



# Going Virtual

A guide to Virtual Summer Projects

# Going virtual with your Summer Projects

We're looking at things differently. Ignited's Teacher Summer Experience Program, typically held inside each company and university, now has the option to be run remotely. We want to make sure that you and your teachers have the same great experiences you've always had, but in a way that's safe and productive for everyone. We've revisited every Summer Project from the past five years to find examples that can be completed virtually. This guide will help you think about those projects for your own teams and help you [get started](#) this year.

## Types of projects

To help navigate some cool ideas, we've grouped five years' worth of Summer Projects into 10 major categories, with specific projects on the following pages.

### Certification Projects

To build skills, experiences or knowledge for customers, employees, or students – [page 2](#)

### Company and Career Awareness Projects

To build awareness about your industry, company, and the roles you need to fill – [page 3](#)

### Curriculum Projects

To reach students with powerful, compelling content relevant to your company – [page 4](#)

### Learning and Development Projects

To create or update employee training or reskilling courses for virtual delivery – [page 6](#)

### New Ideas and Projects

To bring to life new ideas or projects that's been on the back burner – [page 8](#)

### Process Improvement Projects

To streamline, modify and improve processes that help you operate more efficiently – [page 11](#)

### Recruiting Projects

To develop creative ways of bringing new talent into your company – [page 13](#)

### Research and Data Analysis Projects

To generate useful insights from internal and external data for better decision making – [page 14](#)

### Software and Website Projects

To improve, organize, design and test software and website projects important to your team – [page 16](#)

### Teacher Professional Development Projects

To help teachers understand and communicate key concepts to their students – [page 18](#)

# Certification Projects

A short-term program leading to a certificate is a good way to build skills, experiences and knowledge. It's also an Ignited project you can lead remotely and deliver digitally, so it's a great choice this year.

## Build a company certification program

Ignited teachers have worked on many aspects of building company certification programs. They've researched external programs and helped companies decide which types are needed – something for customers, employees or students. They've created programs covering products, services, skills and technologies. They've set up working groups, outlined process steps, created program materials and helped set up reviews with key internal stakeholders.

Teachers' skills also translate easily into a wide variety of other elements that go into a successful certification program. They can deliver training, find and coach instructors and structure materials for efficient and successful learning. Finally, Ignited teachers have helped evaluate learning. They've created certification exams, reviewed exam results and gauged the effectiveness of what students have learned to adjust specific program deliverables.

All of this can be done remotely, and most elements can be completed by teachers during the summer, so you'll have a new certification program ready to launch this year or next.

## Assess external certification programs for employees

If you don't need a company-owned certification program, but want to evaluate external certification programs, having a teacher's expertise will help. Employees can develop new skills that are important to your success, including areas such as emerging technologies, or skills like teamwork or leadership.

For previous projects, teachers have researched different types of external certifications and assessed their effectiveness and feasibility for internal use. Some were already in use at the company and teachers interviewed employees participating in those programs. They evaluated the content, method of teaching and overall satisfaction of participants. They compared the company's needs to what each program delivered and made recommendations. And, they created plans to expand programs internally so new teams and employees could benefit. Because they regularly evaluate content for their own classrooms, their skills are well-suited to these types of projects.

# Company and Career Awareness Projects

Most companies are looking for ways to build awareness about themselves and the roles they need to fill. Ignited teachers can help with several types of projects to develop and grow your talent pipeline.

## Increase company and career awareness with students

Career choices start with awareness about the company you'd like to join or the career you'd like to pursue. But we all know that students often have limited insights into both companies and careers. That's why this is the perfect type of project if you need to find new talent.

Ignited teachers have developed company overviews to provide students with a sense of their working environment, their products and services and the people who work there. They've also helped students explore different roles and understand what skills it takes to secure those roles. Activities have ranged from developing specific classroom modules to "meet the team" video interviews where employees talked about their jobs and careers. Teachers have optimized materials for the classroom and made sure the content fit with core curriculum and current educational standards.

