



April 8, 2019

Ms. Meghan Kenney Velasquez

Founder

Improvement Assurance Group, LLC

13183 Vine Ct.

Thornton, CO 80241

Subject: Clarification Letter; RFGA ADDPC-FFY19-COM/IDX-001  
Development of the ADDPC Community Inclusion Index

Dear Ms. Velasquez:

All applications received under RFGA ADDPC-FFY19- COM/IDX-001 have been reviewed and further clarification is requested in order to make a determination. Please provide a written response to the following questions to me, via email, by 5:00 PM, Phoenix time, Friday, April 12, 2019.

1. Has Improvement Assurance Group created a web accessible site? If so, please provide a link. How will the development of the community index be accessible for the ADDPC and our stakeholders?
2. Describe in more detail how Improvement Assurance Group will conduct end user testing, including information on who be tasked with this, who will be recruited, how and from which disability groups.
3. Describe in more detail who and how Improvement Assurance Group will conduct training with ADDPC staff. Will ADDPC staff need to learn code?
4. Based on the number of staff assigned to this scope of work, provide more information on how the project can be fulfilled if any key staff leave.
5. Describe how you would advise the ADDPC to proceed, after the contract ending date, if a data point to the community index is new or changed.



6. Adjust the budget to show each staff assigned to the project with their hourly rate identified and by their project tasks. Ensure all costs are inclusive of the total amount.

The Evaluation Committee will review your responses and further consider your application. If you have any questions, don't hesitate to contact me at (602) 542-8976 or by email at [mcrane@azdes.gov](mailto:mcrane@azdes.gov)

Sincerely,

A handwritten signature in black ink that reads "Marcella Crane". The signature is written in a cursive, flowing style.

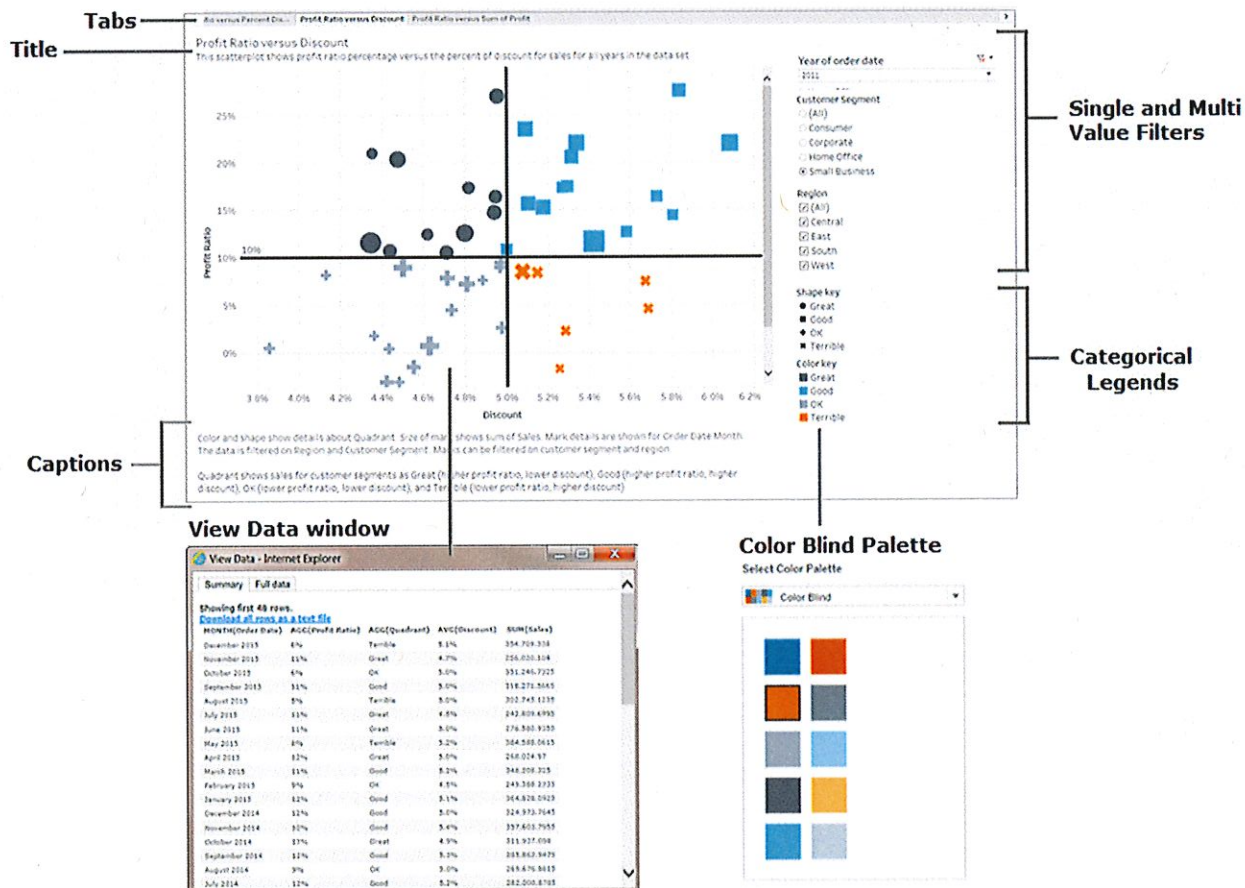
Marcella Crane  
Contracts Manager

**Arizona Developmental Disabilities Planning Council Grant:  
Data Analysis & Visualization**

**Request for Clarification**

**1. Has Improvement Assurance Group created a web accessible site? If so, please provide a link. How will the development of the community index be accessible for the ADDPC and our stakeholders?**

Our software engineer has designed US Section 508 compliant software for his previous employer (i.e., Wells Fargo) in the past. However, none of our recent Tableau clients have requested adherence to US Section 508 requirements. For purposes of this grant, our data visualizations will be created in Tableau and embedded directly on the ADDPC website. Using an HTML iFrame, Tableau data visualizations can be rendered to the client’s browser without any custom software development. Tableau **accessibility features** adhere to the Web Content Accessibility guidelines (WCAG 2.0 AA). As such, we can build views that are accessible to users who use screen readers, braille keyboards, keyboard-only navigation, and so on. Additional accessibility options include tabs, titles, captions, single and multi-value filters, categorical legends, a color-blind palette, as well as keyboard navigation, programmatic context for assistive technologies (using ARIA roles), a text equivalent for charts and visualizations, and compliance with contrast standards. See examples of some features below.







## ADDPC COMMUNITY INCLUSION INDEX

As the content author, we can create WCAG-conformant views following these general steps:

- **Step 1:** Authoring views in Tableau Desktop (version 10.2 and later) following best practices.
- **Step 2:** Publishing the views to Tableau Server (version 10.2 and later).
- **Step 3:** Embedding the views in a web page for users to access the content.

Most data views following the best practice guidelines/features depicted above will be **WCAG-conformant**; they are treated by screen readers as images with a title and a description. Moreover, users will be able to use keyboard navigation to open the View Data window and access the underlying data for the view. Please note that map views in Tableau are not currently supported for WCAG conformance. However, we will ensure that alternative **number displays** for screen readers will be made available where needed.

In general, all our data visualizations keep it simple to **minimize cognitive load**. Doing so helps people more easily see the relationships and intersections in the data. We aim to emphasize only the most relevant and important data. This means reducing the marks in the view to only what is needed. Limiting the level of detail and granularity in the view also helps to prevent cognitive overload. In summary, we (a) limit the number of marks in the view; (b) orient our views for legibility; (c) limit the number of colors and shapes in a single view; (and (d) use filters to reduce the number of marks in the view at a given time.

Dr. Kurz and our software engineer will ensure that all embedded content on the ADDPC web site will conform to the following WCAG 2.0 AA principles:

- **Perceivable.** Information and user interface components must be presented to users in a way that they can perceive. Consider including text alternatives and alternate ways to present the content.
- **Operable.** The user interface components and navigation must be accessible to users from the different devices or methods that they use to interact with the view.
- **Understandable.** The information presented in the view must be understandable to your users. For example, using clearly distinguishable names and labels for different elements shown in your view.

To achieve a balance between overall simplicity/WCAG-conformity and data utility, we have built-in four (4) iterative design sprints (see Gantt chart) as well as two (2) focus group sessions. Moreover, we will build **responsive data visualization layouts** for different types of devices that span a wide range of screen sizes. As such, individuals viewing dashboards experience a design optimized for their phone, tablet, or desktop delivered via a single URL.

### ***2. Describe in more detail how Improvement Assurance Group will conduct end user testing, including information on who be tasked with this, who will be recruited, how and from which disability group? [sic]***

We will lead end user testing by recruiting individuals with disabilities for the focus groups. Dr. Kurz will recruit volunteers from a student with disabilities campus group at ASU. This student association is comprised of students with high incidence disabilities typically classified under



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Individualized Education Plan (IEP) categories such as Specific Learning Disability and Other Health Impairment (OHI). Several students also experience disabilities that affect their mobility. Moreover, we'd like to use ADDPC's contacts to recruit additional disability groups such as individuals with visual impairments. In short, we aim to recruit a diverse group of individuals with disabilities for end user testing.

### *3. Describe in more detail how Improvement Assurance Group will conduct training with ADPC staff. Will ADDPC staff need to learn code?*

ADDPC staff will not be required to learn code. Training of staff is designed to allow ADDPC to independently complete updates to the Tableau data files based on additional ACS data downloads. As such, we will provide **written, step-by-step documentation** that details how the .csv/Excel raw data must be restructured for the Tableau data files. These tasks can be completed by an intern or graduate student within Excel. Automation of the data transformation is not recommended, given frequent changes/additions to the ACS. The probability for syntax to transform the wrong data columns is simply too high. Once the step-by-step guide is followed, the new data can simply be added to the existing file and all data displays are **automatically updated**. As such, the maintenance and update tasks are minimal and do not require specialized knowledge or coding experience.

### *4. Based on the number of staff assigned to this scope of work, provide more information on how the project can be fulfilled if any key staff leave.*

Dr. Kurz has ample access to graduate students to assist with basic data management. We also have a back-up Tableau consultant, Ms. Marie Appel. She currently manages statewide analytic initiatives at the Commit Partnership and operates Dark Horse Data, LLC. For purposes of research, our back-up consultant is Eric Hedberg, a senior data scientist at NORC at the University of Chicago. Dr. Velasquez's back-up consultant is Cassie Breecher, principal consultant at Beyond Strategy Consulting Group. Agile project management will be followed throughout the duration of the grant to ensure a quick and efficient transition in the unlikely event of a replacement.

### *5. Describe how you would advise the ADDPC to proceed, after the contract ending date, if a data point to the community index is new or changed.*

Dr. Kurz will provide **written recommendations** at the end of the project that discuss the impact of additional data vs. changes in existing metrics. First, additional data points are expected and depicted in our trend analyses and data displays. Changes in definition, however, will have to be discussed on case-by-case basis. Second, new metrics are possible and have occurred over the ACS's lifetime. These changes do not impact the current data displays and the aggregate community index. Whether the new metric is relevant for inclusion, however, will also have to be discussed on a case-by-case basis.

### *6. Adjust the budget to show each staff assigned to the project with their hourly rate identified and by their project tasks. Ensure all costs are inclusive of the total amount.*



ADDPC COMMUNITY INCLUSION INDEX

Here is a revised table that contains the requested information.

	Senior consultant <i>Dr. Kurz</i> (\$150/hour)	Senior consultant <i>Dr. Velasquez</i> (\$150/hour)	Software Engineer <i>Louie Velasquez</i> (\$80/hour)	Data Manager <i>Annabella Gallagher</i> (\$40/hour)	Approximate Total Consultant Hours
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The hourly rates vary by consultant: (a) senior consultants rank at \$150 per hour, (b) software engineers rank at \$80 per hour; (and c) data managers rank at \$40 per hour. All costs (i.e., preparation, facilitation, follow-up, etc.) associated with ongoing calls, face-to-face meetings, presentation of deliverables, data cleaning, transformation and visualization, as well as website integration have been included in this estimate. Costs associated with data mining, the creation of memoranda of understanding/data sharing agreements, or other work related to sourcing and scrubbing non-publicly available data has not been included in this budget. Should these services be required as the project develops, Impact Analytica is well positioned to provide them and will adjust the scope of work and budget accordingly. The **total, all-inclusive budget is \$49,930.**

