Individual Work log

Date: 31 March, 2017

Goal: To choose whether our group will use guinea pig or hamster to conduct experiment and come up with ideas for experiments.

Reflection paragraph: I conducted research on guinea pigs since we divided up the work. By this, some of us would be conducting research on guinea pigs and some would be doing hamsters. This is to help us able to work faster and able to decide in a short period of time. I also created the work record form for my own convenient. This is due to the fact that I believe that we would find lots of information for each questions. Therefore, we would need more spaces in order to insert our information. I also thought of questions that would be useful for doing research. Such as, between guinea pigs and hamsters which ones are smarter? Although, the process delayed regarding to the fact that information was harder to find and the sources were not reliable, we would have to continue researching in the next class. In addition, on our next class we are planning to decide on our research questions and what we are going to do. This includes the materials that we would be using the conduct the maze and what types of things we would do to the animal. **Sources:**

http://www.nature.com/nprot/journal/v2/n2/abs/nprot.2007.44.html https://www.google.com/patents/US3260236 https://prezi.com/mbficq70gwmz/guinea-pig-maze-running-science-experiment/ http://www.livescience.com/50658-guinea-pig-facts.html https://www.ncbi.nlm.nih.gov/pubmed/10049600 http://cfhs.ca/athome/guinea_pigs

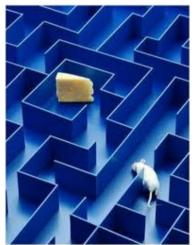
Date: 18 April, 2017

Goal: Choose which animal we would use (final decision) and think of the hypothesis that we would use on our experiment.

Reflection paragraph: I discuss with my team members and we ended up with the decision that we would use both guinea pig and hamster. We would compare whether which ones of them would be smarter by timing those animals. To make it accurate, we would collect the data every day and make a graph, creating trend lines to compare them. The maze would be made from future board. First, we discussed that we would use lego or plastic. However, we thought that it would be too expensive so we changed our decisions and ended up with future board. We hesitated whether we should make one or three mazes, but then we thought that we should just try out one first. I was assigned to continue finding general information about guinea pigs in order to place it in the background information for our proposal. We started to think about details in which how we would accomplish our proposal and what we would needed. This includes scheduling the times and managing work. Basically, today we discussed what each of us would be doing and assigned general jobs that we could do in the moment. We briefly plan and gather details about our experiment. In the next class, we would do further research and would probably design and plan our maze. If there is enough time, we would probably be working on our proposal and distributing specific work for each person. Sources:

https://plus.google.com/113186119715019609871

(We might start from placing foods as path and then reducing the amounts of food)



http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.567.5070&rep=rep1&type=pdf

Date: 19 April, 2017

Goal: Buy materials for the project.

Reflection paragraph: Discussing with my group, we decided that we would need future board in order to create the maze for our hamster and guinea pig. **Sources:** -

Date: 24 April, 2017

Goal: To outline and discuss how we would complete the proposal

Reflection paragraph: In this class, I spent my time reading the guidelines of the proposal and what we were supposed to include in our proposal. I created the google docs which I imported the flowchart of the proposal in order to help my friends start off. Furthermore, I also copied the important information which we are supposed to include it in our proposal. Then, I discussed with my friend the research questions. This include what type of experiment we would be conducting to our experiment and what would we based it on. Not only this, but what we would be gaining from it and how would be make sure that our experiment is controlled. Finally, we ended up with three research questions. The first question is how long does it take for both animals to learn to run the maze? By this, we would be collecting data everyday and track the time that it uses. Second question is that how long would it take for both animals to forget the maze? Lastly, how much time would it take for both animals to recover its memory about the maze? In addition, I also did some outline for the introduction by answering the questions given in the outline. I also thought of the importance of conducting this experiment. However, I would have to discuss it more with my friends and look forward to their feedbacks and suggestions. Sources: -

Date: 25 April, 2017

Goal: Started to find sources to use to the literature review and work on writing the proposal. **Reflection paragraph:** Today, we decided that some of us would be finding sources for the literature review, which one of those people is me. I started to find sources from google scholar because I think that those sources are reliable. The research paper that I found is called *Spatial memory performance of aged rats in the water maze predicts levels of hippocampal neurogenesis*. I believe that this article or journal is related to the animal that I would be working on. Since the experiment is based on rats which are rodents, and those rodents are in the same family with guinea pig and hamster. Besides this, we also discuss among our groups that we would be working on the proposal tonight.

