

Carson City Library Camps with NCLab

AGENDA FOR THE DAY:

*I have also attached our flyers for registering for the events.

6th, 7th & 8th – March 29th 8:00am – 5:30pm

- Team building and problem solving ice breakers. Ex: How do you fit an elephant in a refrigerator, work in teams to solve. Share results.
- Karel Jr.
- Lunch
- Flex Educational Time. Ex: Most wanted to keep working with Karel Jr. and building their game in Karel Jr.
- Tina the Turtle
- Break (Snack Provided)
- 3D Modeling

4th & 5th – March 31st 8:00am – 5:30pm

- Team building and problem solving ice breakers. Ex: How do you fit an elephant in a refrigerator, work in teams to solve. Share results.
- Karel Jr.
- Lunch
- Flex Educational Time. Ex: Most wanted to keep working with Karel Jr. and building their game in Karel Jr.
- Karel Jr.
- Break (Snack Provided)
- Tina the Turtle

*During the program we had items 3D printing on the printers we had. This also allowed us to run mini contents and challenges for the kids, their prize being the 3D printed item.

STAFFING

Sena Loyd – Train the Trainer NSLAPR 8am – 12pm

Aubrey White – Train the Trainer NSLAPR 11am – 6pm

Robert White – Internally Trained 8am – 6pm

SUMMARY:

The two day-camps that we held at the library were a big success overall. Parents and participants alike were excited about the prospect of learning to code.

WHAT WENT WELL:

- The user interface was easy for participants to grasp and made them excited about the courses.
- The older group **quickly** grasped the concepts of Karel and Tina.
- The game structure of the courses made it so that, even during breaks, participants still wanted to keep working.

- The groups enjoyed seeing how their work transformed into real objects via the 3D printers.
- Students liked that they could save their work and customize their desktop.
- **Both groups learned that failing was okay!**

WHAT DIDN'T GO WELL:

- While both groups struggled with the 3D modeling, the younger group had an exceptional amount of trouble grasping those concepts. This could suggest that they need additional skills to enter that course or that they need to progress further through Karel before moving onto Tina (we also did not go into the actual 3D modeling course with the younger group).
- Reading skills were an important factor, especially with the younger group. Students who struggled to read, struggled with the courses and became frustrated much quicker.
- The younger group was far more likely to get frustrated and want to give up, particularly with Tina. It was more difficult to keep them motivated.
- Some participants struggled with problem solving and decision making. Instead of stopping to look at what they were doing, they would randomly change code and see what would work.
- Others had trouble with consistency. They would use the correct code in one place, and then they would immediately stop using it or use it differently.

FUTURE:

- In the future, camps that we do will be multi-day and shorter sessions.
- We will also offer longer term classes over summer with a couple hours of "instruction" each week at the library with students being able to take their logins home to continue the learning process.
- We will offer classes for 4th and 5th graders on weekend days and ask that their parents participate with them. This will help to eliminate some of the issues with younger students.
- We are excited and LOVE NCLab. We will be offering this program as part of our Summer Learning Program. Our goal here with the community is that they either 1) learn how to code or 2) know why coding is important and support it in our local schools.

ANECDOTES:

One participant was so excited by the prospect of 3D modeling and printing something that he moved through the course as quickly as possible until he could start building his own object, and he has since come back into the library to work on it more and to find out how he can send the file to be printed on the library's 3D printer.

Another participant was already familiar with NCLab, and he enjoyed helping those around him when they got stuck on levels.

By the end of the day, the majority of participants appeared to be extremely enthusiastic about coding and wanted to know when the next event would be.