This summary of event post-survey responses was created by Evaluation & Research Associates for the Collaborative Leadership Team to aid in their debrief of this event and planning of future Collaborative events and activities.

134 registrants
- 129 Conference registrants
- 5 non-profit vendors
- 0 for-profit vendors

133 attendees
Summary is based on 63 respondents to the event post-survey
47% response rate

Summary of findings: Over half of the attendees were familiar with NGCP prior to attending this event. Fifty-six percent of attendees were from the K-12 sector (32% teachers or staff, 11% counselors and 13% administration). Attendees were most likely to agree that the conference provided Good (4) or Excellent (5) opportunities for collaboration and networking. Ninety percent of attendees agreed that the content presented was relevant to their work and the speakers presented content effectively. On average, attendees met seven new people. Networking opportunities and becoming more aware of current issues girls face were the most valuable aspects of the event, according to many respondents. One respondent commented, "The most valuable aspect of the event was learning about barriers to girls engaging in STEM, learning strategies to overcome these barriers, and networking with others to learn and identify ways to collaborate."

Familiarity or involvement with NGCP prior to attending this event (n=63)
Respondents selected all that applied.

<table>
<thead>
<tr>
<th>Familiarity or Involvement</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was already familiar with the goals of the project</td>
<td>22</td>
<td>35%</td>
</tr>
<tr>
<td>I had participated in at least one webinar (live or via archive)</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>I had attended at least one previous NGCP in-person event</td>
<td>11</td>
<td>18%</td>
</tr>
<tr>
<td>I learned about the project at a non-NGCP event</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>My program/organization was listed in the NGCP Program Directory</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>I received the NGCP e-newsletter</td>
<td>12</td>
<td>19%</td>
</tr>
<tr>
<td>I had accessed the NGCP website</td>
<td>16</td>
<td>2%</td>
</tr>
<tr>
<td>I had applied for a NGCP mini-grant</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>None of the above</td>
<td>30</td>
<td>48%</td>
</tr>
</tbody>
</table>
Indiana Girls Collaborative Project
Collaboration Conference
STEM-ulating Collaboration: Sustaining Equity and Resources for Indiana Girls
March 19, 2014
Event Post-Survey Summary

Sector represented by respondent (n=63)
Respondents chose the best response.

<table>
<thead>
<tr>
<th>Sector represented by respondent</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 Teacher/staff</td>
<td>20</td>
<td>32%</td>
</tr>
<tr>
<td>K-12 Counselor</td>
<td>7</td>
<td>11%</td>
</tr>
<tr>
<td>K-12 Administrator</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>Higher Education Faculty/staff</td>
<td>9</td>
<td>14%</td>
</tr>
<tr>
<td>Higher Education Administrator</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Informal Education/Community-Based Organization</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Informal Education Museum/Science Center</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Business/Industry</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Professional Organization</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Government Representative</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Researcher/Evaluator</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6%</td>
</tr>
</tbody>
</table>

Other responses:

- BGCCC Board Member

Ratings of the components of this NGCP event (n=61, unless noted below)

<table>
<thead>
<tr>
<th>Component</th>
<th>MEAN</th>
<th>Poor (1)</th>
<th>Fair (2)</th>
<th>Satisfactory (3)</th>
<th>Good (4)</th>
<th>Excellent (5)</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall event (n=62)</td>
<td>4.03</td>
<td>-</td>
<td>8%</td>
<td>15%</td>
<td>44%</td>
<td>34%</td>
<td>-</td>
</tr>
<tr>
<td>Location and facilities (n=59)</td>
<td>4.10</td>
<td>-</td>
<td>-</td>
<td>23%</td>
<td>44%</td>
<td>33%</td>
<td>-</td>
</tr>
<tr>
<td>Speakers/Keynote (n=59)</td>
<td>4.15</td>
<td>2%</td>
<td>7%</td>
<td>7%</td>
<td>44%</td>
<td>41%</td>
<td>2</td>
</tr>
<tr>
<td>Professional development sessions (n=58)</td>
<td>3.98</td>
<td>2%</td>
<td>7%</td>
<td>12%</td>
<td>50%</td>
<td>29%</td>
<td>3</td>
</tr>
<tr>
<td>Collaboration/Networking opportunities</td>
<td>4.16</td>
<td>2%</td>
<td>5%</td>
<td>16%</td>
<td>30%</td>
<td>48%</td>
<td>1</td>
</tr>
</tbody>
</table>
## Level of agreement to the following statements about the event (n=62, unless noted below)

