Northern Illinois University Proposal for

Illinois Report Card Support, Maintenance, and Enhancements RFSP #22032885

Submitted to:
Illinois State Board of Education
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Submitted on behalf of Northern Illinois University

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Executive Summary

Northern Illinois University (NIU) is pleased to submit a proposal for administration of the Illinois Report Card for the 2014-15 school year. Since the launch of a report card prototype in early 2002, NIU has worked closely with Illinois educators, parents, and policy makers to provide meaningful data for improving students' academic achievement. The Illinois State Board of Education contracted with NIU beginning in 2004 to publish an online report card for multiple audiences, and that service has continued for more than ten years. In 2013, ISBE worked with many stakeholders statewide and NIU to produce the new Illinois Report Card during an intensive nine-month process. The RFSP provides a most welcome opportunity to further improve the Illinois Report Card's usefulness to the important audiences who have the power to improve the state's educational system and thus strengthen Illinois' competitiveness in the global marketplace.

Goal of the Project: To provide multiple Illinois audiences with data they can use to improve schools through the Illinois Report Card. Providing actionable data, or "News You Can Use," especially for audiences with differing needs, presents a challenge with which many states and local schools have been struggling for years. We believe that the objectives and activities summarized in this RFSP will enable ISBE to achieve significantly greater recognition and enhanced understanding of the needs of public education through collaboration with NIU and leading statewide stakeholders.

Objective 1: Support and maintain the Illinois Report Card

Working closely with ISBE leadership, NIU will continue to perform the support and maintenance tasks necessary to administration of the 2014 Illinois Report Card, both those required historically and those added in the RFSP. The brief summary provided here is detailed in the proposal's narrative.

Activity 1 – Data for 2013-14 will be added to Student Academic Progress, School Environment, Student Characteristics, and Highlights features for the Educator Preview starting October 15, 2014, and for public release on October 31, 2014. The new metrics for 2014 will be incorporated into the site with consistent style and coherent functionality.

Activity 2 - NIU will provide access to actionable data through intelligent arrays of data that present basic metrics at a single click for novice users and double clicks for drilling down into more advanced data, thus fulfilling ISBE's goals of serving both general and advanced users.

Activity 3 – NIU will improve search, navigation, and selection functions in order to increase the meaningfulness, accessibility, and contextuality of displays. All such changes will be proposed to ISBE and approved prior to development and implementation.

Activity 4 – NIU will connect information supplied by user surveys with data from Google Analytics to improve user analytics available to ISBE and enhance the agency's understanding of how the site is being used and how it might be improved.

Activity 5 – NIU will standardize more fully the displays and functions across the site to ensure that style sheets, spacing, and tools are coherent.

Activity 6 – NIU will make a smooth transition to a new, restructured, and redirected Report Card Team, focusing on site administration and enhancement, while saving the time, effort, and costs needed to move the entire site to a new host site and vendor.

Activity 7 – NIU will provide efficient completion of ISBE goals and timelines, and assure effective collaboration with ISBE staff and statewide stakeholders.

Objective 2: Design and implement enhancements to both the Online and the At-a-Glance Report Cards

Through a subcontract with Collaborative Communications Group (see below), NIU proposes to provide ISBE with the resource team to implement major enhancements to the Illinois Report Card web site.

Activity 1 – The NIU team will conduct ongoing reviews of leading state and local district report cards across the nation in order to identify state-of-the-art data visualization for both overall presentation and for specific data and screen displays.

Activity 2 – The NIU team will redesign icons and other graphics to enhance screen view aesthetics for enriched user experience.

Activity 3 – NIU team will improve compatibility and responsive design for mobile devices, proposing changes to navigation, screen displays, and tools as needed to provide access to the full site for mobile users.

Activity 4 – The NIU team will offer prortunities for users to give feedback that will be used to improve usefulness of the site, building in both passive and interactive user analytics and evaluation feedback and connecting the information retrieved with current and historical data from Google Analytics.

Activity 5— NIU will streamline user functionality for the Principal Entry Form and the At-a-Glance Highlights, improving the user experience and reducing the burden on administrators who supply this information.

Activity 6 – The NIU team will propose a complete redesign of the At-a-Glance reports for all 7-12 templates for the purpose of conveying actionable data without overwhelming users.

Activity 7 – The NIU team will propose a redesign for the Highlights presentation on the At-a-Glance reports, enabling users to gain a more complete view of a school or district.

Activity 8 – The NIU team will work to provide for "Undetermined Enhancements" and other rethinking that may occur mid-project.

The NIU Team's Capacity to Deliver the Activities Successfully

The widely-praised site at http://illinoisreportcard.com is evidence of NIU's capacity to meet and exceed the expectations of this RFSP. The team at NIU worked with the Illinois State Board of Education to produce a new vision for a state report card in 2013, and did so on time and on budget. The NIU capacity for this RFSP is significantly enhanced in two ways. First, a certified, experienced Project Management Professional will oversee all aspects of the project and ensure compliance with ISBE's requirements. The Project Manager will utilize a comprehensive system to ensure problem resolution, cost control, timeliness, budget management, customer relations, and reporting. Second, NIU will subcontract with Collaborative Communications, Inc., to work on web design and data displays. Collaborative Communications is a public education-focused firm that specializes in designing and developing dynamic websites and digital tools

that engage public audiences in using data to improve education. Developers of the award-winning *LearnDC.org* website, Collaborative Communications will bring nationally-recognized talent, ideas, skills, and energy to the Illinois Report Card.

Benefits for ISBE from the NIU Team Partnership

The NIU team is positioned to move forward aggressively to meet and exceed ISBE's expectations for achieving the goals and requirements specified in the RFSP. NIU is uniquely qualified to support, maintain, and enhance the Illinois Report Card.

- Long-term collaboration NIU has worked closely with ISBE on a number of projects for an extended period of time. The experience of this strong, largely successful relationship allows the Report Card Team to understand and anticipate the agency's needs and to respond with flexibility.
- Cost-savings Selecting NIU as the vendor for the Illinois Report Card will eliminate the need for a complex, time-consuming, and expensive transition to a new host site.
- Expertise NIU's team presents unique qualifications in both the existing staff who will
 be retained on the project and in the additions of a project manager and Collaborative
 Communications, all of whom demonstrate an appetite for excellence and for
 innovation. The NIU staff's is experienced and proven in areas of web design, graphical
 design and data display, online tool development, and understanding of the needs of
 parents, educators, and policy makers. Being located in a university gives the NIU team
 access to new talent, skills, and energy offered by undergraduate and graduate students
 who are eager to work on the report card.
- Dependable Technical Infrastructure Over ten years, only two major incidents have occurred to interfere with report card services – an earthquake and a fire. In both cases, services were quickly restored. Outages are so rare that the report in this proposal shows 100% reliability for the website, a standard matched by very few organizations.
- Network NIU staff have worked closely with education organizations, parent groups, individual schools and districts, and state and national partners. The network of interested, long-standing partners is a considerable asset.
- Reputation The NIU collaboration with ISBE has been known and appreciated by educators and district leadership throughout the state.

We would value the opportunity to see that collaboration continue and become still more successful in making a difference for educators and their students in Illinois.

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The RFSP for the Illinois Report Card presents ambitious goals and a tight delivery time frame. This proposal offers to administer the Illinois Report Card for the 2014-2015 school year, providing support and maintenance of the Report Card and designing and implementing enhancements to both the Online and At-a-Glance reports. The Report Card Team at Northern Illinois University (NIU) will use tested, successful solutions that will effectively meet those goals, including

- Enhanced screen view aesthetics for enriched user experience
- Icon presentations that resonate with both general public and advanced users
- Deeper-dives into actionable data through intelligent arrays of 'double clicks'
- Streamlined user functionality for the Principal Entry Form and At-a-Glance reports
- Improved search, navigation, and selection functions
- Improved accessibility and responsive design for mobile devices
- Leading-edge graphical representations and metrics to enhance site content
- Built-in user analytics and evaluation feedback functionality

As the vendor that currently hosts and maintains the Illinois Report Card and also developed and launched the new Illinois Report Card to ISBE's specifications, the NIU team has the technical foundation and experience to administer the Online and At-a-Glance Report Cards. NIU will restructure the team's design and development capacity to build the enhancements and updates for the 2014 release.

Two additions will enhance the NIU team's capacity for the Report Card project. First, NIU will employ a certified Project Management Professional (PMP) who is experienced and qualified to guide Illinois Report Card planning, goal setting, implementation, and reporting. The project manager will make the report card team even more efficient at meeting project milestones. Several qualified candidates have applied for and are interested in this position.

Secondly, IIRC is partnering on this project with Collaborative Communications Group (Collaborative), a public education focused firm that specializes in designing and developing dynamic websites and digital tools that engage public audiences in using data to improve

education. Collaborative has a proven record in bringing innovative and targeted solutions to bear in the areas of visualization, data design and display, design audits, site analytics, and user engagement. Indeed, Collaborative's interactive work has won numerous awards for its accurate, informative and accessible qualities. Collaborative is also the lead contractor for the award-winning <code>LearnDC</code> initiative (www.learndc.org), which includes among other targeted information and resources about education for educators, families and communities, the District of Columbia's cross-sector online interactive school report cards (http://www.learndc.org/schoolprofiles). IIRC sought out Collaborative Communications to benefit from their specific expertise on practical steps to enhance user engagement and the visual design of the Online and At-a-Glance Report Cards.

In addition to the vital partnership with Collaborative Communications, the NIU team brings a strong record in multiple aspects of web-based, educational data reporting to the table, including the following.

- 1) Ten years of experience developing and implementing web tools and web-based resources built to ISBE specifications to support instructional needs of Illinois educators and schools. To date, NIU project deliverables include Illinois Interactive Report Card, IllinoisReportCard.com, Rising Star, MyIIRC, ISBE's enhanced school/district reports, individual student performance data, and more.
- 2) Proven record of supporting ISBE's mission by working with schools, delivering services reliably, and responding to questions and concerns.
- 3) Experience with professional development and presentations NIU report card team associates have delivered hundreds of workshops, professional development trainings, and conference presentations at the district, state, and national levels
- 4) Experience working with agency management the NIU team knows the staff of ISBE and has worked with them in transmitting data efficiently and aligning it for web presentations.
- 5) A record of effective collaboration with important education stakeholders such as the Illinois Principals Association, Advance Illinois, Illinois Business Roundtable, Illinois Association of School Boards, and the ISLE project.
- 6) Sensitivity to the need to actively target a broader audience of parents, community members, and other stakeholders, a strong constituency for the future of education that needs accessible, actionable data to help improve schools.

Specifications/Qualifications/Statement of Work

NIU is currently contracted by the Illinois State Board of Education to host, maintain, and enhance the Online Illinois Report Card and At-a-Glance Report. From January, 2013 onwards NIU worked closely with ISBE management and technical staff to implement ISBE's design and contents for the new Online Report card, culminating after six months of intensive effort in the successful launch of the new Online Report Card in October, 2013. NIU assisted ISBE in completely revamping the site, giving it a fresher, cleaner, streamlined look and functionality as compared to the previous generation site. Of particular importance to the new site was the clear, direct presentation of summary information and new data elements ("metrics") specifically targeting a general audience that included parents, teachers, community members, legislators and advocates, information that can facilitate connections on the part of the public between data and actions to improve student outcomes. The NIU team's substantial experience in managing and interpreting vast arrays of school performance data on behalf of ISBE certainly contributed to the success of the new Online Report Card. This team, which is being restructured and refocused for purposes of this project, presents unique qualifications for administration of the Illinois Report Card in 2014-2015.

The knowledge base and solid technical foundation of the NIU team is significant for the Report Card project in another respect. Thanks to NIU's hosting the Online Report Card and At-a-Glance site, the technical transition in Proposed Phase 2, "Transition of Hosting," will be minimized, saving extensive time, effort, and cost. Transfer of code and data and other artifacts to build out and stand up another version of the website will not be necessary since NIU already hosts the site. This will enable NIU, in partnership with Collaborative Communications, to devote its time to design, approval, and implementation of the project plan upon contract award – especially the needed enhancements - during the project's busiest months preceding the October 31 launch of the 2014 Report Card.

An overview of responses to the requirements described in the RFSP is listed below. These items describe overall objectives for the administration and enhancement of the Online Report Card and At-a-Glance reports. The description of individual work pieces to achieve specific RFSP objectives will be found immediately after this list and in the Project Milestones and Project Deliverables Calendars in section 4.1.

- 1. Roll out new metrics on Online Report Card and At-a-Glance of particular interest to general public parents, community leaders, and advocates.
- 2. Attend to consistent and accessible screen features so that colors, design elements, spacing, vertical scrolling, etc., are coherent across the site. This will be all the more important over time as more data elements and enhancements are added.

- 3. Attend to installing standard functionality for all drill-down links, tabs, and buttons. Currently the site has slight variations in design functionality.
- 4. Enhance look and feel, metric tiles, metadata, and graphics presentations and displays throughout the site. The current state is a fine beginning but as content grows, the number of display screens and tools will increase, so a careful planning of expansion is essential.
- 5. Leverage enhanced website analytics to inform ongoing user feedback and related recommendations for overall improvements to the Online and At-a-Glance report cards.
- 6. Enhance functionality and user features of the Principal Entry Form.
- 7. Enhance look and presentation of the Online School Highlights and At-a-Glance reports.
- 8. Maintain close engagement with ISBE on all enhancements for review and approval through regular meetings and milestone reports.

1.2.1.1 Hosting of the Illinois Report Card Website

1.2.1.1.1 Online report card site, sections, functions

The following data about schools and districts is either currently available on the Online Report Card or will be incorporated into the site for the 2013-14 school year with the October release.

1.2.1.1.1 Academic Progress (8 metrics)

These metrics will be maintained and updated for 2014 Online Report Card release:

Student Academic Growth

State Test Achievement

As part of ongoing development of reporting metrics on the 2013 Report Card, NIU added displays for Subgroup Comparisons, including Achievement Gap and Advanced Comparisons

Graduation Rate
Ready for College Coursework
Status

Since ISBE has received an NCLB waiver, the content on the Status tab is likely to change and may need to be renamed. This tab currently holds AYP reports and provides a link to the compliance report card.

Three additional measures of academic progress are scheduled to be added to the 2014 report card. IIRC will work with ISBE to design and build the displays for these metrics in the 2014 release.

Freshmen on Track
High School Readiness
Middle School Students Passing Algebra

The NIU team will present to ISBE for consideration a Student Pathways summary that shows Middle School Students Passing Algebra I, High School Readiness, Freshmen on Track, Ready for College Coursework, Graduation Rate, and, eventually, Post-secondary Enrollment and Need for Remediation. This summary will provide users with a quick view of key metrics for tracking students' progress and will offer animated, double-click features for each metric to be accessible for users wishing to drill down. Collaborative Communications developed a prototype of this summary, which may be found on pages 19-20. It will be customized to the color palette, graphical design, and functionality that are standardized across the Report Card before submission to ISBE for consideration.

1.2.1.1.1.2 School Environment (7 metrics)

These metrics will be maintained and updated for 2014 Online Report Card Release.

5Essentials Survey

The Online Report Card and At-a-Glance report will display the full 5Essentials report for release in October 2014, including color-coded ranking metrics in the 5Essentials pictogram.

Average Class Size Per Pupil Spending Student Mobility Student Attendance Total School Days

NIU will work with ISBE to design and build displays for the following metrics scheduled for introduction in 2014.

Principal Turnover
Teacher Retention
Teacher Attendance

1.2.1.1.3 Student Characteristics (6 metrics)

NIU will maintain and update these metrics for the 2014 Online Report Card release.

Racial/Ethnic Diversity

The pie chart display of Racial/Ethnic diversity has proven difficult to read for schools that enroll many small groups. The NIU team will work with ISBEe to design and build a more readable display such as the horizontal bar graph shown in the At-A-Glance prototype on page 23. Similar visualizations of racial and ethnic diversity are used in report cards in other states.