## Help students explore your industry

In addition to learning about your company and careers, students can also benefit from learning about your overall industry. They can begin to understand and appreciate how your industry works and touches the lives of people around the world. Teachers working on previous Summer Projects have helped students experience real industry situations and contribute their own ideas on solving common industry challenges. In partnership with key members of company project teams, teachers have also created hands-on activities and experiments. Those have generated interest in different industries and exposed students to new ideas and core industry concepts.

As students worked with materials and learned new ideas and concepts, teachers have also assessed learning effectiveness. They determined if students understood core industry concepts, linked challenges to the real world and had a greater appreciation for the industry and what it does. Previous activities were piloted by groups of teachers in their classrooms, evaluated, refined and made available to larger groups of teachers and schools.

# Curriculum Projects

Reaching students with powerful, compelling content is one of the most important investments you can make to recruit new talent. Teachers are a valuable partner in creating content that works best in classrooms.

## Develop or adapt content for digital delivery

If you've been thinking about creating new content for middle or high school students or already have content about key technologies, skills or roles that you'd like to share, now is a great time to deliver that content digitally. Teachers, teams and subject-matter experts have worked together on previous projects to develop content and lesson plans with virtual whiteboarding sessions. Case studies, experiments, hands-on activities, homework assignments and interesting research projects have all been developed. Teachers have also devised new ways to distribute content digitally, including over social media channels and through teacher and school networks.

Teachers have also tested and evaluated content to ensure it aligns to both the general principals covered in classrooms, but also school, county, state and federal teaching standards. They have been critical partners to make sure every module of content integrates smoothly into day-to-day work and was easy for other teachers to find, use, adapt, share and evaluate. Teachers are actively working in all these areas and have the skills to help with any similar projects for your team.

## Design new digital tools for teachers and students

Developing new digital tools is another great Summer Project. Teachers have built hands-on digital experiences for students that linked careers to core classroom skills. Deliverables like 3D visualizations of data, podcasts of lessons, subject-matter expert videos and virtual toolkits and experiments have all been developed.

Teachers have helped guide discussions to connect new ideas with the core concepts students are learning in their specific grade levels. They've evaluated the effectiveness of new tools, making sure they were useable for students and a wide range of teachers in different school systems and disciplines. And, teachers have created materials to explain how best to use new tools in classrooms, in different grade levels and across multiple subjects. That's been done with web landing pages, online instruction manuals and instructional videos.

# Curriculum Projects

## Use virtual reality to improve classroom experiences

One new tool being used in some classrooms today is virtual reality. Although this is still new in many ways, there are case studies and examples that make this an interesting and valuable Summer Project. Teachers have helped develop and pilot immersive, collaborative learning environments using VR technology. They've set clear content goals and objectives for student learning. They've designed specific experiences such as a virtual field trip to companies, skill development activities requiring teamwork and immersive storytelling to generate student interest in a company and its specific careers.

Previous projects have also brought together multiple teachers interested in VR. They've discussed the teaching possibilities, challenges and impacts to learning. They've worked across companies to gather data and created homework and classroom exercises to use the data. And they've identified the capabilities needed to make VR more impactful for a wider range of classrooms and students. And, companies further benefitted from these projects when they were used both externally with students and internally with employees to develop critical skills. Because teachers are learning and using new technologies and content all the time, many of them have the skills to help you bring VR ideas and projects to classrooms.

## Create materials to develop core competencies, skills

Many companies have invested in Summer Project to create content and materials that developed specific knowledge, abilities or skills. Teachers have outlined the basic learning goals and objectives of those projects and recommended the delivery methods that would have the most impact. Virtual workshops, interactive toolkits and video conferences with instructors have all been developed and delivered. These virtual tools have been blended with project-based, hands-on learning experiences over time.