Later throughout the night, we went on a group call where we discussed what we were going to do. We went on to writing the proposal and I wrote the literature review part. One of my team members and I went on finding journals and I had to eliminate the ones that overlap. Besides this, I had to read most of the journal to understand what they were talking about and then I would have to relate the information to what our experiment was. Furthermore, I explained to my friends whom didn't quite understand what we were going to do and lead them by giving them information about what they would have to write. Also, I edited some of the sentences that did not make sense and added details to some. **Sources:**

https://academic.oup.com/ilarjournal/article/48/1/29/690040/A-Renewed-Look-at-Laboratory-Rodent-Housing-and?searchresult=1

https://www.researchgate.net/profile/Elodie_Drapeau/publication/9012233_Spatial_memory_performances_of_aged_rats_in_the_water_maze_predict_levels_of_hippocampal_neurogene_sis/links/0deec537a679a297a0000000.pdf

http://journal.frontiersin.org/article/10.3389/fnbeh.2014.00136/full

Date: 28 April, 2017

Goal: Ask Miss Charlie for her comments and discuss what we were supposed to edit. Also, to talk about the schedule and how we would be taking care of the subjects. Not only this, to discuss about how to control the experiment.

Reflection paragraph: I asked Miss Charlie for the comments since it was unable to open in my laptop. It took a while until I ended up taking pictures of the comment. We had a short discussion about how we should edit the proposal and if our ideas were valid. Later on throughout the night, we had a group call again. We discussed about how to manage and control the time since our subjects would be needing the forgetting stage. I suggested that we control the time, otherwise the data would be very hard to analyze. We ended up thinking that we would train our subjects during lunch. Then, we would leave it for two periods which would be count as 2 hours of forgetting stage. Lastly, we would run the maze afterschool. However, we would have to ask Miss Charlie if it would be okay not to work on the maze during class period since we would have to control these factors. **Sources:** -

Date: 29 April, 2017

Goal: Edit the 20 comments that Miss Charlie gave.

Reflection paragraph: I went on and started reading the comments that Miss Charlie gave. I had to edit lots of comments and had to think of ways to make the proposal flow. I had edited more than 10 comments and had to rewrite some of the things that my friends wrote. I also added more details since some of them lack information. Not only this, I proved read most of the outline and highlight in color and wrote what we were suppose to edit. For example, if a part lacks information, I would be adding a note to remind my friends that we would have to edit this part.

Sources: -

Date: 30 April, 2017

Goal: Changing the sentence structure to passive voice since we are not able to use we. Furthermore, thought about the idea of controlling the time and making it fair. **Reflection paragraph:** Since, I wasn't sure if we were supposed to use we in the proposal, I decided to ask Miss Charlie and her answer was no. I had to edit all of the sentence to passive and had to rewrite all of them. Besides this, one of the comments that Miss Charlie gave was about time. I had to come up with ideas and thought of ways to compare the learning development of guinea pig and hamster. What I decided to do was to let both subjects run in straight lines and time them. After that, we would create another unit which is to divide the time with the length. Then, we would use this unit to compare with other mazes since we got the rate in which both of them ran. However, I also had another idea of measuring the maze length and then let both subjects run in straight line. From this, we would use the time that they run in straight line compared to the time that they run the maze. **Sources:** -

Date: 7 May, 2017

Goal: Finishing the literature review for the proposal

Reflection paragraph:

I have plan to finish working on the literature review. Since we already find websites, I had to start reading the articles and decide which details are important and which ones are not. After I paraphrased the information from the sites, I started to write description for it. I compare the result of the literature review to other researches that I have heard of. Basically, I did the 5 Cs according to the comments that Miss Charlie gave. However, after asking Miss Charlie I recognize that what I was doing is wrong. I then believe that I should ask for her comments tomorrow.

Sources:

- Gonder, J. C., & Laber, K. (2007, January 01). *A Renewed Look at Laboratory Rodent Housing and Management*. Retrieved May 08, 2017, from <u>https://academic.oup.com/ilarjournal/article/48/1/29/690040/A-Renewed-Look-at-Laboratory-Rodent-Housing-and?searchresult=1</u>
- Darcet, F., Mendez-David, I., Tritschler, L., Gardier, A. M., Guilloux, J., & David, D. J. (2014, April 03). Learning and memory impairments in a neuroendocrine mouse model of anxiety/depression. Retrieved May 08, 2017, from <u>http://journal.frontiersin.org/article/10.3389/fnbeh.2014.00136/full</u>
- Drapeau, E., Mayo, W., Aurousseau, C., Moal, M. L., Piazza, P., & Abrous, D.N. (2003). Spatial memory performances of aged rats in the water maze predict levels of hippocampal neurogenesis. Proceedings of the National Academy of Sciences, 100(24), 14385-14390. doi:10.1073/pnas.2334169100

Date: 8 May, 2017

Goal: Editing the whole proposal and finalizing the literature review and methodology. **Reflection paragraph:**

I edited all of the literature review. I had just realized that there were two parts of literature review one is for the research and the other is for the methodology. Besides this, I also had to move parts of the research literature review to the methodology due to some misunderstanding. From this, I had to read more cites and paraphrase the information. Despite this, I had to do 5 Cs for all of these. For the methodology literature review part, I had to explain to my friends what the experiment is about and had to assign work to each one of them.

