

Impact Study – Summer 2020 Virtual Externship

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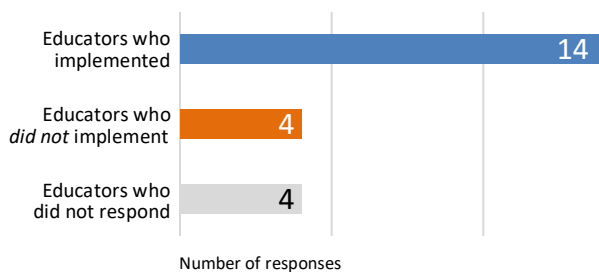
The summer 2020 Virtual Externship program ran for one week in July 2020 and provided a fully remote externship experience that connected 22 educators with 15 different employers. At the end of the program, educators had strengthened their career pathways knowledge and developed network connections that would enhance learning and career opportunities for their students. Additionally, participants developed Externship Projects that ranged from helping students develop career exploration portfolios in middle school to creating a virtual network of industry partners.

In November 2020, educators from the Summer 2020 program were asked to participate in a brief impact study to gain insights about how externship learnings were applied when the educators returned to the classroom (remote or in-person) in the fall of 2020. Eighteen of the 22 summer externship participants responded. Fourteen of those who responded had already implemented externship learnings through a variety of activities and events. Between August and early November 2020, the activities the educators implemented provided career-connected learning for over 1350 students across the state. This report outlines the findings of the summer 2020 impact study, provides an analysis four different educators’ externship-related activities, and presents specific insights for future externships.

Impact Snapshot

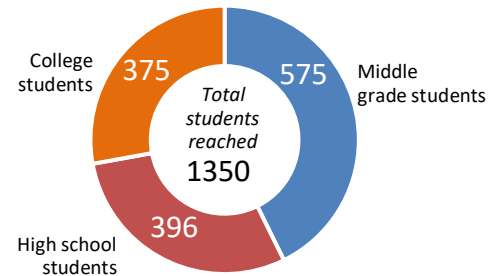
The goal of the summer 2020 Virtual Externship Impact Study was to gain a better understanding of the depth and breadth of the career-connected learning activities that educators brought back to students after their summer externship experience. To capture this information, the 22 summer externship participants were asked to respond to a survey. In-depth follow-up interviews were then conducted with four educators in order to create a more detailed picture of the variety of activities educators implemented with their students and to gain deeper insight from their experiences.

The majority of externship participants implemented activities during fall semester.



The response rate from educators was approximately 80 percent. Of the 18 educators who responded, 14 reported implementing activities in the first three months of the fall semester. These career-connected activities were directly connected to their externship learnings. The four educators who reported that they did not implement activities by the date of the survey, did not comment further on their plans to in the future.

The fourteen educators who implemented externship-related activities during the fall semester directly reached ~1350 students. The students ranged from the middle grades to college, with the greatest number of students in junior high (7th and 8th grades).

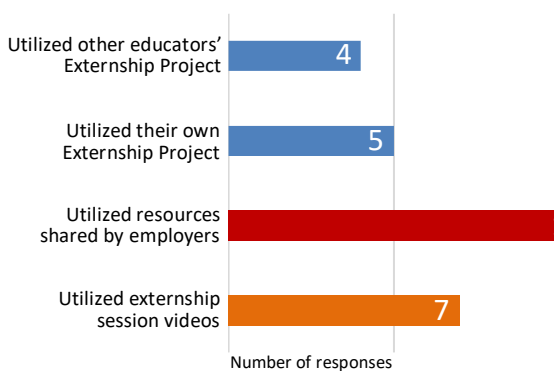


Activities that students engaged in provided foundations for future career pathways and work-based learning experiences, preparing students to make the most of future opportunities. These career exploration activities addressed employability skills, life skills, and career pathways. Activities ranged from virtual mock interviews to money management and future career portfolios. (For more detailed information on activities see Appendix B.)