Low Income Students
Students with Disabilities
Homeless Students
English Learners
Chronically Truant Students

1.2.1.1.4 Highlights (6 metrics)

Highlights in the Online and At-a-Glance Report Cards are populated by school principals using the Principal Entry Form which they can access by logging in to the MyIIRC portal. The NIU team will propose a redesign to improve functionality of the Highlights page and the PEF for both the Online and At-a-Glance Report Cards. The 6 metrics featured in the school Highlights view are all currently available on the Online Illinois Report Card. If ISBE provides data for the School Personnel Resources scheduled for 2014, the NIU team will design a display.

1.2.1.1.2 Technical Architecture of Current Online Report Card

The technical architecture currently in place on the NIU-hosted Online Report Card website is exactly as described in this section. The architecture has functioned well and will be maintained and updated in 2014-2015.

1.2.1.1.3 Site Analytics

NIU currently utilizes Google Analytics on the Online Report Card site to analyze user traffic, screen views, length of time, and other user analytics. All screens are tagged and monthly reports compiled. In 2014-15, NIU will work with Collaborative Communications, a leading consulting practice, to 1) enhance the information about user behavior captured by website analytics, and 2) provide targeted and prioritized recommendations from analysis of user behavior designed to improve use of the website for key stakeholders. Collaborative will significantly enhance the user analytics and user intelligence current embedded in the Online Report Card, combining passive and active data collection and combining these data with insights from user testing and engagement. Collaborative will ensure that ISBE is provided with site analytics that meet and exceed the requirements described in this section of the RFSP, including the linking of user comments with Google Analytics data on patterns of use.

1.2.1.1.4 Search engine optimization

NIU will ensure that the proper URL of the Online Report Card will be returned for users of the leading search engines (Google, Bing, and Yahoo) on the first page of the search results. NIU will partner with Collaborative to manage search engine optimization with an eye to expanding the user base and ease of directly accessing information from search engines. Potential strategies for expanding SEO include enhancing meta tags in page markup to increase the amount of descriptive information available to search engines and social media, creating social links or buttons enabling users to share 'deep' links directly to a single data exhibit, and identification and monitoring of keywords corresponding to searches from target audiences.

1.2.1.1.5 User Survey

The survey presently in place on each page of the Online Report Card generates useful user feedback. NIU will partner with Collaborative to enable ISBE to update the survey and attach user analytics to the survey responses, creating the ability for additional analysis and recommendations for continued enhancement of the survey.

Collaborative will bring energy and expertise to working with IIRC and ISBE to improve and enhance the Illinois Report Card. The Collaborative team has deep experience in designing and developing dynamic websites and digital tools that make data about schools and school districts meaningful and usable for key audiences. Collaborative's engagement will be particularly fruitful in the vital area of site analytics, as their statement below indicates.

Support for Analytics and User Testing/Engagement (Site Analytics 1.2.1.1.3, Search engine optimization 1.2.1.1.4, User Survey 1.2.1.1.5

Collaborative's Approach to User Surveys, Engagement, and Analytics:

Significant intelligence can be gained from passively observing user interaction with a website using a Javascript analytics package. In addition to the out-of-the-box features of a package like Google Analytics, custom events can be developed to track actions like clicking page controls, scrolling, and more. In addition, active user engagement can add significant qualitative detail about the user experience. Rather than an interruptive survey, such active engagement can be embedded in low-cost ways such as in-line questions about the usefulness of a piece of information. With more detailed information about how users are interacting with the online report card, the designers and ISBE will have data to draw upon in understanding user priorities, identifying potential usability issues and making informed design decisions. This can become even more important as the site transitions to becoming fully mobile responsive.

User testing is a critical component of public reporting as it provides proprietary evidence supporting user ability to comprehend and gain value from the data displays. By observing real users in a controlled environment, we gain a nuanced understanding of where they experience challenges and how they respond to design decisions. Similarly, our public engagement has emphasized in-person contact heavily in order to develop early user skills. Giving examples of how the site can be used to answer real questions gives users something to latch onto as they fit what the site provides against their own needs, and those they have yet to discover.

Collaborative's Services to improve User Surveys, Engagement, and Analytics:

Review of existing site feedback and analytics. Consideration will be given to all ways that feedback about the site is currently captured to inform recommendations for improving feedback processes and analytics to improve user experience.

<u>Development of strategic recommendations for improving, enhancing and making meaning of user analytics</u>. The information from the feedback and analytics audit will inform a set of enhancement recommendations and related rationale/metrics.

<u>Usability recommendations for Principal Entry Form</u>. The information from the feedback and analytics audit will inform a set of recommendations to improve the existing principal tool.

<u>Conduct user testing to evaluate data displays.</u> Formal and informal user testing will be used to gather specific evidence about existing and proposed data displays.

<u>Creation of interactive tutorials to proliferate literacy of the tools</u>. Digital tutorials for basic, intermediate and advanced users will increase utility of the data provided in the 2014 Report Card.

1.2.1.1.6 Multi-lingual support

NIU currently has prepared a master data base text file of the Online Report Card in XML, suitable for use in generating multi-lingual support for the Online and At-a-Glance Report Cards in the five languages specified in the RFSP. The XML file will be available to any translation service identified by ISBE who will be responsible for delivering the website content in the five languages. Once ISBE provides the site content in all languages, NIU will provide an easy-to-find, intuitive mechanism for non-English speakers to switch the site to their own language. Collaborative has provided such mechanisms for other states and districts and will assist in the design work. NIU will maintain all site content in the five identified languages.

1.2.1.1.7 Accessibility

The Illinois Report Card site currently complies with World Wide Web Consortium (WC3) accessibility standards. NIU will, in addition, upgrade existing web site functionality to meet requirements of the Illinois Information Technology Accessibility Act (IITAA) accessibility standards, and will seek certification by the IITAA standards.

1.2.1.1.8 Security





1.2.1.1.9 Service Level Requirements

NIU has consistently met the 99.9% uptime requirement, as the following VM report from NIU Information Technology Services indicates.

VM Uptime

Description

This report provides an overview of VMs uptime including VMs with lowest and highest uptime values.

Report Parameters

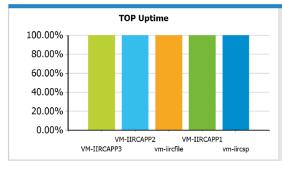
Root Object: Virtual Infrastructure

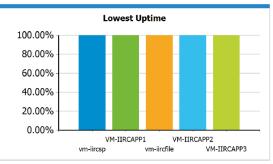
 $\label{eq:Reporting Period: Custom Date Range (10/31/2013 - 4/30/2014)} \label{eq:Reporting Period: Custom Date Range (10/31/2013 - 4/30/2014)}$ $\label{eq:Lepton Date Range (10/31/2013 - 4/30/2014)}$

Grouping: Group by Uptime

Business view: NIU VM Report Groups: IIRC servers

Summary Information





Virtual Machine Uptime

Virtual Machine	Datacenter	Cluster	Host	VM Name	Sum of Uptime (%)
6			Uptime >= 90%		
	SP	Prod01	spesxprd0101.its.niu.edu	VM-IIRCAPP2	99.99%
	SP	Prod01	spesxprd0101.its.niu.edu	VM-IIRCAPP3	99.99%
	SP	Prod01	spesxprd0102.its.niu.edu	vm-iircdb1	99.99%
	SP	Prod03	spesxprd0302.its.niu.edu	vm-iircfile	99.99%
	SP	Prod03	spesxprd0304.its.niu.edu	vm-iircsp	99.99%
	SP	Prod03	spesxprd0304.its.niu.edu	VM-IIRCAPP1	99.99%

Under a new contract, NIU will continue to meet that requirement thanks to the reliable 24/7 infrastructure maintained by the NIU Information Technology Services. ITS maintains all external facing hardware for the Illinois Report Card.

1.2.1.2 Import and maintenance of report card data

NIU will adhere without exception to the requirements for import and maintenance of report card data, for ensuring that data posted on the Illinois Report Card accurately reflects the data provided by ISBE, for utilizing the file formats and metrics specified, and for building out the data base utilizing the RCDTS codes. NIU accepts CSV and Excel formatted files transmitted either as zipped e-mail attachment or uploaded to IIRC's secure FTP server. ISBE might consider

standing up an ODS serve,r so that data feeds can be ingested directly from ISBE source files and refreshed on the web presentation screens of the Online Report Card in real time.

1.2.1.3 Hosting of the Principal Entry Form

NIU currently hosts the Principal Entry Form (PEF) and will continue to do so. Launched in August 2013, the PEF is still evolving. With ISBE approval, NIU will propose, design, and implement enhancements to hosting the PEF that will improve functionality for users. See Section 1.2.2 Enhancements.

<u>1.2.1.3.2 – Authentication Requirements</u>

As the RFSP describes, NIU currently provides access to the PEF through the MyIIRC sign-on system that ensures that only legitimate school staff are allowed to access and modify the contents of the PEF. At this time 850 of the 863 Illinois public school districts are registered on MyIIRC, accounting for a total of 35,207 registered users. NIU will work with ISBE to explore the benefits for Illinois educators in managing access to the PEF through IWAS. If benefits are sufficient, NIU will work with ISBE on implementation.

<u>1.2.1.3.3 – Support for Principal Entry Form</u>

NIU will continue to provide ISBE with the ability to modify the specific categories and subcategories of highlights information collected in the PEF, as well as their presentation on the Online Report Card and the At-a-Glance Report Card.

1.2.1.4 Production of At-a-Glance Report Cards

NIU will propose, design and implement, with ISBE approval, enhancements to production of the At-a-Glance Report Cards. See items 3.1-3.3 in <u>Section 1.4 Milestones</u> and <u>Deliverables</u>, below. See also <u>Section 1.2.2 Enhancements</u>.

1.2.1.5 Help Desk Capability

At NIU, the Report Card Help Desk is staffed 8:00-4:30 daily by Valerie Lorusso, who will continue to provide responsive service to handle inquiries about website technical issues that are forwarded from ISBE's central email address at reportcard@isbe.net. An experienced customer service expert who has earned a devoted following among report card users, Ms.

Lorusso and other NIU Help Desk staff will also respond at the explicit direction of ISBE to inquiries outside of website technical issues.

1.2.2 Enhancements

1.2.2.1 Online Report Card Enhancements

1.2.2.1.1 Visual Design Enhancements

The task of rethinking visual presentation and graphics across a web site with many visual displays where content and design are frequently changing is by no means easy. To help address this critical need, the project subcontractor, Collaborative Communications, will contribute invaluable assistance grounded in a depth of experience in the area of data design and display. Collaborative's audit of the existing website will provide direction for increasing consistency and coherence of colors, fonts, graphic images, and functionality. The NIU team, including Collaborative, will propose enhancements and implement approved changes.

1.2.2.1.2 Enhancements to Data Displays

Data Design and Display (Online Report Card Enhancements 1.2.2.1 and At a Glance Report Card Enhancements 1.2.2.2) Proposed by Collaborative Communications

Collaborative's Approach to Data Design and Display

Public data reporting presents a unique challenge for information design. Users will arrive at the reporting tool with questions that require drawing intelligence from many different datasets. Users may respond negatively to being overwhelmed with too much information, particularly when its salience is unclear. At the same time, public reporting tools have users with a wide range of data literacies and experience requirements. Balancing these competing priorities is the key design challenge for such tools.

We must place limitations upon ourselves in order to remain focused on design for our users. We might limit the number of different visualization types used in a single interface and separate out summary and detail views to put the user in control of the amount of information being shown. We develop a unified visual vocabulary for the entire site, embedding meaning in color and layout, so that experience of one data exhibit boosts comfort and literacy with others. And we ensure that sufficient context is provided, both visually and in page copy.

Collaborative's Services for Implementing Data Design and Display

<u>Audit existing design and display elements</u>. Through investigation of the data, the existing site and interviews with NIU and ISBE project team members, we will review and provide feedback on the existing site and materials/plans for the 2014 Report Card.

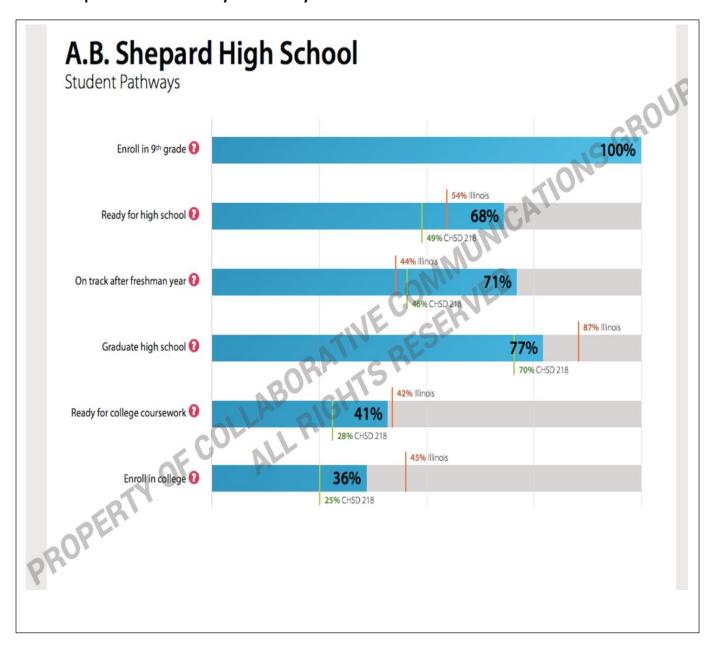
<u>Create strategic design and display recommendations</u>. From the intel gathered through the audit process, we will draw up a prioritized set of recommendations designed to enhance and improve the design and display of the school report cards on IllinoisReportCard.com for the target audiences.

Support implementation of design and display enhancements.

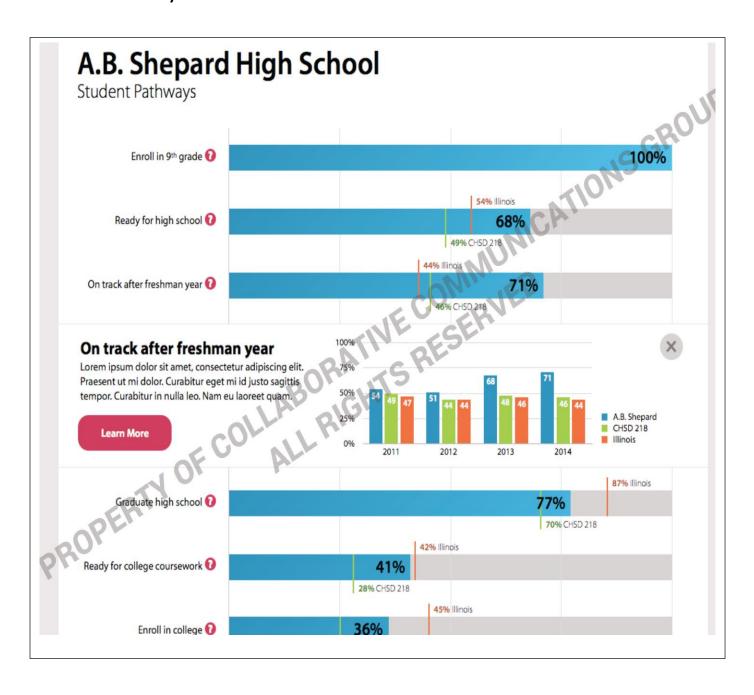
- Consult on formatting data for specific measures needed for the redesigned 2014 Report Card
- Create new sketches and mockups for the most effective data display (static PDF and on site)
- Provide technical guidance, as needed

Collaborative Communications has solid experience in creating meaningful and easy-to-understand design for complex data visualizations. Here is an example of a "Student Pathways" conceptualization for high schools. The visualization combines many data elements in a single exhibit so as to explore the relationships between these elements. Each element is contextualized by comparisons to state and district values; these elements improve understanding of the data shown while deferring to, not distracting from, the primary focus on the school's values. Additional information, here in the form of a time series detail view, is just a click away, revealing a hidden page element with an enchanting page fold animation. This visual reward creates a 'hook' that subtly compels users to continue to explore the exhibit. The detail view presentation also shows how increasing the contextual information and user experience of the path to the exhibit can enhance existing data displays

Sample "Student Pathways" Summary



Student Pathways Detail View



1.2.2.1.3 Updates to Site Content

Throughout development of the new Illinois Report Card, NIU has worked closely with ISBE to update content, including revisions and replacement of the "metadata" elements that are unique to this report card – the Explanations of Display, Context, and Resources. Minor text changes are easily made for the most part, and NIU will continue to respond quickly to update requests from ISBE and to suggest other modifications for ISBE approval.