Sources:

- Barnhart, C. D., Yang, D., & Lein, P. J. (n.d.). Using the Morris Water Maze to Assess Spatial Learning and Memory in Weanling Mice. Retrieved May 08, 2017, from http://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0124521
- Vorhees, C. V., & Williams, M. T. (2014). Assessing Spatial Learning and Memory in Rodents. Retrieved May 08, 2017, from <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4240437/</u>

Date: 9 May, 2017

Goal: Start conducting the maze.

Reflection paragraph:

My group and I helped each other by measuring the future board. We calculated the size that we wanted the maze of the hamster and guinea pig to be. Then, we had to calculate the holes that would be made, making them proportion to one another. After we finalize everything up, we then decide to cut the future board. While doing the work, I film my friends so that we would have some process of learning in our video.

Date: 16 May, 2017

Goal: To continue working on the maze and measure the speed of both species of the subject. **Reflection paragraph:**

I cut the future board into small pieces and helped my friends measure the size of the future board. On the previous days which was my week end, I cut the velcro so it was already ready. I also edited the flowchart (final draft). Not only this, I began to take the subjects out and measured its speed. By this, a future board was placed near a wall and the subjects were to run on a straight line. One of my friends measured its time and I took videos. **Sources:** -

Date: 17 May, 2017

Goal: To finish the maze

Reflection paragraph:

We continued cutting the future board and taping the materials together. A glue gun was used in order to make the maze strong. Some of the materials that we had already made was lost, so I had to help my friends cut more future board. I also cut the velcro. We then place the velcro on the future board and stick them together. One of my friends helped finalize how both mazes will be and we calculated the proportion in order for it to be fair for both species. We also came after school to finish the maze and our dream came true. THE MAZE IS NOW COMPLETE.

Sources: -

Date: 18 May, 2017 **Goal:** To run the actual maze.

Reflection paragraph:

Today on lunch we started running the maze. One of my friends that were the adopter of the subjects place the subjects onto the maze. (This is due to the fact that both of these people have already bond with the subjects. Then, one took control of counting the errors the subjects made and the other took control of the time. I was taking the video for it. After that, after school we came again. During the maze process, food were placed as trials in order for the subjects to reach the end line. We also took time bonding with them. **Sources:** -

Date: 19 May, 2017

Goal: To run the actual maze.

Reflection paragraph:

We ran the maze during lunch time and afterschool which we do not have animal behavior period today. We did it additionally. During this time, we were able to observe which subjects ran faster and were able to control the time that we used to experiment them. **Sources:** -

Date: 23 May, 2017 **Goal:** To edit the video **Reflection paragraph:**

I started to edit the video in animal behavior period and discuss with my friends how they wanted the video to become. Although, I couldn't do much because it was a very short period of time. I started to plan how I would conduct the video and started to upload the video into iMovie. From this, it took longer than I thought. I had to continue uploading it at home. Not only this, I knew I had to manage my time wisely because we do not have much time left and the video would be due soon. I had planned to edit the video again the next period. **Sources:** -

Date: 24 May, 2017

Goal: To edit the video

Reflection paragraph:

I edited the video again. By this, I have used photoshop to create the introduction cover of the video. In addition, I have checked the dates and what we have done in the past days. I arranged the videos in chronological order and began writing titles to it. I did not know how to create animations, so I began searching in Youtube on how to add them. I watched the videos for a while and was able to do it on ours. It took me a long time to create good animations.

Sources: -

Date: 25 May, 2017

Goal: To edit the video and start writing reflections

Reflection paragraph:

I continued edit the video by fast forwarding it and clipping it so that each of the video seem to go along and is able to merge to one another. However, I had to start writing on my individual reflection. I had so much to do that I wasn't sure which one I should start with. I decided to write two of the paragraphs first. I opened the rubrics while I was writing the reflection and answered all of the questions stated on the rubric. I had planned to finish the reflection and video when I have time because there would be no classes left for me anymore. **Sources:** -

Date: 27 May, 2017

Goal: To finish the video and the reflection

Reflection paragraph:

I had edited the songs, added more animations, clipped the video, and finalize everything. I had also finished the reflection, added ESLOs and double checked the stuffs I wrote on the previous days. I had waited many hours and uploaded the video on Youtube. **Sources:** -

Date: 28 May, 2017

Goal: To re-edit and finish the video again.

Reflection paragraph:

Asking Miss Charlie, I had recognized that we had to add the proposal content onto the video. Therefore, I had to redo everything and publish the video again. This time I added voice over and a lot more information onto the video.

Sources: -