<table>
<thead>
<tr>
<th>Statement</th>
<th>MEAN</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand how NGCP could benefit me and my work.</td>
<td>4.18</td>
<td>-</td>
<td>3%</td>
<td>11%</td>
<td>50%</td>
<td>35%</td>
<td>-</td>
</tr>
<tr>
<td>The content was relevant to my work.</td>
<td>4.29</td>
<td>-</td>
<td>6%</td>
<td>3%</td>
<td>45%</td>
<td>45%</td>
<td>-</td>
</tr>
<tr>
<td>Speakers presented the content effectively. (n=60)</td>
<td>4.27</td>
<td>-</td>
<td>3%</td>
<td>7%</td>
<td>50%</td>
<td>40%</td>
<td>2</td>
</tr>
<tr>
<td>The materials provided were useful. (n=58)</td>
<td>4.12</td>
<td>-</td>
<td>5%</td>
<td>14%</td>
<td>45%</td>
<td>36%</td>
<td>2</td>
</tr>
<tr>
<td>I learned practices or strategies to engage girls in STEM. (n=58)</td>
<td>4.09</td>
<td>2%</td>
<td>7%</td>
<td>7%</td>
<td>50%</td>
<td>34%</td>
<td>2</td>
</tr>
<tr>
<td>I specifically learned practices or strategies to engage underrepresented girls (African-American, Hispanic/Latina, Native American, and girls with disabilities) in STEM. (n=55)</td>
<td>3.22</td>
<td>9%</td>
<td>15%</td>
<td>33%</td>
<td>33%</td>
<td>11%</td>
<td>5</td>
</tr>
<tr>
<td>I met people with whom I would like to collaborate.</td>
<td>4.19</td>
<td>2%</td>
<td>-</td>
<td>13%</td>
<td>48%</td>
<td>37%</td>
<td>-</td>
</tr>
<tr>
<td>I learned strategies for collaborating effectively. (n=56)</td>
<td>3.52</td>
<td>2%</td>
<td>11%</td>
<td>36%</td>
<td>38%</td>
<td>14%</td>
<td>4</td>
</tr>
<tr>
<td>I am leaving with ideas of potential collaborative partners or for collaborative projects.</td>
<td>4.00</td>
<td>2%</td>
<td>6%</td>
<td>16%</td>
<td>42%</td>
<td>34%</td>
<td>-</td>
</tr>
<tr>
<td>I plan to apply or implement information I learned at this event in my work. (n=59)</td>
<td>4.25</td>
<td>-</td>
<td>3%</td>
<td>7%</td>
<td>51%</td>
<td>39%</td>
<td>2</td>
</tr>
</tbody>
</table>

## Participation in NGCP

<table>
<thead>
<tr>
<th>Statement</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I brought information or resources from their own program or work to share with others. (n=60)</td>
<td>23</td>
<td>38%</td>
</tr>
<tr>
<td>I would like to participate in future NGPC events or activities. (n=60)</td>
<td>55</td>
<td>92%</td>
</tr>
</tbody>
</table>

## Number of new people respondent connected with at this event (n=54)

<table>
<thead>
<tr>
<th>Minimum response</th>
<th>Maximum response</th>
<th>Mean number of new connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>30</td>
<td>7</td>
</tr>
</tbody>
</table>
All responses from open-ended questions are included below (as written by respondents).

What respondents might use from the event and how:

To create new collaborations

- A session on engineering service learning projects showed how our organization could get help on projects and provide actual engineering experiences for high school and college students. Learning about different programs/services provided contacts for potential partnerships.
- As a result of this event, my district is planning to meet with more higher education partners in the future in order to begin more wide scale collaboration projects.
- Be more involved with programs going on around me.
- FAB FEM female in STEM career speakers bureau PURDUE SWE program collaboration
- I made many contacts that will help broaden and strengthen my outreach efforts.
- I recently received information regarding a NASA grant proposal, for which I hope to use contacts from the meeting. I also will be working with other contacts to identify Indiana projects to help girls in STEM.
- Met new people to collaborate with.
- Pursue a partnership with a local organization/agency
- We might partner with EPICS High.
- We plan to collaborate with partners to spread awareness about strategies to engage with girls in STEM, with a focus on meeting the girls at their interest level, and finding a way to tie STEM careers to their areas of interest.