1.2.2.1.4 Mobile Compatibility and Responsive Design

The project partners will design and implement cross-platform solutions to make the Illinois Report Card a mobile friendly site (with screen width 480px & below). Using design requirements provided by the subcontractor Collaborative Communications, the project web developers will develop and implement application solutions for ISBE for review and approval. Several issues to be addressed include: 1) developing new sets of Cascading Style Sheets to restyle user interface elements to be mobile compatible 2) replacing top tabs with 'burger'-like menu options, including second- and third-level navigation options and 3) rethinking graph displays for small screen presentation. The collaboration with Collaborative Communications will be particularly fruitful in designing these enhancements.

1.2.2.1.5 Redesign of the Principal Entry Form and Highlights Display

Both the Principal Entry Form and Highlights Display will benefit from improvement. For example

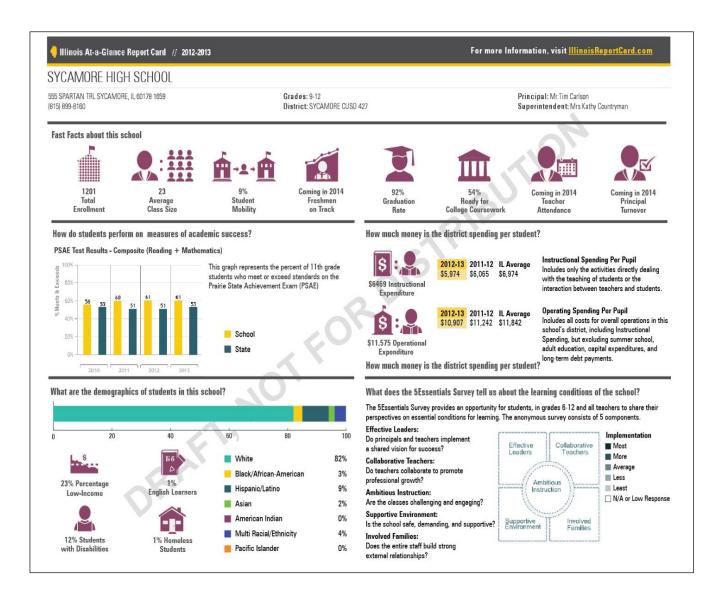
- The School Highlights page (Figure 5 in the RFSP) appears to be text-heavy and compressed. A more open, uncrowded design might be advisable.
- On that page, the left column (where courses/activities are selected) seems cramped, while arraying dual columns to list the courses on the right is an unfortunate compromise.
- The two click buttons in the screen lower left, "Save" and "Done," might create confusion as their functions seem to overlap.
- The At-a-Glance Review Page (Figure 7) is equally dense and overcrowded.
- Finally, the way that users must close the Highlights screen in order to edit information in the At-a-Glance Review screen, as described in the RFSP, seems cumbersome.

One possible avenue to pursue might be to utilize a screen design solution. When users enter information into the School Highlights screen, then click an "edit" button, a split screen would display side-by-side the information formatted both for Highlights and for the At-a-Glance views. The split screen would display only one of the six information panels in the present At-a-

Glance view at a time, but this would actually create more visual space and allow users to focus on one type of information at a time. Toggle functionality would allow users to move through the size At-a-Glance Review panels, allowing them to concentrate their attention on each in turn. It might also be advisable to construct the screen flow such that changes to the Highlights Screen would automatically flow right into the At-a-Glance Review, an approach that seems not to be available in the present system. This would assure that the At-a-Glance Report and the School Highlights screen view on the Report Card website will always be in synch.

1.2.2.2 At-a-Glance Report Card Enhancements

Enhancements to the At-a-Glance Report Card will be approached similarly to the enhancements to the Online Report Card as described above. Collaborative Communications will provide recommendations for enhanced visual design and data displays of the School Highlights on the At-a-Glance Report Card. Working with ISBE and stakeholders, NIU will develop alternatives to the current At-a-Glance for consideration by ISBE, using best practices from leading states and school districts. As an example, NIU has created a mock-up illustrating how icons and simpler language might increase the visual appeal and intuitive understanding of the At-a-Glance. This version reduces the density of text and is also better aligned with the displays used in the Online Report Card.



Sample view – At-a-Glance Redesign - Back

Illinois At-a-Glance Report Card // 2012-2013

For more Information, visit IllinoisReportCard.com

SYCAMORE HIGH SCHOOL

555 SPARTAN TRL SYCAMORE, IL 60178 1659

Grades: 9-12 District: SYCAMORE CUSD 427 Principal: Mr. Tim Carlson Superintendent: Mrs. Kathy Countryman

Courses, programs, and resources offered

Physical Education, Health, and Wellness

Academic Courses

Sycamore High School offers a comprehensive college preparatory curriculum. Approximately 70% of our students matriculate on to college. We currently have graduates attending a wide range of colleges and universities including Havard, Brown, Georgetown, NIU, Illinois, and Kishwaukee College.



Sycamore High School has a dynamic PE and Health curriculum. Students have the opportunity to take Weight Training, Speed & Agility, Dance or Individual and/or Team Sports. SHS has implemented a research-based Learning Readiness PE program to assist students academically.



Other Programs and Activities

Sycamore High School offers over fifty different clubs and activities to enhance the educational experience of its students. These clubs and activities not only expose students to a variety of new learning environments, but also provide many leadership and service opportunities for our students.



School Awards

Sycamore HS was named to the AP Honor Roll in 2012-13. SHS was the Conference Math Champions for the 3rd consecutive year in 2013. Over 20 Music students qualified for state in IMEA. SHS won 3 Conference Championships, 4 Regional & Sectional Championships and finished 3rd in state in Wrestling.



Career Development Courses and Programs

Sycamore High School and the Kishwaukee Education Consortium offer a wide variety of Career Readiness programming. These programs range from entry level skill development programs to advanced internships with a variety of paths. Many courses offer dual credit through our local community college.



More Information on the Illinois Report Card.

Space for Expanded Highlights

(RIBUTII

By visiting IllinoisReportCard.com, you will be able to see more details about each item of information for this school. There you will find charts spanning multiple years, more detailed explanations, additional resources, more of the school's programs and activities, as well as powerful tools that let you dig deeper into data in the

Sycamore High School offers 19 IHSA sports and a variety of IHSA activities. SHS has won numerous conference and IHSA events, including a third place finish in wrestling last year. In the past decade SHS has finished in the top four in the state eight separate time s in a varieyt of sports.



Most of this data has been collected by ISBE from school districts through data systems. Some information, such as the Highlights, is entered directly by principals and can be updated throughout the year.

For detailed information about how academic growth is calculated, or for further explanation on any data, go to IllinoisReportCard.com

School Personnel Resources

Teachers, coaches, counselors, other learning support personnel



Art rooms, field house, swimming pool, computer labs, theater





Proposal Narrative Summary

The NIU team is positioned to move forward aggressively to meet and exceed ISBE's expectations for achieving the goals and requirements specified in the RFSP. The NIU team has the skills and experience to continue what has been a productive collaboration. In addition, project administrators have refocused and realigned the NIU team so as to conform to the new sets of requirements in the RFSP. In this way, the NIU team will once again be positioned to support ISBE's vision for a new public-facing web presence with agility and responsiveness. The appointment of a highly qualified, PMP certified project manager, which is currently in progress, will bring a heightened efficiency to project activities and attention to timelines that will be important given the tight calendar this project requires. And bringing on Collaborative Communications Group to focus on design, user analytics, and graphics enhancements will be a highly important additional capacity to provide what can be acknowledged is an essential need for this project. The NIU team believes strongly that in responding to the new focus of this RFSP, we are moving rapidly in a new direction that will provide even greater benefits to Illinois educators, parents, and communities.

1.4 Milestones and Deliverables

1.4.1 Milestones

ISBE Report Card Project Milestones				
Phase 1 – Project initiation	n			
Phase	Who	What	When	
1.1 Project Kick off	ISBE team & NIU team	Set project roles and gather information	Week of June 23, 2014	
1.2 Project Management Planning	Project Manager	Detail personnel roles for NIU and ISBE staff, establish project protocols in four areas	July 1-8, , 2014	
1.3 Staffing (if needed)	NIU Team	Appoint Project Manager, a certified PMP; process Collaborative Communications subcontract	Week of June 23, 2014	
1.4 Requirements Documentation/Work Plan	NIU Team*	Produce business requirements and implementation plan for the project structure for Online and At-a-Glance Report Cards	NIU currently hosts Online Report Cardwill minimize transition time and costs	
*NIU Team includes design	subcontractor	Collaborative Communications		
Phase 2 – Transition of Ho	sting			
2.1 Transfer or reproduction of site code	n/a	Stand up Online RC in own environment identical to present site	NIU currently hosts Online Report Card	
2.2 Transfer of school and district data	n/a	Populate 2012-13 school and district data replicating current site	NIU currently hosts Online Report Card	
2.3 Testing Online Report Card by new vendor	NIU Team	Testing plan to review and test functionality	NIU will continue ongoing testing	
2.4 Online Report Card goes live new vendor	n/a	Cutover to occur prior to June 30, 2014	Cutover not necessary	
Phase 3 –Development of Enhancements	 Feature			
3.1 Requirements Documentation/Detailed Design	NIU Team working with ISBE	Define ALL 2014 enhancements for Online and At-a-Glance Report Cards; NIU and Collaborative will set up design models and	July 15, 2014, and ongoing	

		implementation plan; get ISBE	
		approvals	
3.2 Feature	NIU Team	NIU with Collaborative will	August 15, 2014
			August 15, 2014
Enhancement	working with	develop and test	
Development and Testing	ISBE	enhancements; get ISBE	
		approvals	
3.3 User Feedback	NIU Team	NIU Team with Collaborative	August 15-September
	working and	will create and implement	15, 2014
	ISBE	plan to gather end user	
		feedback	
3.4 Final Design Sign-off	ISBE	ISBE sign-off on all	September 20, 2014
		enhancements	
Dhara 4 Januar of the 26	MAD ! ! !		
Phase 4 – Launch of the 20 Entry Form	114 Principal		
4.1 Requirements	NIU Team	NIU Team and ISBE develop	July 18, 2014
documentation/detailed	and ISBE	requirements and plan	, ,
design		enhancements to new PEF;	
		streamline user experience.	
		NIU Team provides detailed	
		design and authentication	
4.2 Development and	NIU Team	NIU builds new PEF in	August 1, 2014
Testing	and ISBE	development environment	7 10.8 000 = 7 = 0 = 1
	41.4.052	where ISBE and end users can	
		participate in testing; NIU	
		insures compatibility of	
		Highlights enhancements on	
		both Online and At-a-Glance	
		Report Cards	
4.3 PEF open for	NIU team	Provide principals login	August 15, 2014
=	NIO team	authentication and access to	August 15, 2014
principals			
		the PEF two months prior to	
		Educator Preview Period	
Phase 5 – Launch of the 20	014 Illinois		
Report Card	1		
5.1 Online and At-a-	NIU Team	Host 2014 Online and At-a-	September 15, 2014
Glance RC modified to		Glance RC in development	
include all enhancements		environment for ISBE review	
		and testing	
5.2 Online and At-a-	NIU Team	Post 2013-14 school year data	September 30, 2014
Glance RC modified to		to Online and At-a-Glance	

		·	
include 2013-14 school		sites; create test plan and test	
year data		2014 data	
Note: vendor compliance v	with Tasks 5.1 ar	nd 5.2 is contingent up receiving a	all state provisioned
2013-14 school year data r	equired for Onl	ine and At-a-Glance Report Cards	no later than
September 1, 2014			
5.3 Educator Preview	NIU Team	Educator Preview Period to	October 15, 2014
Period opens for 2013-14	working with	log in and preview 2014	
Online and At-a-Glance	ISBE	Online and At-a-Glance Report	
Report Cards		Cards, report data issues to	
·		ISBE & NIU	
5.4 2014 Illinois Report	NIU Team	Go live with all 2013-14 school	October 31, 2014
Card official public		year data and all 2014	
launch		enhancements	
Phase 6 – Ongoing Mainte	nance		
6.1 Identify and resolve	NIU Team	NIU Team will work with ISBE	Ongoing as needed
data quality and site		to identify any data quality	
function issues		and function issues; log, track,	
		and resolve such issues quickly	
6.2 Identify minor	NIU Team	NIU Team will work with ISBE	October 31, 2014-
feature gaps; develop	working with	to identify minor feature gaps	June 30, 2015
plan for new features	ISBE	based on user feedback;	
		prioritize and plan	
		implementation of those	
		features to be added to site	
6.3 Ongoing site	NIU Team	NIU Team will maintain full	October 31, 2014-
maintenance		service levels of site	June 30, 2015
		throughout school year and	
		will resolve all site	
		functionality problems	

1.4.2 Deliverables

ISBE Report Card Project – Vendor Deliverables Calendar				
Phase 1 – Project initiation	n			
Phase	Vendor Responsibilities	ISBE Review Period		
1.1 Project Kick-off Meeting	Plan and facilitate project kick-off meeting	n/a		
1.2 Project Management Plan and Work Plan	Prepare formal project management plan, including personnel roles and responsibilities,	July 15-31, 2014		

	expectations for NIU and ISBE staff, timelines,	
and protocols in four areas 1.3 Transition Plan NIU currently hosts Online and At-a-Glance Report Cards, reducing the need for a technical transition, but will produce a plan for transition to the new structure of the project as outlined in 1.2		n/a
Phase 2 – Transition of Ho	osting	
2.1 Test Plan for Transitioned Online Report Card	Provide a copy of testing plan for ongoing functionality of Online and At-a-Glance Report Cards	July 31, 2014
2.2 Cutover Plan for Online Report Card	NIU currently hosts the Online Report Card – cutover not necessary	n/a
Phase 3 –Development of	Feature Enhancements	
3.1 Detailed Design Document	d Design Produce a detailed design document itemizing enhancements and modifications to be made to existing Online and At-a-Glance Report Cards prior to launch of 2014 Report Cards	
3.2 Feature Enhancement Development and Test Plan	Produce plan for developing and testing enhancements and modifications	August 1-15, 2014
3.3 Enhanced Design Sign-off	Upon completion of all features enhancements and modifications, obtain ISBE sign-off	August 15, 2014
Phase 4 – Launch of the 2	014 Principal Entry Form	
4.1 Detailed Design Produce a detailed design document for new PEF, including enhancements and modifications as well as plan for security and authentication		August 15-31,2014
4.2 Principal Entry Form Test Plan	Produce a test plan for PEF that will confirm proper functionality of all aspects of site, user interface, authentication, and data base storage. Plan will confirm that Principal-submitted information appropriately populates both Online and At-a-Glance Report Cards.	August 15-31, 2014
4.3 Principal Entry Form Launch	Launch the PEF for principal use on or before September 1, 2014.	September 1, 2014

Phase 5 – Launch of the 20	014 Illinois Report Card	
5.1 Final Version of Online and At-a-Glance Report Cards Completed	Make available to ISBE final versions of 2014 Online and At-a-Glance Report Cards for ISBE review and approval	September 15-30, 2014
5.2 Educator Preview Period Plan	Develop a plan to make Online and At-a- Glance Report Cards available to school and district staff to review at least two weeks before public launch	September 15-30, 2014
-	liverables 5.1 and 5.2 is contingent upon receiving required for Online and At-a-Glance Report Cards	=
5.3 Official Public Launch Plan	Develop a launch plan for 2014 Illinois Report Card site, detailing procedures for seamless, overnight transition from 2012-13 Online Report Card to enhanced, 2013-14 Online Report Card.	October 1-15, 2014
5.4 2013-2014 Illinois Report Card	Deliver 2013-2014 Illinois Report Card Online and At-a-Glance versions with enhancements and new school year data no later than OCTOBER 31, 2014	October 31, 2014
Phase 6 – Ongoing Mainte	enance	
6.1 Punchlist of all immediate post-launch data quality and site function issues	Maintain punchlist of all immediate issues concerning data quality or site functionality arising from launch	October 31, 2014- February 1, 2015- ongoing review by ISBE
6.2 Feature Gap Plan	Create list of feature gaps not included prior to launch but to be added throughout school year	January 1-March 1, 2015- ongoing review by ISBE
6.3 Site Maintenance Plan	Create post-launch project management plan focusing on maintenance of IRC site, with adjustments in personnel, roles, activities, and communications suited to an ongoing maintenance rather than a development operation. Site maintenance plan to serve as roadmap for project deliverables for contract renewals.	March 1-June 1, 2015

1.5 NIU/Staff Specifications - Overview

Along with specific goals identified in the RFSP regarding maintenance and enhancement of the Online Illinois Report Card and At-a-Glance Reports, there are broader work processes that will work to optimize project progress and accountability.