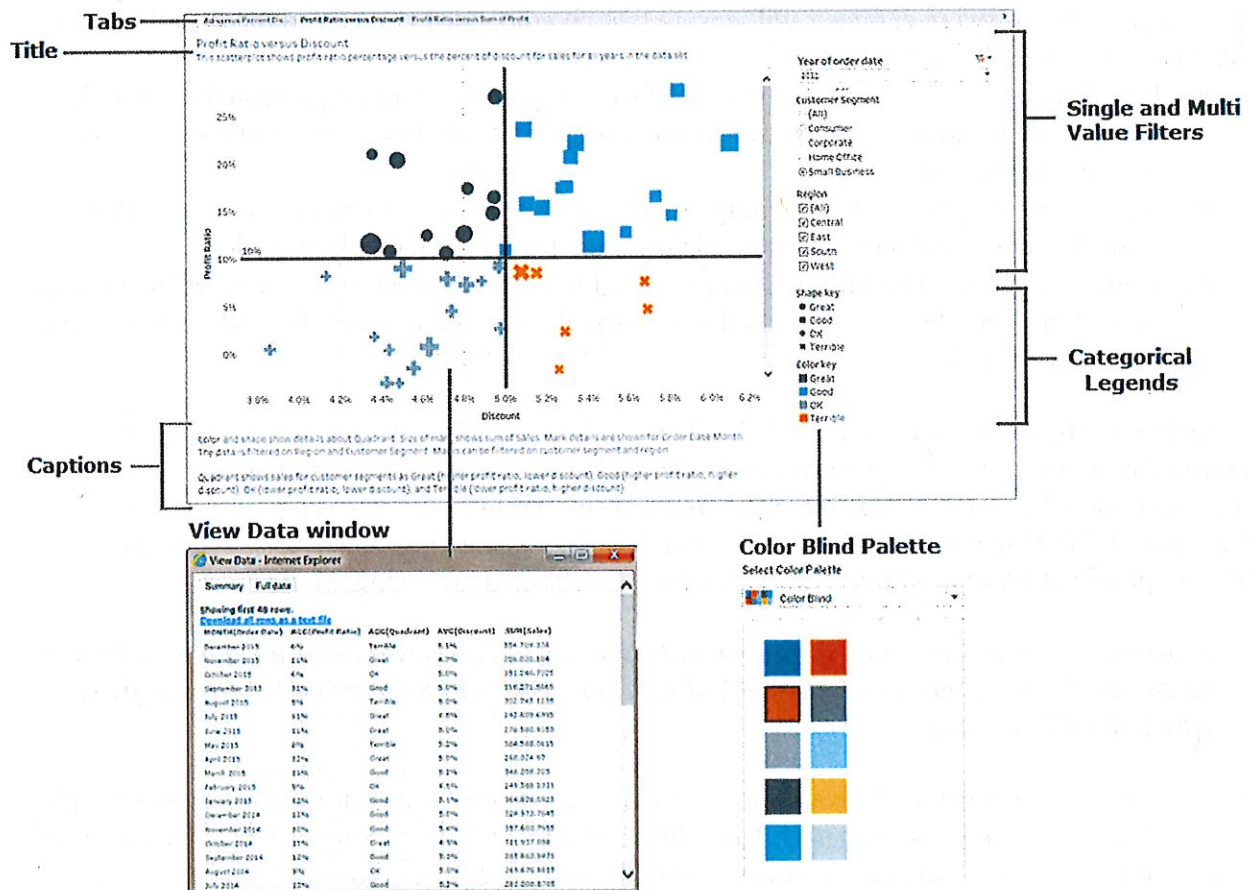


**Arizona Developmental Disabilities Planning Council Grant:  
Data Analysis & Visualization**

**Request for Clarification**

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**Arizona Developmental Disabilities Planning Council Grant:  
Data Analysis & Visualization**

Based on 2017 survey estimates, nearly 900,000 children and adults in the state of Arizona have a disability<sup>i</sup>. A necessary but not sufficient condition for understanding and improving their outcomes is the accessible reporting of data along key outcome domains including (a) demographics, (b) employment, (c) education, (d) housing, (e) transportation, and (f) poverty rates. While public data sets such as the American Community Survey (ACS) collect these data, the respective information is not fully accessible to all individuals with a range of abilities. To ensure status and trend for each outcome domain can be readily understood, data must be aggregated at the appropriate level and visualized to facilitate comprehension. These tasks require technical expertise in the areas of statistics, data visualization, and accessibility. To provide the full breadth and depth of expertise and meet all requirements set forth by the Arizona Developmental Disabilities Planning Council (ADDPC), **Impact Analytica**<sup>ii</sup> is assigning a full team—project manager, software engineer, and data manager—to the task. The team will be led by **Dr. Alexander Kurz**, a nationally recognized disability researcher in the areas of accessibility and data visualization.

- 1. Briefly describe the capacity for the Applicant organization to successfully complete the goals of this project. Provide any previous experience with the activities requested in this scope of work, and a link to the final product(s), if available.*

**Impact Analytica** is a division of Improvement Assurance Group, an Arizona-registered Limited Liability Company. Impact Analytica specializes in educational consulting, program evaluation, and data visualization. Our senior lead consultants, Dr. Meghan Velasquez and Dr. Alexander Kurz, have worked successfully with a diverse set of clients including Valley of the Sun United Way, Vello, Emergenetics International, Pearson, StriveTogether, Smarter Balanced Assessment Consortium, Tonto Creek Camp, Digital Promise, Maricopa County Community Colleges District, Thriving Together, and the Office of Catholic Schools in the Archdiocese of Denver and Detroit. Dr. Kurz will be the team lead for this project due to his depth of experience as a disability researcher and specialized expertise in data analytics, statistics, and data visualization. Dr. Kurz will be supported by Dr. Velasquez, a quality improvement consultant who specializes in results-based facilitation, process improvement, impact analysis, and programmatic redesign. The team will also include a software engineer for iFrame integration of the Community Inclusion Index dashboards into the agency platform website as well as other needed custom builds and data uploading functions to be discussed with ADDPC staff. Additional data management support is provided by a data manager with doctoral-level course work in statistics and experience with managing large-scale data sets. A selection of relevant **work examples** is included below.

**Data Center for Thriving Together:** <http://www.thrivingtogetheraz.org/data-center/>

The Data Center captures the work of Thriving Together, a local collective impact initiative for the larger Phoenix metropolitan area, and its partners along eight cradle-to-career milestones including leading indicators that contribute to the overall milestone metric<sup>iii</sup>. The opening dashboard features a geomap and icon-driven milestone navigation with mouse-over descriptions. Clicking on a milestone such as high school graduation brings the user to the milestone metric and its leading indicators. The user can select years, review mouse-over descriptions, and dive deeper into disaggregated data at the indicator level (click on the arrow in



the top right corner). Please note that this client did not request adherence to US Section 508 requirements. For purposes of this grant, we would conform to Web Content Accessibility guidelines (WCAG 2.0 AA). This can include building views that are accessible to users who use screen readers, braille keyboards, keyboard-only navigation, and so on. Additional accessibility options include tabs, titles, captions, single and multi-value filters, categorical legends, a color-blind palette, as well as keyboard navigation, programmatic context for assistive technologies (using ARIA roles), a text equivalent for charts and visualizations, and compliance with contrast standards.

**Phoenix Union High School District Experience Dashboard:**

[https://tableau.strivetgether.org/t/ThrivingTogether/views/PUHSDHSEExperience/Dashboard1?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display\\_count=no&:showVizHome=no](https://tableau.strivetgether.org/t/ThrivingTogether/views/PUHSDHSEExperience/Dashboard1?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no)

The Experience Dashboard utilizes a school district boundary shapefile overlay for the geomap as well as an interactive tooltip that features two embedded visualizations. The dynamic filtering for CTE credits allows students to filter high schools by CTE offerings. Shapefile overlays can be used effectively to initiate data displays based on zip code, county, census tract, or school district boundary.

- 2. Provide the name(s) of the key staff who would be assigned to this project, their educational background, length of time with organization, current title at firm, and previous experience with disabilities, and data analysis and graphics. Attach current resumes or CVs of each team member involved. Resumes/CVs are excluded from the 10-page maximum.*

**Alexander Kurz, PhD, BCBA-D**, *Senior Lead Consultant*, earned his doctorate in Special Education from Vanderbilt University and currently works in the School for Social and Family Dynamics at Arizona State University (<https://isearch.asu.edu/profile/1789188>). He has spent over two decades serving students with disabilities including as a special education teacher, behavior analyst, and researcher. Dr. Kurz has led federal research grants on students with disabilities for the U.S. Department of Education (DOE) including the Institute of Education Sciences (IES) and the Office of Special Education Programs (OSEP) with combined awards totaling over 45 million dollars. He has published over 40 peer-reviewed journal articles and book chapters on students with disabilities including two edited volumes on accessibility. At Vanderbilt, Dr. Kurz served as the Dunn Family Scholar in Educational and Psychological Assessment. More recently, Dr. Kurz was named a Tableau Fellow by the Tableau Foundation (<https://www.tableau.com/foundation>), which provided him with intensive data visualization training. Over the past few years, he has developed numerous data dashboards in Tableau for several organizations including Thriving Together, Vello, and the Phoenix Union High School District. In addition, Dr. Kurz has prepared Impact Reports that summarize the results of smaller research projects and/or program evaluations for practitioners. Lastly, Dr. Kurz serves as the Director for the Arizona Practitioner-Researcher Educational Partnership (AzPREP) Office and the Internship in Applied Data Analysis and Data Visualization both housed at Arizona State University. As such, Dr. Kurz has the **psychometric expertise** and **content knowledge** to develop appropriate indicators and inclusion indices, as well as the relevant **technical expertise** to develop accessible data visualizations. See CV for more details. *Length at organization: 2 years*

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**Meghan Kenney Velasquez, EdD**, *Senior Consultant*, earned her doctorate in Educational Leadership and Supervision from Arizona State University. She is an expert group facilitator with extensive training in **results-based leadership (RBL)** and **results-based facilitation (RBF)**. Dr. Velasquez has received a Lean Six Sigma Green Belt certification and completed **Design Thinking** training. Using these skills, Dr. Velasquez has led several continuous improvement projects that leveraged **facilitated data experiences** to help groups make meaning of complex data sets and develop organizational solutions that increase accessibility and transparency, as well as center end user satisfaction in institutional decision-making. Her expertise will be needed to facilitate a **user-centered design process** and productive meetings between ADDPC staff and project consultants. This facilitation will ensure indices and data visualization are iteratively designed and refined to meet ADDPC requirements and that the project maintains appropriate schedule and compliance. Dr. Velasquez has further managed several large-scale, multi-year projects including a major school reform project for which she was named Administrator of the Year. In that work, Dr. Velasquez was responsible for the supervision and improvement of school-based programs for children and teens with autism, generalized learning disabilities, cognitive and physical impairments. She is well versed in Arizona accessibility standards and has over ten years of experience supporting children and families with varied abilities in better understanding their rights and accessing services. See CV for more details. *Length at organization: 4 years*

**Louie Velasquez, BS**, *Software Engineer*, earned his bachelor's degree in Management Information Systems from the University of New Mexico. Mr. Velasquez has architected, developed, and managed custom software applications for over 15 years in both the public and private sectors. Specifically, his experience is focused on developing web-based software solutions from the ground up designed to run in high transactional and high availability environments. He has extensive experience related to **user experience (UEX) design** when developing client facing applications. As soft engineer, Mr. Velasquez oversees and is responsible for the success of the flagship web software product named LUCA. As such, he is highly skilled across a variety of programming languages, iFrame integration, and Drupal 7. See CV for more details. *Length at organization: 3 years*

**Annabella Gallagher, MS**, *Data Manager*, earned her Master's degree in Family and Human Development at Arizona State University. She is a current doctoral student at Arizona State University with research interests in adolescent development, etiology of aggressive behaviors, and the development and evaluation of prevention and intervention programs. Further, she specializes in measurement and statistical analyses, and holds extensive experience working with large-scale data sets and conducting literature synthesis. Annabella has prepared best practice briefs to inform intervention efforts, as well as contributed to the development of the Thriving Together Data Center. Her experience with large-scale data sets will support data import and preparation based on ACS data. See CV for more details. *Length at organization: 1 year*

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- 3. Provide a time line with key tasks and what is needed from ADDPC to complete the project within the project year. It is important that what is developed be tested by the end user before final roll-out. Ensure this is built in to the timeline.**

The following scope of work (SOW) is designed to (a) develop an indicator dashboard that will simplify localized and complex disability data by Arizona county; (b) create data visualizations including geomaps, charts, and infographics, as well as a method to easily update the data; and (c) allow for the collection of additional data and display this information on the ADDPC website for accessibility. To this end, publicly available data from the ACS will be used to represent how individuals with disabilities in the state of Arizona are performing along key outcome domains including (a) demographics, (b) employment, (c) education, (d) housing, (e) transportation, and (f) poverty rates. To ensure data are aggregated at the appropriate level and singular indices are psychometrically sound, the work will progress in several phases and feature data collection and design sprints.

### **Introductory Phase – Level Setting**

- Conduct a facilitated Design Thinking session that builds connections between consultants and ADDPC staff, scopes an ideal future state, and surfaces possible solutions beyond what is already known or being executed in other organizations. This experience will produce the basis for end product design that data collection sprints and dashboard design sprints will be aligned to
- Review of expectations with ADDPC staff for metrics and data visualization outcomes including exemplars and non-exemplars (i.e., desired audience, intended interpretations, use of status and trends, historical data, comparative analyses)
- Review of expectations with ADDPC staff for singular “community inclusion” indices including psychometric and accessibility ramifications (i.e., desired audience, intended interpretations, use of status and trends, historical data, comparative analyses)

### **Phase 1 – Data Collection Sprints**

- Execute six (6) data collection sprints using ACS data (i.e., demographics, employment, education, housing, transportation, and poverty rates) for each Arizona county
- Replicate sprints for additional states for comparative analyses<sup>iv</sup>
- Clean and structure data for Tableau “long file” processing

### **Phase 2 – Design Sprints**

- Execute seven (7) design sprints for each key outcome domain (i.e., demographics, employment, education, housing, transportation, and poverty rates) and the overall community inclusion index
- Each design sprint will be launched with ADDPC staff and include a data overview, data visualization recommendations, and one (1) iterative design cycle

### **Phase 3 – Integration & Finalization**

- Execute one (1) focus group for end user testing with individuals with disabilities (to be provided by ADDPC staff) to gather feedback and revision requests. The focus group will be jointly planned and organized between ADDPC and the Impact Analytica team to ensure a rigorous and accessible testing experience. Both Dr. Kurz and Dr. Velasquez have experience conducting focus groups and cognitive labs. The focus group will include direct usage of the data visualization dashboards by end users in two ways. First,

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minimally directed exploration by the end user allowing the ADDPC and consultants to observe interest, common errors, and natural interaction with the dashboards. Second, guided exploration will simulate a common use case and encourage users to interact with the dashboards for a specific purpose. This will allow the ADDPC and consultants to refine guidance and accessibility supports built into the visualization. The focus group will include a follow-up that provides a facilitated UX debrief with end users, ADDPC staff, and the Impact Analytica team.

- Develop inline frame integration, which will ensure that all data visualizations are incorporated into the ADDPC platform website using an inline HTML frame (iFrame). Using an HTML iFrame, Tableau data visualizations can be rendered to the client's browser without any custom software development provided by ADDPC. The agency will be provided the necessary HTML, JavaScript, and technical support needed to correctly implement the data visualizations into the platform website. By using an inline frame, all development is performed without any impact to ADDPC and as a result, all updates do not require any user acceptance testing from ADDPC of features or functionality. Impact Analytica will maintain its own development and testing environment with no impact to technology infrastructure at ADDPC. In addition to the supports already in place on the Tableau framework for accessibility, development and design will be focused on providing a clear, accurate, and readable visualization of the data. The data visualizations will be consumable from all modern browsers (i.e. Chrome, Edge, Internet Explorer, Safari, FireFox) across different screen types. The aim is to have the content readable and the experience consistent across different device platforms (i.e. Windows, MacOS, Android), screen sizes, and browsers. If any additional design measures are needed to meet the branding or design needs of the organization, Impact Analytica is committed to providing a custom experience with the guidance of ADDPC.
- Finalize and present data dashboards including data update functionality.
- Train ADDPC on the use of the data update functionality.