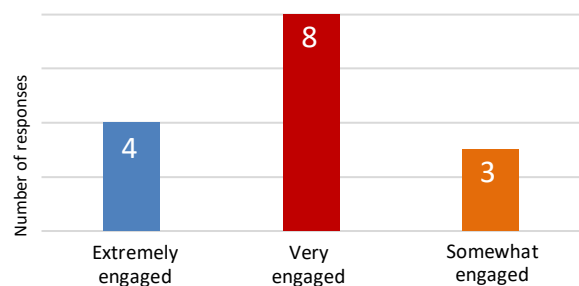
Activity Focus	Activity Type
Employability Skills Activities	Employability skills research
	Align classroom and workplace skills
	Virtual guest speakers (2)
Career Exploration Activities	Virtual tour (2)
	Career exploration activities (4)
	Virtual mock interviews
Career-connected Activities (career and life skills)	Social media awareness
	Personal goal setting (2)
	Money management (2)
	Leadership

At least five educators’ activities included virtual interactions with industry partners, and three quarters of the educators reported using externship session videos or resources provided by industry partners or other educator participants during the externship. Additionally, educators noted that these career-connected activities and virtual experiences were highly effective at engaging students.

Educators found employer resources valuable.







Educators noted that students were highly engaged in career-connected activities.



Impact Stories

To illustrate the wide-range of externship-inspired activities that educators brought to students this fall, follow up interviews were conducted with four different externship participants who volunteered to share their stories. All four educators applied externship learnings in unique ways to meet the specific needs of their students and schools. (For detailed accounts from each educator see Appendix A.)

 <p>Educator: Dana Dix Grade level: 7th & 8th Externship-connected activities:</p> <ul style="list-style-type: none">• Money management lesson• Guest speaker <p>Students participating: ~ 150</p>	 <p>Educator: Ken Mattern Grade level: 12th Externship-connected activities:</p> <ul style="list-style-type: none">• Virtual mock interviews <p>Students participating: 60</p>
 <p>Educator: Erin Quigley Grade level: 11th Externship-connected activities:</p> <ul style="list-style-type: none">• Financial planning <p>Students participating: 3</p>	 <p>Educator: Javier Pedrosa Grade level: College Externship-connected activities:</p> <ul style="list-style-type: none">• Career exploration <p>Students participating: ~70</p>

While activities and numbers of students varied among the four educators who were interviewed, there were four underlying trends that emerged from their collective experience:

- 1. Career-connected learning works when students' needs are understood and prioritized.**
Each of the educators interviewed knew their students and how to support their learning. Dana Dix understood the complexity of systems thinking for middle school students and adapted money management lessons and invited guest speakers to help students make connections with their own experience. Erin Quigley responded to the requests from his third-year sports medicine students to bring in “real-life” money management as it related to their future careers. Ken Mattern recognized how students need one-on-one interactions with industry professionals before their senior internship. And, Javier Pedroza embraced the necessity of introducing culturally relevant role models and local examples to his students.
- 2. Existing links to career-connected learning in the school or classroom enrich externships.**
Among the educators who participated in the follow-up interviews, each had a prior connection to career-connected learning—curriculum or programs that explicitly link learning and students' future career paths. Javier Pedroza teaches business management courses at Pima Community College. Both Ken Mattern and Erin Quigley are connected to CTE programs with their districts. Dana Dix teaches Career Exploration

using the JFF Possible Futures curriculum to help prepare her students for promising and fulfilling careers in STEM and beyond. Each participant mentioned that the externship provided highly valuable connections that were immediately adaptable at their work.

3. *Educators who recognize network connections as necessary leverage new contacts.*

Whether through their own experience outside of education or through their career-connected programs, each of the educators interviewed noted that they value network connections as ways to bring information and opportunities back to their students. Dana Dix and Javier Pedroza knew the impact “real-life” role models could have on their students’ understanding as well as career and personal identity. Erin Quigley valued the third-party validation and inspiration that industry resources would provide for her students. Ken Mattern understood that the most valuable career asset is who you know. This mindset surfaced as an important aspect of each educators’ experience.

4. *Organizational leadership empowers innovative applications of externship learning.*

All of the externship participants who were interviewed noted that their director or department head encourages adaptation and innovation in the classroom and had passed along the externship opportunity. Javier Pedroza’s department chair participated in the externship alongside her colleagues and continues to encourage innovation in and beyond the classroom. Ken Mattern received district administrative support to bring his vision of externship-inspired activities to students beyond his classroom. Dana Dix was encouraged to collaborate with a fellow teacher whose curriculum was closely linked with an externship contact. And, Erin Quigley is supported by her director as she experiments with innovative, career-connected experiences in the Sports Medicine III. Without organizational leadership that supported and encouraged innovative, hands-on activities, the externship outcomes for these educators wouldn’t be as impactful.