Requirement: ISBE will require ongoing engagement with the project to monitor progress on milestones and to conduct product reviews and approvals.

Solution: Upon project initiation, the NIU report card team will promptly schedule a project kick-off meeting with ISBE to receive updated project parameters as soon as possible. Thereafter, the NIU team will consult frequently with designated ISBE staff on project goals, timelines and work progress by holding regular (weekly or bi-weekly) conference calls facilitated by Adobe Connect screen-sharing technology. IIRC staff will also be available for face-to-face meetings at ISBE offices or the NIU-Chicago offices at 33 N. LaSalle St., Suite 1700. The office is equipped with a spacious conference room. This communication plan will include any subcontractors engaged in the project.

The NIU team will provide an organizational chart identifying staff engaged in this project and their phone and email contact information. Staff will be available for being contacted by ISBE. In addition, NIU has identified a Point of Contact person who will handle and route general enquiries such as those forwarded from ISBE's Illinois Report Care call-center.

Requirement: ISBE will require a highly-skilled, PMP-certified Project Manager to closely oversee day-to-day work activities, monitor project tasks, and track progress on meeting all milestones and deadlines.

Solution: At this time, NIU is reviewing applications from qualified candidates who have the skills, certification, and experience necessary to step into this highly important role. The Project Manager will manage the project team communications, coordination, deliverables and will provide ongoing quality assurance. Digital management tools such as Basecamp will be used to ensure that all members of the project team have access to key documents, deliverables, and status updates. Candidates under consideration have high-level project management experience with large-scale website projects for government agencies as well as the experience needed to provide sufficient oversight and support to ensure consistency in the quality of the stated deliverables. The Project Manager will utilize a comprehensive system to ensure problem resolution, cost control, timeliness, budget management, and customer service.

Requirement: Staff time on task must be accounted for and documented. All employees must work from on-site unless ISBE has approved an exception.

Solution: All NIU report card staff are required to use the project's task-management software (Anuko Time-Tracker) to input daily their time and effort on all task assignments. Centrally managed on a project file server, the Anuko software offers customized time-on-task reports across all employees and project activities. In addition to allowing cost-accounting by project and, within projects by task, this technology meets the state requirement that all state employees document their daily work time activities to within 15 minutes. In addition, the NIU Human Resources Division requires employees to report total work hours per day into the University's SOEAA (State Official and Employees Ethics Act) Work Time Reporting web site. This site is monitored and compliance is required. The requirement that "all services shall be performed in the United States" will be complied with.

1.5.1 Staff Qualifications

<u>Project Manager</u> – The RFSP requires a highly qualified project manager with demonstrated expertise managing similar projects who has demonstrated communication, team building, and management skills. The project manager will coordinate activities of the project with weekly status reports to the project owner/primary contact.

The PM will have the experience to provide sufficient oversight and support to ensure consistency in the quality of the stated deliverables, and will utilize a comprehensive system to ensure problem resolution, cost control, timeline compliance, task management, implementation, and project documentation and reporting.

The NIU leads on this project have identified several suitable project manager candidates, and have selected Jennifer M Nicholus as our top candidate (resume attached). While no position can be offered for the project until contract award, Ms. Nicholus has expressed a strong interest in the position.

Ms. Nicholus has compiled an outstanding record as project manager for the past dozen years. She is Certified PMP by the Project Management Institute (2002), and, in addition to a BA degree, also holds an MBA in Organizational Behavior from Lake Forest Graduate School of Management (2008). Ms. Nicholus has served in project management roles for Hewitt Associations, Allstate Insurance and WellPoint. She is an experienced program and project

manager with proficiency in planning and implementing global projects and business transformation programs. While her direct experience in education is more limited, she clearly has the organizational skills that are increasingly necessary for successful implementation of complex web development projects such as this one. It should be noted that Ms. Nicholus will also serve as a part-instructor in the evening PMP certification program at Northern Illinois University.

<u>Production Team -</u> The NIU production team for the maintenance and enhancement of the Online and at-a-Glance Report Cards is organized into four areas: Quality Assurance (QA), Data Base (DB), Web Application Developers (WA), and Content Specialists (CS).

Quality Assurance: Manages data processing, file management and maintenance; data mapping for data base ingestion; data mapping to standards alignment and screen presentation; testing and debugging.

Michael Gillespie – QA lead. Mr. Gillespie holds a BS in Psychology from University of Iowa and has coursework in the Department of Educational Technology, Research and Assessment at Northern Illinois University. He manages all aspects of the QA team, with central responsibility for data processing, file management, and data base and standards mapping. Mr. Gillespie has seven years' experience with the IIRC project, three as a graduate assistant and four as a full-time professional. For a data-driven project such as this one, where accuracy, validity, and timely completion is critical, it is essential to have a solid QA 'backbone' and Mr. Gillespie fulfills that role with exceptional skill and reliability.

Zhoumingna Li ("Mina") – QA support staff. Mina holds several Master's level degrees including, most recently, an M.S. in Operations Management and Information Systems (OMIS) from Northern Illinois University. She has an unusual range of programming and data skills, including statistical, data base, web developer programs. She provides essential support for the QA responsibilities of the project.

<u>Data Base Analyst/Architect</u>: Responsible for managing data base architecture; specifically, manages and updates the array of data base tables on which the structure of the current Illinois Report Card is built. Preparation for the October, 2014, launch will require some updating of current data base tables. This effort will be concentrated in the time between the release to NIU of the data from ISBE and the public launch. Because NIU currently houses the Illinois Report Card Data base the extent of upgrade will be limited and, after the 2014 launch, largely a maintenance responsibility.

Shashi Reddy – Lead Data Base Manager and Architect. Mr. Reddy has over 20 years' experience in data base management and architecture across a wide array of government, education, and private organizations. Since joining IIRC in 2009, Mr. Reddy has led the DB team in building out cohesive DB architecture enabling web developers to scale their applications efficiently and economically. He has strong leadership skill for the entire programming side of the project, and is especially capable as a team manager for Agile planning. He emphasizes the need to keep the team current in latest technologies. Mr. Reddy, who has a B.S. degree from Gulbarga University (India), and an MS degree in OMIS from Northern Illinois University, holds certifications in multiple Microsoft DB technologies and has a wide range of program skills.

Web Application Developers: Responsible for technical effort required for implementing, configuring, enhancing, and maintaining the web site's user interface screens and embedded screen functionalities. The developers will work closely with the data design and display specifications provided by Collaborative Communications, including, for example, the screen palette, user analytics tolls, and graphics displays, and responsive design specifications. A significant core of current code can be utilized. However, given the scale of enhancements and new presentation artifacts, the web development side will require a larger time on task than the data base maintenance.

Mohammed Abdul Muqeet –Mr. Mohammed Abdul is lead technical architect of web development for this project. Since joining IIRC in 2006, he has provided highly capable leadership of the project's Agile planning procedures, managing and coordinating the work processes with three other developers. He has been notably proficient in applying latest programming technologies and in researching and adapting third-part tools to enhance screen functionality. Mr. Mohammed Abdul will be lead on the NIU side in working to assure timely implementation of the design and display specifications provided by Collaborative Communications. He will have particular responsibility for enhancements for the PEF look and functionality, including enhancements to the Highlights and the At-a-Glance Review screens. He has a B.S. in Computer Science from Osmania University (India), and a MS. Degree in Management Information Systems from Northern Illinois University.

Arjun Kyatham – Mr. Kyatham is junior web developer with three years' experience in software development for private companies before joining NIU-IIRC in January, 2013. Mr. Kyatham is highly proficient in .NET and in WCF/web services, among other programs. He will support the implementation of screen specifications, with particular responsibility for the enhancements to screen designs and data displays on the Online Report Card. He holds a BS in Electronic

Engineering from Jawaharial Nehru Technological University (India), and a MS in Electrical Engineering from University of Southern California.

Sandeep Nagapuri – Mr. Nagapuri is junior web developer with strong skills in Java as well as .NET, and other web technologies. He will have lead responsibility for maintaining the MyIIRC user interface and authentication system, and for installing upgrades as may be required for enhanced user functionality of the PEF. He has significant experience in software development for private industry, as well as a MS in Computer Science from Northern Illinois University.

<u>Content Specialists:</u> Responsible for reviewing and preparing final copy of ISBE-approved content to the site, including the extensive metadata and other information items intended to assure public acceptance and understanding of site content; responsible for providing practitioner feedback on terminology, user instructions, labels, explanatory mouse overs, and other embedded information; responsible for user guides and video clip scripts.

Marilyn Bellert – Associate Director of NIU's P-20 Center and IIRC Senior Research Associate, Ms. Bellert is project lead for reviewing site content working with ISBE, and for information management, and outreach. She is also responsible for design and production of print and electronic materials for various audiences, with particular focus on features that serve parents. With Cheryl Callighan, Ms. Bellert will review and update site content to support site enhancement with the 2014 release. Ms. Bellert holds an M.A. in English fro Washington University.

Cheryl Callighan – Ms. Callighan has extensive experience as an educational consultant with advanced professional skills in Common Core alignment, School Improvement Coaching, and Standard Aligned Classroom. She assists in reviewing and managing site content provided by ISBE.

Brian Walk – Mr. Walk is a web designer and front-end developer. Working with technical staff, he has been responsible for developing high-quality design solutions using such tools as Bootstrap, HTML5, and Cascading Style Sheets to be incorporated into screen development. In the next stage of this project, Mr. Walk will assist Collaborative Communications in providing design elements to the web applications team.

Project Director

Harvey Smith – Responsible for overall direction of the NIU team's engagement on the Illinois Report Card Support, Maintenance, and Enhancement project. Harvey is founding director of

the Illinois Interactive Report Card and has coordinated its development through an existing NIU-ISBE Intergovernmental Agreements since 2004. He has directed the development of IIRC into a trusted tool with both ISBE and with direct services to school districts, including the Data for School Innovation (DSI) service through which districts can have their local assessments posted under controlled access to web presentation screens for teachers to utilize for classroom instruction and school improvement. He has extended the working relationships to include policy stakeholders such as Advance Illinois, the Illinois Principals Association, and Illinois Business Roundtable. For this project, he will work closely with the Project Manager who will have day-to-day oversight, while focusing on the leadership and agency collaboration with ISBE leadership and with the project partner, Collaborative Communications. He will also play a lead role in personnel management and oversight of deliverables on time and on budget. Mr. Smith has a Ph.D in History (Sociology minor) from the University of Wisconsin-Madison.

Samples of Websites Successfully Designed for three clients by Web design Team

Illinois Mathematics and Science Academy (IMSA) – Brian Walk http://imsa.edu

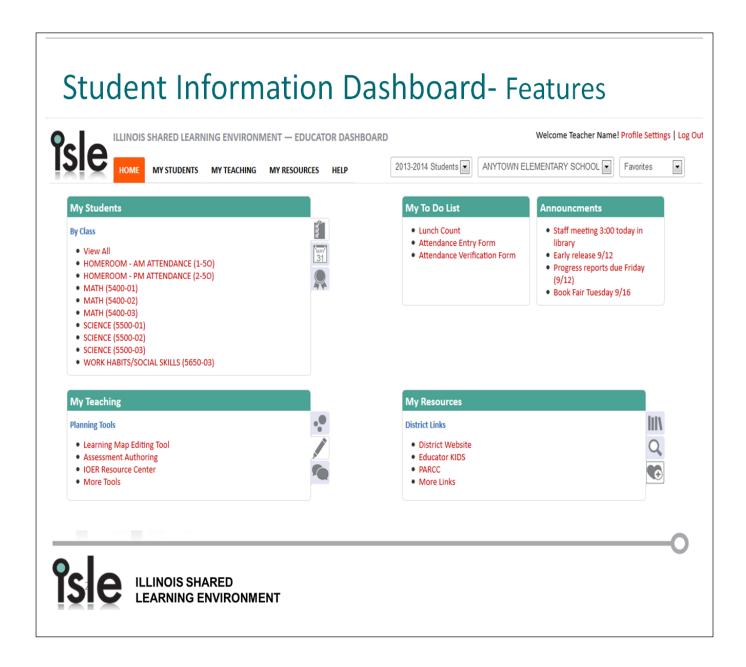
Northern Illinois University – Brian Walk http://www.niu.edu

LearnDC – Collaborative Communications Group http://www.learndc.org

Samples of Websites with successful data displays for two clients by Web design Team

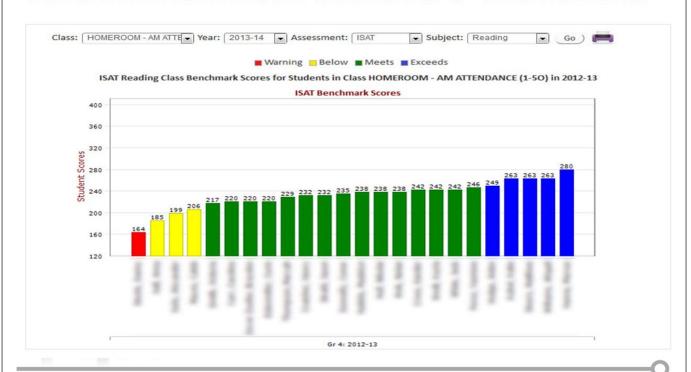
Illinois Honor Roll – Brian Walk http://www.ilhonorroll.niu.edu

ISLE Educator dashboards (Illinois Shared Learning Environment) – Harvey Smith (Password protected site for teacher access –Three sample screen views attached here)



Student Information Dashboard- Attendance Teacher Name's Students View All By Class By Custom Group By Assessment LastName, FirstName Forms Student Record Grades and Credits Attendance Contact Info Student Performance Total Absences Excused Unexcused Unknown Term 2013-2014 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 11 12 13 14 15 16 17 13 14 15 16 17 18 19 10 11 12 13 14 15 16 18 19 20 21 22 23 24 20 21 22 23 24 25 26 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Su Mo Tu We Th Fr Sa Tu We Th Fr Sa Su Mo Tu We Th Fr 9 10 11 12 13 14 9 10 11 15 16 17 18 19 20 21 12 13 14 15 16 17 18 9 10 11 12 13 14 15 9 10 11 12 13 14 15 22 23 24 25 26 27 28 19 20 21 22 23 24 25 16 17 18 19 20 21 22 16 17 18 19 20 21 22 LEARNING ENVIRONMENT

Student Information Dashboard- Benchmarks





1.7 Subcontractor – Collaborative Communications Group

Introduction

Collaborative Communications Group, Inc. (Collaborative) is a communications consulting practice that forms partnerships to create initiatives, distinctive products and sustainable solutions that can improve the lives of children, their families and their communities. Collaborative believes that education is central to many of our toughest social problems and that communications is at the core of addressing many of those problems. We use collaboration,

dynamic knowledge of a variety of education issues and content areas, and the technical application of communications skills and vehicles to get results.

