Geocaching & Pomona’s Public Parks

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Abstract

The city of Pomona has many public parks located throughout the city and many of them are surrounded by residential zones. Geocaching is defined as “Geocaching is a real-world, outdoor treasure hunting game using GPS-enabled devices. Participants navigate to a specific set of GPS coordinates and then attempt to find the geocache (container) hidden at that location”. The average age of geocachers is in the 40’s, parks are suitable places for geocaching because of their easy terrain and easy access to the majority of the population, and a comfortable walking distance from home to park is about one mile. Geocaching in Pomona’s public parks would increase the use of them with a high residential density around the parks within a comfortable walking distance of one mile. Four parks were surveyed for geocaching hiding spots, mapped out in ArcGIS, and measured for residential density. These parks were Kellogg, Ganesha, Memorial, and Washington and they were chosen because they were distributed throughout the city and ranged in size. Ganesha Park had the best locations for hiding geocaches and had the highest residential density of 64.5%. Kellogg Park had the lowest residential density of about 30%. All four parks were suitable for geocaching and if geocaches were hidden within these parks and the population living around the parks got involved, then there use would increase.
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1.0 Introduction

The city of Pomona has many public parks within its city limits. These parks range from small and square shaped like Memorial Park (323 ft. by 327 ft.) to large and irregular shaped like Ganesha Park (984 ft. by 1,573 ft) (Google Earth). Many of these public parks are located next to neighborhoods and schools which gives a large population of people the use of these parks. Parks are places where the people can engage in social activities, physical activities, and escape urban pollution to breathe fresh air (Cohen et al., 2007). This is why parks are located throughout cities such as Pomona so every citizen can use the park and its facilities. In order for a city to be successful, it must have parks to keep its population satisfied.

Geocaching is an activity that takes place all around the world in areas such as national forests, urban environments and city parks (Geocaching.com). It is a great activity that people can do in groups or individually and it’s a good way to get neighborhood communities involved and socially interacting. On geocaching.com, it is defined as “Geocaching is a real-world, outdoor treasure hunting game using GPS-enabled devices. Participants navigate to a specific set of GPS coordinates and then attempt to find the geocache (container) hidden at that location” (Geocaching.com). These containers can be hidden in places like trees, under rocks, under bushes, hanging on buildings, and even in plain sight if the container is camouflaged. Some rules include the caches can’t be buried or out of the reach of small kids and each cache has to be at least a certain distance away from another cache. The size of these caches can vary also with sizes ranging from large to micro. Large to small size caches usually contain trinkets and a note pad for the person to write their geocache name and date of when they found it for others to see. The trinkets can be anything and any size (as long as it fits in the cache). Some examples include coins, small toys, key chains, etc. In the micro caches, only a writing utensil and paper are
provided so the person can still prove they found the cache. The container holding the geocache can be anything as well. Some examples include ammo boxes, lunch boxes, fake hollow rocks, small tin cans, and chapstick tubes.

On the geocaching website, all the geocaches are listed and identified on google maps and each caches latitude and longitude are given. This is what is downloaded into the GPS in order for the person to find each cache. On the website, the user can create a profile, log geocaches found, track other geocaches, and hide their own geocache. These geocaches can range in type also with traditional geocaches, multicaches, virtual cache, Earth cache, and many others. A positive feature of the website is all geocaches can be recorded and they must be approved by the people running the website before they can become an official geocache. This makes it fair for all ages to participate and enjoy this activity. Geocaching has grown since its creation in 2000 and has spread to become an international activity with a geocache on every continent, including Antarctica.

Geocaching is an activity that many types of organizations can get involved with. The Boy Scouts is one organization that actively participates in geocaching by awarding geocaching merit badges to the scouts who earn them. I conducted an interview with a Boy Scout leader, Randy Van Steen, to gain more information about how the Boy Scouts get involved with geocaching. According to Mr. Van Steen, Boy Scouts learn safety, geocaching terms and etiquette, how GPS technology works, and steps for finding and logging a cache while working to receive their merit badge. The guidelines to receive the merit badge include, “plan a geohunt for a youth group at school or place of worship, then choose a theme, set up at least four waypoints, teach the players how to use a GPS unit, and play the game” (Interview). Earning this merit badge forces the Boy Scouts to learn the geocaching rules and safety, which is the most
important step to learn in order to enjoy the activity. Mr. Van Steen also mentioned how they do promote geocaching in groups rather than individually, because this makes the activity more safe and fun. They teach the Boy Scouts how to leave no trace which means they minimize their impact on the environment, which is a big concern with geocachers since they are going ‘off the trail’ to get to the cache. Overall, the Boy Scouts promote geocaching as a great activity for youth groups and all ages to participate in and Mr. Van Steen says that geocaching is one of his favorite parts about the Boy Scout program because of the fun everybody has while participating.