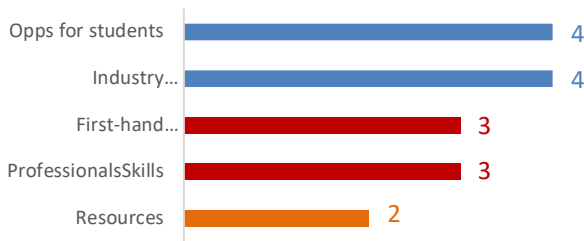
Implications and Insights

While the long-term impact of the summer 2020 virtual externships is impossible to document at this time, the participants’ course implementation is both inspirational and instructional. It is worth noting that pilot participants (early adopters) are more likely to be innovative and motivated. Nevertheless, there are two key insights that emerged from the educators’ post-externship experiences:

- Connections and opportunities inspire educators to participate, but they leverage resources far more often than new network connections.
- Externships paired with existing career-connected learning curriculum or programs have the potential for a greater impact.

Connections inspire, but resources are leveraged.

When participants were asked what inspired them to participate, their responses fell into five primary categories: access resources for students, update understanding of professional skills, gain first-hand knowledge, make industry connections, and find opportunities for students.



It is clear that educators have a need and a desire to connect their students with professional networks and opportunities; however, the externship resources that participants reported utilizing the most were employer handouts and slide decks.

Consequently, in future externship programs it may be beneficial to support and encourage businesses to share prepared career path, industry data, and recruiting resources. Additionally, since only 40% of participants contacted externship employers after the program, it may be helpful to provide follow-up opportunities for educators to reconnect with industry partners and build relationships.

Enhance existing career pathways education.

Another insight to note is the link between externship-inspired activities and career-connected learning. While not all educators who participated in the initial virtual externship were already engaged in a program or curriculum that promoted career-connected learning (such as Possible Futures or a CTE program), those who made that connection were excited to implement activities and share their learnings with students and colleagues. Interview participants noted that the future, it would be helpful to explore how virtual externships might enhance current career pathways development by specifically

1. supporting career-connected learning at different grade levels;
2. serving as an onboarding or professional learning opportunity for inter- and intra- organizational collaboration around specific career pathways; and
3. addressing career identity challenges, such as the underrepresentation of women and femmes in the computer sciences.

In summary, the initial virtual externship was successful at inspiring educators to bring relevant, career-connected learning activities to over 1300 students this fall. Responses from educators who participated in the virtual externship indicate that the model is flexible, yet robust enough, to adapt and support any number of educational initiatives that would be enhanced through business/industry connections.

APPENDIX A – Four Impact Stories

Each of the following provides details on the career-connected activities that four externship participants brought back to their schools to enrich learning and their students' futures.

Enriching Possible Futures – Dana Dix

In early July, when Dana received an email about the Summer Virtual Externship from her District CTE director, she jumped at the opportunity to participate. Dana teaches Career Exploration to 7th and 8th graders at Rhodes Jr. High in Mesa Public Schools, and she saw the externship as an excellent way to connect career exploration to life beyond the classroom.

Dana was excited to begin building connections with local businesses and corporations as enrichment for her adaptation of the [Possible Futures](#) curriculum. Possible Futures is a curriculum that helps students in middle grades and early high school explore STEM occupations and develop skills like collaboration and communication. The externship was the first professional learning that Dana attended that was geared specifically towards life outside the classroom and making connections with experts in career fields. And, she took full advantage of that opportunity. Students at Rhodes benefited from two, unique, externship-inspired learning activities.

One leveraged online money management lessons Dana encountered in an externship session hosted by Charles Schwab and facilitated by Robert Wiggins. Dana paired budgeting and money management lessons with the Possible Futures curriculum on Future Security. The lessons she used are available at schwabmoneywise.com. As students in Dana's classes imagined their "Dream Life" and what it would mean for them financially, they began to grasp how the concepts of education, career choice, and lifestyle preferences are all intertwined. Dana notes that this systems-level thinking is sometimes very abstract for Jr. High students. However, as her students continue to build their "Dream Life" scenarios, applying the money management lessons paired with the Possible Futures curriculum, their possible futures become a more tangible reality.

In addition to money management lessons in her own classes, Dana helped a fellow teacher set up a guest speaker visit with Ruben Serrano, an electrical engineer at DP Electric, whom Dana connected with through the externship. Dana noticed that the DP Electric externship session aligned well with the Possible Futures Engineering and Design units, and so she invited Ruben, along with a representative from [Build Your Future Arizona](#), to talk to her colleagues' class about possible career pathways. Later the students applied what they learned from the guest speaker session to their "Dream Life" scenarios in her class to see if engineering would be a viable career path for them to explore. As Dana's students continue to explore their "Dream Life" next semester, she dreams of a post-Covid 19 classroom where Dana hopes to take employer engagement to the next level, offering a problem for students to solve alongside the experts.