To get started with a similar project, your teams and teachers would prioritize which skills are most in demand for your organization. Teachers will help examine which grade levels (or employee populations) benefit the most from learning these skills, and then work together with your team to build the lesson plans and other supporting materials needed to close these skill gaps. For previous projects, teachers have repurposed existing employee content for student use, and anything designed for in-person instruction was reworked for digital delivery.

# Learning and Development Projects

Training teams have been using digital tools for years, but many assets can still be converted for digital delivery. Those conversions are perfect candidates for Summer Projects.

## Convert your instructor-led courses to virtual delivery

Many teams have instructor-led training courses they've used successfully in the past that they'd like to convert for virtual or on-demand delivery. Ignited teachers have created frameworks for using digital media and virtual delivery for wider and faster content deployment. In some cases, that required significant rework for 1-2 courses that had previously been in-person and simulation-based. At other companies, teachers converted a larger number of smaller courses and activities.

Teachers have developed a wide range of training tools, including virtual presentations, recorded material, self-guided learning over the web, learning applications and video webcasts with instructors and experts. In some projects, teachers have documented each step of the conversion process and captured key lessons learned so companies could use that process as a template to convert larger course libraries. Other projects have required direct examination of Learning Management Systems to formulate a set of recommendations on which courses to clean up, re-purpose, convert and update.

## Create reskilling opportunities with virtual courses

Effective reskilling courses are always needed in the learning and development toolkit and our teachers have worked on a number of these projects. Some teachers started by profiling impacted employee populations. They created a deeper understanding of the overall business context and how market and company changes impacted key roles. They then outlined each team's learning needs. Those profiles helped build the business cases for re-skilling that were reviewed and supported by company leadership teams.

Teachers have also mapped out new skills, gathered insights from internal and external subject-matter experts and built baseline training courses. They've ensured that instructors are prepared to deliver training on a variety of subjects, and they've explored a variety of delivery methods that benefit adult learners. Solutions such as video, gamification, demos, Q&A sessions and hands-on learning labs have all been delivered as Summer Projects. Teachers have also measured the impact of reskilling efforts and provided reports on effectiveness and improvements.

# Learning and Development Projects

## Create a digital overview of your business, function or team

Most companies have overviews of who they are, their history and what they deliver to customers. Business units, functions and teams rarely have the time to create or maintain similar overviews. That's a fantastic Summer Project for a teacher, who can then share that overview with their students and other teachers after the summer ends.

Companies who have completed these projects with Ignited teachers have focused on interviewing key stakeholders, reviewing company archives and web-based materials and finding photographs and other assets to enhance storytelling. Topics have included the elements of the team, what the team delivers in the wider organization, and how to be successful as part of the team. The final deliverables have often been PowerPoint presentations, but some companies have created video stories that their teachers helped set up, script and edit. And teams have used the overviews both internally to explain the value of what they do and externally with students and college graduates they want to recruit onto the team.

## Improve training documentation and materials

Through the years, we've found that many companies get behind on keeping their training documentation and materials updated. Teachers have worked on a wide variety of Summer Projects in this area, from reviewing and removing old courses to suggesting edits for onboarding materials, teachers have worked.

Working with trainers and L&D teams, teachers have assessed online and offline materials, updated specific courses, reviewed document libraries and proposed entirely new solutions when old ones were ineffective. Based on their classroom experiences, teachers have also created guides for facilitators based on their classroom experiences and added fresh perspectives to off-the-shelf training modules, often incorporating blended learning concepts and techniques.

At some companies, teachers have also started or contributed to larger training projects. One company asked their Ignited teacher to create a manual of Talent Development procedures and practices so their team could operate more consistently across the globe. Another company sponsored a Summer Project to start refreshing their Learning Management System and asked the teacher to scope the project, create the global plan and help present the plan to company leaders for feedback and support.

## New Ideas and Projects

New ideas and projects are critical for every team. Time and availability are often barriers to starting something new, but our Summer Projects have jump-started several new ideas for teams.