2.0 Background

There were three main questions that needed to be answered first before the method of the project could be completed. These questions included the average age of a geocacher, parks being suitable places to geocache, and a comfortable walking distance from home to park.

2.1 Average Age of Geocacher

Geocaching is the practice of hiding a container in a particular location for other “geocachers” to find using a GPS receiver. There are three main areas of focus that influence the age group of geocachers and location suitability of a geocache (O’Hara, 2008). First, geocaching is a location based experience that has established and sustained itself over several years. This has an influence over current geocachers since they have essentially grown up with the activity as well as helped to define its growth. Second, people have the opportunity to participate locally, regionally, and internationally. Parks are specifically suited for geocaching since the caches can be easily moved, relocated, or new ones created. Currently, caches are being created at the astonishing rate of more than 5,000 per month (Ihamäki, 2007). Third, geocaching is of interest because it is comprised of both location-based elements and on-line elements. Understanding the
diverse relationship between in situ and on-line behaviors is an important factor when determining age group attraction and the necessary cache walking distances. There are six defined motivations for geocaching (O’Hara, 2008). Each of these motivations has a direct impact on age group participation, location, and walking distances. The six motivations are:

- **Social walking**: Geocaching creates an opportunity to get out and walk. Social walking defines the activity as not simply a destination or a find. Instead, an integral part of the experience is the walking to arrive at the geocache. This sense of purpose helps to motivate participants to walk and engage in physical activity and without this they would be less inclined to go.

- **Discovering and Exploring Places**: A key motivation underlying participation was its use as a way of discovering new places to go. It is not so much the finding of a cache that is the primary focus, but where the path leads the geocacher to as a consequence of doing this treasure hunt.

- **Collecting**: As an activity, geocaching is more than just the sum of the individual caching experiences. The geocaching web site keeps a record of all the different caches a particular geocacher or caching team have done. Their “collection” of cache finds as a whole was a demonstrable record of what they have achieved. Building this up was an important and ongoing driver for continued participation.

- **Profile and statistics**: Part of the value of these collecting practices within geocaching comes from being immersed within the social context of the geocaching community. With this in mind, it is important to consider the ways this was enabled through the on-
line environment and how this completely tied the location-based experience with accompanying on-line behavior.

- **First to find (competition and urgency):** The numbers game is an important driver for continued participation in geocaching activity. But there were other aspects of the activity which created compulsion and urgency among participants to get out there and search for a geocache. The most notable example discussed by participants was the practice of being “First-to-Find” a newly published cache and the particular kudos associated with this.

- **Challenge (individual and social aspects):** A key driving factor for ongoing participation is that geocaching provided a number of sources of challenge.

The age of the geocachers directly relates to their geocaching experience, physical ability and the geocache difficulty. For example, a certain class of geocacher may prefer a route of strenuous hikes through mountains and technical rock climbing as great fun and as a challenging setting for geocaching. Another geocacher may view it as a game of finding tiny treasures.

Figure 1 illustrates that about 25% of the geocachers are from 12 to 30 years old.