The full SOW will span a total of 12 months. A detailed breakdown of the activities and their respective timelines is included the following Gantt chart.

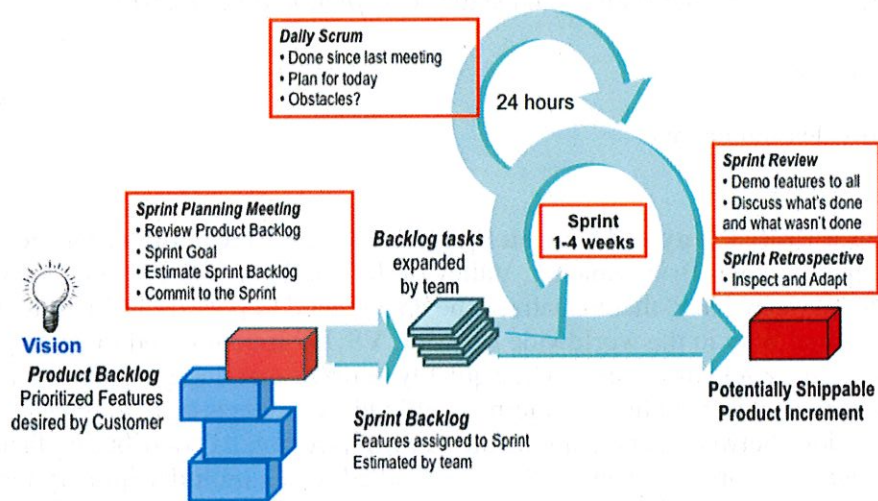
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	June '18	July '18	Aug '18	Sept '18	Oct '18	Nov '18	Dec '18	Jan '19	Feb '19	Mar '19	Apr '19	May '19
Internal research and design meetings (bi-weekly)	X	X	X	X	X	X	X	X	X	X	X	X
Design thinking session with ADDPC	X											
Expectation speccing with ADDPC	X											
Data collection sprints												
Design sprints												
Design sprint launch meetings with ADDPC						X	X	X	X			
Design revision video conferences with ADDPC							X	X	X			
Website iframe integration												
End user testing focus group and follow-up										X	X	
Final design revision based on end user feedback												
Final presentation meeting with ADDPC											X	
Data update functionality												
Data update training with ADDPC												X



**4. If key staff left the organization during the contract period, what would the Applicant organization do to ensure project activities are continued on time, and completed successfully with the project year?**

Impact Analytica is committed to ensuring client satisfaction and on-time completion of project deliverables. As stewards of client resources, we believe that proactive work is essential to managing any unforeseen transitions. As such, we utilize Agile Project Management frameworks to plan, execute, and document our work. This approach ensures all team members are abreast of one another’s work and that work is documented in real time. By doing this, if a key team member were to leave the organization, we would have the shared knowledge and documentation necessary to seamlessly plug in a new expert to take over the work. The figure provides a visual representation of the Agile Project Management framework and how we approach our work internally.



Furthermore, as a division of Improvement Assurance Group and a close collaborator with Arizona State University, Impact Analytica has access to a broad range of talent in statistical analysis, data visualization, facilitation, and software development. For this project, we have identified four key project roles:

- Senior Lead Consultant: This role will be filled by Dr. Kurz who will focus on the data visualizations and development of the Community Inclusion Index.
- Senior Consultant: This role will be filled by Dr. Velasquez who will focus on project management and user experience design.
- Data Manager: This role will be filled by Ms. Annabella Gallagher who will be responsible for data cleaning and transformation in preparation for visualization.
- Software Engineer: This role will be filled by Mr. Louie Velasquez who will execute the development of inline frame integration for the dashboards.

For each of these roles, Impact Analytica has identified a ‘backup’ member of our broader team who has the requisite knowledge, skills and expertise to successfully execute the key responsibilities of the role. Further references or information on these team members is available upon request.

**5. Provide up to two current references. Include contact information, and briefly describe the type of research conducted, for whom was the research conducted for, and when the research was completed.**

**Thriving Together - Dr. LeeAnn Lindsey, former Executive Director**

Drs. Kurz and Velasquez have worked with Thriving Together, the largest collective impact initiative in the state of Arizona, for over three years. Together they have supported the Thriving Together team in developing internal policies for rigorous inquiry, data visualization, and data utilization to support the collaborative work aimed at increasing performance in six key outcome areas (kindergarten readiness, third grade reading, eighth grade math, high school graduation, post-secondary enrollment and post-secondary completion). Additionally, Drs. Kurz and Velasquez regularly conduct research relating to these outcome areas as they work to understand key drivers of current performance, the relationship between policy and outcomes, and promising practices being utilized in other regions and states. *Completion date: 8/2017*

Dr. LeeAnn Lindsey:  
602.370.5253  
LeeAnn@edvolvelearning.com

**Valley of the Sun United Way - Mr. Brian Spicker, former Chief Impact Officer**

Under the leadership of Mr. Brian Spicker, Valley of the Sun United Way began its work to create an online "Poverty Hub" that visualized the data related to poverty in Maricopa County. As the largest United Way in the worldwide network, VSUW is committed to leveraging its resources to break the cycle of poverty. They quickly realized that doing this would require a state-of-the-art data center that allowed internal staff and external partners to understand the multiple intersections between data that tells the story of poverty, its contributing factors and its unacceptable outcomes. Drs. Kurz and Velasquez worked with a multidisciplinary team to design their data center and create the infrastructure necessary to tackle this groundbreaking work. Though not yet complete, the facilitated work with Dr. Kurz and Velasquez has supported VSUW in eliminating redundancies in their data sets, streamlining data collection and reporting practices, and creating a shared sense of what matters most when considering poverty. *Completion date: 4/2018*

Mr. Brian Spicker:  
602.573.8566  
BrianSpicker210@gmail.com

Additional references are available upon request.

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**6. Provide a budget that shows a total all-inclusive cost. Include the number of hours at the hourly rate for each of the key staff working on this project.**

Based on the phase-specific activities and timelines displayed in the Gantt chart, the table below lists the associated consultants and approximate hourly time allocations per activity. Please note that Impact Analytica’s SOWs are always based on deliverables to protect client resources. The work on deliverables will not stop in case hours are maxed out. Projected hours below are estimates and may shift between consultants or across activities on an as-needed basis.

	AK	MK	LK	AG	Approximate Total Consultant Hours
Internal research and design meetings	X	X	X	X	16 hours
Design thinking session	X	X			6 hours
Expectation speccing	X	X			12 hours
Data collection sprints	X			X	112 hours
Design sprints	X			X	122 hours
Design sprint launch meetings	X	X			12 hours
Design revision video conferences	X	X			8 hours
Website iframe integration			X		72 hours
End user testing focus group and follow-up	X	X	X		18 hours
Final design revision	X	X	X		16 hours
Final presentation meeting	X	X			5 hours
Data update functionality			X		42 hours
Data update training	X	X			6 hours
<b>TOTAL</b>	<b>195</b>	<b>68</b>	<b>78</b>	<b>106</b>	<b>447 hours</b>

The hourly rates vary by consultant: (a) senior consultants rank at \$150 per hour, (b) software engineers rank at \$80 per hour; (and c) data managers rank at \$40 per hour. All costs (i.e., preparation, facilitation, follow-up, etc.) associated with ongoing calls, face-to-face meetings, presentation of deliverables, data cleaning, transformation and visualization, as well as website integration have been included in this estimate. Costs associated with data mining, the creation of memoranda of understanding/data sharing agreements, or other work related to sourcing and cleaning non-publicly available data has not been included in this budget. Should these services be required as the project develops, Impact Analytica is well positioned to provide them and will adjust the scope of work and budget accordingly.

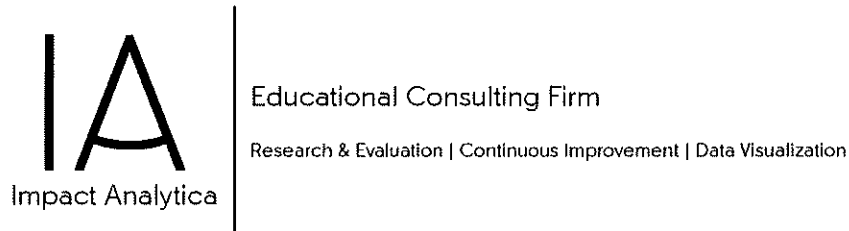
The **total, all-inclusive budget** based on hours and rates listed above is **\$50,000**. Our senior consultants will accommodate local travel to meeting locations at the ADDPC office for face-to-face meetings. For additional information, please consult the subsequent financial documents.

## ADDPCC COMMUNITY INCLUSION INDEX

For any additional questions, please contact our senior consultants directly.

**Alexander Kurz, PhD, BCBA-D**  
480.392.8812

**Meghan Velasquez, EdD**  
248.563.9681



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<sup>i</sup> Based on the 2017 American Community Survey (ACS), an estimated 12.8% (plus or minus 0.29 percentage points) of non-institutionalized, male or female, all ages, all races, regardless of ethnicity, with all education levels in the state of Arizona reported a disability. A total of six disabilities were reported through the ACS: (a) hearing disability, (b) visual disability, (c) cognitive disability, (d) ambulatory disability, (e) self-care disability, (f) independent living disability.

<sup>ii</sup> Impact Analytica is a division of Improvement Assurance Group, an Arizona-registered Limited Liability Company. Impact Analytica specializes in educational consulting, program evaluation, and data visualization.

<sup>iii</sup> Please note that Thriving Together is responsible for maintaining current data.

<sup>iv</sup> A full replication of the data collection and design sprints associated with each Arizona county for additional states has significant budgetary implications and adds a layer of complexity to data interpretation. The current budget allows for limited comparative analyses. Should full replications of this SOW be required for additional states, Impact Analytica is well positioned to provide them and will adjust the scope of work and budget accordingly.

## EDUCATION

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Ph.D.	<b>Vanderbilt University, 2011</b> Advisors: Dr. Stephen N. Elliott and Dr. Daniel J. Reschly Special Education: High Incidence Interdisciplinary Program in Educational Psychology Dissertation: <i>Opportunity to learn the intended curriculum: Measuring key instructional indicators and examining relations to achievement for students with disabilities</i>	Nashville, TN
M.Ed.	<b>Vanderbilt University, 2007</b> Advisors: Dr. Joseph H. Wehby and Dr. Stephen N. Elliott Special Education: Behavior Disorders Applied Behavior Analysis Certification Program Thesis: <i>Alignment of the intended, planned, and enacted curriculum in general and special education and its relation to student achievement</i>	Nashville, TN
B.S.	<b>Middle Tennessee State University, 2003</b> Philosophy	Murfreesboro, TN
B.A.	<b>Middle Tennessee State University, 2001</b> Special Education	Murfreesboro, TN
	<b>Pädagogische Hochschule Ludwigsburg</b> Special Education	Ludwigsburg, Germany

## RESEARCH CONCEPTS, AREAS, AND PARADIGMS

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<b>Concepts:</b>	Opportunity to Learn (OTL); Accessibility; Alignment
<b>Areas:</b>	Instructional Coaching; Teacher Effectiveness; Exceptional Learners
<b>Paradigms:</b>	Single-Case Design; Continuous Improvement (CI); Applied Behavior Analysis (ABA)

## PROFESSIONAL AND GRADUATE RESEARCH EXPERIENCES

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2014 – Present	<b>Director for Data and Research</b> Thriving Together, Valley of the Sun United Way	Phoenix, AZ
2013 - Present	<b>Director</b> Arizona Practitioner-Researcher Educational Partnership Office, Arizona State University	Tempe, AZ
2018 - Present	<b>Associate Research Professor</b> T. Denny Sanford School of Social and Family Dynamics, Arizona State University	Tempe, AZ
2013 - 2018	<b>Assistant Research Professor</b> T. Denny Sanford School of Social and Family Dynamics, Arizona State University	Tempe, AZ



2011 – Present	<b>Affiliated Adjunct Faculty</b> Mary Lou Fulton Teachers College, Arizona State University	Tempe, AZ
2012 - 2018	<b>Courtesy Research Associate</b> Behavioral Research and Teaching Program, University of Oregon	Eugene, OR
2011 - 2013	<b>Assistant Research Professor</b> Learning Sciences Institute, Arizona State University	Tempe, AZ
2008 - 2011	<b>Research Assistant</b> Center for Assessment and Intervention Research Dr. Stephen N. Elliott, Peabody College of Vanderbilt University	Nashville, TN
2007 - 2010	<b>Data Analyst</b> Discovery Education Assessment, LLC	Nashville, TN
2007 - 2008	<b>Board Certified Behavior Analyst (BCBA)</b> Scarab Behavioral Health Services, LLC	Nashville, TN
2005 - 2007	<b>Research Assistant</b> Vanderbilt Behavior Research Center Dr. Joseph H. Wehby, Peabody College of Vanderbilt University	Nashville, TN
2003 - 2005	<b>Special Education Teacher</b> Learning Center, Kearny Educational Complex	San Diego, CA
2001 - 2002	<b>Special Education Teacher</b> Blackman High School	Murfreesboro, TN
1995 - 1997	<b>Educational Assistant</b> Staatliche Heimsonderschule für Körperbehinderte	Markgröningen, Germany