### Discover and share best practices and lessons learned

Everyone talks about them, but few teams find the time to collect, share and use them. That's the nature of best practices and lessons learned. Although they're often rated as valuable and save teams time, the effort to gather and package them is a struggle we've all faced.

So, many of our Summer Projects have focused on gathering internal and external lessons learned and sharing best practices. Teachers have developed repeatable methods to gather practices, combed through data sets for relevant insights and captured lessons learned from engineering design notes and team minutes. Other teachers have focused on processes to share practices. They've created repositories for team members to contribute practices and made reports to the leadership teams summarizing a specific set of insights and improvements.

### Develop a digital community of practice

One of the most powerful ways to develop a specific practice, evaluate a new idea or build a high-functioning team is to tap into a wider community. But those communities don't always exist or have run out of steam as energetic leaders and active participants change. So, some companies have worked with teachers on Summer Projects to establish new communities of practice (COPs) in the digital world.

Those communities have spanned different topics – from key technologies and engineering functions to specific practices across a company such as change management. Teachers usually started with researching existing COPs inside and outside the company and then evaluated them according to the needs of the team sponsoring the Summer Project. Where a community existed, the teacher helped raise awareness and created tools to encourage participation.

When a relevant community didn't exist, teachers helped create them. They gathered feedback and ideas from interested parties, created community guidelines and helped identify leaders. They also created guides and toolkits to help teams learn about and participate in the communities and stay engaged over time as people and leaders changed. Teachers are well-suited to community building since they regularly work across their subject matter areas and collaborate with fellow teachers to develop ideas, content and practices.

# New Ideas and Projects

## Design events, activities and awards on social media

Even though most events, activities and award ceremonies are in person, there are some good reasons to go digital from time-to-time. Companies often have global audiences, but don't have the travel budget to bring everyone together. Or, they want to encourage different types of participation beyond what traditional face-to-face events activities allow. In these cases, companies have turned to social media platforms, with the help of tech-savvy teachers.

Previous projects have spanned every aspect of an event, from identifying the right kinds of technology platforms to handling key logistics. Teachers have managed outreach to specific audiences and developed event materials. One teacher was responsible for developing a “digital giveaways catalogue” for the company’s sponsorships and events, which included identifying items, costs, lead times and other key information that helped marketers find something new and creative to support their conferences and events. With a fresh set of eyes and a hunger to learn, teachers are a great partner to bring your events and activities into the digital world.

## Develop improvements that support product launches

Several Summer Projects have been created to review, vet and document current practices around product launches. Teachers have optimized and simplified procedures, created presentations to suggest improvements and evaluated the quality checks and approvals required for a successful launch.

Teachers often start by developing an understanding of the launch process. They've interviewed key employees to gather insights and suggestions, read essential documents for background and researched similar processes online or through best practice archives. Some teachers have even engaged with outside vendors embedded in the process to gain fresh insights and ideas.

Deliverables have included the definition and testing of new protocols, updated work instructions for key roles in the process, training materials for associates and new templates and documents to support more efficiency. Often teachers have been involved in product launch reviews and have helped provide insights during continuous improvement discussions with leaders and different teams. And some teachers have completed special projects like reviewing product promotional and advertising materials or developing training programs that improved the overall understanding of the product launch process. Teachers develop processes and procedures that work for their classrooms and change them every year to adapt to evolving educational standards. They are well-equipped to help with similar processes for your team.

# New Ideas and Projects

## Highlight the power of 3D printing for schools and students

3D printing is a relatively new technology with the power to transform classrooms and student learning. From rapid prototyping to manufacturing with new materials, the technology creates exciting opportunities for teachers and companies.