We have deep experience in designing and developing dynamic websites that position our clients to communicate their mission, goals, objectives and daily activities to a variety of audiences. Our comprehensive knowledge and understanding of public education combined with our previous work experience with federal, state and local governments and school districts, gives Collaborative the unique capacity to partner with Northern Illinois University (NIU) to meet and exceed the goals and objectives of the Illinois State Board of Education (ISBE) in ongoing efforts to improve School Report Cards.

About Collaborative Communications

Collaborative is an economically disadvantaged woman-owned small business (EDWOSB). Incorporated in 2000, Collaborative is a strategic consulting firm dedicated to integrative solutions to education, workforce and community challenges. Collaborative forms and nurtures partnerships with individuals, government, philanthropic and education organizations at the federal, national, state, district and community levels to achieve our clients' goals through superior consulting, communications and program management strategies. Collaborative's goal is to align and leverage individual and collective capacities to improve the quality of delivery and impact—and ultimately, to support improvements in education policy and practice.

Based in Washington, DC, and with offices in California, Connecticut, Florida and Maryland, Collaborative works at the federal and national level and also goes deep in efforts with state-level agencies and local community-based organizations. Collaboration is central to our philosophy and brand. Our process depends on engaging leadership, staff, partners, networks, constituents and end-users in bringing ideas and solutions that have meaning and that move

ideas to action. That's true for everything we do. And under that Collaborative umbrella, we organize teams and partners that enable us to offer a range of services to meet various and evolving needs. Our focus in on building evolving and deepening relationships over time, with a continual focus on exceeding expectations and delivering exceptional quality—every single time.

Collaborative has a proven track record of creating effective communications strategies, award-winning multi-media products and capacity-building services. Collaborative brings specific experience and expertise to support and advance the work of ISBE, including:

Innovative online solutions.

Every successful online initiative puts its users at the center. Whether a web-based resource center, an online community or an email campaign, success hinges on understanding of the audience. We develop award-winning online solutions that help our partners and clients share information, connect ideas and people, and build relationships and knowledge that increase impact. Our aim is not simply to build websites but to use the right tools to move our clients' work forward.

Team with extensive knowledge and demonstrated experience in statewide public school data. Our team demonstrate extensive knowledge of statewide public reporting. Because all of our work is focused on P-12 education, Collaborative brings a deep understanding of education content. We also have a deep understanding of charter networks through many of our other national and local clients. We bring significant experience and knowledge regarding how data about schools informs and impacts school choice and assessment, in particular.

Project management.

We have extensive experience managing effective user engagement processes, data design and display and other digital projects. For more than a decade, we have demonstrated sufficient oversight and support to ensure consistency in the quality of our products. We have comprehensive systems in place to ensure effective management of all contracts, including quality, problem resolution, cost control, timeliness, budget relations and customer service. Through the Collaborative approach, we ensure that all work is of the highest quality, completed on time and on budget.

Among many examples of Collaborative's work (see www.collaborativecommunications.com), a primary example of prior experience relevant for this project is with the DC Office of the State Superintendent of Education (OSSE) LearnDC, www.learndc.org. OSSE contracted with Collaborative to create the State Education Agency's Common Core website, aimed at multiple audiences, including parents and educators in all public and public charter schools. The website

was deliberately structured and branded under a broad education frame (LearnDC), which allowed OSSE to expand the content beyond the Common Core. Success in the original Common Core site development led to additional sole-source contracts to expand the LearnDC site to include content in early childhood and the design and development of school profiles. The site is a one-stop source of relevant, accessible education resources serving the needs of all stakeholders who play a role in delivering quality education for District residents. LearnDC adds value with a comprehensive, searchable and growing resource library combined with interactive visualization of education data, currently focused on school and program performance. For the LearnDC project, Collaborative was responsible for managing the project team and execution of the following tasks:

- Content tailored to core audiences (educators, administrators, parents, students) on Common Core, early childhood education and school profiles. This included language that helped these audiences understand Common Core and a series of web-based tools (such as standards-based lessons, instructional and informational videos, etc.) that support implementation;
- Overall project management, including oversight of execution of all budget and deliverables, as well as meeting coordination with project staff and OSSE;
- Research and discovery, including and securing all approvals and processes necessary to build the three current sections of the site, and the development of a content strategy.
- Visual design and branding, based on principles of user engagement;
- Information design and data visualization, creating accessible and fully interactive presentations of school data to meet audience needs;
- Technical site build and launch, including integration of a content management system and Javascript data visualization framework;
- Development and tested site to ensure compliance with Section 508 technical standards and industry-standard Web Content Accessibility Guidelines 2.0 (WCAG 2.0);
- Ongoing maintenance, including search engine optimization and application of server and CMS patches to ensure continued security and functionality; and
- Development of launch, outreach and marketing plan.

J. Harvey Smith

Director, Illinois Interactive Report Card Northern Illinois University

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2003 - Founder and Director, Illinois Interactive Report Card (http://iirc.niu.edu), 1993 - Associate Professor, Department of History, Northern Illinois University

Education

Swarthmore College B.A., History University of Wisconsin-Madison M.A. History,

Ph.D History (Sociology minor)

Professional Experience

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2003-	Director, Illinois Interactive Report Card
2011-	School Improvement Grants Evaluation Project, committee member,
	headed by Advance Illinois (with Paul Zavitkovsky, U.of Illinois-Chicago)
2010-	Project Partner, ISLE – Illinois Shared Learning Environment
2010-12	P-20 Council: Revising the Illinois State Board of Education School Report
	Card (task force and steering committee) headed by Advance Illinois and
	Boston Consulting Group
2006-2012	Illinois State Testing Advisory Committee (Illinois State Board of
	Education)
2002-2004	Member, State of Illinois School Assessment and Accountability Task
	Force, Robert Schiller, Illinois State Superintendent of Education, Chair
2002-2003	Chair (interim), Department of History NIU
1996-2002	Director, Social Science Research Institute, NIU

Funded Projects

2003-	Illinois State Board of Education, "Illinois Interactive Report Card,"
2007-2013	Illinois State Board of Education, "Statewide Evaluation of 21st Century
	Community Learning Centers" Statewide Evaluation (with Dr. Penny
	Billman)
2001-2003	National Science Foundation-Division of Undergraduate Education, "An
	Integrated Approach to Educating a Diverse Population on Environmental
	Management Systems," NSF, #0088903,2001-2002, co-PI with Philip
	Carpenter (Geology) and Murali Krishnamurthi (Engineering) NIU

Selected Technical Reports

Parents Guide to the Illinois Interactive Report Card (user manual),
Guide for Illinois School Boards to the IIRC (in partnerships with the

Illinois School Boards Association (co-author, Marilyn Bellert)

2007-2012 "Illinois Statewide Evaluation: 21st Century Community Learning Centers"

(with Penny Billman), submitted to Illinois state Board of Education,

Annual reports

Selection National Conference Presentations

2010 "Use of Growth Models and Student Achievement with High Stakes

Accountability Testing" American Educational Research Association

Annual Conference, Denver, Colo. (with Steven Wallace),

2008 "Swimming the Dataquarium: Demonstration of Four States' Data Delivery

Systems" (with Ohio, Wisconsin, Massachusetts), American Educational

Research Association Annual Confernece, New York, NY

Conferences, Presentations and Workshops (selected):

2006- Statewide Webinars – Illinois Principals Assocation

"Analyzing Assessment Data for Student Learning - Elementary Schools"

"Analyzing Assessment data for Student Learning - High Schools"

(series of four webinars annually)

Harvey Smith gives 25-30 presentations annually. Recent Examples:

"Using the Illinois Interactive Report Card for School Improvement" (administrator's workshop), Moline School District, Rock Island IL

"High School Assessment Data for Student College Readiness,"

(administrator's workshop), Regional Office of Education, Ottawa, IL, Feb.

"Illinois Interactive Report Card: Using Assessment Results to Improve Instruction" (professional development workshop), Illini Bluffs School District, IL

"Targeting Instruction with Student Data: the Illinois Interactive Report Card" (teacher workshop) Kirby School District 140, Tinley Park, IL Assessment Data for Education Leaders," Administration Leadership

Workshop, Eastern Illinois University, Charleston, IL,

MyIIRC Workshop CUSD 430, Sandwich, IL

ICE/Illinois Computing Educators Presentation, Pheasant Run, St. Charles, IL

Lee-Ogle Workshop, Dixon, IL

Dolton Dist 149 Principals Workshop, Dolton, IL

NCLB Chicago Conference, Chicago, IL

ACT Conference, Pheasant Run, St. Charles, IL

ACT Conference, Springfield IL

Using IIRC for School Improvement IETC Conference, Springfield IL

Reaching the Goal: Secondary and Post Sec. Wksh, Southwest IL CC

Reaching the Goal: Secondary and Post Sec. Wksh, Richland CC

Reaching the Goal: Secondary and Post Sec. Wksh, Morraine Valley CC

DeKalb MyIIRC Workshop, DeKalb IL

Data and Teaching Resources for Special Education, IAASE Fall Conference, Tinley Park, IL

A Data and Instruction Support tool for Illinois Teachers, AdvancEd Illinois Fall Conference, Champaign

Using Data to Improve Instruction, Kirby SD 140 workshop

Using Assessment Results to Improve Instruction, Illini Bluffs CUSD 327

Using Data to Improve Instruction, Illinois State University

Using Assessment Results to Improve Instruction, Ottawa Township High School Workshop

Using Assessment Results to Improve Instruction, Rock Island School District 41 Data Resources for Special Education, IAASE Winter Conference, Crowne Plaza, Springfield IL

Data Quality Impacts AYP Calculation and Use of Data, 72nd Joint Annual Triple I Conference, Chicago, IL.

Using Technology as a Tool in School Improvement Efforts, Association for Educational Communications and Technology, Chicago, IL Using IIRC Student Data Analyses for High School Improvement, CADCA (Chicago Area Directors of Curricular Assessment), Vernon Hills, H.S. Improving Schools One Kid at a Time: Raising Assessment Results using the Interactive Illinois Report Card, Illinois Association for Supervision and Curriculum Development Board of Directors, College of DuPage

Home:

Cell:

E-mail:

QUALIFICATIONS SUMMARY

Senior Technology Leader with demonstrated expertise in technology strategy; Capable portfolio manager with deep experience aligning technology resources to business strategy; Experienced program and project manager with proficiency in planning and implementing global projects and business transformation programs; Process champion, highly skilled in aligning strategies and talent with key business drivers to strengthen results; Dynamic communicator, able to build consensus/collaboration across global organizations; Proven dedicated and creative leader.

MANAGEMENT SKILLS AND EXPERIENCE SUMMARY

Enterprise Transformation

Capabilities in business process diagnosis and architecture; Thorough understanding of the relationship and dependencies among an organization's business model, personnel, and technical infrastructure; Excellent analytical aptitude, including the ability to balance strategic goals with detailed execution.

Entrepreneurship and Relationship Building

Skilled at building effective relationships with individuals of varying backgrounds and levels of experience, from junior analysts to senior executives; Comfortable operating in dynamic environments, swiftly understanding and affecting the appropriate business drivers.

Global Business Management

Experienced in building and managing teams across the globe; Able to successfully organize and incent offshore teams for high performance; Experienced with managing global collaboration efforts; Adept at quickly diagnosing and eliminating barriers to offshore success.

Project Planning and Execution

Ability to control all facets of a project, from time to risk to financials; Capable of establishing team structure and managing project resources in a matrixed environment; Understands the importance of managing stakeholder relationships and effective lines of communication.

People Management

Experienced in managing people in both formal and informal reporting relationships; History of managing various types of resources, both technical and non-technical; Skilled at performing as a "manager of managers."

PROFESSIONAL EXPERIENCE

WellPoint, Chicago, IL

2011-Present

Delivery Manager, Sr. Project Manager

- Manage the planning and delivery of the first pilot implementation of IBM's Watson technology in the Healthcare industry (selected amongst peer group as the first overall delivery lead).
- Partner with business to align delivery scope to business strategy and innovation capabilities.
- Proactively mentor project lead resources to support individual career development goals and organizational needs.
- Champion the implementation of Lean methodology for the project management discipline within the delivery organization; Support organizational goals regarding Lean adoption.

ALLSTATE INSURANCE, Northbrook, IL.

2008-2011

Portfolio Manager

- Functioned as the overall owner of the Sales and Marketing portfolio of project work for the underwriting technology organization; portfolio comprised of both tactical and strategic projects ranging up to a \$140+ million business transformation program.
- Created new processes to support better understanding of requirements processes between business groups resulting in a 1.5 FTE annual cost savings.

- Partnered with the business client to evaluate innovative change projects, including exploration of technology and business requirements options to best meet both external and internal objectives.
 Lead cross-functional ideation teams to understand technology impact of large scale initiatives.
- Enhanced the ideation process to include a deeper understanding and communication of risks and dependencies, resulting in improved results delivery and thus improved trust and partnership with the business.
- Managed the resource and budget impact of the projects within the portfolio, working across technology and finance to optimize technology spending to calibrate to financial goals.
- Provided leadership and direction to programs and projects through influential relationships.

HEWITT ASSOCIATES, Lincolnshire, IL

1999-2008

Director (Delivery Group Manager), Program Manager – 2004 to 2008

- Performed as a Delivery Group Manager for company's Talent consulting practice, reporting directly to the practice leader and providing people management to a group of approximately 25 resources.
- Managed and supported five global product teams with business cases totaling an annual investment of \$15+ million.
- Provided strategic, program leadership to a multi-year, global business transformation team of 100+ people driving multinational process, methodology and technology realignment; overall investments totaled over \$29 million which supported a \$90 million annual revenue for this services business group.
- Drove 40% annual cost savings by effectively leveraging onshore and offshore resource mix.
- Managed the business and technology relationship with multiple internal consulting groups; aligned business goals to strategic technology initiatives to optimize ROI; maintained ongoing communication on project progress including detailed financials and milestone analysis.
- Spearheaded an internal focus group to improve the process analysis, development and project management processes; authored and implemented PMO practices for a group of 30 project managers; fostered continued professional collaboration regarding key PMO success factors throughout other areas of the firm.
- Aligned overall practice strengths and responsibilities through collaboration with co-development partners to guide offshore sourcing efforts; acted as a liaison to several co-development management resources, providing input and guidance to ongoing efforts around the use of off-shore resources.
- Assisted with teaching and improving the company's project management curriculum (PMI oriented).

Project Manager, People Manager - 1999 to 2004

- Acted as the project manager for one of Hewitt's most globally pervasive technology projects, leading
 the 26 person global team to implement a complex compensation analysis system in over 30
 countries in 5 years; managed a \$10 million budget which successfully funded a solution that has
 proven to be scaleable far beyond its original scope; directed growth of the application to support 300+
 internal users, 10,000+ external users and \$45 million of annual revenue.
- Provided business transformation analysis support to (the above mentioned) global project team, working with resources around the world to understand, align and translate their needs to cohesive, streamlined processes.
- Performed as the technology team liaison to the European region for the consulting line of business; provided the business leadership with an outlet to convey their strategic direction and worked with local technical leadership to operationalize that strategy.
- Acted as the project manager and leader for several technology projects, ranging in size and budget from 2 to 3 person projects with budgets of less than \$500,000 to project teams of 20+ people with annual budgets over \$1,000,000; worked through various solutions including process reengineering, software selection and application development.
- Initiated quality process improvements including rearchitecting various testing processes and selecting and implementing an automated test software package; formed the practice's first virtual quality assurance team and mentored the succeeding leader.
- Provided ongoing people management to 6 to 8 associates, managing career paths, performance and pay.