## AWARDS AND HONORS

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2015	<b>Tableau® Fellow</b> Selected as Tableau Data Fellow for Data Visualization to Support Data-Based Decision Making and Continuous Improvement	Tableau Foundation
2015	<b>Article of the Year</b> Editorial Board of <i>Assessment for Effective Intervention</i> selection for Council for Exceptional Children (CEC) Division CEDS	Council for Exceptional Children
2011	<b>Bonsal Applied Education Research Award</b> Award for Research and Development of Educational Technology with Large-Scale Application K-12	Vanderbilt University
2008 - 2011	<b>Dunn Family Scholar of Educational and Psychological Assessment</b>	Vanderbilt University

## CONTINUING EDUCATION

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2018	<b>Results-Based Facilitation (RBF) Training</b> Skills and Competencies Based on Annie E. Casey Foundation Approach to Group-Based Decision-Making and Implementation	StriveTogether Network
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2016	<b>Results-Based Leadership (RBL) Training</b> Skills and Competencies Based on Annie E. Casey Foundation Approach to Leadership Development for Social Change	StriveTogether Network
2016	<b>Lean Green Belt Certification Training</b> Skills and Competences Based on the Six Sigma DMAIC Problem Solving Approach	Arizona State University
2015	<b>Equity Competency Training</b> Skills and Competencies Based on the E3: Education, Excellence & Equity Approach by Just Communities	StriveTogether Network

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**PEER-REVIEWED PUBLICATIONS** (*n* = 28)

- Dudek, C. M., Kettler, R. J., Reddy, L. A., & Kurz, A. (in press). Use of Multiple Assessments for Measuring Teacher Practice: An Initial Investigation for Educational Practice. *International Journal of Humanities and Social Science*.
- Arnold-Berkovits, I., Kurz, A., & Reddy, L. A. (2018). Teacher log of students' opportunity to learn and classroom observation: An initial investigation of convergence. *Educational Assessment, Evaluation and Accountability*, 27, 1-23. doi:10.1007/s11092-018-9288-2
- Elliott, S. N., Kurz, A., & Yel, N. (2018). Opportunity to learn what is on the test and performance on the test. *Journal of Special Education*, 23, 1-9. doi:10.1177/0022466918802465
- Reddy, L. A., Glover, T. A., Kurz, A., Elliott, S. N. (2018). Assessing the effectiveness and interactions of instructional coaches: Initial psychometric evidence for the iCoach assessments. *Assessment for Effective Intervention*, 23, 1-16. doi:10.1177/1534508418771739
- Kettler, R. J., Reddy, L. A., Glover, T. A., & Kurz, A. (2018). Bridging-the-gap: Classroom strategies assessment system-observer form. *Assessment for Effective Intervention*, 23, 1-3. doi:10.1177/1534508417747391
- Glover, T. A., Reddy, L. A., Kurz, A., & Elliott, S. N. (2018). Use of an online platform to facilitate and investigate data-driven instructional coaching. *Assessment for Effective Intervention*, 23, 1-9, doi:10.1177/1534508418811593
- Glover, T. A., Kettler, R. J., Reddy, L. A., & Kurz, A. (2018). Formative assessment approaches to informing school practices and teacher evaluation: Key considerations. *Assessment for Effective Intervention*, 23, 1-2. doi:10.1177/1534508418811589
- Kettler, R. J., Arnold-Berkovits, I., Reddy, L. A., Kurz, A., Dudek, C. M., Hua, A., & Lekwa, A. (2018). Multi-method teacher evaluation for high poverty schools: Observations and self-ratings of instructional and behavioral management. *Studies in Educational Evaluation*, 59, 224-234.
- Reddy, L. A., Dudek, C. M., Peters, S., Alperin, A., Kettler, R. J., & Kurz, A. (2018). Teachers' and school administrators' attitudes and beliefs of teacher evaluation: A preliminary investigation of high poverty school districts. *Educational Assessment, Evaluation and Accountability*, 30(1), 47-70. doi:10.1007/s11092-017-9263-3
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- Elliott, S. N., Kurz, A., Tindal, J., & Yel, N. (2017). Influence of opportunity to learn indices and education status on students' mathematics achievement growth. *Remedial and Special Education*, 38(3), 145-158. doi:10.1177/0741932516663000



- Glover, T. A., Reddy, L. A., Kettler, R. J., **Kurz, A.**, & Lekwa, A. (2016) Improving high-stakes decisions via formative assessment, professional development, and comprehensive educator evaluation: The School System Improvement Project. *Teachers College Record*, 118(14), 1-26.
- Yarbro, J., McKnight, K., Elliott, S. E., **Kurz, A.**, & Wardlow, L. (2016). Digital instructional strategies and their role in classroom learning. *Journal of Research on Technology in Education*, 8(4), 274-289. doi:10.1080/15391523.2016.1212632
- Reddy, L. A., Dudek, C. M., Kettler, R. J., **Kurz, A.**, & Peters, S. (2016). Measuring educators' attitudes and beliefs about evaluation: Initial evidence for the Teacher Evaluation Experience Scale. *Educational Assessment*, 21(2), 120-134. doi:10.1080/10627197.2016.1167592
- Kurz, A.**, Elliott, S. N., & Roach, A. T. (2015). Addressing the missing instructional data problem: Using a teacher log to document Tier 1 instruction. *Remedial and Special Education*, 36(6), 361-373. doi:10.1177/0741932514567365
- Roach, A. T., **Kurz, A.**, & Elliott, S. N. (2015). Facilitating opportunity to learn for students with disabilities with instructional feedback data. *Preventing School Failure*, 59(3), 168-178. doi:10.1080/1045988X.2014.901288
- Reddy, L. A., Kettler, R. J., & **Kurz, A.** (2015). School-wide educator evaluation for improving school capacity and student achievement in high-poverty schools: Year 1 of the school system improvement project. *Journal of Educational and Psychological Consultation*, 25(2), 90-108. doi:10.1080/10474412.2014.929961
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- Kurz, A.**, Elliott, S. N., Lemons, C. J., Zigmond, N., Kloo, A. & Kettler, R. J. (2014). Assessing opportunity-to-learn for students with and without disabilities. *Assessment for Effective Intervention*, 40(1), 24-39. doi:10.1177/1534508414522685
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- Schulte, A., Elliott, S. N., Kurz, A. (2015). Understanding and accelerating achievement growth for students with disabilities. *Smarter Balanced Assessment Consortium Spotlight Series for Teachers Supporting Students with Disabilities*. Los Angeles, CA: University of California Press.
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- Elliott, S. N., Beddow, P. A., Kurz, A., & Kettler, R. J. (2011). Creating access to instruction and tests of achievement: Challenges and solutions. In S. N. Elliott, R. J. Kettler, P. A. Beddow, & A. Kurz (Eds.), *Handbook of accessible achievement tests for all students: Bridging the gaps between research, practice, and policy* (pp. 1-16). New York: Springer.
- Kurz, A., & Elliott, S. N. (2011). Overcoming barriers to access for students with disabilities: Testing accommodations and beyond. In M. Russell & M. Kavanaugh (Eds.), *Assessing students in the margins: Challenges, strategies, and techniques* (pp. 31-58). Charlotte, NC: Information Age Publishing.
- Elliott, S. N., Kettler, R. J., Beddow, P. A., & Kurz, A. (2010). Research and strategies for adapting formative assessments for students with special needs. In H. L. Andrade & G. J. Cizek (Eds.), *Handbook of formative assessment* (pp. 159-180). New York: Taylor & Francis.

## BOOKS (n = 2)

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- Elliott, S. N., Kettler, R. J., Beddow, P. A., & Kurz, A. (Eds.). (2018). *Handbook of Accessible Instruction and Testing Practices*. New York: Springer.
- Elliott, S. N., Kettler, R. J., Beddow, P. A., & Kurz, A. (Eds.). (2011). *Handbook of accessible achievement tests for all students: Bridging the gaps between research, practice, and policy*. New York: Springer.

## UNDER REVIEW

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- Kurz, A., Reddy, L. A., Kettler, R. J., Glover, T. A., Velasquez, M. K., & Kirtman, L. (2018). Work styles attributes and their relations to instructional coaching behaviors. *Journal of Professional Development in Education*.
- Kurz, A., Reichenberg, R. E., Elliott, S. N., & Yel, N. (2018). Opportunity-to-learn performance levels and student achievement gain for students with and without disabilities. *Remedial and Special Education*.

Reddy, L. A., Hua, A., Dudek, C. M., Kettler, R. J., Arnold-Berkovits, I., Lekwa, A., Crouse, K., Kurz, A., & Hu, J. (2018). Use of school administrator and teacher ratings of classroom practices on student achievement in high poverty schools. *Studies in Educational Evaluation*.

## IN PREPARATION

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Kurz, A., Reddy, L. Elliott, S. N., & Kettler, R. J. (2018). The effects of instructional coaching on opportunity to learn. *Teaching and Teacher Education*.

Kurz, A., Reichenberg, R., & Yel, N. (2018). Setting opportunity-to-learn standards for effective teaching. *Educational Evaluation and Policy Analysis*.

## MEASUREMENT INSTRUMENTS ( $n = 9$ )

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Kurz, A., & Elliott, S. N. (2017). Classpath [Software application]. Tempe, AZ: Arizona State University

Kurz, A. (2016). OSCCES: Outdoor STEM-Centered Camp Experiences Scale. Tempe, AZ: Arizona State University

Glover, T. A., Reddy, L. A., Elliott, S. N., & Kurz, A. (2017). iCoach Case Facilitator [Software application]. Newark, NJ. Rutgers University.

Elliott, S. N., Reddy, L. A., Glover, T. A., & Kurz, A., (2017). iCoach Performance Monitoring Rubrics [Online and paper forms]. Newark, NJ. Rutgers University.

Reddy, L. A., Kurz, A., Glover, T. A., & Elliott, S. N. (2017). iCoach Ratings Scale [Online and paper forms]. Newark, NJ. Rutgers University.

Reddy, L. A., Glover, T. A., Kurz, A., & Elliott, S. N. (2017). iCoach Interaction Style Scale [Online and paper forms]. Newark, NJ. Rutgers University.

Glover, T. A., Reddy, L. A., Elliott, S. N., & Kurz, A. (2017). iCoach Observation Record [Online and paper forms]. Newark, NJ. Rutgers University.

Reddy, L. A., Dudek, C. M., Kettler, R. J., Kurz, A., & Peters, S. (2016). Teacher Evaluation Experience Scale [Paper form]. New Brunswick, NJ: Rutgers University.

Kurz, A. & Elliott, S. N. (2012). MyiLOGS: My instructional learning opportunities guidance system (Version 2) [Software and training videos]. Tempe, AZ: Arizona State University.

## PRESENTATIONS AND SYMPOSIA ( $n = 32$ )

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Lindsey, L., Velasquez, M., Kurz, A., & Hoffman, B. (2017, October). *Students at the center: Engaging youth voice in collective impact*. Presentation at the annual meeting of the StriveTogether Cradle to Career Network, Phoenix, AZ.

Breecher, C., Kurz, A., Lindsey, L., & Velasquez, M. (2017, October). *360 communication: Up, out, down and all around*. Presentation at the annual meeting of the StriveTogether Cradle to Career Network, Phoenix, AZ.

Elliott, S. N., Kurz, A., Yel, N., & Tindal, G. (2017, April). *Mathematics content aligned or not and test performances of students with disabilities*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX

- Kurz, A. (February, 2017). *Educational redemption and instructional coaching*. Paper presented at the annual Pacific Research Coast Conference, San Diego, CA.
- Kothari, P., Kurz, A., Perrault, P. G., & Sheldahl, J. (2016, October). *Equitable data-driven decisions: Creating strong community learning partnerships*. Paper presented at the annual meeting for the Grantmakers for Education, Denver, CO.
- Yarbro, J., McKnight, K., Elliott, S. E., & Kurz, A. (2016, June). *Digital instructional strategies and their role in classroom instruction*. Paper presented at the annual meeting of the International Society for Technology in Education, Denver, CO.
- Kurz, A. (February, 2016). *Measuring Opportunity to learn through a teacher log*. Paper presented at the annual Pacific Research Coast Conference, San Diego, CA.
- Elliott, S. N., Kurz, A., Tindal, G., Stevens, J. & Yel, N. (2015, April). *Predicting end-of-year mathematics achievement of students with and without disabilities: The role of opportunity to learn and CBM measures*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.
- Kettler, R. J., Reddy, L. A., & Kurz, A. (2015, April). *Multi-method teacher evaluation: Integrating scores from multiple observational tools*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.
- Peters, S., Kurz, A., Reddy, L. A., Dudek, C. M. & Kettler, R. J. (2015, April). *Teachers' and administrators' experiences with teacher evaluation: A preliminary investigation of high-poverty school districts*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Reichenberg, R., Kurz, A., & Yel, N. (2015, April). *Setting opportunity-to-learn standards for effective teaching*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Thiessen, P., Austin, F., Doran, J., McCoy, K. M., Kurz, A., & Mathur, S. (2014, October). *The effect of the setting for delivery of intervention for misbehavior on task performance: Impact on disorderly individual with ASD and peers*. Presentation at the annual meeting of the Teacher Educators for Children with Behavior Disorders, Tempe, AZ.
- Elliott, S. N., Kurz, A., Tindal, G., Stevens, J. & Yel, N. (2014, April). *Predicting end of year mathematical achievement with opportunity to learn and CBM measures: Year 1 report*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.
- Kettler, R. J., Reddy, L. A., & Kurz, A. (2014, April). *The SSI Project: Modernizing educator evaluation and professional development*. Paper presented at the annual meeting of the Council for Exceptional Children, Philadelphia, PA.
- Elliott, S. N., Kurz, A., & Davies, M. (2013, October). *Research on opportunity to learn: A key access and validity issue when testing students with disabilities*. Presentation at the annual meeting of the Australian Association of Special Education, Adelaide, AU.
- Elliott, S. N., & Kurz, A. (2012, June). *Opportunity-to-learn as a moderating variable in achievement growth*. Paper presented at the annual CCSSO National Conference on Student Assessment, Minneapolis, MN.
- Kurz, A. (2012, May). *Using teacher logs to measure opportunity-to-learn in the context of special education: Conceptual and methodological challenges and empirical findings*. Presentation at the Educational Testing Service Research and Policy Forum, Princeton, NJ.