Companies with a strong interest in 3D printing have partnered with teachers for hands-on and virtual projects. Some teachers have built and used 3D printers at companies to experiment with the technology itself. Then they've brought those experiences and ideas back to their students and classrooms. Teachers have updated instruction manuals to make them easier to understand and created reports for a general employee audience on how the technology benefits the company and transforms its manufacturing process.

Other teachers have focused on sharing new ideas in classrooms. Their Summer Projects focused on creating 3D printing curriculum. They developed presentations, shot and edited instructional videos and designed lab modules for high school and undergraduate students. Teachers have also connected 3D printing to specific lesson plans that helped students understand the technology's fundamental physics and how manufacturing processes work inside big companies.

## Educate students and influencers about key technologies

Students and teachers are often disconnected from the most interesting new technologies being used by companies today. Most middle and high school curriculum is oriented towards teaching the fundamentals of math and science and still lags when it comes to using the newest examples of key industry technologies. So, some companies have started to fill the gap.

Summer Projects focused on new technologies often started with learning more about the technology and its uses. For example, one project involving autonomous vehicles required gaining deeper experiences with the vehicles so the teacher could design experiments and interesting exercises for pre-university students. Many of these projects have been similar, asking teachers to look at the underlying concepts and ideas that can be shared with students to generate interest and excitement.

Teachers have supported field experiments, analyzed measurement data, developed data visualizations, created "active learning modules," and helped engage technology influencers. Teachers have also helped teams understand the way people learn so they're better able to communicate to the public.

# Process Improvement Projects

Many types of process improvement projects have been completed over the years and teams have found teachers to be valuable partners in making improvements and offering new insights.

## Format, centralize and digitize company-wide processes

Processes exist in every corner of the company. This decentralization leads to different formats, tools and successes with implementation. That's why many companies have sponsored Summer Projects with teachers to start centralizing and standardizing their processes.

Teachers have worked on all types of processes, from HR to IT to Manufacturing to University Relations. They've usually started by uncovering where important processes exist and the teams that implement and own them. That discovery phase yields a variety of formats, documents, websites and other process elements. Many projects have then focused on creating a consistent, centralized format for consistency and ease of annual updates. Teachers have mapped process flows, identified data sources, clarified outputs and digitized documents that were stored in various binders. A large focus of these projects has also been helping teams develop and create simple, useable repository tools (i.e. SharePoint or Box) and updating the documentation on how to find and use the repositories.

## Improve functional or team-specific processes

These types of process improvement projects have often focused more on process efficiency and outcomes. Sometimes a team is globally dispersed and that's caused a process to fracture. Other times, teams haven't documented or improved a process they've been using for years.

Teachers have worked on every element of process improvement, from better data collection to step simplifications and risk analysis. Corrective actions have been reviewed. Knowledge transfer projects have been started. And, cost saving initiatives have been supported. Most projects have included actionable recommendations, summary reports and even new documentation. Some projects have required new training modules, better communication protocols and updated metrics and performance indicators. These types of projects vary widely and are open for any of your specific requirements and needs!

To manage a classroom effectively requires teachers to develop and improve processes and procedures that work in a dynamic, changing environment. Although it's not always visible, it's a critical skill that underlies a lot of the work our teachers do every day!

# Process Improvement Projects

## Develop new digital tools to support a critical process

When re-engineering a process requires an investment in new tools, the work for in-house teams often increases. Companies considering either off-the-shelf or custom solutions have used Ignited teachers to help them justify tool investments and advance their projects faster.

Teachers working on these projects have contributed everything from initial tool scoping and requirements gathering to custom research and data analysis. They've interviewed users to investigate the root causes behind the declining usage of existing tools. They've developed models to predict future tool use. And, they've researched vendors, created tool comparison charts and organized data to show how improved tools will streamline processes.

Teachers have also been critical partners to create recommendations, gather anecdotal and factual evidence to support recommendations and develop presentations to sell new ideas and approaches with the suggested tools. Teams working with teachers have also asked for help to develop training modules for new tools, run train-the-trainer workshops and provide critical support for successful tool rollouts across the company.