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Percent</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12-20</td>
<td>8%</td>
</tr>
<tr>
<td>2</td>
<td>21-30</td>
<td>17%</td>
</tr>
<tr>
<td>3</td>
<td>31-40</td>
<td>23%</td>
</tr>
<tr>
<td>4</td>
<td>41-50</td>
<td>24%</td>
</tr>
<tr>
<td>5</td>
<td>51-60</td>
<td>17%</td>
</tr>
<tr>
<td>6</td>
<td>61-70</td>
<td>10%</td>
</tr>
<tr>
<td>7</td>
<td>71-80</td>
<td>2%</td>
</tr>
<tr>
<td>8</td>
<td>81-90</td>
<td>0%</td>
</tr>
<tr>
<td>9</td>
<td>&gt; 90</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Figure 1:** Average age of geocachers

Source: [http://www.factsfacts.com/geocaching/GeocacherAges.htm](http://www.factsfacts.com/geocaching/GeocacherAges.htm)
This corresponds to the fact that teachers are discovering that geocaching can have an educational and beneficial role as a great learning activity for students. Arizona State University Professor Alice Christie conducted a seminar on the applicability of geocaching as an educational tool. The seminar was titled “Using GPS and Geocaching Engages, Empowers, and Enlightens Middle School Teachers and Students”. The following comments were from Dr. Christie’s seminar from other educator’s (Retrieved from: http://www.alicechristie.org/pubs/E6/index.html):

- **Hands-on nature of the experience:**
  - A great hands-on learning experience.
  - I liked being able to get outdoors and actually use a new technology to accomplish a goal.
  - I had never worked with a GPS, but we were able to quickly learn by doing and then find all our caches.

- **Collaborative nature of the experience:**
  - Working together as a group to figure out a solution to a problem was the key to our success.
  - It gave me an opportunity to work with and get to know some classmates and have a good experience with them.
  - I had never used these devices so it was nice to have a security blanket in the form of other people to help.
  - I especially like the conversations and problem-solving skills our group developed during this activity.

- **Engaging nature of the experience:**
  - The best part of geocaching is the thrill of finding the "prize" and figuring out what it means and how it relates to clues other groups find.
  - What I liked most about geocaching was the spirit of mystery. Where is the cache? What is inside the cache?
  - It was fun trying to find the caches at the coordinates in the GPS. I like trying to solve mysteries, and it was like a big mystery.
  - The most memorable moment was when I was first to find the cache. Even though it was not a race, I can see my students being as vigorous about it as I was.

- **Thought-provoking nature of the experience:**
  - I believe that geocaching is a grand way to incorporate technology, physical activity, and logical reasoning.
  - Geocaching was an exciting activity that sparked thought-provoking reasoning in an unconventional way.
Based on these comments, the average age of a typical geocacher is expected to decrease as educators begin to understand the benefits of geocaching as an educational tool. This study shows how younger adults and kids can get involved with geocaching and the previous study, Figure 1, shows how any age can participate in geocaching but 40 is about the average age.

2.2 Parks are suitable places to geocache

A survey of Los Angeles County (southern California) residents found that less than half the respondents had visited a national forest, state park, or open space preserve outside of a city during the height of travel season for even a one hour excursion (Tierney, Dahl and Chavez 1998). In a study of 50 years of use of various public lands in the U.S., national parks in Japan, and national parks in Spain, Pergrams and Zaradic (2008) reported an ongoing and fundamental shift away from nature-based recreation. At the same time, consider that the primary role played by diet and physical activity in emotional and physical well-being is complemented by secondary roles played by connections to nature and social communities (Pretty, Griffin, Sellens and Pretty 2003). These authors suggest that closeness to nature increases sense of well-being, as well as the likelihood of understanding of and the care for nature, and its rediscovery, can lead to transformations in people and nature. It also suggests that disconnections are harmful - both to individuals and to societies. How then do we make the reconnections? The data evaluated here suggest the use of technology to get youth outdoors. Based on this research, public parks make a good place for geocaching because of their ease of access to the population and good hiding places for geocaches (Chavez, 2009). They also start as a great way to get into geocaching because their terrain isn’t too difficult like national forests or desert terrain.
2.3 Comfortable walking distance

Comfortable walking distance is different among different people and ages. Depending on what type of lifestyle a person lives, walking distance could range from simple to extreme. Trotman et al used a typical walking distance of 50km as a reasonable geocacher roaming distance (Trotman et al, 2005). However, this equates to 31 miles and seems like an extreme estimate. In a study by the University of Wisconsin-La Crosse, the effects of geocaching on heart rates of elementary students seems to give a more reasonable estimate of a comfortable walking distance for a geocache in a park. The purpose of this study was to examine physical activity levels based on heart rate in elementary aged students when walking, (trial 1) and geocaching (trial 2). Subjects in grades 3 through 6, ages 8-12 were selected as a convenient sample. Figure 2 illustrates the distance in miles for grades 3 – 6. As illustrated, the average distance in miles for geocaching is just over 1 mile, which can be applied to all ages of a population.