- Elliott, S. N., & Kurz, A. (2012, April). *Measurement of opportunity-to-learn and its contribution to achievement gains of students with disabilities*. Paper presented at the annual meeting of the National Council on Measurement in Education, Vancouver, Canada.
- Elliott, S. N., & Kurz, A. (2012, April). *Measurement of opportunity-to-learn and its contribution to achievement gains of students with disabilities*. Presentation at the U.S. Department of Education Leveraging Resources Conference, Bethesda, MD.
- Kettler, R. J., Elliott, S. N., Kurz, A., & Lemons, C. (2012, February). *Measuring what teachers teach and students learn: An integrated model*. Presentation at the annual meeting of the National Association of School Psychologists, Philadelphia, PA.
- Kurz, A. (2012, February). Access to the general curriculum: A differentiated opportunity structure for students with disabilities. In N. Zigmond (Chair), *Assessment, opportunity-to-learn, and teacher perceptions: Putting the pieces together for students in special education*. Symposium conducted at the annual Pacific Coast Research Conference, San Diego, CA.
- Kurz, A. (2011, June). *Instructional progress management: An introduction*. Presentation at the annual Arizona Department of Education Leading Change Conference, Tucson, AZ.
- Elliott, S. N., & Kurz, A. (2011, April). *Learning analytics: Measuring indicators that matter*. Presentation at the annual Arizona State University Education Innovation Summit, Scottsdale, AZ.
- Elliott, S. N., & Kurz, A. (2011, February). *Measuring students' access to the intended and assessed curriculum: Constructs, tactics, and tools*. Presentation at the annual meeting of the National Association of School Psychologists, San Francisco, CA.
- Kettler, R. J., Kurz, A., Beddow, P. A., & Elliott, S. N. (2011, February). *Online identification of students with learning problems or instructional needs*. Poster presented at the annual meeting of the National Association of School Psychologists, San Francisco, CA.
- Kurz, A., & Elliott, S. N. (2010, September). MyiLOGS: A measure of students' opportunity to learn the intended curriculum. In B. Jupp (Chair), *Evaluating and rewarding educator effectiveness: Innovations and lessons from the field*. Symposium conducted at the national meeting of the National Center for Performance Incentives, Nashville, TN.
- Elliott, S. N., & Kurz, A. (2010, July). *Measuring student access to the intended and assessed curriculum: Constructs, tactics, and tools*. Presentation at the annual meeting of the Office of Special Education Programs Project Directors, Washington, DC.
- Kurz, A. (2010, July). Access to what should be taught and will be tested: Students' opportunity to learn the intended curriculum. In C. J. Lemons (Chair), *Reading instruction and assessment for children in special education*. Symposium conducted at the annual meeting of the Society for the Scientific Study of Reading, Berlin, Germany.
- Beddow, P. A., Kurz, A., Kettler, R. J., Elliott, S. N., Mosiman, M., & Williams, L. (2010, April). *Strategies to increase student access to assessment and aligned instruction*. Presentation at the annual meeting of the Council for Exceptional Children, Nashville, TN.
- Elliott, S. N., Kurz, A., Beddow, P. A., & Frey, J. (2009, February). *Cognitive load theory: Instruction-based research with applications for designing tests*. Presentation at the annual meeting of the National Association of School Psychologists, Boston, MA.
- Roach, A. T., Niebling, B. C., Kurz, A., & Wixson, C. S. (2007, August). *Aligning curriculum, instruction, and assessments: New tools for psychologist*. Presentation at the annual meeting of the American Psychological Association, San Francisco, CA.

Kurz, A., & Fink, J. (2004, December). *Mapping the IEP: Facilitating student involvement in the IEP process through visual media*. Presentation at the annual meeting of the California League of Middle Schools, Monterey, CA.

## RESEARCH GRANTS AND OTHER EXTERNAL FUNDING

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- 2017 – Present      **Technology-Supported Behavioral Support Coaching: Project Select-Support-Succeed (Project S3).**  
*U.S. Department of Education - \$2,498,436*  
Principal & Co-Principal Investigators: Kurz, A., Glover, T. A., Reddy, L. A., & Elliott, S. N.
- 2014 – Present      **A Collective Impact Initiative: Thriving Together**  
*United Way - \$326,150*  
Principal Investigator: Kurz, A.
- 2013 - Present      **Integrated Technology Tools for Optimizing Instruction and Assessment Results for Students with Disabilities (I2PM)**  
*U.S. Department of Education - \$2,499,988*  
Principal & Co-Principal Investigators: Elliott, S. N., Kurz, A., Tindal, G.
- 2012 - 2017      **The School System Improvement (SSI) Project**  
*U.S. Department of Education - \$39,703,502*  
Principal & Co-Principal Investigators: Reddy, L. A., Kettler, R. J., & Kurz, A.
- 2013 - 2015      **What Works for Title I: Understanding the Contributors and Barriers to School Improvement (WWT1)**  
*Institute of Education Sciences - \$399,993*  
Principal & Co-Principal Investigators: Kurz, A., Giovannone, C. L.
- 2011 - 2012      **Opportunity to Learn the Arizona Alternate State Standards for Students with Significant Cognitive Disabilities (ADE 1% OTL)**  
*Arizona Department of Education - \$75,000*  
Principal & Co-Principal Investigators: Kurz, A., & Williams, L.
- 2011 - 2013      **Enhancing the Large-scale Application of MyILOGS: Educational Technology for Instructional Progress Management (EdTech-IPM)**  
*Arizona State University Venture Catalyst - \$50,000*  
Principal & Co-Principal Investigators: Elliott, S. N., & Kurz, A.

## INTERNAL FUNDING

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- 2013 - 2015      **Sanford School Seed Grant (S3G)**  
*T. Denny Sanford School of Social and Family Dynamics - \$10,300*  
Principal Investigator: Kurz, A.

## OTHER RESEARCH GRANT AFFILIATIONS

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- 2011 - 2017      **National Center on Assessment and Accountability for Special Education (NCAASE)**  
*Institute of Education Sciences*  
Principal & Co-Principal Investigators: Tindal, G., Stevens, J., Schulte, A., & Elliott, S. N.  
Role: Investigator

- 2009 - 2012 **Modified Alternate Assessment Participation Screening (MAAPS)**  
*U.S. Department of Education*  
 Principal & Co-Principal Investigators: Elliott, S. N., Kettler, R. J., & Zigmond, N.  
 Role: Investigator
- 2008 - 2011 **Consortium for Modified Alternate Assessment Development and Implementation (CMAADI)**  
*U.S. Department of Education*  
 Principal & Co-Principal Investigators: Elliott, S. N., Rodriguez, M. C., Roach, A. T., & Kettler, R. J.  
 Role: Graduate Research Assistant
- 2008 - 2010 **Operationalizing Alternate Assessment for Sciences Inquiry Skills (OAASIS)**  
*U.S. Department of Education*  
 Principal Investigator: Foster, C. J.  
 Role: Graduate Research Assistant
- 2008 - 2009 **Consortium for Alternate Assessment Validity and Experimental Studies (CAAVES)**  
*U.S. Department of Education*  
 Principal & Co-Principal Investigators: Elliott, S. N., & Compton, E.  
 Role: Graduate Research Assistant

## UNIVERSITY TEACHING AND SUPERVISION

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- Spring,  
2018 **Dissertation Committee Member**  
 Comprehensive Exam  
 Dr. Kathleen Andereck (Chair), Dr. Wendy Hultsman (Member), Dr. Jeniece Morales (Member), Dr. Brian Winsor (Member), Dr. Alexander Kurz (Member), Virginia Coco (Student), School of Community Resources and Development, Arizona State University
- Fall,  
2017 **Dissertation Committee Member**  
 Comprehensive Exam  
 Dr. Sabina Low (Chair), Dr. Stephen Elliott (Member), Dr. Kevin Grimm (Member), Dr. Marilyn Thompson (Member), Dr. Alexander Kurz (Member), Danielle Desfosses (Student), School of Social and Family Dynamics, Arizona State University
- Fall,  
2012 **Guest Lecture**  
 Title: *Formative Assessment of Classroom Instruction Using MyiLOGS*  
 Dr. Stephen N. Elliott, Mary Lou Fulton Teachers College, Arizona State University
- Spring,  
2012 **Dissertation Committee Member**  
 Title: *Empowering the First-Year Teacher*  
 Dr. Kathleen Puckett (Chair), Dr. Sarup Mathur (Member), Dr. Alexander Kurz (Member), Pamela Roggeman (Dissertator), Mary Lou Fulton Teachers College, Arizona State University
- Fall  
2009 **Teaching Assistant**  
 Course: *Assessment of Academic Achievement for Accountability*  
 Dr. Stephen N. Elliott, Peabody College of Education, Vanderbilt University
- Fall,  
2009 **Guest Lecture**  
 Title: *Measuring Opportunity-to-Learn*  
 Dr. Stephen N. Elliott, Peabody College of Education, Vanderbilt University
- Fall,  
2009 **Guest Lecture**  
 Title: *Alignment of Curriculum, Instruction, and Assessment*  
 Dr. Stephen N. Elliott, Peabody College of Education, Vanderbilt University



- Fall,  
2009                    **Guest Lecture**  
Title: *Consequences of Large-Scale Assessment*  
Dr. Stephen N. Elliott, Peabody College of Education, Vanderbilt University
- Spring,  
2009                    **Teaching Supervisor**  
Responsibilities: *Supervision and Evaluation of Student Teachers*  
Dr. Kimberly J. Paulsen, Peabody College of Education, Vanderbilt University

## WORKSHOPS AND TRAINING SESSIONS

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- Kurz, A. (2013, February). *Gathering instructional data: Feedback on classroom observations, the MyiLOGS report, and the MyiLOGS OTL summary scores*. Professional development workshop for participants in the NCAASE Multiple Measures study, Eugene, OR.
- Kurz, A. (2013, January). *Gathering instructional data: Feedback on classroom observations, the MyiLOGS report, and the MyiLOGS OTL summary scores*. Professional development workshop for participants in the NCAASE Multiple Measures study, Tempe, AZ.
- Kurz, A. (2012, October). *Observing classroom instruction using the MyiLOGS observation protocol*. Professional development workshop for classroom observers in the NCAASE Multiple Measures study, Tempe, AZ.
- Kurz, A. (2012, September). *Observing classroom instruction using the MyiLOGS observation protocol*. Professional development workshop for classroom observers in the NCAASE Multiple Measures study, Eugene, OR.
- Kurz, A. (2012, September). *Tracking instruction of the Common Core State Standards*. Professional development workshop for participants of the Rodell Foundation MAC-Ro program, Phoenix, AZ.
- Kurz, A. (2012, September). *Understanding opportunity-to-learn and academic growth for students with and without disabilities*. Professional development workshop for participants in the NCAASE Multiple Measures study, Eugene, OR.
- Kurz, A. (2012, August). *Observing classroom instruction using the MyiLOGS observation protocol*. Professional development workshop for in the NCAASE Multiple Measures study, Tempe, AZ.
- Kurz, A., & Elliott, S. N. (2012, August). *Understanding opportunity-to-learn and academic growth for students with and without disabilities*. Professional development workshop for participants in the NCAASE Multiple Measures study, Tempe, AZ.
- Kurz, A., & Elliott, S. N. (2012, July). *Understanding opportunity-to-learn and academic growth for students with and without disabilities*. Professional development workshop for participants in the NCAASE Multiple Measures study, Tempe, AZ.
- Kurz, A., & Elliott, S. N. (2011, May). *Summative review of the MyiLOGS report and the MyiLOGS instructional growth plan*. Professional development workshop for participants in the AZ Department of Education 1% OTL study, Tempe, AZ.
- Kurz, A., & Elliott, S. N. (2011, March). *Using the MyiLOGS report to develop instructional improvement goals via the MyiLOGS instructional growth plan*. Professional development workshop for participants in the AZ Department of Education 1% OTL study, Tempe, AZ.
- Kurz, A. (2011, January). *Enhancing coverage of the Arizona alternate standards: How to use MyiLOGS reliably and with fidelity*. Professional development training for participants in the AZ Department of Education 1% OTL study, Tempe, AZ.

- Kurz, A.** (2011, December). *Enhancing coverage of the Arizona alternate standards: How to use MyiLOGS reliably and with fidelity*. Professional development training for participants in the AZ Department of Education 1% OTL study, Tempe, AZ.
- Kurz, A.** (2011, January). *MyiLOGS classroom observation training*. Observer reliability training for university personnel in the MAAPS field test, Pittsburgh, PA.
- Kurz, A.** (2011, January). *MyiLOGS classroom observation training*. Observer reliability training for state personnel in the MAAPS field test, Columbia, SC.
- Kurz, A.** (2010, December). *MyiLOGS classroom observation training*. Observer reliability training for state personnel in the MAAPS field test, Phoenix, AZ.
- Kurz, A., Kettler, R. J., & Beddow, P. A.** (2010, December). *Enhancing coverage of the intended curriculum: How to use MyiLOGS reliably and with fidelity*. Professional development training for participants in the CMAADI OTL study, Indianapolis, IN.
- Kurz, A., Kettler, R. J., & Beddow, P. A.** (2010, November). *Enhancing coverage of the intended curriculum: How to use MyiLOGS reliably and with fidelity*. Professional development training for participants in the MAAPS field test, Columbia, SC.
- Kurz, A., & Elliott, S. N.** (2010, October). *Enhancing coverage of the intended curriculum: How to use MyiLOGS reliably and with fidelity*. Professional development training for participants in the MAAPS and CMAADI field test, Phoenix, AZ.
- Kurz, A., Elliott, S. N., & Beddow, P. A.** (2010, September). *Enhancing coverage of the intended curriculum: How to use MyiLOGS reliably and with fidelity*. Professional development training for participants in the MAAPS and CMAADI field test, Laveen, AZ.
- Kurz, A.** (2010, June). *Pilot study workshop for MAAPS: Measuring Opportunity-to-Learn (OTL) using MyiLOGS*. Teacher training for the MAAPS pilot study, Lake City, SC.
- Kurz, A., & Elliott, S. N.** (2010, April). *Pilot study workshop for MAAPS: Opportunity to learn, screening tests, and rating scales*. Teacher training for the MAAPS pilot study, Phoenix, AZ.
- Kurz, A., & Shrago, J. S.** (2010, March). *Pilot study workshop for MAAPS: Opportunity to learn, screening tests, and rating scales*. Teacher training for the MAAPS pilot study, Uniontown, PA.
- Kurz, A.** (2006, October). *Surveys of the enacted curriculum alignment workshop*. Teacher training for the Surveys of the Enacted Curriculum research study, Nashville, TN.

