Using Data and Data Visualization to Improve Equity in Program Participation

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Arizona Cooperative Extension

"Improving Lives, Communities and the Economy"

A statewide non-formal education network bringing research-based information into communities

A cooperative effort between the federal government, the University of Arizona’s College of Agriculture and Life Sciences, each of the 15 counties in the state, and with 5 tribes.

Creating Equity Visualization Tools

Action

Comparisons

Programs in 15 counties across Arizona and offices on 5 reservations

Mission: To improve lives, communities and the economy by inspiring the next generation of leaders, inventors, entrepreneurs and problem solvers... transforming the ordinary into the extraordinary.

Most Arizona youth (ages 5-19) are White or Hispanic or Latino. The demographic composition of Arizona’s youth is the inverse of the overall population.

Data Sources

Questions

Comparisons

Data Sources

What variables are available?

<table>
<thead>
<tr>
<th>Program Data</th>
<th>Administrative Data</th>
<th>Population Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Age</td>
<td>Race</td>
</tr>
<tr>
<td>2016</td>
<td>10-19</td>
<td>White</td>
</tr>
<tr>
<td>2015</td>
<td>11-18</td>
<td>Hispanic/Latino</td>
</tr>
<tr>
<td>2014</td>
<td>12-17</td>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>2013</td>
<td>13-16</td>
<td>Other or Multi-Racial</td>
</tr>
<tr>
<td>2012</td>
<td>14-15</td>
<td>White Non-Hispanic</td>
</tr>
<tr>
<td>2011</td>
<td>15-16</td>
<td>Hispanic/Latino</td>
</tr>
<tr>
<td>2010</td>
<td>16-17</td>
<td>American Indian</td>
</tr>
<tr>
<td>2009</td>
<td>17-18</td>
<td>Black</td>
</tr>
<tr>
<td>2008</td>
<td>18-19</td>
<td>Asian or Pacific Islander</td>
</tr>
</tbody>
</table>

What geographic identifiers are available?

<table>
<thead>
<tr>
<th>Age groups</th>
<th>County</th>
<th>Zip Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-11</td>
<td>12-13</td>
<td>14-15</td>
</tr>
<tr>
<td>16-17</td>
<td>18-19</td>
<td>20-21</td>
</tr>
</tbody>
</table>

Our goal is to compare apples to apples as much as possible.

Action

At the organizational level
- Recognize and identify systemic barriers that may lead to institutionalized inequity
- Leadership reemphasizes a culture of inclusion
- Examine recruitment and hiring processes
- Provide ongoing training to raise awareness and facilitate action

At a personal level
- Recognize and identify local barriers
- Face conscious and unconscious bias

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- Recognize and identify local barriers
- Face conscious and unconscious bias

Specific to the programming we were looking at
- Consider the definitions of club and group programs
- Include youth perspectives in program development
- Outreach and training for adult volunteers with interests and skills aligned with youth’s
- Design and communicate the benefits of 4-H for a new generation
- Communities of Practice to address equity
- More broadly
- Develop data systems and processes to be able to identify disparities and to monitor change over time

Comparisons

1. Comparing the racial and ethnic composition of counties to county programs

Non-White youth, including Hispanics and American Indians, are well-represented in 4-H clubs in La Paz County. The “other” category includes youth who may have been identified as multi-racial.

2. Comparing participation rates by race, ethnicity, and sex

Participation rates among all youth are equal, though rates of participation differ by race.

3. Comparing new enrollment numbers

Internet Current Enrollment by Race and Ethnicity

4. Comparing Club and Group program enrollment

Participants in Hispanic/African American or more than one ethnic group compared to group programs. Rates of Hispanic youth participation is much higher than for group youth in counties 4-H.

Groups of programs operated for 10 hours or less

*not unique participants

Variable Definitions

Age groups: 10-11, 12-13, 14-15, 16-17, 18-19
County: 1-19 counties in Arizona
School District: 1-19 school districts in Arizona
Zip Code: 1-19 ZIP codes in Arizona
Geographic Definitions: 1-19 geographic areas in Arizona

Arizona Cooperative Extension

College of Agriculture and Life Sciences
Norton School of Family and Consumer Sciences