## Update your process metrics, data sets and tools

Improving key performance indicators and working with data sets has also been a strong focus of many Summer Projects through the years. Teachers have done everything from assisting teams in developing new metrics using raw data to designing systems that assess operational effectiveness on a large, company-wide scale.

These types of projects tend to cluster into two main areas: developing new metrics and improving the underlying processes and tools used to take measurements and generate data. Teachers have started by meeting and working with the subject-matter experts close to a measurement process or program. They've gathered insights about why accurate measurements are difficult to pinpoint and have suggested ways to improve data gathering, consistency and reporting.

Teachers have also supported the creation of new metrics in areas as diverse as Engineering, IT, Manufacturing, Supply Chain, Software Development and HR. These metrics are team decisions and teachers often provide the data, insights and ideas they've gathered as they've worked on their Summer Projects.

# Recruiting Projects

Finding creative ways to bring new talent to companies is a huge challenge. But teachers can offer unique perspectives on how to keep students interested, excited and informed about companies and careers.

## Establish a virtual volunteer program with local schools

Getting employees engaged directly in schools, with teachers and students, is a powerful way to improve employee retention, build your company's reputation and make a real difference in the lives of under-served communities. Companies who have completed Summer Projects with teachers recognize that those projects are simply the start of longer and more fruitful relationships in their communities. Ignited helps keep those connections active.

Teachers with these types of Summer Projects have developed content for company volunteer programs and shared ideas for inspiring other teachers to participate. They've provided insights on their own schools and shared the constraints and limitations often seen across the educational system. They've also designed tools and materials to engage corporate teams and leaders who are interested in STEM education and volunteerism, with the goal of increasing participating in existing programs.

## Design a virtual internship experience

Another way that teachers have supported recruiting new talent is by designing and helping run virtual internship programs. These projects have included evaluating existing internship programs, creating virtual internship experiences, and blending in-person interactions with virtual supports and materials. Teachers bring a wide variety of transferable skills to this work.

Clarifying program goals and the value for participants is the logical starting point for most projects. As teachers build a virtual program, they work with a wide range of team members and brainstorm the main program elements, requirements and workplan. That includes creating overview presentations to sell key concepts to company leaders and stakeholders. Teachers also support hiring managers, with specific coaching on writing interesting job descriptions or inspiring program content. Teachers also help with the recruiting process and provide valuable insights on how to reach targeted students.

As virtual teaching approaches become more widespread, teachers are also getting more involved in technology platform evaluations, tool assessments and developing new KPIs.

# Research and Data Analysis Projects

With mountains of data being created and gathered, it's critical to have professionals who can analyze it and provide valuable insights. Teachers with math and science backgrounds are perfect fits for these projects.

## Research new business opportunities and solutions

With many teams at full capacity, critical research into new business opportunities and solutions often falls by the wayside. Marketing, Business Development and Corporate Strategy teams have benefitted from having teachers support the early stage research and environmental scanning that leads to opening new markets, developing new products and driving growth.

Summer Projects have often started with market analysis and research. Teachers have done background research on new geographies, analyzed competitors, assessed the strengths and weaknesses of company products and services and calculated opportunity size and potential projects to incubate in different business units. Teachers have also gone deeper and analyzed the various components of an opportunity to help define the vision and roadmap, as well as assist teams in gathering data and insights into potential solutions, vendors and partners.

## Develop or improve research and data analytics tools

Some companies we've worked with have realized how difficult it can be to keep up with the latest and greatest tools available in research, data science and data analytics. Things change so fast that by the time one tool set gets implemented and is being used successfully, powerful new tools and capabilities have been developed.

Teachers have helped with this situation in some interesting ways. Some teachers have designed, constructed and tested custom data tools for companies. They've combined multiple legacy data sources, analytics engines and reports into something better than what existed previously. Some projects required developing strategic frameworks and mathematical models of data points to provide the ability for predictive analysis and proactive decision making.