Broad Horizons – Ken Mattern

Each year, approximately 60-100 high school seniors in the Peoria Unified School District (PUSD) complete CTE internship experiences. This past summer as Ken Mattern, internship coordinator and CTE instructor with PUSD, participated in the Summer Virtual Externship the wheels were already turning—how could the externship benefit those students? He wanted to leverage his virtual externship to benefit all the seniors who would be placed at internships in the fall.

Ken, who is by nature a connector (and Energizer bunny), immediately saw that, by design, the externship addressed the persistent problem of organizational silos. Ken notes that there isn't a lot of cross over between industry and educational networks in Arizona, which presents a real challenge when you have hundreds of students who need access to learning and career opportunities for a better future. So, Ken leveraged the externship to broaden his network and that of his students. He planned to connect employers with internship students through virtual mock interviews.

When Ken presented the idea of virtual mock interviews to prepare students for their internships, some of his fellow teachers were reluctant. But he pursued his vision and solicited help from an assistant to help manage the logistics. All 60 students had a one-on-one virtual mock interview with an employer. Most were able to take place during class time; however, coordinating 60, individual, 15-minute virtual mock interviews for students district-wide was not uncomplicated. Employers' and students' schedules are full; however, everyone went out of their way to make it work.

For example, Robert Wiggins with Charles Schwab solicited many individuals from his team to participant and then went above and beyond, handling the coordination for multiple weeks of mock interviews with the Charles Schwab team. Additionally, Ken shared that a student was having trouble connecting video conference, so Jeff Burch with Wells Fargo pivoted and went old school with a phone interview. Ken shared that Jeff brought the example back to his team as evidence that there is no excuse not to get involved in your local community. Career-connected learning can happen anywhere in simple ways that enrich students' opportunities and access to a bright future.

Ken notes that the response from students and employers was overwhelmingly positive. He hopes to do it all over again next year, both the externship and the mock interviews. And next year there will be more buy-in from fellow teachers who were pleased with the students' experience. As Ken looks ahead to more career-connected experience that prepare students for work-based learning, he hopes to engage employers in virtual tours for both students and families, so they can see first-hand the career opportunities in our communities.

Pay it Forward – Erin Quigley

This year Erin Quigley is piloting a new class, Sports Medicine III (Anatomy and Professional Skills). So when she learned about the externship from Amphi’s CTE director, it seemed like a perfect fit. During the externship, Erin was particularly interested by the financial capability lessons made available through one of the externship sessions. When she returned to the classroom this fall, she implemented the lessons as part of her professional skills curriculum in Sports Medicine III.

Sports Medicine III is the year-three course of the Sports Medicine Program at Amphi High School. It is the class where students focus on professional skills in preparation for adulthood—managing their own lives and careers. This is the first year that the class is being offered, and Erin has a small class of three students. Each one of her students has plans to enter a different career path in the medical arts. One wants to be an RN, another a psychiatrist, and the third a surgical tech, but none had thought about the intersections of their career and their personal finances before Erin’s class and the lessons she adapted from the externship resources.

As part of the first semester curriculum, Erin’s students completed six financial lessons, ranging from learning about the stock market (and how to read the stock ticker) to a unit on mortgages and homeownership. Erin notes that her students have been begging for this type of soft skill development — for hands-on experiences and preparedness in financial and professional skills.

Consequently, Erin took the basic financial lessons and wove them into a project where her students are comparing the cost of living and education in Arizona to that of another state. The students will then create a cost of living life plan to help them achieve their personal goals. Erin notes that the financial education piece has helped her students see how they need to save and manage their money. Just recently the students applied this learning directly as they began completing their college applications and searching for scholarships.

Prior to the externship, Amphi’s Sports Medicine program was already partnering with Banner Health to deliver a fully immersive, experience exploring the medical arts at Banner’s facilities. Erin notes that it is an amazing experience. She also recognizes that many students are unable to participate in off-campus programming. Throughout the virtual externship, Erin was inspired by the connections and easy access to industry partners. The virtual externship has inspired her to bring more industry connections virtually into classroom. Erin plans to explore virtual field trips and guest speakers in the upcoming year. Meanwhile, her Sports Medicine III students are gaining personal and professional skills in highly personal and relevant ways as they prepare for their future careers.