- Worked as the liaison between the IS and the HR departments to negotiate strategic technical direction; collaborated with department leadership to plan and execute projects in line with that strategy.
- Led a project team of 10 people across 2 disparate financial departments to build a single technical solution that improved efficiency and financial margins for both groups; successfully implemented a reengineered process, creating shared efficiencies; effectively managed the \$200,000 budget.
- Provided analysis support to several technical initiatives across departments, using both TQM and reengineering techniques for process efficiency

ACCENTURE (ANDERSEN CONSULTING), Chicago, IL Process Analyst/Consultant

1995 - 1998

- Performed as a process consultant for large-scale Human Resource Information Systems (HRIS) implementations, working with clients to analyze their internal processes and reengineer them in the context of a systems implementation; specialized in PeopleSoft and Lawson HRIS.
- Acted as an expert resource in HRIS information as part of a specialty group within the firm, providing support and input to other consulting groups in relation to HRIS selection through implementation.
- Co-authored several methodology development documents related to human resource process reengineering that were leveraged throughout the firm as part of the overall consulting methodology.

EDUCATION

MBA, Specialization in Organizational Behavior, June 2008

Graduated with High Honors

Lake Forest Graduate School of Management

BA, Economics and English Literature, minor in Italian, 1995 Graduated Cum Laude Saint Mary's College

Certified PMP by the Project Management Institute, 2002

Trained in process reengineering by the Center for Reengineering Leadership, 1996

MOHAMMED ABDUL MUQEET

Objective

To obtain a responsible and challenging position in the organization, where I could make a valuable contribution through my skills and work experience.

Core Competencies

Project Management Object Oriented Programming Systems Development (Web, Database)

Responsive Design Performance Optimization Web Server Administration

Web Standards Compliance (W3C, Accessibility) Web Services (SOAP, REST) Web Security

Technical Skills

Programming Languages: VB, C#, ASP.NET, IBM Assembler, COBOL, C, C++, Java, PHP, XML, XSL, SQL Web Technologies:

JavaScript, jQuery, D3, SVG, AJAX, CSS3, HTML5, Spring MVC, JSP, WCF, MVC Oracle RDBMS 7.3, Access, MS-SQL Server 2000/2005/2008, DB2, PostgreSQL Win, Linux, Apple OS X, Git, Joomla!, Spring Tool Suite, Eclipse, Visual Studio

Version Control Tools: CVS, VSS, Team Foundation Server

APIs & Tools: Google (Analytics, Forms, Maps API v3, Fusion Tables API)

Profile

• Proficient in web architecture, design and implementation.

- Adept in quickly gathering requirements, exploring multiple approaches and identifying optimal solutions.
- Extensive experience in managing IT project life cycle through all phases.
- Familiar with the software design methodologies.

Work Experience

Illinois Interactive Report Card, Technical Architect/ Lead, Northern Illinois University, DeKalb, IL

June 2011 – Present

- Collaborate with the various stakeholders to understand business needs, communicate technical challenges and brainstorm feasible solutions & workarounds.
- Lead multiple concurrent software development/implementation projects; managing scope, schedule, issues/risks, trade-offs, communications and expectations.
- Lead the full-stack design, development and migration of web applications into a SOA model.
- Utilized Agile best practices to engage with the client in managing the product backlog, develop user stories, prioritize them and work within the team to implement, test and deliver.
- Mentor/ review team adherence to development best practices ensuring the security, scalability and reliability of the applications.

Illinois Interactive Report Card, Senior Application Developer, Northern Illinois University, DeKalb, IL

March 2006 - May 2011

- Translated high level requirements into software solutions, built consensus between diverse and complementary project groups establishing acceptance of new methods and standards.
- Lead a team for Web site production, including: design, production timetable, development, status reporting, client/project team coordination, and quality assurance.
- Gained familiarity in current and emerging web technologies integrating them into existing systems.

Hewitt Associates, Application Developer, Lincolnshire, IL

May 2005 – February 2006

- Interfaced with senior business leaders in understanding their business needs and model solutions.
- Developed high value business solutions using Access and .NET technologies with diverse user base of thousand across multiple geographic locations
- Provided on-going support and necessary updates to existing legacy systems.

Academic Qualifications

Masters in Management Information Systems, Northern Illinois University Bachelors in Computer Science, Osmania University

Relevant Projects worked on:

Interactive Illinois Report Card - Public Report Card Service - Responsible for technology acquisition, architecture design, development, deployment, and maintenance of this system which provides a rich array of interactive online tools for measuring and comparing school performance in standardized test across the state. The system was developed in .NET with a SQL Server backend.

- Designed and developed HTTP(S) REST web services using WCF supporting multiple data formats (XML & JSON), multi-language, versioning and used by multiple applications.
- Designed and developed modular, reusable UI elements/ Apps using the MVC framework.
- Created efficient database design, .NET data access components and optimized stored procedures ensuring improved response times and reduced load on the database servers.
- Implemented business logic as .NET Framework assemblies (C#, VB.NET) reused across applications.
- Developed reusable libraries for customizing graphs generated by charting.
- Designed and built flexible, innovative web-based data visualizations, working with D3.js.
- Designed and built XML & XSL-based architecture for rendering report layouts and page content.
- Implement and leverage Google Analytics custom reporting (using dimensions & metrics) integrated with user surveys to provide strategic business insight to improve user experience and site optimization.
- Lead the development of front-end for the site written in ASP.NET, C#, AJAX, XML, HTML5, CSS3, JavaScript, Twitter Bootstrap ensuring cross-browser cross-platform compatibility, responsive design, improved performance and user experience.
- Utilized Google's Map & Fusion Table API's to provide a search feature with custom overlays.
- Instituted code standards and performed periodic team code review to ensure compliance.
- Developed and implemented functional and load testing plans for the application.
- Created and maintained project documentation and deliverables.
- Planned, installed, configured, and administer Web servers in Windows 2003/2008 environment.

Illinois Shared Learning Environment – Student Information System Dashboards – As a key partner in providing various tools for teachers, administrators, students and parents in a shared environment, responsible for reviewing and contributing towards system requirements, architecture design, technology selection for building a portal solution, and integration within it. The portal being developed uses the uPortal framework and a Shibboleth-based IDM to facilitate SSO.

- Communicate requirements to appropriate partners, and follow-up ensuring them being met.
- Developed & communicated application requirements based on evaluating the various existing or proposed external systems with which it is required to integrate with.
- Break-down project deliverables into tasks, assign, review and ensure completion.
- Installed, configured Shibboleth service provider, and integrated with identity provider to achieve SSO.

Interactive Illinois Report Card - Student Data Service - Responsible for initial technology acquisition, architecture design, development, deployment and maintenance of this system which is a paid service, providing educators a rich array of interactive online tools for measuring, and comparing student performance in their classrooms. The system was developed in .NET with a SQL Server backend.

- Designed and developed the custom SSO solution and reusable integration components used additionally by various other applications.
- Leading the effort to migrate existing application into an SOA model.
- Guide developers in cross-browser compatibility, front-end design, techniques to code robust systems, developing and implementing sound test plans.

Leave Administration and Tracking System – Responsible for the development of a system used by the Leave Administration Shared Services for tracking different leaves on an employee basis, determining eligibility, and yet be flexible enough to handle the wide variation in the associated rules that can be applied for different employees. The system has been developed in .NET with a DB2 backend.

- Interfaced with senior business leaders in understanding the business needs and model solutions.
- Wrote complex SQL queries to update, fetch data and also to fulfill client analytical reporting needs.
- Wrote data access library used in cluster wide system development by writing class modules in VB.NET
- Support all aspects of change control and insure that proper procedures are followed when making changes to production systems and databases.



SUMMARY

Talented senior level IT professional with over 18 years of industry experience. As a technical consultant, successfully designed and implemented solutions for a variety of business and technical problems including new system development, application modifications, data conversions and day-to-day system administration & support. Skilled SQL Server Business Intelligence Architect, developer/DBA, Client/Server application developer, Web application development, analysis of requirements, systems design. Possess experience in the following business areas: Education, Petroleum, Insurance, Transportation, Logistics. Other accomplishments include extensive programming experience and exposure, excellent communication skills and an ability to transform business ideas into viable solutions.

SKILL SET

O (16)	MICHOCOPT CERMINING COL CERMIN ACCORD
Certifications	MICROSOFT CERTIFIED SQL SERVER 2000 DBA
	MICROSOFT CERTIFIED SQL SERVER 2000 DEVELOPER
	MICROSOFT CERTIFIED VISUAL BASIC DEVELOPER
	MICROSOFT CERTIFIED PROFESSIONAL (MCP)
	MICROSOFT CERTIFIED SOLUTION DEVELOPER (MCSD)
Databases	MS SQL SERVER 2012/2008/2005/2000, SYBASE, ORACLE,
	DB2, INFORMIX, AS 400, MS ACCESS 2000/2003/2007/2010
Environments and Networks	WINDOWS NT, WINDOWS 2000/2003/2008, MS EXCHANGE
	SERVER, 2/3 TIER APPLICATIONS, DATAMART, DATA
	WAREHOUSE, APPLICATION VIRTUALIZATION
Industries	PETROLEUM, INSURANCE, TRANSPORTATION,
	EDUCATION, RETAIL
Operations and Technologies	PROCESS AUTOMATION, DATABASE/APPLICATION
1	DESIGN, LOGICAL AND PHYSICAL DATABASE
	MODELING, DATA CLEANSING, DATA FORMATING,
	CUSTOM ETL, WINDOWS SHARE POINT SERVICES,
	STORED PROCEDURES, TRIGGERS, CURSORS,
	DTS, LINKED SERVERS, LOG SHIPPING, BACKUP AND
	RECOVERY, COM, DCOM, ASP, OLE, MTS, MS IIS, ADO,
	CDO,ODBC, OLEDB, ACTIVEX, MAPI, MS EXCEL
	MACROS/AUTOMATION, IBM MQ SERIES
Programming Languages	T-SQL, VB.NET, VISUAL BASIC, JAVA, VB SCRIPT, VBA,
	JAVA SCRIPT, HTML,XML,XSLT
Business Intelligence	SSIS 2012/2008/2005, SSRS 2008, SSAS 2008, SAP BUSINESS
	OBJECTS R2
Utilities and Tools	REMEDY INCIDENT MANAGEMENT, REMEDY CHANGE
CONTENS MAIN A COLO	MANAGEMENT, MS DTS, MS OFFICE, VISIO, ERWIN,
	DREAMWEAVER ULTRADEV, GLOBALVIEW
Non-Technical	Understanding of Oil Trading Concepts, Futures Trading,
Non- I centical	Supply Hedging, Deal Valuations, Mark-to-Market
	Supply medging, Dear valuations, Mark-to-Market



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EDUCATION

NORTHERN ILLINOIS UNIVERSITY

MS in Operation Management & Information Systems 2009-2013

GULBARGA UNIVERSITY

BS in Electrical Engineering, Gulbarga University, India 1987-1991

EMPLOYMENT HISTORY

NORTHERN ILLINOIS UNIVERSITY	2011- Present
NORTHERN ILLINOIS UNIVERSITY	2011- Prese

Title: Database Architect

INDEPENDEDNT CONSULTANT 2010-2011

Title: Data Warehouse Consultant

NORTHERN ILLINOIS UNIVERSITY 2009-2010

Title: Database Manager

INDEPENDENT CONSULTANT 2005-2009

Title: Consultant

PSC GROUP LLC, SCHAUMBURG, IL 1998 -2005

Title: Technical Consultant

INFOBRIDGE INC, NAPERVILLE, IL 1996-1998

Title: Technical Consultant

CGPL LTD. BANGALORE, INDIA 1992-1996

Title: Computer Technician

WORK EXPERIENCE

Northern Illinois University Dekalb, IL

Illinois Interactive Report Card

As a **Database Architect**, leading a team to design and implement a data warehouse to support data intensive analytic web applications designed and developed for K-12 grade students, parents and educators in the state of Illinois.

Key responsibilities,

- Technical accountability for the database environment.
- Design and develop solutions to support on-going and new projects.
- Monitor and assist junior support staff in operational and problem resolutions.
- SQL Server database administrator (6 servers, ~35 databases with size 10GB-60GB)
- Manage development, test & production database environments.
- Database performance tuning.
- Preventive and database maintenance tasks.
- Change request management and implementation.
- Technical SME (Subject Matter Expert) for the application and work closely with other project teams.

Nov 2011- Present

Key accomplishments,

- Involved in lead role to design and develop database environment for "ISLE Dashboards".
 Designed and developed high performance ETL packages to load data from "Student Information" systems from districts participating in ISLE project.
- Re-architected a database environment to reduce application load and improve site performance for Illinois School Report Card project resulting in significantly improving site performance and reliability.
- Successfully migrated production database environment from SQL 2008 server to a SQL 2012 instance running on a Windows 2008 virtual server.

Independent Consultant Downers Grove, IL

Dec 2010-Nov 2011

Data warehouse Consultant/Architect

Currently providing Business Intelligence, Database, Application architecture and support services to for a established Logistics company using Microsoft BI and SAP BO R2 products. Primary responsibilities include developing and maintaining SQL databases, converting SQL Server 2000 DTS packages to SSIS 2005 packages, new SIIS 2005 ETL packages, BO Universes and supporting BI Analysts in an environment consisting of IBM AS400, MQ Series, Informix, DB2, VB.NET SQL Server 2005 64-bit, SAP Business Objects XI R2. Major accomplishments include developing a process to purge data warehouse databases, developing VB.NET Windows Service to process MQ Messages and SSIS package performance improvements.

Northern Illinois University Dekalb, IL

May 2009- Nov 2010

Illinois Interactive Report Card

As a Database Architect, headed a team to design and implement a data warehouse to store the assessment results of the K-12 grade students in the state of Illinois. The data warehouse was implemented using ROLAP model and the aggregate/detail data required for reporting was generated on the fly using a set of complex SQL Stored Procedures. As a Database Architect, I was responsible for database schema, logical and physical design of the database. As an ETL Architect/Developer, designed and developed ETL packages using SQL Server Integration Services to parse, clean and load the data from multiple sources in multiple formats into the data warehouse. The data warehouse stores assessment information for approximately 1.5 million students per year from 3800+ schools for 16 different assessments. The data warehouse is the only system in the state of Illinois with a comprehensive year-over-year performance reporting of the students for state and/or school district mandated assessments such as ISAT, PSAE, PLAN, EXPLORE and others. The entire project took around 1 year to complete. The development team included a .NET web developer and 3 junior staff.

BP Warrenville, IL

June 2001 - Apr 2009

As a contractor, served as a lead developer/administrator for a business critical Trade Control/Risk Management tool, serving 20 direct analysts and around 50 data subscribers including Oil & Gas traders, Schedulers, Market Risk analysts etc.

Key responsibilities,

- Technical accountability for the entire solution.
- **Design** and **develop** solutions to align with supply trade control business model.
- Monitor and assist junior support staff in operational and problem resolutions.
- SQL Server database administrator (5 servers, ~25 databases with size 10MB-90GB)
- Manage development, test & production environments.
- Application and database performance tuning.
- Preventive and database maintenance tasks.
- Change request management and implementation.
- Technical **SME** (Subject Matter Expert) for the application and work closely with other project teams.