Apply lessons/activities

- Alice programming software presented will be used to form a summer camp session.
- Ideas for classroom planning and after-school plans
- I plan to use several of the lesson ideas presented to include STEM activities in the school day.
- I will use the NASA sight for lesson plans for my engineering class.
- I would use tips and strategies I learned to engage girls in my high school science classroom
- NASA ignite programs and engineering as part of my lesson plans. I'd like to start a STEM programs not only at my school but in our district as well.
- The engineering and design process presented by many speakers at this event will be integrated into future projects.
- Through collaboration with a local elementary school, I would like to use Alice to develop an interest in programming

Will share information about STEM and STEM careers

- Emphasize how STEM careers are attainable.
- I am hoping to incorporate some of the NASA pieces
- I am now more aware of the need to share with my students what STEM careers look like on a daily basis.
- Integrating more STEM related articles and fields of interest within my language arts classroom.
- Looking at increasing more PLTW courses being taken in our high school and trickle down to opening PLTW courses at the elementary and middle school levels.
Activities for elementary school level:

- Great ideas on teaching engineering concepts to elementary students.
- Engineering activities for elementary age kids as well as ideas for computer engineering activities.
- I plan to contact our Elementary Principals to discuss the possibility of implementing PLTW at the elementary level.
- I plan to try to encourage my district to begin our STEM learning at the elementary school by working with, or using projects of, Project Learning Tree. Also to encourage some Computer Science exploration using Alice.
- I’m disseminating some of the materials to middle school and elementary programs. I got an idea for a new way to involve female engineers with my female engineering students.

Information about informal education programs:

- Find the local girl scout chapter to get involved with our high school.
- I also plan to use the resources provided for summer STEM instruction.
- I will be able to promote the GO STEM summer camp I learned about to my students.
- Info about the new PLTW Launch program will be useful in the 2014-15 school year.
- Information about Alice computer programming

- The sessions from the Girl Scouts and the IUPUI center was especially informative. I am going to take a look a look at the Girl Scouts STEM document that they discussed to try and employ some of their strategies in our STEM camp and with our teachers during the school year.

Strategies to better engage girls in STEM

- Engagement tips for girls
- I like how the presenters indicated that not all STEM activities have to be large activities. I will also be mindful of how I interact with females in the classroom and speak to other teachers about this as well.
- I think that encouraging schools and programs to try girls-only classes or groups is worthwhile and effective.
- Was useful to think about how our instruction and expectations might not be sensitive to the strengths or styles that are typically associated with girls.
- Working and engaging girls in DTEM Education

To apply for funding:

- I am hoping to apply for a project grant.
- I will also encourage other organizations to apply for the INGCP mini-grant.
- I will apply some of the information that I learned in my mini-grant proposal.
- Information on websites with relevant data regarding girls and STEM will be useful as we design programs and seek funding.

Other

- Have already talked with colleagues and ordered materials.
- I appreciated the discussion and exploration of equity across STEM implementation.
- I thought the 20 year trend information was important to further along the importance of our mission to encourage more girls to get involved with STEM.
- I will continue to encourage and support this path in my work.
- Ideas to share with teachers
• Share the resources with colleagues
• Take ideas from programs back to our district.

Information or a resource that respondent accessed that was shared by another program at the event:

Programs/Vendors

EPICS
- EPICS High
- The EPICS program that provides assistance to non-profits via service learning in engineering projects by students.

Girls, Inc
- I learned more about Girls, Inc
- Girls, Inc. sessions.

Girl Scouts
- Also the research from the Girl Scouts will hopefully be of some use when attempting to write grants and make justifications in the future.
- I mentioned the Girl Scouts STEM information above.

NASA
- NASA Ignite! I hope to attend a NASA Ignite workshop in the near future and use that information at our next campus event for middle school girls in STEM.
- NASA ignite (2)
- NASA ignite resources: STEM lessons to use with students
- NASA information can always be used. Also the connections between the after school network and the iSTEM group will be helpful. I did hear good ideas from Connor Prairie’s group, as well, about a STEM day.
- Programs with NASA
- The group working under a grant from NASA had much to share.
- The NASA Ignite curriculum might be a good fit for an academic summer program for at risk urban youth that I am working with. Also there were some good resources given during the DOE Data presentation.