An Inspiring Vision – Javier Pedrosa

As a life-long learner who began his career in the broadcast industry and now applies his skills as business management faculty at Pima Community College, Javier Pedrosa was interested in new ways to bring industry perspectives into the classroom. The virtual externship presented the perfect opportunity to find ways to make learning more relevant and meaningful for his students.

Javier teaches business management. He notes that the externship provided excellent information and resources for his Management 200 course, small business management and entrepreneurship. Javier is always looking for ways to stay at the forefront of what industry is doing. The externship delivered examples and foundational concepts that were timely and relevant. Javier recognizes that real, local content and connections (that compliment the required material) are always most engaging for his students. But Javier has also brought externship connections and learnings beyond the classroom to the PCC Business Club.

As co-advisor to the business club, Javier shared information from his externship with the students. Most of the students in the club are business majors and will transfer to UA or ASU after completing their associate’s degree. Javier brought in handouts and Ppt slides from several of the employer sessions. The club members particularly liked the information and concepts discussed in UA Yuma’s session about the future of the work. This information helped the students understand the skills and mindset they will need to succeed in the corporate cultural environment of the future. For Javier, the virtual externship was very timely. During the pandemic, students need more ways to connect and learn, and educators need to make learning of all types as accessible as possible.

For example, Javier mentioned that during the externship, participants and presenters spoke often about how important it is to understand students’ reality, the challenges they face, and how they have to juggle so much along their career path—especially during a pandemic. Javier credited the externship with helping him adapt more readily to his students needs in order to help them be successful. Students are under a lot of pressure and struggling, often financially, socially, and academically. Javier notes that educators, need to make sure that the learning in the classroom is engaging and connected to students’ personal goals and community so that they have the motivation to keep working toward their dreams.

As Javier continues to leverage resources and connections from the externship in his courses and with the club this year, he is building his own virtual externship of sorts by inviting guest speakers from the Latinx business community for virtual sessions with the PCC Business Club. Javier has noticed through his own experience, that too often organizations and educators overlook the Latinx community when inviting guest speakers—yet demographically Latinx individuals make up nearly half of the population in the Tucson community. Inspired by the externship, Javier challenges all educators to bring culturally-relevant industry connections, role models, and local examples to the forefront of student learning in ways that reflect students’ lives, culture, and identities.

APPENDIX B — Implementation Snapshots

	<i>School/District</i>	<i>Grade</i>	<i>Students</i>	<i>Engagement</i>	<i>Activity</i>	<i>Contact</i>
1	Rhodes Jr High Mesa Public Schools	7-8	150	Very	1. Money management 2. Virtual guest speakers	Yes
2	Management Pima CC	-	300	Very	Alignment of classroom and workplace cultures	No
3	Crane Middle Yuma Schools	7-8	60	Extremely	1. Virtual worm farm visit 2. Virtual guest speaker	Yes
4	ASM Phoenix Union	9-12	30	Very	Goal setting	No
5	CDO HS Amphi Public Schools	9-12	134	Somewhat	1. Social media awareness 2. Non-profit career exploration	No
6	ASM Phoenix Union	11-12	19	Very	1. Leadership 2. Career exploration	No
7	Management Pima CC	-	75	Extremely	Career exploration and employability skills resources	Yes
8	Fourth Ave Jr High Yuma Elementary	7-8	45	Very	Life skills lessons and employer resources	No
9	Cactus HS Peoria Unified	12	60	Extremely	Virtual mock interviews w/ employers	Yes
10	Crane Middle Yuma Elementary	7-8	90	Very	Virtual guest speaker	Yes
11	Ironwood Ridge Amphi Public Schools	10	100	Somewhat	Shared employability skills resources	No
12	Fourth Ave Jr High Yuma Elementary	8	200	Very	Construction virtual field trip	Yes
13	South Mountain AAEC	12	50	Somewhat	Discussion of possible career paths	No
14	Lauffer Middle Sunnyside Unified	7-8	30	Very	Creating future careers portfolios	No
15	Amphi HS Amphi Public Schools	11	3	Extremely	Financial resources and life planning	No
16	Shadow Ridge Dysart Unified	-	-	-	NONE	-
17	Metro Tech HS Phoenix Union	-	-	-	NONE	-
18	Shadow Ridge Dysart Unified	-	-	-	NONE	-