Application support team Share Point website administrator

Key accomplishments,

- Re-architected an MS Access based solution into a 2-tier SQL Server based solution resulting in a significant improvement in application availability and performance. Migrated a numbers of client side/functions/reports code into SQL Stored Procedures, Triggers & UDFs thereby significantly improving system performance and reliability.
- Upgraded application interfaces improving the data validity and availability.
- Streamlined report generation and user account management.
- Implemented data archive procedures for Compliance.
- Implemented changes to the application to comply with SOX (Sarbanes-Oxley) requirements.
- Implemented **Disaster Recovery** procedures including custom SQL database log shipping for the application with a recovery time of as little as 2 hours.
- Re-architected a market data feed processes resulting in approximately \$70K in license savings for each project/system that utilizes the data feed.
- Professionally and successfully transitioned the support tasks to onshore/offshore team.

Kemper Insurance Lake Zurich, IL

Nov 2000 - May 2001

The insurance company planned to implement an electronic review system to audit legal bills and save the company approximately **8 million** dollars/year. I was assigned the complex task to design and develop the audit rules component based on Uniform Task Based Billing Codes. The b-to-b electronic legal bill review system accepts invoices over a secured website and processes them on a scheduled basis. I designed and built the COM components to validate the invoices in real time using LEDES 1998B format and process the invoice using a predefined set of rules based on American Bar Association's ABA codes. The COM components were built using Visual Basic 6.0 based on OOD principles and MTS/DCOM technology is used to host the objects on remote machines.

eFox Hoffman Estates, IL

June 2000-July 2000

A Chicago area sales training company was in need of an MS Excel developer to quickly develop a tool in MS Excel to include it in their new sales training package. To address their immediate need I developed a tool using MS Excel at an amazing pace on schedule.

South Cook SD4 Chicago Heights, IL

A Chicago area Intermediate Service Center was in the need of building a system to manage the events/courses held at their location. I was engaged to design and implement a system to facilitate event management, online registration and invoicing features. I designed and implemented the Event Management System using MS SQL Server database and MS Access 2000 2 tier client/server application.

MidstateExpress Aurora, IL

May 2000-May 2000

A Chicago area based freight transportation company was interested in developing a mechanism to provide faster access to information: basic company background, rate quotes, shipment scheduling, shipment tracking, claims, on-line forms for shipments, and completed shipping document images. Since all this data existed on internal systems, the need was to deliver it to the customer in a more cost effective fashion without manual intervention. During final stages of the implementation process the technical team faced an issue which would have made the entire project worthless. The company had all their documents stored on optical disk drives as .PDF files with their location entries in MS SQL Server database. As there is no known interface to access the MS SQL Server from a Domino web server running on an AS400, the development team turned to Microsoft experts for help. I was engaged to solve their problem. I built a COM component to retrieve the .PDF documents and built an ASP page on an IIS server to provide the HTML required by the Domino web page.

NYK Line Downers Grove, IL

Jan 1999 - Mar 2000

One of the largest shipping company in the world was in the process of building a system to improve the efficiency of their Rail Billing operations for their branches at Chicago and Boise. Most of the operations were manual in nature and required significant human intervention for daily activities. To streamline the rail billing and accounting operations, the company formed a project team to design and build the Rail Billing System. Due to the lack of internal technical staff, I was engaged to design and implement the entire system within 10 weeks. I took it as a challenge and built the system within the allotted time frame and impressed the project management team. The system included rail billing, EDI, accounting modules. I used MS Visual Basic, MS Access, Procom Plus and MS Access data replication between Chicago and Boise to build the system.

Swiftgift Highland Park, IL

Nov 1998 - Dec 1998

A Chicago area based start-up company providing MasterCard-based gift debit cards to consumers and corporate clients was in need of a custom application to track all orders and to determine the current balance on each card. While the initial implementation included mainframe transactions, FTP-site transactions, reporting, card-order import and order-file generation and was capable of electronically ordering large volumes of corporate cards, there was no way to track any cards after the cards had been sent. There was also no way to determine the balance on cards after the cards had expired. Because the client was in the first round of venture capital funding, a low-cost, interim proof-of-concept system was in order. To keep costs in line and proceed as quickly as possible, designed a solution using Microsoft Access database, which would handle all of the needed requests for a moderate throughput (<1000 cards/day). The front end of the application was Visual Basic to allow the users of the application the flexibility to communicate with a variety of systems, such as the FTP site and the CICS mainframe system over a Modem connection. The solution enabled the company to accept volume corporate orders and to track the status and balance of all cards ordered with the system or via the external website. More importantly, it allowed them to evaluate their business process and make the necessary improvements for second round funding.

Fermi Lab Batavia, IL

June 1999

A Chicago area government laboratory was in the process of developing a help desk reference guide to support on of their custom software package. The client was in need of a Microsoft developer to build a solution to track the in-coming help desk requests and reformat the mails to enable the client to build the help desk reference manual. I was engaged to build the solution. Developed a MS Exchange Server mail box agent to monitor the help desk requests and format as per client specifications.

Newspaper Services of America Naperville, IL

Sep 1998- Dec 1998

An advertising consultancy firm was in the process of building a pilot application to analyze the newspaper circulation in the US to address their increasing customer requirements. The initial system, developed by a consulting firm, was not user friendly and required significant maintenance. I was engaged to address the usability aspects of the application and improve the application performance. I redesigned the system by normalizing the database and optimizing the UI to support the new database modal. My efforts were instrumental in getting the project approved for production by the company's management.

Village of Rosemont Rosemont, IL

Aug 1998 - Sep 1998

The city village office was in need of a cost-effective solution to manage the inventory during village events. Developed an MS Access based solution to manage the inventory including bar code labeling feature.

Shashi Reddy Page 6

Belair Express Schiller Park, IL

July 1998 - Aug 1998

A Schiller Park, IL area based warehousing company was in need of solution to track the inventory movement. Their existing system was built on a file based database system using Filemaker Pro. The old system was labor intensive with no check made on the inventory movements. Designed and developed and MS Access based solution to maintain the inventory movement which significantly reduced the human intervention in the tracking the incoming and outgoing inventory.

Allstate Insurance Northbrook, IL

Nov 1997 - May 1998

I was involved in the development of ActiveX component called 'Hot Interfaces' for insurance company. The component was designed as a "screen scraper" to interface with legacy applications.

Sears Hoffman Estates, IL

Sep 1997 - Oct 1997

I was involved in the development of custom applications for Human Resources department.

Price Waterhouse Chicago, IL

Aug 1996 - Sep 1997

As a part of a team of 4 developers, I was involved in the development of a tax analysis tool called "Power Player" for the tax consulting company.

BHEL Bangalore, India

Nov 1992 – Sep 1996

I was a part of customer support team involved in the installation and maintenance of computer systems and Novell Networks. Maintained several client networks, desktops & printers, handling software installations, contract renewals and also supervised customer support team.

Michael Gillespie

Mgillespiel@niu.edu

PROFESSIONAL EXPERIENCE

Illinois Interactive Report Card, 2007 - Present

Northern Illinois University DeKalb, IL

Summary: Seven years of experience analyzing and compiling data and ensuring the quality of user's experience. Collaborate with clients (district and schools) and ISBE, grantor daily on several tasks and projects. Held title as Graduate Assistant from 2007 -2009 before being promoted to current position as Research Associate in 2009 – present.

Key Responsibilities

- Compiled data reports by aggregation, transformation, and restructuring of report card and student level assessment data.
- Analysis and preparation of assessment data for processing in SPSS and SQL server 2008
 - o Data validation
 - o Data cleaning
 - o Data restructuring
 - o Data Transformation
- Systematically organized and managed assessment data provided by the state and approximately 200 districts spanning the timeframe of 2000-2014
- Developed a holistic understanding of more than 17 assessments
 - o Score metrics
 - o Benchmarking
 - o Data hierarchy; overall scores and sub-scores
- User Interface Design
 - o Designed preliminary assessment screen templates based on the data from assessment vendors: Assessment rosters, charts and reports, and student reports
 - o Maintained screen templates for utilization and review by any team member
- Development and implementation of testing protocols to verify data processing, integration, and screen functionality were updated correctly:
 - o MyIIRC screens
 - o DSI screens
 - o ISLE dashboards screens
 - o Assessment rosters
 - o Student reports
 - o Charts
 - o ISLE dashboards
 - o Public report card screens
- Data mapping:
 - o Categorization, classification, and standardization of assessment data for screen designs
 - o Mapping of assessment data into requested formats; SIF and Edfl standards
 - o Integration of assessment data into standard framework
 - o Data mining, classification, and standardization of assessment data into
- Collaborated with programmers on various projects
 - o Communicated assessment metrics and screen requirements

Mgillespie l@niu.edu

- o Elaborated on data related issues and provided
- o Provided documentation specific to the individual programmers
- Provided customer support on data related questions
- Formalized procedures for the processing of webinar usage files from the state
 - o Setup steps which ensured proper access to Rising Star plan
 - o Created documentation file which provides information as to when users were given access including information provided by the user at the time the webinar was completed

Page 2 of 2

RELEVANT SKILLS AND KNOWLEDGE:

- Data Analysis and reporting:
 - o Preparation, Transformation, integration of data from multiple source
 - o Data categorization and summarization
 - o Data extraction and aggregation
 - o Data mapping of assessments into SIF (Schools Interoperability Framework) and Ed-Fi standards; both state and local
- Application proficiencies:
 - o Experience with SQL Server Management Studio
 - o Extensive knowledge of SPSS
 - o Microsoft Office applications: Microsoft Word, EXCEL, Power-Point, and ACCESS

EDUCATION

University of Iowa

Bachelor of Science in Psychology May 2005

Northern Illinois University DeKalb, IL, 2007 - 2009
48-credit hours taken towards a Master of Educational Psychology
Relevant Coursework:





EDUCATION

University of Southern California

Angeles, USA

MS, Electrical Engineering

Los

May 2010

Jawaharlal Nehru Technological University

India

BTech, Electronics & Communications Engineering

Hyderabad,
May 2008

TECHNICAL SKILLS

Programming: C, C++, C#, VB(ASP.NET), Socket Programming, HTML, XML, XSLT, REST, SOAP, MVC, Java

Script/jQuery,Twitter Bootstrap, Ajax, Perl, JSON, PHP.

Databases: SQL, MYSQL, InterSystems Cache **Operating Systems:** Windows, Linux, Mac O/S X.

Debugging Tools: MS Visual studio(2005, 2010), Firebug, IE(Debug mode)

Souce control: TFS, Apache SVN

WORK EXPERIENCE

Illinois Interactive report card project(NIU)

IL,USA

Research Associate (Software development)

[C#,VB(ASP.NET),MVC,REST,SOAP,SQL,Javascript/jQuery]

Dekalb,

11/12-

Current

 Designed, compiled, and implemented fully functional dynamic code in .NET to support a growing state and national web education service.

- Application development, web services design and implementation, and working with clients.
- Work involves heavy usage of ASP.NET & C#, VB.NET, jQuery/JavaScript, X/HTML, HTML5,WCF/Web Services, MVC, XML/XSL, SQL Server 2005 and 2008.

Atlas Development Corporation

Calabasas,

CA,USA

Software Developer (Atlas Medical) [C#(ASP.NET),SQL,Javascript/jQuery]

03/11-11/12

- The Medical division provides a suite of industry leading connectivity solutions to hundreds of national and regional commercial diagnostic testing facilities and hospital outreach programs accessed by more than 75,000 physicians and clinicians.
- Performed Graphical User Interface application development using C#, JavaScript, and HTML.
- Used Inter System's Cache database server and SQL server for the database handling.
- Performed system integration, testing, debugging on multi-tiered platforms.

Asset Management Specialists.

Bristol, PA,USA 06/10-

Software Developer 03/11

 Developed, created, and modified general business applications software or specialized utility programs.

- Designed and customized software for client use with the aim of optimizing operational efficiency.
- Work involved usage of Perl DBI modules, web based scripting and C programming as well.

Information Technology Services, University of Southern California Angeles, USA Student Consultant 05/10

Los

01/09 -

• Troubleshooting a variety of technical problems ranging from wired and wireless internet connectivity, network jacks and sockets, email configuration, looking up DHCP logs etc.

TECHNICAL PROJECTS & PAPERS

Facebook Flickr integration for generating required images using Google maps [Ajax, Spring 2010 JSON, Java Servlets, Facebook API]

• This project dealt with using AJAX, JSON, and Java Servlets to produce Google maps generated Flicker images for the given input city, state combination as entered by the user. It is used to map the input's geographical coordinates as given by the google maps software http://maps.google.com/maps?hl=en&tab=wl and thus generate the corresponding pictures. Furthermore, I had also added an application which lets you publish these pictures onto your personal Facebook account's Wall page using the "upload" button at the bottom of the display page.

Website (PERL Search aggregator) [Perl CGI, Apache]

Developed a website, which summarizes the result of a search query on Youtube.com.
 When a user issues a search query, the server-side script executes the query on YouTube and retrieves the video name, video description, video rating, and video thumb of the top three records from "Playlist Results", "Channel Results", and "Promoted Videos".

Multi Threaded Socket Programming (Using C/C++)

Fall 2008

 Simulated a race among mobile wireless units to help them reach their target with the help of Checkpoints before running out of battery/range using communications over TCP & UDP sockets involving parallel threading.

RELEVANT COURSEWORK

Résumé

Name: Zhuomingna Li

Address:

Primary Number: (

Email: zli6@niu.edu

Degree: MS in Operation Management and Information System

Education

Degree: Bachelor of Economics May 2009

School: BoHai University, China Major Emphasis: International Business and Trade

Main Courses:

Cumulative GPA:

Degree: Master of Professional Accounting and Master of International Finance, March 2012
School: Deakin University, Melbourne, Australia Major Emphasis: Accounting and Finance
Main Courses: Quantitative analysis method, Data analysis management. Business process management,
Corporate accounting, Management accounting, Auditing, Accounting theory, Corporate Finance,
International Finance, Financial Market, Treasury risk management, Investment portfolio Management,
Business and Commercial law.

Degree: Master of Science in Operation Management and Information System, Dec 2013 School: Northern Illinois University, DeKalb, IL

Major: Operation management information system Certificate: SAP and Business Intelligence Main course: SAP: Business Decision Technologies, Management of IS Technology; Advanced SAP system; Enterprise Process Improvement, Business Telecommunications. Business Systems Analysis and Design, Business Applications of Database, Information Technology Project Management.

Computer Skills

Applications: SAP, SQL, Data warehousing and Business Intelligence (BI), Data modelling techniques, Microsoft Access, Microsoft Front Page, Visual Basic Advance, NET 4.5 IN C++, VB, SPSS.

Experience

- 1. Researcher Intern at ShenYin & WangGuo Securities (July 2008-Oct 2008; Feb 2009-July 2009)
 - · Research on money markets and security markets following growth rate.
 - Create a custom report for analytics in support of business processes.
- 2. Part time job: Faysoft Pty Ltd in Australia (Mar 2011-Feb 2012)
 - Computer data analysis to help client to create such definitions as a formal project proposal.
 - Record financial transactions include sales, purchases, income, receipts and payments by an individual or organization.
- 3. Full time: Global Investment Consultant Company (Apr 2012-Aug 2012)
 - Worked closely with data analysis professionals and statistical editors to provide the best rationalization of capital investment.
 - Help clients to minimize the potential risk of investment by utilized formula driven procedures.
- 4. Graduate Assistant in Illinois Interactive Report Card (Oct 2012-Dec 2013)
 - Technical assistance to the lead statistical programmer for the IRC project.
 - Preparing code in SPS, running files, compiling data, stored procedures and managing large files
 of educational database.
 - · Building and maintaining databases.
 - Help supervisor to meet project deadlines, provide accurate and timely output, and work effectively with others in a team environment.
- 5. Research Associate/SPS in IIRC (Jan 2014-Until now)
 - Data processing and analysis, compilation, and transformation;
 - Data quality assurance.