Figure 2: Walking distance in miles for children in grades 3-6. Source: Trotman et al, 2005
The average age for geocachers today is the 40’s. However, it has been noted that this is expected to drop as the younger population gets involved in the activity and as schools promote geocaching as an educational tool. An example of this is the new merit badge recently issued by the Boy Scouts for geocaching. Parks are considered as an excellent area to set up geocaches. Parks offer multiple geographical dynamics where simple as well as creative geocaches can be hidden. In addition, parks are centrally located within cities, offering easy access and meet the one mile comfortable walking distance criteria. With these three questions answered, Pomona’s parks could be a possible place to geocache as long as they have a good amount of citizens living around them. Geocaching in Pomona’s public parks would increase the use of them with a high residential density around the parks within a comfortable walking distance of one mile.

**3.0 Method**

3.1 Study Area

The study area for this project was four different parks spread out through the city of Pomona. These parks included Kellogg Park, Ganesha Park, Memorial Park, and Washington Park. These parks were chosen because they represented a good distribution throughout the city which can be seen on the map below. These parks ranged from small, Memorial Park, to large, Ganesha Park. These parks also featured good areas for geocaching and they were surrounded by housing and some were located right next to elementary schools like Kellogg Park, which gave the park a good chance for being in a high residential density area.
3.2 Park Survey

Each of the four parks was visited to survey the parks for good spots to hide the geocaches. Good hiding spots include any place that is out of sight from somebody not geocaching. This means that any spot is a good hiding place such as under a bush, on a tree limb, and on top of utility boxes. Pictures of the spots which stood out to be the best for hiding geocaches were taken and recorded. The smaller the park, the more difficult it was to find good spots, but each park included multiple spots to hide geocaches.
3.3 Mapping

After the surveys were complete for each park, they were then mapped in ArcGIS to show location and to figure out how many residential zones were within a mile walking distance. These residential zones included houses and are divided by major streets and freeways. A street layer, city boundary layer, and park layer were added to the map in order to figure out what streets would be within a mile walking distance.

3.4 Determining Residential Density

With knowing the streets in walking distance based on the GIS map, a satellite image of the park can be viewed to figure out how many houses are within walking distance based on the streets. On each satellite image of the parks, four 1 mile long lines were created extending out from the middle of each park. This split the image into four quadrants (NW, NE, SE, SW). Within these quadrants, the residential zones are counted and the number of houses within each zone is estimated. Then the number of houses from each quadrant is added up to figure out the total number of houses within one mile of the park and this represents the population density. Based on house lot size and density within a one mile circle around the park, my assumption is about 2,000 houses to equal 100% residential density. The number of houses represents the residential density because each house has at least one individual who lives there who could participate in geocaching. This is the only data needed for this project because it deals with houses as residential density not population counts. This method of estimating the number of houses per residential zone was used because there wasn’t enough time during the research to count each individual house. The total number of houses to equal 100% residential density is also estimated based on how many houses could fit within the one mile radius. This was the method used because of the time restrictions on this research. This process was done for each of the four parks that were surveyed.
4.0 Results
4.1 Kellogg Park
4.1.1 Geocache sites

Kellogg Park had many good geocaching spots throughout the entire park. The best locations included the fence around the park, which had good vine cover that was low to the ground (Picture 1) and taller standing shrubs with easy access to their base (Picture 4). The park also contained a unique medium size log which is placed along the path that goes around the park. This log (Picture 3) makes a great place to hide a geocache because of the hiding spots underneath and around the log. Overall, Kellogg Park makes a great place to go geocaching because of the multiple geocache hiding spots.

Picture 1: Vine cover along the fence
**Picture 2:** Low lying vegetation cover

**Picture 3:** Large log
4.1.2 Residential Density

The process to figure out the residential density for Kellogg Park is illustrated in the map and satellite image below:
The house number counts for each quadrant and the residential density are illustrated in Table 1 and 2. The density was 30% which is the lowest out of the four parks. This is due to its location on the eastern side of Pomona near industrial zones and Cal Poly Pomona. The university does offer potential geocachers with the students living in the dorms and suites on campus and therefore were included in the count for residential density.

