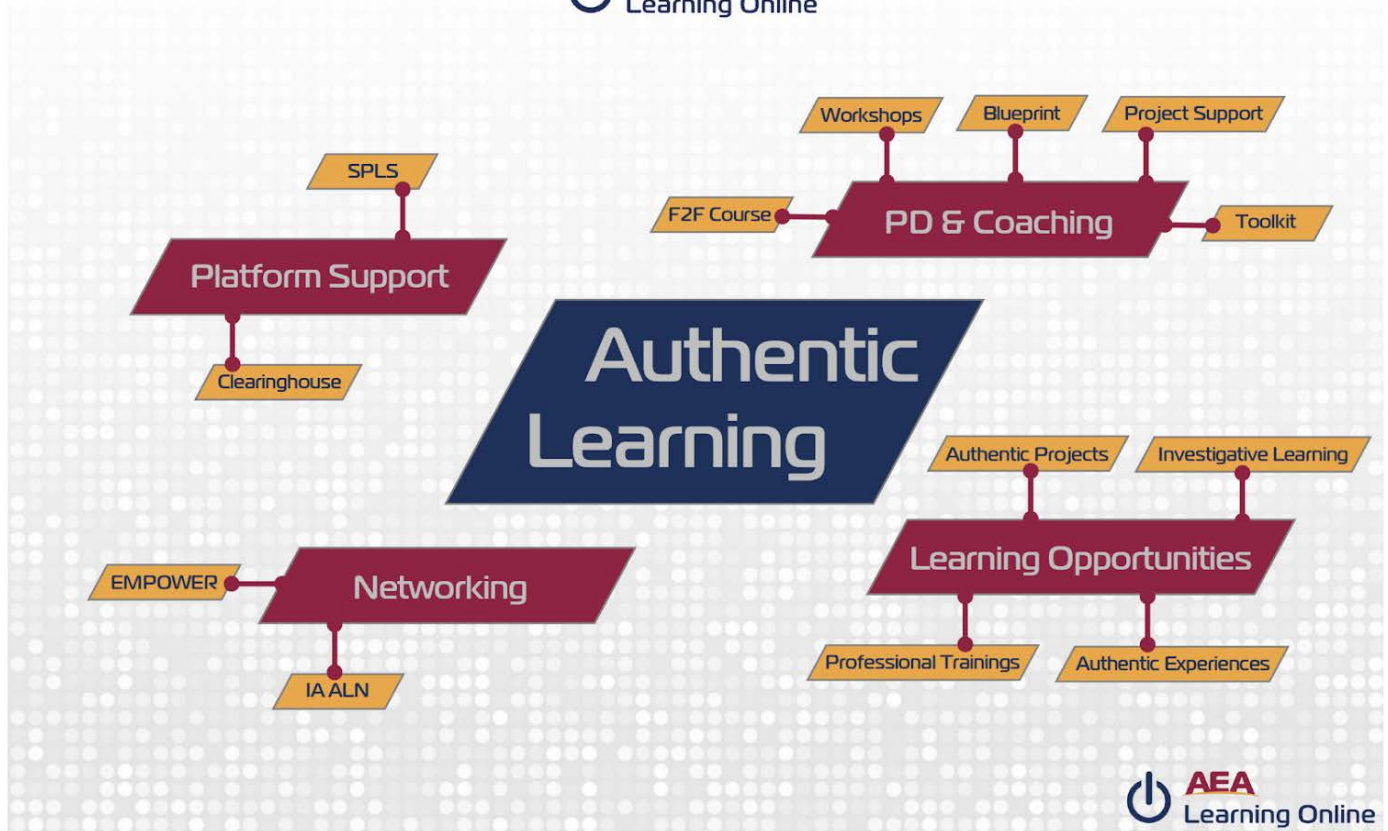
Course Credit	ICAN	Document to Prove					
Workplace Writing	I can spell correctly.	https://docs.google.com/presentation/d/1ZuFM2ePkb1S8XktrkomHY972hKHUyxANmS82wUlr6Y/edit#slide=id.p	Brochure	Workplace Writing	I can produce clear and coherent writing that is appropriate to task, purpose, and audience.	https://www.wevideo.com/view/1105623367	Script to Wevideo
Workplace Writing	I can include formatting, graphics, and multimedia when useful in aiding comprehension by the reader.	https://www.wevideo.com/view/1105623367	Wevideo	Workplace Writing	I can strengthen my writing by planning, revising, editing, reviewing, or redrafting, paying special attention to how to make the paper appropriate to purpose and audience.	https://www.wevideo.com/view/1105623367	Revised multiple times... can Mrs. Henry approve this standard?
Workplace Writing	I can thoroughly develop the topic by choosing the most important and relevant facts, extended definitions, concrete details, quotations, or other information and examples which are appropriate for the audience's knowledge.	https://www.wevideo.com/view/1105623367	Wevideo	Workplace Writing	I can use technology, namely the Internet, to produce, publish, and update individual or shared writing projects in response to ongoing feedback, including new arguments or information.	https://www.wevideo.com/view/1105623367	Wevideo & comments on presentation
Workplace Writing	I can give a concluding statement that supports the argument presented.	https://www.wevideo.com/view/1105623367	Quote on Wevideo	Workplace Writing	I can avoid plagiarizing.	https://www.wevideo.com/view/1105623367	Quote on Anne Frank
Workplace Writing	I can develop my claim and counterclaims fairly, giving relevant evidence for each while point out strengths and weaknesses thinking about the audience's knowledge, level, concerns, values, and possible bias	WACO Presentation-pointed out strengths and weaknesses to ILEAD Program		Workplace Writing	I can integrate information into the text selectively to maintain the flow of ideas	https://www.wevideo.com/view/1105623367	Wevideo
Workplace Writing	I can write arguments which support claims from important topics or texts with strong reasoning and relevant and appropriate evidence	https://www.wevideo.com/view/1105623367	Wrote the wording for examples to show genocide is still happening	Workplace Writing	I can demonstrate that I can use standard English grammar and usage when speaking or writing	https://www.wevideo.com/view/1105623367	Wevideo

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