Sandeep Kumar Nagapuri

Summary:

- Have 4 years and 7 months of experience in IT Industry (till date) in areas like Requirement Analysis, Design, Coding, Testing, Implementation, Project Coordination and Client Interaction.
- Strong in OOPS, Java, J2EE, C#, ASP.NET, JQuery, JavaScript/DHTML, Ajax, SQL Server/T-SQL, MySQL, Web Services, XML, Maven.
- Well acquainted with all phases of Software Development Life Cycle (SDLC).
- · Ability to adapt and learn to new technologies is one of my core strengths.
- Fast Learner and having very good Issue analysis & trouble shooting capability.
- Skilled problem solver, able to guide and work with diverse, cross-functional teams.
- · Practiced SDLC, Agile methodologies and SCRUM.

Education:

Northern Illinois University
 Master of Science in Computer Science Engineering
 GPA -

DeKalb, IL, USA Spring 2013

Technical Expertise:

Languages	Java, C#, VB, C, C++, PHP, Perl, ASP.NET.						
Technologies	Web-Services, SOAP, REST, ASP MVC, WebAPI, Stripes MVC, Spring MVC, Web Forms, Window Forms, J2EE, JSF, Hibernate, ADO.NET, Entity Framework, Swings, AWT, HTML, CSS, Java Script, JQuery, Ajax, XML, JSON, SOAP-UI, Shibboleth, Apache Axis1.4, Maven, Apache Ant, TestNg, iOS mobile programming and EMS/NMS, Agile development methodology.						
Middleware	JBoss, Apache Tomcat, IIS.						
Development Tools	Eclipse, Visual Studio, Xcode, Clearcase, Clarify and IDCE, Microsoft Suite, VSS, Team Foundation Server, Synergy, ChartFX.						
Databases	SQL, SQLServer, T-SQL, MySQL, PL/SQL, Oracle 10g/11g						
OS	Windows XP, UNIX, Linux, Mac, iOS						

Work Experience:

Illinois Interactive Report Card (IIRC) - Northern Illinois University

DeKalb, Illinois, USA

Illinois Interactive Report Card (www.iirc.niu.edu) with support from Illinois State Board of Education is the premier web site for test results and other school improvement information for Illinois schools.

<u>Project</u>: MylIRC – Single Sign On Authentication and Authorization application with extensively designed customized options for admins and users to manage and monitor all the other applications of IIRC.

Research Associate - Lead ASP.NET Developer

July 2013 - Present

Roles:

- Implemented new enhancements and bug fixes into the current legacy written in C#.
- Maintained Authentication and Authorization module for the IIRC website.
- Envisioned and built front-end for the site written in ASP.NET, Visual Studio, C#, ADO.NET, XML, HTML, JQuery, Ajax, CSS.
- Maintained SQL Server database to responsively handle complex queries (T-SQL, triggers, stored procedures, functions) and .NET data access components.
- Designed a N-tier architecture and new DB design for the rewrite of the application with MVC, WebAPI, Entity Framework, BootStrap, RESTful services, Shibboleth SSO.
- Designed and Implemented Java UI client for interacting with the Rest web services with Spring MVC for an external UPortal project.

<u>Project</u>: Student Data Services (SDS) – Services to provide student level data to school and district administrators with easy-to-understand graphics, information screens, and color-coded performance measures for each of the 3907 public schools and 869 school districts in Illinois State.

Graduate Research Assistant - ASP.NET Developer

Feb 2012 - May 2013

Roles:

Incorporated new enhancements and bug fixes into the current legacy written in VB.NET and C#.

Sandeep Kumar Nagapuri

- · Worked with JQuery, JavaScript and AJAX for front-end enhancements and client side validations.
- Implemented interactive charts with ChartFX and designed roster screens with grids and tables that take data from a huge school database.
- Took the initiative to reconstruct the whole SDS project from VB in VS 2005 to C# in VS 2010 and successfully finished it within the challenged deadlines.
- · Designed a new project from scratch with an enhanced structure for District 87 module in C# and ASP.NET 4.0 framework.

NOKIA Mobile Broadcast Solutions - Wipro Technologies Limited

Hyderabad, Andhra Pradesh, India

Nokia's Mobile Broadcast Solution is globally the first DVB-H server platform intended for commercial Mobile TV services.

<u>Project</u>: Broadcast Account Manager (BAM)- An on-line service fulfillment and charging solution for paid mobile broadcast services.

Project Engineer – Java and J2EE Developer

Aug 2010 - Jan 2012

Roles:

- Worked with an existing system by installing new enhancements and bug fixes into codebase.
- Efficiently handled multi tasking by providing support to BAM 2.3(implemented using Struts framework and stores procedures)
 and redesigning the BAM 4.0(implemented using Stripes Framework, Hibernate and JQuery).
- Developed/Redesigned Web-Services for BAM 4.0 using SOAP and Apache Axis 1.4.
- Redesigned the project structure by modularizing the code in to different respective modules and building the project with MAVEN, which supported multiple deployments.
- · Maintained the maven artifactory for the entire BAM project.
- Designed and developed the new web screens using HTML, JSP, Stripes Tag Library, AJAX, and JQuery.
- Proactively developed a design for extensive login authentication of the user accounts, which could be in common for all the components within MBS architecture.

AVAYA Unified Communications Management - Wipro Technologies Limited

Bangalore, Karnataka, India

<u>Project</u>: UCM Sustenance - A software product from Avaya utilizing a Service-oriented architecture that serves as a foundation for unifying configuration and monitoring of Avaya Unified Communications Servers and data systems. It has all flow from UI communicating to call server for managing the telecommunication network (s)/network elements including sub servers.

Project Engineer – Java and J2EE Developer

Sept 2009 - July 2010

Roles:

- Identified the business requirements for the project and followed agile methodology by interacting with team and attending Scrum meetings.
- Worked with an existing system by installing new enhancements and bug fixes into codebase.
- · Implemented JSF web framework effectively.
- Developed new screens using JSF tag library, JSTL, and JavaScript on the presentation tier and written Session Beans to handle Business Logic.
- Handled web deployment services by using ANT and Maven scripts for multiple modules of the project.
- Maintained the call servers and handled the procedures for efficient communication of these servers to their respective networks elements in the EMS/NMS structural design.
- Involved actively in performing sanity testing of Nortel call-servers.

Certifications:

- Unified Competency Framework Java/J2EE 2.1 Certification at Wipro Technologies Limited.
- Unified Competency Framework Java 1.1 Certification at Wipro Technologies Limited.
- EMS/NMS Certification Wipro Technologies Limited.

References:

Available upon request.

MARILYN BELLERT

Associate Director, Center for P-20 Engagement Northern Illinois University

EDUCATION

Carleton College B.A., English Washington University M.A., English

APPOINTMENTS

ALLOHULDIND		
Northern Illinois University	Associate Director, P-20 Center	2008-Present
Northern Illinois University	IIRC Senior Research Associate	2001-Present
Northern Illinois University	Executive Assistant to V-P	2001-Present
Outreach, Engagement, and Regional Deve	elopment	
Florida International University	Program Director	April, 2000
University Outreach		
Illinois, Colorado, D.C., Massachusetts	Independent Consulting in	1990-2000
	Education Policy, Instructional	
	Technology, Planning & Facilitation	
College of DuPage	Research and Grant Writing	1990-1995

SELECTED REPORTS, POSTINGS, AND PUBLICATIONS

Bellert, M., News articles on 15 topics, 2011-2014, *NIU Today*; http://www.niutoday.info
Bellert, M., Academic Performance of Transfer Students, 2008-2013. DeKalb, IL: Northern Illinois University

Bellert, M., Transfer Students Surveys 2011-2013. DeKalb, IL: Northern Illinois University Bellert, M., Users Guides and all narrative materials for Interactive Illinois Report Card 2004-2014 and Illinois Report Card, 2013-14; http://iirc.niu.edu and illinoisreportcard.com

Bellert, M., Engagement at Northern Illinois University, submitted to the Carnegie Foundation, August 2008; earned recognition of NIU by Carnegie for University Engagement in Outreach and Partnerships

Billman, P. & Bellert, M.(ed.), 2006, Keeping Illinois Competitive: Status Report on Science, Technology, Engineering, and Mathematics Education in Illinois. DeKalb, IL: Northern Illinois University & Illinois Business Roundtable http://www.keepingillinoiscompetitive.niu.edu

NIU P-20 Website http://www.niu.edu/p20, 2004-2014

SELECTED RECENT PRESENTATIONS

Bellert, M., et al, "NIU's P-20 Initiatives," Northern Illinois University

Bellert, M., & Pfeifer, A., Board Members' Training in Use of Report Card Data for Policy-making, Triple-I Conference, Chicago.

Bellert, M., & Smith, H., "Advanced IIRC Users Guide to the PSAE," Illinois High School Coalition Conference, Bloomington, IL

Bellert, M., and Kaplan, A., "STEM Outreach, Digital Convergence Lab, and Other Potential Investments," NIU Foundation

Bellert, M., "P-20 Strategic Planning Projects: Issues and Options," NIU

Bellert, M., "P-20 Strategic Planning and Outreach," Regional Superintendents Conference, NIU

PROFESSIONAL AND RELEVANT VOLUNTEER ACTIVITIES

2012-2014	Chair, Regional College Readiness Committee
2008-2012	Founding Co-chair, Design Team, DeKalb High School-NIU Partnership/PDS
2002-2014	NIU P-20 Task Force staff
2001-Present	Senior Research Associate, Interactive Illinois Report Card (IIRC), NIU
1997-2003	Vice-Chair, Illinois State Board of Education
1998-2001	NCATE Unit Accreditation Board, representing state boards of education
1993-1997	National Assessment Governing Board, representing local boards of education
1991-1995	Chair and Interim Director, ED-RED, research and lobbying organization for 120
	suburban school districts in the Chicago metropolitan area
1983-1996	President and board member, Glenbrook High Schools Board of Education

ILLINOIS REPORT CARD RESPONSIBILITIES

Marilyn Bellert works on the Illinois Report Card, IIRC, MyIIRC, Data for School Innovation, and the Illinois Honor Roll as a writer, marketing specialist, and strategist who focuses on maintaining currency and planning updates for these products. She designs and oversees production of print and electronic materials for the products, customizing messages for various audiences, prepares and disseminates press releases and other internal (NIU) and external communications. She participated actively in the development of illinoisreportcard.com, especially in developing features that serve parents. Using her extensive experience as a policy-maker in Illinois and nationally, Marilyn plays a key role in upgrading Report Card services and planning new products for the future that will serve the needs of families and educators. When not working directly on the Report Card, Marilyn manages NIU's P-20 Center, overseeing more than 30 university-wide projects and activities with external partners. Her partnership development and facilitation skills with diverse groups have helped to build the Report Card's user base and its effectiveness.

Web Designer and Front-End Developer

Energetic, innovative and motivated design professional with nearly 20 years of experience in print and web design. Supervise a team of graphic designers and collaborate with marketing and communication specialists as well as web developers. Routinely work directly with clients to deliver high-quality design solutions, and collaborate with technical staff as needed to see projects through from concept to implementation. Proven successful as an individual and as part of a project team. Interested in furthering my career into a more specialized areas of user-centered design, responsive web design, and mobile applications.

Education

- Graduate Certificate in Geographic Information Analysis, Northern Illinois University, DeKalb, Illinois, May 2012
- Certified Usability Analyst, Human Factors International, May 2008
- MSEd. in Instructional Technology, Northern Illinois University, DeKalb, Illinois, May 2005
- B.F.A. in Visual Communication, Northern Illinois University, DeKalb, Illinois, May 1995

Professional Experience

Director for Outreach Communications

Outreach, Engagement, and Regional Development, Northern Illinois University, DeKalb, Illinois, August 2005 - present

- Interface Designer and Consultant for university-related websites
- Designer on marketing initiatives for our regional credit and non-credit programs, including lead-nurturing other email marketing campaigns
- System Administrator for university-wide content management system, specializing in creating and managing university and customized web themes
- · Supervisor of design and administrative support staff

Lead Interface Designer

eLearning Services, Northern Illinois University DeKalb, IL, September 2001 - August 2005

- Designed and maintain electronic and print communications for units in the Division of Outreach, Engagement, and Regional Development and other university initiatives
- Designed and produced a promotional CD-ROM
- · Served as lead interface designer on a \$1.5 million grant-funded web-based learning project

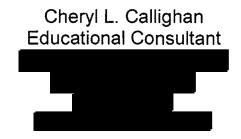
Senior Designer

Gerard Design, Naperville, IL, November 1999 - August 2001

- Designed high-impact brochures, catalogs, advertising, and Web-based communications for fortune 500 companies and associations headquartered in the Chicago suburbs
- · Participated in all phases of design from client needs analysis through final press production
- · Maintained a high level of customer service and loyalty

Technical Skills

- · Web Development: HTML, CSS, content management systems, responsive design methods
- Adobe Creative Suite: Dreamweaver, Illustrator, Photoshop, InDesign, some Flash
- Business Software: Microsoft Office
- Course-based knowledge of ArcGIS, GeoMedia
- Operating Systems: Windows XP/7, Mac OS 10.X



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Illinois State University	B.S. in Education	1978
Continuing Education Co	ourses	
Concordia College		1982
Northern Illinois Univer	rsity	1994

Recent Professional Development

Common Core Standards Doug Reeves 2011

Differentiated Coaching, University of Kansas, Center for Research on Learning 2009

Common Formative Assessments Certification, The Leadership and Learning Center 2008

Instructional Coaching, University of Kansas, Center for Research on Learning 2008

Professional Experience

 Northern Illinois University Outreach ISLE Content Specialist Illinois Report Card Content Specialist DSI Training Consultant 	2011 - present
 Kishwaukee Intermediate Delivery System School Improvement/Rising Star Coach Marengo Community High School 	2001-2011
School Improvement Coach DeKalb High School	2009 - 2010
 Standards Aligned Classroom Coach DeKalb High School Hiawatha High School, Kirkland, IL McHenry High School Cary School District - all six schools Cortland Elementary School Somonauk Elementary School School Support Team 	2001-2009
Flinn Middle School, Rockford, IL	2009

2007-2008

Haskell Elementary School, Rockford, IL

Staff Educational Consultant

Burpee Museum of Natural History 1987-1992

Classroom Teacher

Clinton Rosette MS, DeKalb, IL (permanent sub)	1996
Anne M. Jeans Elementary School, Hinsdale, IL	1981-1983
Milne Grove Elementary School, Lockport, IL	1978-1981

Presentations

DeKalb District 428

Summer training Deconstructing Standards	2010
Deconstructing Standards PLT leaders	2009
Leadership skills for Professional Learning Teams	2009

Raising Student Achievement Conference

2006 and 2007

- Formative Assessment
- Creating and Communicating Targets
- Language Arts in Multiple Learning Styles

McHenry County Curriculum Council 2006

Standards Aligned Classroom Initiative

Meramac Valley R-III District, Pacific, MO 2005

Formative Assessment

Publications

Callighan, Cheryl L. <u>How to Teach Spelling Without Going Crazy</u>, Monday Morning Books, 1999

Callighan, CherylL. <u>How to Teach Vocabulary Without Going Crazy,</u> Monday Morning Books, 1999

Callighan, Cheryl L. <u>Starting Points for Grammar</u>, Monday Morning Books, 2000 Callighan, Cheryl L. <u>Starting Points for Spelling</u>, Monday Morning Books, 2000 Callighan, Cheryl L. <u>Starting Points for Vocabulary</u>, Monday Morning Books 2000

Callighan, Cheryl L. Vowels with Vitality, Good Year Books, 2001

Recent Community Involvement

Sycamore United Methodist Church L3 Strategic Leadership Team

American Red Cross Blood Drive Coordinator

January 2013-Present September 2011

February 2011 January 2010 American Red Cross DeKalb County Chapter, Spring Fundraising Campaign Chairperson 2009

Sycamore United Methodist Church, Church Council Chairperson 2007-2008 American Cancer Society Relay For Life, Staff Volunteer 2005 and 2006 Pay It Forward House, volunteer 2005-2009

Cheryl L. Callighan