Project Learning Tree
- Looking at increasing more PLTW courses being taken in our high school and trinkle down to opening PLTW courses at the elementary and middle school levels.
- The information provided during the project learning tree was very informative and appeared to be of great benefit for the girls.

University resources
- Info from Purdue
- IUPUI Infomatics contact
- Met university partners to help with our work
- Purdue Women in Engineering Outreach team. We discussed some ideas for my school.

Other Programs/Vendors
- Alice Women working in Computing
- FabFems
- IN Girls Collaborative Min-grants and fall grant program. IN Afterschool STEM standards
• Inspire information
• National Space Grant Foundation
• Techbridge
• The Great Lakes Equity Center shared a great framework which I will in turn share with my colleagues across the school district.
• The vendors that were set up provided different curriculum ideas and those could be useful in the future. Also, the lady that spoke from the Girls Center (I can't remember the exact name), gave some great activities that could be used with not only girls but boys as well.

Data/Resources
• connecting reading with engineering.
• curriculum
• DNR
• Girls Inc Build a Bridge activity.
• I liked using books in STEM - story telling is an excellent way to engage young women in STEM
• I was able to share information on collaborative partners and also mini grant information.
• The statistics and links from the Data session
• the studies shared were helpful
• The tracking data session provided many resources for me to obtain data to share with my students.
• web site and a book

People or organizations missing from this event:
From the field of education:
• It felt as though this event was really not for K-12 educators and more for afterschool/enrichment programs. There is value in including more of the K-12 sector, particularly when the state is beginning the process of a STEM School Certification. Not all stakeholders were at this event.
• male educators
• Marketing personnel. How do I market STEM to high school/middle school students? What are some strategies that have worked.
• Need more participation from Indianapolis Public Schools and other school systems.
• Teachers that are from language arts areas that have successfully worked with STEM teachers. How do you implement STEM areas into language arts and get buy-in from all language arts teachers or capitalize on the teachers you do have supporting the program?
• Also the colleges did not have info for their satellites (NWI) areas.
• University partners and organizations in the northeast and northwest parts of the state. Most partnerships are currently concentrated in the southwest and indianapolis areas.

Industry
• Eli Lily volunteers
• I was surprised that since Computer Science has the largest STEM need according the Bureau of Labor and Statistics that there were NOT DOE representatives from the content area that covers computer science
(Business Marketing and Information Technology) Sad to see only 3 males in attendance. It will take more than just females to get female enrollment up.

- Industry input
- industry representatives
- The businesses who are looking to hire girls

Other underrepresented groups

- people with disabilities
- More representatives from minority groups

Other

- Martin University (NASA Program)
- Purdue (Engineering)
- Researcher to explain what works specifically with girls. How do we keep girls interested in Middle School? What specific programs to girls gravitate toward as they get older and why? Since STEM jobs are isolating and girls are social how can we better connect the two? Would be nice to include high level females in STEM careers who are good role models to talk about what made a difference for them. How did they succeed when most don't?
- Business community
- Lego Mindstorm and how it can be applied to STEM
- The girl scouts only had Indy local information.
- Can't think of anyone (2)
- Don't know (2)
- N/A (4)

Most valuable aspect of the event:

Networking and collaborating

- Collaborating (2)
- Connecting with new and potential collaborators.
- Connections
- connections to people and interactions on topics of mutual interest.
- getting the word out about girl-centered STEM programming
- Meeting a whole new group of people whom I don’t normally engage with.
- Met with the Purdue Women in Engineering folks in the lobby area. They were able to provide me with valuable information and we discussed working together in the future. I would have been nice to hear from them all the sources they have that can be utilized by the schools.
- Networking (9)
- networking - information about what is going on and the current state of affairs in Indiana
- Networking - the workshop facilitated by Bev where we all discussed our organizations and how we can partner. Terrific!
- Networking with other professionals
• The networking session where I met several people from organizations which may have interest in supporting my K-4 STEM program.