## MENTORING

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2017- Present	<b>Danielle Desfosses</b> <i>Directed Research; Dissertation Committee Member</i> Title: TBA
2017- Present	<b>Patricia Cruz</b> <i>Directed Research; Dissertation Committee Member</i> Title: TBA
2016- Present	<b>Annabella Gallagher</b> <i>Directed Research</i>
2016- Present	<b>Virginia Coco</b> <i>Directed Research; Dissertation Committee Member</i> Title: TBA

- 2015-2016 **Khaerannisa Cortes**  
*Directed Research*
- 2014-2015 **Chara Price**  
*Directed Research*
- 2013-2015 **Ray Reichenberg**  
*Directed Research*
- 2013-2016 **Nedim Yel**  
*Directed Research; Dissertation Committee Member*  
Title: TBA
- 2011-2012 **Pamela Roggeman**  
*Dissertation Committee Member*  
Title: *Empowering the First-Year Teacher*  
Dr. Kathleen Puckett (Chair), Dr. Sarup Mathur (Member), Dr. Alexander Kurz (Member),  
Mary Lou Fulton Teachers College, Arizona State University

## SERVICE

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- 2012 – Present **Director**  
Arizona Practitioner-Researcher Educational Partnership Office, Arizona State University  
Relevant Expertise: Program Evaluation, Continuous Improvement Research
- 2015 – Present **Director**  
Internship for Applied Data Analysis and Data Visualization, Arizona State University  
Relevant Expertise: Advanced Tableau Training, Continuous Improvement Methods
- October, 2018 **Guest Reviewer**  
*Educational Researcher*  
Relevant Expertise: Instructional Time, Inclusion, Students with Disabilities
- 2017 – 2018 **Guest Editor**  
*Assessment for Effective Intervention*  
Special Issue: *Informing School Practices and Teacher Evaluation via Formative Assessments*
- March, 2015 **Guest Reviewer**  
*Journal of Special Education Leadership*  
Relevant Expertise: Special Education, Teacher Evaluation, Effective Teaching
- September, 2013 **Guest Reviewer**  
*Assessment for Effective Intervention*  
Relevant Expertise: Special Education, Teacher Evaluation, Opportunity-to-learn
- March, 2010 **Guest Reviewer**  
*National Assessment Governing Board*  
Relevant Expertise: Achievement Level Descriptors for NAEP
- March, 2010 **Guest Reviewer**  
*Educational Measurement: Issues and Practice*  
Relevant Expertise: Opportunity-to-learn
- September, 2009 **Guest Reviewer**  
*Review of Educational Research*  
Relevant Expertise: Testing Accommodations

- 2009 - 2011    **Graduate Student Mentor**  
Mentor for Incoming Doctoral Student
- 2007 - 2011    **Behavior Analyst (BCBA)**  
Family Consultant for the Hope Gardens Community Association  
Relevant Expertise: Applied Behavior Analysis

## **PROFESSIONAL AFFILIATIONS**

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- 2008 – Present    **American Educational Research Association (AERA)**  
Division D - Measurement and Research Methodology  
Division H - Research, Evaluation, and Assessment in Schools
- 2008 – Present    **Council for Exceptional Children (CEC)**
- 2008 – 2012        **American Psychological Association (APA)**
- 2007 – 2011        **Association for Behavior Analysis International (ABAI)**
- 2009 – 2011        **National Council on Measurement in Education (NCME)**
- 2007 – 2011        **Tennessee Association for Behavior Analysis (TABA)**

## **LICENSURES AND CERTIFICATIONS**

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Board Certified Behavior Analyst – Doctoral (1-07-3583)  
Special Education (K-12, Mild/Moderate)  
Special Education (K-12, Modified)

United States  
State of California  
State of Tennessee

## Meghan Catherine Kenney Velasquez

13183 Vine Ct.

Thornton, CO 80241

[Meghan@improvementassurance.com](mailto:Meghan@improvementassurance.com)

Ph: (248) 563-9681

### EDUCATION

2016	Lean Green Belt Certification, Arizona State University College of Engineering
2013	Ed.D. Educational Leadership and Supervision, Arizona State University
2009	M.Ed. Secondary Science, Arizona State University
2007	B.A. Sociology and Psychology, Wayne State University

### RELEVANT EXPERIENCE

January 2016-present	Founder and CEO, Improvement Assurance Group
April 2015-present	Founding Board Member, Isaac Community Foundation
January 2014-present	New Principal Mentor, Arizona State University
October 2012-July 2016	Director of STEAM and innovation, Isaac Elementary School District
August 2011-October 2012	Acting Principal (intermittent assignment), Moya and Butler Elementary
November 2011-present	Program Advisory Council member, North Central University
May 2011- October 2012	Content Specialist in STEM, Isaac Elementary School District
September 2011-present	Independent Consultant, education practice and research
May 2010- May 2011	District Mentor, Creighton Elementary School District
October 2009- present	Faculty Associate, Arizona State University
April 2007- present	Staff editor/Contributing author, Landon Elsemere Press
June 2007- May 2011	Teacher, Creighton Elementary School District
December 2008- 2009	Mentor Teacher, Arizona State University, Mary Lou Fulton Teacher's College
July 2008- May 2009	District Policy Representative, Teach for America
June 2007-May 2009	Corp Member, Teach for America
October 2006-June 2007	Substitute Teacher, Dearborn Public School District

### EDUCATIONAL RESULTS AND INVOLVEMENT

2015-July 2016	Lead the revision of current strategic plan and creation of subsequent three-year strategic plan
2015-July 2016	Facilitated bi-monthly Executive Team sessions with a focus on continuous improvement
2015-July 2016	Facilitated collaborative problem solving and improvement inquiry among central office and all ISD campuses
August 2015	Developed and trained all ISD leadership (sites, central office and teachers) on effective data analysis and problem solving using Lean/Six Sigma
June 2015	Led the creation and launch of the Isaac Standard Operating Procedures and Information for administrators and teachers
2013/14-2016	Led site improvements resulting in over 40% increase in staff retention
2014-2016	Over 20% increase in student proficiency as measured by AZELLA
2014-2016	Up to 30% increase in student proficiency as measured by AIMS Science
May 2013	Served as a reviewer for the Presidential Science Teachers Award with the Arizona Department of Education
2012-2016	Designed and implemented comprehensive school reform for three sites (~1950 students, 12 leaders and ~100 teachers) in Isaac Schools District #5 utilizing STEAM content and pedagogy and innovative school governance model

2012	Served as a state grant reviewer with the Arizona Department of Education for the MSP: Science Literacy Grant
2011-2012	Designed and implemented district wide common formative assessment protocol
2011	Secured partnership with Arizona State University resulting in over \$10,000 in professional development for fourth grade teachers and over \$10,000 in materials to support inquiry-based science instruction.
2007/08 through 2010/11	Achieved significant gains (80% mastery) with 8 <sup>th</sup> grade science students as measured by AIMS DPA and pre/post test data.

#### **AWARDS AND HONORS**

2016	Administrator of the Year, Isaac Schools District #5
2015	Bronze Award for PBIS, Arizona Department of Education
2015	Annie E. Casey Foundation, Collective Impact and Results Based Leadership Intensive, sponsored participant
2009	Sue Lehmann, National Excellence in Teaching Award, semi-finalist
2006	Frank Hartung Memorial Award- Wayne State University Department of Sociology
2004	Award for Campus Excellence- Wayne State University, Project 350

#### **PUBLISHED WORKS**

Under review	Futures: Long Range Planning in Criminal Justice, assistant editor
In progress	Contemporary Issues in Social Justice, Second Edition Graduate Text, co-author and first editor
May 2013	Journeys, Adventures, Bridges and Puzzles: A case study approach to understanding teachers' conceptions of STEM, author
July, 2009	Contemporary Issues in Social Justice, Undergraduate Text, co-author
May, 2009	OurCourts.org, Lesson Plans, author

#### **SCHOLARSHIP AND GRANT AWARDS**

2017	on behalf of SD27J, Pathways Planning Grant	(\$30,000)
2016	Science Foundation Arizona, Velocity Project for coding and robotics	(\$18,900)
2015	Arizona Commission on the Arts Award, Using Drama to Address Academic Language in ELL Students	(\$15,000)
2012	Kids Can: Building Computers	(\$3,500)
2011	ISD/ASU E3 Grant from National Science Foundation	(\$10,000)
2010	Teach for America/ASU Fellowship	(two years graduate tuition)
2006	Undergraduate Research Grant, "Anti-Infection Efforts and the Altered Image." Wayne State University.	(\$2,300.00)
2003	Title IV, Michigan Education Scholarship	(\$3,000.00)

#### **GUEST LECTURES AND WORKSHOP FACILITATION**

October 2017	Authentically Engaging Youth for Transformational Change, StriveTogether National Convening	(TBA)
October 2017	Effective Communication and Strategy, StriveTogether National Convening	(TBA)
November 2015	Teach for America Leadership Fellows, Lead for Phoenix Panel	(Phoenix, AZ)

January 2015	Arizona Business and Professional Women Group, Keynote Speaker	(Phoenix, AZ)
October 2011- 2013	Energy, Engineering and Excellence	(Phoenix, AZ)
August 2011	Introduction to Inquiry and Constructivist Teaching	(Phoenix, AZ)
October 2010	Student Tracking Workshop	(Phoenix, AZ)
May 2010	Effective Leadership and Team Building Workshop	(Phoenix, AZ)
February 2010-May 2011	Unit and Lesson Planning	(Phoenix, AZ)
March 2010	Professional Learning Communities	(Phoenix, AZ)
March 2010	Understanding Pyramid of Interventions	(Phoenix, AZ)
December 2009	Cornell Notes for Middle School	(Phoenix, AZ)
September 2009	Investment in the Middle School Classroom, Teach for America PLC	(Phoenix, AZ)
April 2009	Effective Strategies for Teaching Vocabulary in the Content Areas, Teach for America PLC	(Phoenix, AZ)
December 2008	Effective Strategies for Teaching Vocabulary in the Content Areas, Southwest Summit	(Flagstaff, AZ)
November 2006	Morality and the Law, Wayne State University CRJ200	(Detroit, MI)
March 2006	Morality and the Law, Wayne State University CRJ200	(Detroit, MI)

#### **CONFERENCE PRESENTATIONS**

April 2016, accepted	Everyone Can Engineer, National Science Teachers Association	(Los Angeles, CA)
October 2012, accepted	The Sixth E: The STEM Language Connection, Association of Latino Administrators and Superintendents	(Phoenix, AZ)
July 2012	Creating Equitable STEM Experiences, California Association of Latino Superintendents	(San Jose, CA)
June 2011	Keeping TFA, International Research Symposium, University of Granada	(Granada, Spain)
December 2008	Effective Strategies for Teaching Vocabulary in the Content Areas, Southwest Summit	(Flagstaff, AZ)
2006	Wayne State University Conference for Undergraduate Research	(Detroit, MI)
2006	Wayne State University Sociology Research Day	(Detroit, MI)
2004	Ohio Coalition on Conflict, Beginning Mediation Workshop	(Columbus, OH)

#### **OTHER CERTIFICATIONS, CREDENTIALS and SKILLS**

- Lean Green Belt, Certified Practitioner
- Thinking Maps, Certified Trainer
- Conflict Resolution and Mediation, Certified Practitioner
- Balanced Leadership, McRel Trained Practitioner
- Managing Change, McRel Trained Practitioner
- Purposeful Community, McRel Trained Practitioner
- Non-violent Communication, Trained Practitioner
- Certified teacher grades 6-12, Arizona Department of Education
- Certified school administrator, Arizona Department of Education
- Proficient Spanish speaker



## PROFILE

Challenging the way we view computing today affects tomorrow's user experiences. Creating these positive experiences are what drive innovation and ingenuity which allow us to think beyond what is possible.

As a software engineer and architect, I have created solutions that challenge our ideas of how we interact with technologies by redefining new ways to present and consume data. The solutions I've architected and developed are part of a SaaS delivery model focusing on applications that work on all devices with an emphasis on scalability and reliability. With a diversified professional career and experience in different areas of the software lifecycle, I can contribute to a team on day one.

I possess a true passion for technology and software development, I am competent in identifying complex use cases and evaluating options to apply effective solutions. Most importantly, I can quickly design and develop efficient software solutions from the ground up with little to no supervision.

Ultimately, I am motivated to grow a team and positively impact others around me through continuously emphasizing a culture of professional growth. Through this growth, we can measure the success of an organization, its team members and its ability to define, create, and achieve technological goals.

## EDUCATION

**Bachelor of Business Administration** May 2005

**Concentration in Management Information Systems (MIS)**

Anderson Schools of Management, University of New Mexico, Albuquerque, NM

## TECHNOLOGIES

<b>Languages</b>	C#, Java, VB.Net, JavaScript, JQuery, T-SQL, JSON, XML, HTML, CSS, Bootstrap
<b>Frameworks</b>	.NET 4.5/Core, ASP.NET, MVC
<b>Databases</b>	Azure SQL, SQL Server 2016/2012/2008/2005, SQL Server Reporting Services, Oracle
<b>Source Control</b>	Visual Studio Team Services, Git, Subversion
<b>Services</b>	Web API, RESTful APIs, WCF, ASMX Web Services, SAML 2.0
<b>Patterns</b>	MVC, MVVM, Repository, Abstract Factory

## PROFESSIONAL EXPERIENCE

**May 2017 - Current**

**Chief Technology Officer**

**Improvement Assurance Group - Thornton, CO**

- Responsible for full lifecycle development and management of the LUCA software application, an MVC continuous improvement web application platform.
- Gather client feedback to organize sprints for enhancements to the LUCA platform.