Other teachers have spent their summers assessing available off-the-shelf tools. These teachers have done everything from primary research to comparison shopping to online testing. Some have created Consumer Reports-like comparisons to help teams evaluate their options. And others have used data from existing systems to point out weaknesses in the current tools. They've then suggested alternative tools to create better data and decision making for companies.

# Research and Data Analysis Projects

## Organize existing data into useful insights

One of the most common, and useful, Summer Projects has been teachers working with existing data to generate new and useful insights for decision making. This often required taking a step back to organize raw or curated data and getting it ready for analysis. Many companies have under-invested in their data management practices and suffer from too much decentralization and customization. Teachers have helped fix some of these foundational issues.

In addition to organizing data, some projects have required coding and scoring data, creating categories of insights, developing new visualization techniques and pairing internal data with external sources to generate more robust insights.

Teachers have designed and conducted testing and analyzed the test data. Working from longitudinal data sets, they've used statistical analysis to generate new insights. And, they've used data to identify behavioral trends, predict probable outcomes and recommend system-wide modifications and process improvements. Math and science teachers teach these skills to students every year and can help your team on a variety of Summer Projects.

## Grow the next generation of data scientists and analysts

Teachers have also worked on Summer Projects that are part of an effort to grow the next generation of data scientists and analysts. Companies have stepped up to highlight the importance of these roles. They want to help better prepare students for the advanced courses required to be successful in these fields and they've worked with teachers to make that happen.

Many of these Summer Projects have shown students how companies generate, use and need data to be successful. Teachers have developed materials outlining the basic techniques of data analysis and have made sure the concepts are appropriate for middle and high school students. And, they've created guided, hands-on experiences for students to work together in small groups on activities using simulation, analysis and visualization tools.

Some Summer Projects have asked teachers to develop content on identifying trends, clearly presenting data and visualizing techniques for simple data sets. Other projects have had teachers create content about the fundamentals of data modeling, how to build prototypes, best practices in constructing algorithms and techniques for developing predictive models. Teachers have also ensured content aligns to school, County, State and Federal standards.

# Software and Website Projects

Teachers have brought new perspectives to many different types of software and web-based projects. Companies have encouraged these diverse views to help them strengthen these important investments.

## Improve your websites and online tools

These types of Summer Projects vary widely from company to company. Some teams have asked teachers to evaluate content and articles they've posted, as a fresh set of eyes for consistency, quality and clarity. Others asked for help evaluating usability, navigation and online tools.

Teachers have written automated test protocols, ported code, updated site navigation flows and found and removed dead links. They've also developed rubrics to evaluate site usability, look and feel, accessibility, clarity and freshness. Teachers with design backgrounds have been asked to support site refreshes and redesigns, offering internal developers and designers a fresh perspective from outside the team. And with online tools, teachers have tested a whole range of user experiences, from critiquing GUIs to evaluating reporting complexity and accuracy.

## Organize and repurpose your online repositories

With the explosion in the volume of company-generated and external data, companies are finding it challenging to organize, store and keep that data fresh and useable. Teachers have been asked to lead an assortment of Summer Projects that help teams solve this complex and persistent dilemma.

Projects have spanned every level of scope, scale, cost and impact. Teachers have cleaned up, organized and archived team SharePoint sites. They've planned enterprise-wide repository projects, evaluated external storage options and recommended new technologies to company leaders and teams.

Teachers have also gotten tactical, with projects to tag existing and new data objects, align documents with content standards, and provide quality control and indexing for repositories of documents, images and files of various origins. They've developed graphical user interfaces for SharePoint sites to improve accessibility and worked with IT teams to communicate to employees the requirements for hosting and using a new repository tool.