<table>
<thead>
<tr>
<th>Quadrant</th>
<th># of Residential Zones</th>
<th># of Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>NE</td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>SE</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>SW</td>
<td>3</td>
<td>250</td>
</tr>
</tbody>
</table>

Table 1: House counts for each quadrant

<table>
<thead>
<tr>
<th>Total # of Houses</th>
<th>Calculation</th>
<th>Residential Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>600/2000= 0.3</td>
<td>30%</td>
</tr>
</tbody>
</table>

Table 2: Total number of houses and residential density
4.2 Ganesha Park

4.2.1 Geocache sites

Ganesha Park was the best for geocaching hiding spots because of the large amount of vegetation and the large size of the park. The trails that lead back into the hills and brush were perfect for hiding geocaches along the path and not too far away off the path (Picture 5&6). Along the main roads within the park, large amounts of overgrown shrubs and trees made a great location to hide geocaches with very easy access to them (Picture 7). There were places along rock walls (Picture 8) that were close to the parking lot and made easy access hiding spots. Overall, Ganesha Park is full of great hiding spots throughout the entire park.

Picture 5: Stairs leading up to path along the hill
Picture 6: Path along the hill into the brush

Picture 7: Vegetation along the side of the road
4.2.2 Residential Density

The process to figure out the residential density for Ganesha Park is illustrated in the map and satellite image below:
The house number counts for each quadrant and the residential density are illustrated in Table 3 and 4. Ganesha Park had the highest residential density with 64.5%. This was due to the large amounts of residential zones within each quadrant around the park. The houses within some of the residential zones were on smaller lots which allowed more to be in those zones, increasing the residential density.

<table>
<thead>
<tr>
<th>Quadrant</th>
<th># of Residential Zones</th>
<th># of Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>2</td>
<td>130</td>
</tr>
<tr>
<td>NE</td>
<td>8</td>
<td>410</td>
</tr>
<tr>
<td>SE</td>
<td>7</td>
<td>450</td>
</tr>
<tr>
<td>SW</td>
<td>13</td>
<td>300</td>
</tr>
</tbody>
</table>

**Table 3:** House counts for each quadrant

<table>
<thead>
<tr>
<th>Total # of Houses</th>
<th>Calculation</th>
<th>Residential Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>1290</td>
<td>1290/2000 = 0.645</td>
<td>64.5%</td>
</tr>
</tbody>
</table>

**Table 4:** Total number of houses and residential density
4.3 Memorial Park

4.3.1 Geocache Sites

Memorial Park had the least amount of hiding spots for geocaches due to its small size. Some of the best spots included underneath the lamp post (Picture 9) and on top of the utility boxes behind the closed bathroom building (Picture 12). Both of these spots would be great places to hide a micro or small cache. The large tree in the front part of the park (Pictures 10&11) would work for hiding geocaches because its trunk bulges out, creating places to hide the caches off the ground. The size of Memorial Park makes it more suitable for small size geocaches, but still is a good park to hide geocaches in general.

Picture 9: Space underneath lamp post
Picture 10: In between the two trunks of this tree

Picture 11: Around and on the tree
4.3.2 Residential Density

The process to figure out the residential density for Memorial Park is illustrated in the map and satellite image below:
The house number counts for each quadrant and the residential density are illustrated in Table 5 and 6. Memorial Park’s residential density was the second highest with 58.5%. There were many residential zones around the park but were small in size for the SW quadrant. Also, the large industrial and commercial zones in the middle of the circle, going east-west, and downtown Pomona lowered the residential density for Memorial Park.