- Develop new software modules, design new UX features, and manage the technology team to meet the needs of the LUCA platform.
- Represent the technical capability and vision of Improvement Assurance Group and work with the company's partners to develop data integrations.

**Technologies Used:** C#, Microsoft Azure Platform (SQL, Azure Functions, Services), WebAPI, Tableau Js API, EntityFramework, Bootstrap, JQuery, third-party JavaScript libraries for HTML5 charting

### **October 2013 – April 2018**

#### **Application Systems Engineer 5**

##### **Wells Fargo Bank, N.A. – Chandler, AZ**

- Responsible for full lifecycle development of the retail branch inventory and device health monitoring systems.
- Tasked with providing product road maps and coordinating software releases.
- Architected and developed new software strategies for collecting and aggregating both inventory and device health data in a high transaction environment.
- Implemented software development best practices in my group for version control, release strategies, data collection and data warehousing strategies.
- Cultivated a developer culture and facilitated code reviews for the team.

**Technologies Used:** C#, JavaScript, JQuery, MVC 5, Web API, SQL Server 2008, T-SQL

### **August 2010 – October 2013**

#### **Technical Lead**

##### **Infinity Software Solutions - Scottsdale, AZ**

- Technical lead responsible for managing development resources, creating the technical roadmap and architecting solutions to create new revenue streams.
- Responsible for designing, developing and testing software components written in C# and VB.Net on the .Net 4.5 framework.
- Served on multiple projects as the company's technical lead tasked with managing software lifecycles, milestones, expectations and deadlines and communicating the company's development efforts.
- Served as solution architect and developer for proprietary web service integration between the HRIS system and third-party payroll providers.
- Designed and developed a proprietary single sign on (SSO) solution for third party information systems to connect with the HRIS.
- Identified and implemented best practices and development policy.

**Technologies Used:** VB.Net, C#, Visual Studio 2013, SAML 2.0, Windows Identity Framework, SQL Server 2012, WCF, Asp.Net 3.5, JavaScript, Asp.Net AJAX, T-SQL, IIS 7, CSS

### **October 2009 - August 2010**

#### **Systems Engineer IV**

##### **Technisource Inc. - Wells Fargo Bank, N.A. - Chandler, AZ**

- Developed a remote image solution utilizing the .Net 3.5 framework, WCF and Silverlight that enables Wells Fargo to image and re-image computers on the bank network to Windows 7 and predefined build specifications.
- Created a WCF application service network to enable a Silverlight application to control remote machines as well as mine inventory data.
- Designed and developed ASP.Net utility applications used for second level support including applications used for computer inventory, Active Directory integration, performance reporting and resource management.
- Responsible for integrating best practices, architectural design and coding standards to the development team.

**Technologies Used:** C#, Visual Studio 2008 Team System, WCF, Silverlight 3, ASP.Net 3.5, SQL Server 2005/2000, JavaScript, ASP.Net AJAX, T-SQL, LINQ, ADO.NET, IIS 6.0, CSS

### **December 2008 – August 2009**

#### **.NET Developer**

#### **FLEXTIME Limited – Dublin, Ireland**

- Responsible for designing and developing in C#, .NET enhancements to the company's flagship web based product Vision Time used for time recording and attendance.
- Coordinated a migration release for the first .NET based version of the Vision Time application.
- Developed a .NET 3.5 Windows application used to integrate with an XPocket hardware module used for time recording and attendance.
- Designed and developed a service based product authentication key workflow to authenticate software from remote customer sites.
- Proactive in researching and integrating best practices and new technologies into the development team for continued scalability and growth.
- Responsible for addressing and developing solutions to user requests as well as software application bugs.

**Technologies Used:** C#, Visual Studio 2008 Team System, WCF, ASMX Web Services, Asp.Net 3.5, SQL Server 2005/2000, JavaScript, ASP.Net AJAX, T-SQL, LINQ, ADO.NET, ASP, IIS 6.0, CSS

### **March 2008 – October 2008**

#### **Senior .NET Developer Consultant**

#### **Robert Half Technology – Thornburg Mortgage – Santa Fe, New Mexico USA**

- Utilizing Visual Studio 2008 Team System, I developed an ASP.Net C# enterprise application module to execute and expedite mortgage loan bank wire transfers.
- Architected and developed a high visibility, enterprise wide mortgage loan securitization application leveraging .NET 3.5 Win Forms, Windows Communication Foundation, SQL Server 2005 and BizTalk in a highly service oriented architecture.
- Responsible for taking business requirements and developing a functional production ready application under strict deadlines.



- Implemented a LINQ based data access structure in a distributed application environment and leveraged Microsoft Ajax Extensions for improved performance and application scalability.
- Developed and coordinated release documentation as well as functional and design specifications during the development lifecycle.
- Utilizing an agile development plan, our development team performed effectively in a distributed team environment meeting deadlines, exceeding expectations and delivering a quality software product.

**Technologies Used:** C#, Visual Studio 2008 Team System, WCF, ASMX Web Services, ASP.Net 3.5, SQL Server 2005, JavaScript, ASP.Net AJAX, XML, T-SQL, LINQ, ADO.NET, IIS 6.0, CSS, Telerik RAD Controls ASP.NET/Win Forms

### **July 2007 - Sep 2008**

#### **.NET Web Developer Contractor**

##### **Robert Half Technology – Sun Health Care – Albuquerque, New Mexico USA**

- Responsible for the development of an enterprise-wide ASP.Net 2.0 C# web application used for patient care center facilities.
- Developed a SQL Reporting Adhoc Dashboard interface utilizing ASP.Net 2.0, C# and SQL Server 2005 used for intelligent dynamic reporting.
- Development in Visual Studio 2005 and SQL Server 2005.
- Successfully developed the business and presentation layers of this application utilizing XML web services, ASP.Net AJAX, Infragistics Net Advantage 2007 Volume 1 controls and a dynamic data-driven architecture.
- Tasked with meeting customer deadlines and providing project updates and client demos.
- Accountable and provided insight on the development of the application as well as areas for improvement and scalability.

**Technologies Used:** C#, Visual Studio 2005 Team System, ASMX Web Services, ASP.Net 2.0, SQL Server 2005/ Reporting Services, JavaScript, ASP.Net AJAX, T-SQL, ADO.NET, IIS 6.0, XHTML, CSS, Infragistics Net Advantage 2007 Volume

### **October 2007 - February 2008**

#### **Arizona Department of Economic Security – Division of Developmental Disabilities**

##### **KVG Consultants – Phoenix, Arizona USA**

- Innovative ASP.Net C# developer tasked with maintenance as well as new development on an enterprise wide, service oriented web application.
- Development utilizing Visual Studio 2003 and SQL Server 2000.
- Responsible for developing modules in an object oriented web development environment.
- Actively creating a migration plan in efforts to begin a full migration of the .NET 1.1 FOCUS web application to .NET 2.0.

**Technologies Used:** C#, Visual Studio 2003, ASMX Web Services, VB.NET, ASP.Net 1.1, SQL Server 2000, JavaScript, T-SQL, ADO.NET, IIS 6.0, HTML, CSS

### **January 2007 - June 2007**

### **.NET Developer**

#### **Ortiz Consulting LLC – Web Application Development – Albuquerque, New Mexico**

- Successfully architected, developed and deployed an ASP.Net 2.0 Vb.Net, enterprise level production management system used for a high value art dealer in Las Vegas, NV.
- Experience with full software development lifecycle in two Asp.Net web applications.
- Development in Visual Studio 2005 and SQL Server 2005.
- Created an ASP.Net 2.0 VB.Net web application used for online cattle tracking inventory management for a Texas based cattle broker.
- Integrated XML web services as a standard for all future web development at Ortiz Consulting.
- Identified ASP.Net AJAX as an integral technology needed for end user experience and incorporated this technology into new and existing production applications.
- Maintained existing production level web applications developed in VB.Net.

**Technologies Used:** C#, Visual Studio 2005 Team System, ASMX Web Services, VB.NET, ASP.Net 2.0, SQL Server 2005/2000, JavaScript, ASP.Net AJAX, T-SQL, ADO.NET, IIS 6.0, XHTML, CSS

### **April 2006 – January 2007**

#### **Software Developer**

#### **SolutionWerx, Inc. – Software Application Development – Albuquerque, New Mexico**

- Responsible for designing, developing and testing both new and existing .NET application modules in accordance with software requirement documentation.
- Served as project lead for two projects delegating software development tasks, financial and team resources and creating software requirement documentation in accordance with client criteria and feedback.
- As project lead, successfully released latest version of enhanced application, ETMS v5.2.2 into production for Los Alamos National Laboratories Technology Transfer Division.
- Proven experience coding .NET applications in large scale production environments at Los Alamos National Laboratories.
- Accomplished object oriented developer primarily working with VB.Net and ASP.Net in the .NET 2.0 framework utilizing Microsoft SQL Server 2005 and SQL Reporting Services 2005 to create high level business intelligence applications and reports.
- Demonstrated success in commercial website development by creating two ASP.Net CMS's for private sector firms.
- Experience creating stored procedures in both SQL and PL/SQL for both Microsoft SQL Server 2000/2005 and Oracle database schemas consuming data through web services.



**Technologies Used:** C#, Visual Studio 2005 Team System, ASMX Web Services, VB.NET, ASP.Net 2.0/1.1, SQL Server 2005/2000, JavaScript, ASP.Net AJAX, T-SQL, ADO.NET, IIS 6.0, XHTML, CSS, Infragistics Net Advantage 2003

**August 2005 – March 2006**

**Programmer/Analyst I**

**Albuquerque Public Schools – Information Technology – Software Development - Albuquerque, New Mexico**

- Technical lead for the submission of state mandated district reporting.
- Responsible for the technical aspects used for accurately reporting public school district information to the Public Education Department for the state of New Mexico.
- Coordinated with Albuquerque public schools charter schools to ensure data integrity and accuracy utilizing multiple Microsoft Access databases.
- Tasked with querying Access relational databases and reports to adhere to the changes in requested information from the Public Education Department.
- Designed and implemented a .NET intranet interface utilizing Visual Studio 2003 to efficiently expedite the current process for reporting state mandated data.

**Technologies Used:** C#/VB.NET, Visual Studio 2003 Team System, ASP.Net 3.5, MS Access, JavaScript, ADO.NET, HTML, CSS

**September 2005 – January 2006**

**Lead Programmer - Website Designer**

**ArtGallery 66 – Independent Website Designer – Bernalillo, New Mexico**

- Responsible for graphic design, web based application programming (.NET) using Visual Studio 2003 and complete site content integration of an Ecommerce art gallery.
- Constructed a web based Microsoft Access backend database to house art gallery inventory.
- Collaborated with art gallery operating partners for initial website technical specifications as well as innovative procedures for online website functionality.
- Coordinated training for art gallery's operating partners for complete use of website tools and maintenance functions.
- Provided installation and support of complete wireless network for the art gallery including: networked drives, printers, peripheral devices and email.

**Technologies Used:** C#/VB.NET, Visual Studio 2003 Team System, ASP.Net 3.5, MS Access, JavaScript, ADO.NET, HTML, CSS

**May 2004 – June 2005**

**Information Technology Intern (Internship)**

**City of Albuquerque – Information Technology – Water Utility - Albuquerque, New Mexico**

- Coded, tested and deployed C# .NET web based applications using Visual Studio 2003 based on technical requirements to contribute towards the Geographical Information Systems department's ongoing city water web development project.

- Development done in Visual Studio 2003.
- Supported the City of Albuquerque – Water Utility Department with the installation and integration of new equipment, machines, hardware and software to meet specifications and needs.
- Responsible for resolving computing needs of non-technical clients.
- Diagnosing hardware and software problems and replacing defective components.
- Conferring with network users about how to solve existing system problems thus actively searching for ways to assist internal clients.

**Technologies Used:** C#, Visual Studio 2003 Team System, ASP.Net 1.1, MS Access, JavaScript, ADO.NET, HTML, CSS

## REFERENCES

Available Upon Request

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**Annabella M. Gallagher, M.S.**


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**Contact Information**

Email Address: Annabella.Gallagher@asu.edu  
 Phone number: 480-658-7547 (c)  
 Mailing Address: T. Denny Sanford School of Social and Family Dynamics  
 The Arizona State University  
 850 S Cady Mall, Room 205  
 Tempe, AZ 85281  
 Mail Code: 3701

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**Education**

The Arizona State University T. Denny Sanford School of Social and Family Dynamics <i>Ph.D., Family and Human Development</i> , Expected May 2020 <i>Specialization in Measurement and Statistical Analysis</i> (completed Dec. 2018) <i>Comprehensive Examination</i> completed February 2019	2014- current
The Arizona State University T. Denny Sanford School of Social and Family Dynamics <i>M.S., Family and Human Development</i> Thesis: " <i>Experiences of Relational Aggression in Adolescent Sibling Relationships: Prospective Links to Perceived Competence</i> " Committee: Drs. Kimberly Updegraff, Becky Ladd, and Marilyn Thompson	2016
The Pennsylvania State University, Brandywine <i>B. S., Human Development and Family Studies</i> Minor in <i>Civic and Community Engagement</i> Certificate in <i>Youth Development and Social Justice</i> Thesis: " <i>Predictors of dating violence among college students</i> " Cumulative GPA: 3.95 Graduated with Highest Distinction	2012

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**Honors and Awards**

ASU Graduate and Professional Student Association Individual Travel Grant	2019
Recipient of I-Corps Customer Discovery Grant	2018
Recipient of the CLAS Doctoral Fellowship for First Generation Students	2017
ASU Graduate and Professional Student Association Individual Travel Grant	2017
ASU Graduate Travel Grant	2017
Ruth Cowden Memorial Scholarship Endowment	2016
Nominated for CLAS Graduate Excellence Fellowship for First Generation Students	2016
ASU Graduate and Professional Student Association Individual Travel Grant	2016
ASU Graduate Travel Grant	2016
University Graduate Fellowship	2014-2017
Ruth Cowden Memorial Scholarship Endowment	2014
Penn State Brandywine Class Pride Award for Excellence in Research	2012
Anita and David Lipson Scholarship	2012
Penn State Brandywine Top Research Award in Social Sciences	2012
Undergraduate Research Conference Travel Grant	2012
Penn State Brandywine Undergraduate Student Research Award	2012
Phi Kappa Phi Honor Society	2012