# Software and Website Projects

## Test new software applications and key features

Teachers have been invaluable partners in testing new software applications and key features for companies. Testing projects have spanned business applications, browsers, Microsoft Office rollouts and upgrades to legacy applications. Teachers have tested new features using protocols developed by the company but have also developed and executed their own testing approaches and shared the results with the project team.

Several projects have also supported testing for updated user interfaces. Teachers have conducted tests themselves, but also gathered groups of employees for multiple rounds of UX/UI testing. They've helped interpret and package test results from various data sources to share and review. One teacher was also asked to analyze test script logs to ensure any post-launch failures were understood and worked on with various software development teams. We've found over the last five years that these are the projects where teachers' skills in knowing how people learn and consume information have been very valuable.

## Design an interactive program for students

A few software and web-based projects over the last five years have requested teachers that can help develop applications and interactive programs to be used by students. These have included projects for specific EdTech companies, but also organizations wanting to generate more interest in their industries and critical career paths. The competition for talent and the need to cultivate core skills have been the motivation behind a number of these Summer Projects.

Teacher participation levels have varied in these projects. Some teachers were involved at the beginning stages, helping to define and design key requirements and functionality. Some companies asked teachers to assess student practices for use in program development. They also helped evaluate how well programmers met those needs. Other teachers were brought in later to evaluate a current stage of development. They provided ongoing feedback and teaching insights on different components and program parts.

Other projects relied on teachers for their expertise in developing student-relevant content. They were asked to scope, build and test lessons and teaching modules incorporating specific outcomes, technologies and skills. Teachers also created, developed and tested various classroom scenarios so programs could be more customized and relevant for a wider group of students.

# Teacher Professional Development Projects

Ignited has worked with companies every summer for more than three decades to deliver powerful teacher professional development experiences and bring new insights and ideas back to students.

## Convert hands-on demos and experiments for virtual delivery

Companies have started to invest more in helping teachers adapt and reach students in non-traditional ways. That includes some classroom activities like demos and experiments that have traditionally required face-to-face, hands-on interactions. That's why a handful of Summer Projects over the last five years have asked teachers to show other teachers how to perform demos and experiments virtually.

Teachers have reworked existing demos and experiments, moved content to a mix of video, live stream and interactive, web-based tools. They've developed websites targeted to other high school teachers with instructions on how to build prototypes and perform lab demos. And, they've created pre-and post-activity materials that supplement the virtual delivery experience. And while virtual was important, most projects recognized that a blended approach is the reality in most schools today. So, many of the projects required new skill sets to be transferable back to project-based learning opportunities that could be used in classrooms.

## Develop a virtual workshop about near-term technologies

A new set of Summer Projects is emerging. A few companies focused on today's cool new technologies want to make sure that students learn about them early. They've recognized that industry innovations in artificial intelligence, machine learning, biotech, data science and advanced manufacturing are significantly outpacing classroom content and that students might not consider these careers early enough to learn the advanced math and sciences required.

They've also realized that teachers first need to be comfortable with these near-term technologies before they can be effectively shared with students. That's why companies are working on Summer Projects to help educate teachers, create new content and match emerging technology topics to key concepts being learned in high school math and science.

Virtual workshops on these technologies have teachers coaching other teachers. They help their peers understand the fundamentals, link ideas to core curriculum and explore how to develop lesson plans. Subject-matter experts from companies are included in virtual sessions, along with previously developed multimedia and other tools. Teachers also deepen their understanding by asking questions, brainstorming new ideas and sharing best practices during the workshops.

## Getting Started

This collection of idea is a sample of projects we've supported over the last 35 years. Projects run from June to August and we have a wide variety of virtual options we can customize to meet your needs... it's up to you!

You can also read more about Ignited and our programs at <https://www.ignitededucation.org/companysolutions/summer-teamwork-projects/>

To get started with your Virtual Summer Project, contact:

**Jeff Schmidt**, Chief Executive Officer, at 408.916.7059 or [jeff@ignitededucation.org](mailto:jeff@ignitededucation.org)