<table>
<thead>
<tr>
<th>Quadrant</th>
<th># of Residential Zones</th>
<th># of Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>8</td>
<td>300</td>
</tr>
<tr>
<td>NE</td>
<td>6</td>
<td>250</td>
</tr>
<tr>
<td>SE</td>
<td>8</td>
<td>270</td>
</tr>
<tr>
<td>SW</td>
<td>14</td>
<td>350</td>
</tr>
</tbody>
</table>

Table 5: House counts for each quadrant

<table>
<thead>
<tr>
<th>Total # of Houses</th>
<th>Calculation</th>
<th>Residential Density</th>
</tr>
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<tbody>
<tr>
<td>1170</td>
<td>1170/2000 = 0.585</td>
<td>58.5%</td>
</tr>
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</table>

Table 6: Total number of houses and residential density
4.4 Washington Park

4.4.1 Geocache Sites

Washington Park had a limited number of geocache hiding spots due to the large sports fields within the park. Some good hiding spot locations included along the path around the pool which had vegetation covering the hanging onto the path (Picture 13). Underneath utility boxes behind each baseball diamond made a great location for a micro cache (Picture 14). The trees around and within the park had low hanging branches which made for good hiding spots because they had easy access to them (Pictures 15&16). Washington Park had good easy access hiding spots which would make for a good first-time geocacher.

Picture 13: Vegetation along the path
**Picture 14:** Underneath the utility box

**Picture 15:** In the low lying tree branches
4.4.2 Residential Density

The process to figure out the residential density for Washington Park is illustrated in the map and satellite image below:
The house number counts for each quadrant and the residential density are illustrated in Table 7 and 8. Washington Park’s residential density was the third lowest at 50.5%. It was low because of the large industrial zones located to the North and East of the park which is clearly visible in the satellite image. The Pomona city border was also within the one mile radius of the circle which made those houses not count since they aren’t within the city limits. Washington Park’s activity is already high due to the sports fields, so geocaching could easily be done here because many of the people are familiar with the park already.

<table>
<thead>
<tr>
<th>Quadrant</th>
<th># of Residential Zones</th>
<th># of Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>11</td>
<td>330</td>
</tr>
<tr>
<td>NE</td>
<td>5</td>
<td>210</td>
</tr>
<tr>
<td>SE</td>
<td>6</td>
<td>150</td>
</tr>
<tr>
<td>SW</td>
<td>12</td>
<td>320</td>
</tr>
</tbody>
</table>

Table 7: House counts for each quadrant
### Total # of Houses | Calculation | Residential Density
---|---|---
1010 | 1010/2000= 0.505 | 50.5%

**Table 8:** Total number of houses and residential density

### 5.0 Conclusion

All four of the parks surveyed (Kellogg, Ganesha, Memorial, and Washington) and were all suitable for geocaching because they had multiple hiding spots for geocaches and easy terrain. Ganesha Park was the best for geocaching because of the park’s size and amount of vegetation cover. The large area of vegetation in the middle of the park makes a great place to hide geocaches and the multiple trails leading into these areas make for easy access. Memorial Park had the least amount of hiding spots due to its size, but still had hiding spots for small and micro caches. From these findings, the larger a park is and more vegetation a park has, the more suitable it will be for geocaching. All of these parks fall within the range of being suitable for geocaching.

For residential density, three of the parks (Ganesha, Memorial, and Washington) had residential densities higher than 50%. This means these three parks have a large population of possible geocachers living around the parks. If geocaches were hidden within these parks and the population around them got involved with geocaching, then the parks use would increase. Kellogg Park was an exception because it had a population density of about 30% which is well below 50%. This could be a problem, but with Cal Poly Pomona being within the one mile radius and students living on campus, there could be a large number of possible geocachers. Also, the elementary school next to Kellogg Park could also include many potential geocachers. Overall, the use of all these parks would increase with the addition of geocaching to them. They all have hiding spots and people living around them which is all that is needed for a great geocaching activity.
Including geocaching into Pomona’s parks will increase their use and be a social benefit to the citizens of the city. Geocaching is great to do in groups and can get the community involved with each other and be a starting point for social interaction. It can only be a benefit to the citizens of Pomona and would become popular with the current park users. Geocaching is also a great starting point for the city to inform the citizens to keep the parks clean and to respect the environment. It will help Pomona’s Parks raise its status and let not just the citizens of Pomona know, but all of the people living in Southern California that Pomona has many city parks great for social activities.
Works Cited


Minutolo, S. L. 2010 May The Effects of Geocaching on Heart rates of elementary students. University of Wisconsin-La Crosse. College of Science and Health