Awareness

• awareness and the need for change
• better informed about the work.
• Having time to think about the issue and talk to colleagues.
• Hearing other people’s thoughts and ideas
• I just found the overall presentations about females in the STEM fields interesting and useful.
• learning about new resources!
• Learning about the various programs that exist and having the opportunity to network with those offering the programs.
• Learning what programs are out there to help schools.
• Nice to see some understanding that we can just start STEM education in 9-16. STEM thinking and skill attainment must begin in preK-8. Would have been nice to have code.org presentation.
• The most valuable aspect of the event was learning about barriers to girls engaging in STEM, learning strategies to overcome these barriers, and networking with others to learn and identify ways to collaborate.
• Thinking about changing instruction.
• What is actual being taught and presented to younger girls
• Wonderful resources

Learning about NGCP

• Learning about NGCP and their work across the nation and in Indiana.
• Learning about the existence and mission of the NGCP.
• Learning about the NGCP for possible future use

Speakers

• inspirational speakers
• Keynote speakers (4)
• The guest speakers were awesome!

Workshops/Break-out sessions

• Breakouts (2)
• Purdue’s break-out session
• Workshops (2)

Other

• all was good
• Data Driven Instruction
• Grant availability for GO Projects
• The people that were involved and the Elementary PLTW information
Other feedback or suggestions to improve this event or NGCP overall:

List of attendees
- Having a sheet in the packet with all participants contact info.
- I would like a list of attendees and contact information in our packet. I know you can’t always guarantee that those who sign up, show up, it would help to make connecting even easier.

More detailed strategies
- I was really hoping to see actual implementation ideas that we could take back to the classroom that day. Examples: Girls like to work collaboratively and seating arrangement is very important to them so try to use tables opposed to single-student desks. Use puppies to draw girls to Computer Science enrollment tables. Know that a high percentage of girls who enroll in CS are encouraged to do so by family, so engage parents by hosting a parent/daughter programming competition. Use landscape or animal photos as room décor to create a learning environment a girl would feel comfortable in. Go after non-traditional students like artists to create CS bulletin boards, or writers to maintain a CS Facebook page... get their foot in the door. There was plenty of information but very little that I felt I could take home and immediately act on.
- Don’t read the slide to me. Provide proven strategies that work to attract females to STEM education. We all know it’s difficult, that’s why we were there. Help me develop some ideas that will work in my school.
- It felt like we needed more discussion time following some of the presentations. Maybe a panel discussion would be helpful.

Facility/Accomodations
- A facility with larger small group rooms. Lots of sessions were full. Also, presenters ran out of hand outs.
- Get us in a lab on online to explore new strategies!
- Maybe more information regarding logistics (i.e. what you can bring into the building, vendor set-up, etc.)
- Need to make sure lunch is served in a different room than a presentation. Caterers were setting lunch up throughout Girls Inc. presentation. The presenter did an outstanding job of not letting it distract her... but it was distracting for those in the audience.
- Once I got there, it was great, but I didn’t feel the directions were very clear on where to park and where to go once I arrived at the government building.

Generally positive
- Both keynote speakers were excellent and spoke to the need of more STEM education for young women in the state.
- Good to hear from Ritz
- I know it was a lot of work for the people who were on the committee. Everything was great.
- I really enjoyed the event. I am thankful to have had the opportunity to attend.
- N/A
- No - it was great/No/None (3)
- Overall, I thought the event was very informative and resourceful.
- Thank you for all you did! The day was very helpful and informative.
- Very well organized and attended.
Other

- I think it should be assumed that attendees know what STEM is if they signed up for the conference. I wanted more detailed, specific, and unique ideas to engage students and I felt like this was a very general overview.
- If the wrap-up was not actually going to happen -- a little notice would have been nice.
- I suggest doing away with the mini-grants entirely. The presentation was campy at best. The number of hoops being requested for so little money has to be a joke. If not it should be. Stark contrast to presentation by project lead the way -- who's least expensive program is still in the many $1000's range.
- It was low energy and had a government feel rather than a inspirational feel.
- More time for attendees to visit exhibits.
- maybe a more organized networking session to present what everyone is working on? I don't know for sure but you are off to a great start.
- Offer PGP points to teachers who attend for the day. Much of what I heard in the equity session would be very relevant for classroom teachers. I would have liked to see additional sessions focused for classroom teachers.
- Each speaker talked about school requirements and is STEM, however not one mentioned what actual industries what from students.
- Stronger speakers
- Find a way to get more of the under served at the table. I realize this will take work and time.
- More workshop geared toward Middle/High school teachers. Great ideas I need help implementing them.
- I’d also like to have to seen more about the successes of the programs and even hear from girls themselves. Celebration of successes and what IS working well (no matter how minor) is just as important as addressing the issues.