Penn State Brandywine Academic Excellence Scholarship	2011-2012
Penn State Brandywine Academic Achievement Award	2011-2012
Suburban West Realtors Association Scholarship	2010-2011
Penn State Brandywine's Dean's List	2010-2012

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### Research Interests

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Adolescent development  
 Romantic relationships in adolescence  
 Sibling relationships and family processes  
 Etiology of aggressive behaviors  
 Development and evaluation of intervention & prevention programs  
 Measurement and statistical analyses

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### Research Experience

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<p><b>Graduate Research Assistant</b>  <i>ASU Siblings Are Special Project (SIBS)</i>          The Arizona State University, Tempe          College of Liberal Arts and Sciences          Administered sibling intervention to elementary school children; Generated control curriculum and training manual; Trained staff on control program implementation; Survey construction; Data collection; Intervention program implementation; Mentored, trained, and supervised undergraduate students.</p>	2018- current
<p><b>Applied Data Analysis for Collective Impact Intern &amp; Independent Consultant</b>  <i>Valley of the Sun United Way, Thriving Together Initiative</i>          Phoenix, Arizona          Identify best practices to inform interventions for cradle-to-career milestones; Present material to project teams and Director; Contributed to the development of a college preparation intervention; Prepare intervention materials; Data management and analysis; Participation in <i>Tableau</i> training; Data preparation for <i>Tableau</i> software; Construct data visualizations in <i>Tableau</i> for cradle-to-career milestones.          Please visit the link below to view the <i>Thriving Together Data Center</i> constructed in collaboration with Dr. Alexander Kurz: <a href="http://www.thrivingtogetheraz.org/data-center/">http://www.thrivingtogetheraz.org/data-center/</a></p>	2016- current
<p><b>Graduate Research Assistant</b>  <i>The Arizona Twin Project (ATP)</i>          The Arizona State University, Tempe          Developmental Psychology Department          College of Liberal Arts and Sciences          Emotion Coding Team Leader; Data management; Codebook Development; Data Analyses; Supervision of undergraduate research assistants in the emotion coding of parent and child task videos.</p>	2016- 2017
<p><b>Graduate Research Assistant</b>  <i>The Sanford Harmony Program (SHP)</i>          The Arizona State University, Tempe          T. Denny Sanford School of Social and Family Dynamics          Prepared and collected evaluation data on the Sanford Harmony Program; Data management; Data Analyses; Codebook Development; Manuscript Preparation; Mentored and supervised undergraduate research assistants. Participation in data collections for other related projects.</p>	2014- 2016



<p><b><i>Independent Consultant</i></b>  <i>Committee for Children (CFC)</i>            Seattle, Washington            Conducted and prepared literature reviews for research scientists to inform and create evidence-based social and emotional learning curriculum; Made recommendations for best practices.</p>	<p>2013- 2018</p>
<p><b><i>Research Assistant</i></b>  <i>Brandywine Child Development Lab</i>            The Pennsylvania State University, Brandywine            Under the direction of Dr. Jennifer Zosh            Completed Penn State's Online Reporting Child Abuse Training; Recruited participants and obtained informed consent; Administered behavioral testing with 24- to 48-month-old participants.</p>	<p>2013</p>
<p><b><i>Undergraduate Research Student</i></b>  <i>Department of Human Development and Family Studies</i>            The Pennsylvania State University, Brandywine            Under the supervision of Dr. Tia Kim            Designed a study examining the predictors of intimate partner violence among college student; Applied for IRB approval; Recruited participants; Collected data; Data analyses: Conference and manuscript preparation.</p>	<p>2010- 2012</p>
<p><b><i>Research Assistant</i></b>  <i>Department of Human Development and Family Studies</i>            The Pennsylvania State University, Brandywine            Under the direction of Dr. Tia Kim            Completed Institutional Review Board training.            Conducted offsite data collection for the Delaware County Regional Career Education Partnership for a needs assessment on how to successfully re-engage high school dropouts into the educational process; Examined the gender differences in moral identity and aggression; Participated in literature review; Data analyses; Conference and manuscript preparation.</p>	<p>2010</p>

### **Teaching Experience**

<p><b><i>Online Instructor</i></b>            The Arizona State University, <i>iCourse and ASUOnline</i>            Courses:</p> <ul style="list-style-type: none"> <li>• <i>Infant and Toddler Development in the Family</i> (Summer 2019)</li> <li>• <i>Research Methods</i> (Summer 2019)</li> <li>• <i>Research Methods</i> (Summer 2018)</li> <li>• <i>Introduction to Parenting</i> (Summer 2017)</li> <li>• <i>Research Methods</i> (Summer 2016)</li> </ul> <p>Development of course materials; Present material; Provide feedback; Grade assignments.</p>	<p>2016- current</p>
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**Online Teaching Assistant**

The Arizona State University, *ASUOnline* Master's Sociology Program  
Course:

2016-  
current

- *Social Change*
- *Diversity and Society*
- *Adolescent Development*
- *Diversity in Families*
- *Human Development*
- *Sociological Theory*
- *Social Change and Adjustment*

Course preparation; Graded assignments; Provided student feedback.

**Teaching Assistant**

The Arizona State University  
Course:

2015-  
current

- *Human Development*
- *Personal Development*

Presented lecture material; Conducted office hours; Graded in-class and writing assignments; Proctored exams; Constructed Student Academic Reports; Maintained Blackboard course sites.

**Teaching Assistant**

The Pennsylvania State University, Brandywine  
Course: *Adolescent Development*

2012

Presented lecture material; Conducted office hours and review sessions for undergraduate students; Graded in-class assignments and exams.

**Statistical Training & Workshops***Quantitative Courses:*

Multiple Regression; Analysis of Variance; Exploratory and Confirmatory Factor Analysis; Structural Equation Modeling; Regression Models for Multilevel and Non-Normal Data; Latent Growth and Mixture Models using Longitudinal Data; Messy Data in SEM; Mediation Analyses.

*Quantitative Workshops:*

Latent Class Analysis (*Penn State University*); Modern Missing Data Methods (*University of Arizona*); Data Management (*Arizona State University*); Scholarly Writing (*Arizona State University*); Data Management: Recommended Practices (*University of Nebraska-Lincoln*); Statistical Graphics (*Arizona State University*).

*Software Proficiency:*

*SPSS, SAS, MPlus, Excel, & Tableau Software: Business Intelligence and Analytics.*

*Research Workshops:*

NSF Innovation Corps (I-Corps; *Arizona State University*).

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**Peer Reviewed Publications**


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- Gallagher, A. M.**, Updegraff, K. A., Padilla, J. & McHale, S. M. (2018). Longitudinal associations between sibling relational aggression and adolescent adjustment. *Journal of Youth and Adolescence*, 47(10), 2100-2113. doi: 10.1007/s10964-018-0871-0
- Andrews, N. C. Z., Martin, C. L., & **Gallagher, A. M.** (2016). On the association between self-reported own- and other-gender similarity and the use of physical and relational aggression in sixth grade children. *Archives of Sexual Behavior*, 45, 1-10. doi: 10.1007/s10508-015-0685-z

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**Manuscripts in Preparation**


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- Gallagher, A. M.**, Updegraff, K. A., Padilla, J., & McHale, S. A. (in preparation). Longitudinal growth of sibling relational aggression in adolescence: Associations with youth and sibling dyad characteristics.
- Gallagher, A. M.**, Oro, V., Lemery-Chalfant, K., & Doane, L. (in preparation). Predicting sibling relationship qualities in childhood: Genetic and environmental contributions.
- Gallagher, A. M.**, Ha, T., & Updegraff, K.A. (in preparation). The use of technology in adolescent romantic relationships: A systematic review.

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**Presentations**


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- \***Gallagher, A. M.**, Updegraff, K. A., Padilla, J., & McHale, S. A. (2019, March). *Sibling Relational Aggression: Developmental Change and Associations with Family Relationship Dynamics in Adolescence*. Poster presented at the biennial meeting of the Society for Research in Child Development, Baltimore, Maryland.
- \***Gallagher, A. M.**, Lemery-Chalfant, K., Beekman, C., & Doane, L. (2017, April). *Predicting Sibling Relationship Qualities in Childhood: Genetic and Environmental Contributions*. Poster presented at the biennial meeting of the Society for Research in Child Development, Austin, Texas.
- Sang, S., **Gallagher, A. M.**, Updegraff, K. A., Rodriguez De Jesus, S., Kuo, S., McHale, S., & Umana-Taylor, A. (2017, April). *I Look Up to You: Younger Siblings' Modeling and Educational Outcomes*. Paper presented at the biennial meeting of the Society for Research in Child Development, Austin, Texas.
- Liu, Y., **Gallagher, A. M.**, Roberto, A. J., & Shafer, M. S. (2017, April). *Exploring substance-abuse treatment providers' communication with clients about medication-assisted treatment: A test of measurement and structural invariance of the Theory of Planned Behavior*. Poster presented at the 4th Biennial D.C. Health Communication Conference (DCHC), Fairfax, VA.
- \***Gallagher, A. M.**, Updegraff, K. A., McHale, S. M., & Wheeler, L.A. (2016, April). *Adolescent sibling relational aggression: Prospective links to self-worth, and peer and romantic competence*. Poster presented at the biennial meeting of the Society for Research on Adolescence, Baltimore, Maryland.

- \***Gallagher, A. M.**, Updegraff, K. A., McHale, S. M., & Wheeler, L.A. (2015, December). *Relational aggression in sibling relationships: Prospective links to self-worth, and peer and romantic competence in adolescence*. Poster presented at the 2015 Institute for Social Science Research Poster Contest, Tempe, AZ.
- \***Gallagher, A. M.**, & Kim, T. E. (2012, April). *What influences dating violence?* Poster presented at the 2012 Pennsylvania State Regional Undergraduate Research Symposium, Media, PA.
- \***Gallagher, A. M.**, & Kim, T. E. (2012, April). *The impact of acceptability on dating violence*. Poster presented at the Pennsylvania State University, Brandywine's Exhibition of Undergraduate Research Enterprise and Creative Accomplishment, Media, PA.
- \***Gallagher, A. M.**, & Kim, T. E. (2012, April). *Predictors of dating violence among college students*. Poster presented at the 23<sup>rd</sup> Annual St. Joseph's University Sigma Xi Student Research Symposium, Philadelphia, Pa.
- \***Gallagher, A. M.**, & Kim, T. E. (2012, March). *Gender differences in moral identity and aggression*. Poster presented at the biennial meeting of the Society for Research on Adolescence, Vancouver, BC Canada.
- \***Gallagher, A. M.**, & Kim, T. E. (2011, April). *Moral identity and its impact on aggression*. Poster presented at the 22<sup>nd</sup> Annual St. Joseph's University Sigma Xi Student Research Symposium, Philadelphia, Pa.
- \***Gallagher, A. M.**, & Kim, T. E. (2011, April). *Gender differences in the relation of identity and aggression*. Poster presented at the Pennsylvania State University, Brandywine's Exhibition of Undergraduate Research Enterprise and Creative Accomplishment, Media, PA. Presentation may be heard on Penn State Brandywine's website at: <http://brandywine.psu.edu/Academics/eureca2011.htm>
- \***Gallagher, A. M.**, & Kim, T. E. (2010, April). *Understanding aggression: Do self and identity matter?* Poster presented at the Pennsylvania State University, Brandywine's Exhibition of Undergraduate Research Enterprise and Creative Accomplishment, Media, PA.

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\*Presenting Author

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**Community Service**

<b>Dog Walker/Volunteer</b> , Arizona Humane Society, Campus for Compassion, Phoenix, AZ	2017
<b>Volunteer</b> , Child Crisis Center, Mesa, AZ	2015
<b>Undergraduate Peer Reviewer</b> , <i>Undergraduate Journal of Service Learning and Community-Based Research (UJSL&amp;CBR)</i>	2012
<b>Lead Organizer</b> , Penn State Brandywine Children's Book Drive for Philadelphia Reads, The Pennsylvania State University, Brandywine	2012
<b>Invited Speaker</b> , Student Representative at Scholarship Luncheon, The Pennsylvania State University, Brandywine	2012
<b>Panel Member</b> , The Undergraduate Research Panel, The Pennsylvania State University, Brandywine	2012
<b>Invited Speaker</b> , Presented information on HDFS undergraduate research at Penn State Brandywine to the Penn State Advisory Board	2012

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**Memberships and Professional Affiliations**

<b>Member</b> , Society of Research on Adolescence (SRA)	2015-current
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<b>Member</b> , Family and Human Development Graduate School Association (GSA), The Arizona State University	2014-current
<b>Member</b> , Penn State Alumni	2012-current
<b>President</b> , Undergraduate Research Club at The Pennsylvania State University, Brandywine	2012
<b>Member</b> , Psychology Club at The Pennsylvania State University, Brandywine	2012
<b>Member</b> , Society of Research on Adolescence (SRA)	2015-current

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### **Researcher Biography**

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Annabella M. Gallagher is a doctoral student in the T. Denny Sanford School of Social and Family Dynamics at Arizona State University. She holds a master's of science degree in Family and Human Development from Arizona State University. Her research interests include adolescent development, family and adolescent relationship dynamics, the etiology of aggressive behaviors, and the development and evaluation of prevention and intervention programs. Further, she specializes in Measurement and Statistical Analyses, and holds extensive experience working with large-scale data sets and conducting literature synthesis. Annabella has served as the Applied Data Analysis for Collective Impact Intern at *The Valley of the Sun United Way* since 2016. While at United Way, Annabella has prepared best practice briefs to inform intervention efforts, as well as contributed to the development of the *Thriving Together Data Center*, which includes the development of data visualizations for the selected cradle-to-career milestones. Upon graduation, Annabella plans to continue her research efforts to inform applied efforts in the promotion of positive human and family development.

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