Results and Discussion

This study was conducted with a small group of 7th grade Latina student to observe the effect of career awareness and career exploration work on their academic goals and post-secondary planning. One of the research question was, whether a field-trip to a local university and meeting successful college Latina students would influence the middle school students' aspirations to go for higher education?

The intervention implemented to address this question was a visit to Portland State University and interacting with successful college Latina students from Las Mujeres group. The objective of this intervention was to introduce successful college role models as mentors who also shares the same background of that of our students. There were similarities in ethnicity, socio-economic and immigration status, as well as some of the same experience of racial and institutional oppression.

In order to measure the effect of this visit on students' aspirations to go for higher education, the participants filled out a field trip record after the visit. Participants were asked to report their learning from that day after meeting the mentors. Some of the responses that showed direct impact of the visits are shared below:

Field Trip Record findings:

Participant 1 writes, "College can get you through a lot of things and a better life in future." They also wrote, "I would like to be a surgeon in the future and plan to go to college."

Participant 2 writes that they learned, "how much college cost" and that "I would like to go to college and join the airforce."

Participant 4 writes that "we talked about racism and about the struggles and successful things that happened in each woman's life" and they learn that "how Pam *(mentor)* was discriminated but is still (hella) successful."

Participant 5 writes, "I learned that college is really important" and "you need education for everything." They also mentioned that, "I would attend college if I would have enough money." Participant 7 writes, "that you can still go to college even if you weren't born in USA." In response to whether they would like to attend a college sometime in your life, this participant wrote, "yes, because I want to learn more about what I want to do when I grow up."

Thus, 100% of the middle school students showed positive attitude towards college education. They all expressed their desire to go to college. About 71% (5 out of 7) students connected their ethnic identity with that of the mentors in their field trip report. It could be concluded that this intervention is a helpful tool in strengthening the college aspirations among the Latina middle school students.

<u>Pre- and Post-worksheet findings:</u>

The second and third research questions were as follow:

- Whether the students would learn about the available post-secondary options and would it help to develop their own post-secondary plan at the end of the study?
- Whether the overall career exploration intervention with a small group of at-risk Latina students would increase their commitment towards their academic work?

In order to address these questions, other interventions that were implemented were three after school workshops and an individual meeting to discuss the career steps and work on career path. In order to assess the effect of all the three interventions, participants were given a planning worksheet (Appendix 4) prior to the beginning of the research study and at the end during the individual meeting. This planning worksheet had a few questions regarding education and employment, that ended in a sentence formation at the end. This was also a qualitative assessment.

Participant	Pre-worksheet responses	Post-worksheet responses
1	Plan to attend medical school to work in a field such as medicine and become a doctor.	Plan to attend high school and community college to work in a field such as health care.
	Will be employed by a school practicing medicine.	Will be employed in health care field being a surgeon or in pharmacy.

An important information about this student was that they have indicated "going to school" as something they like to do in their post worksheet. With regards to what do they need to make their dreams come true, earlier they had mentioned to study hard and get good grades whereas after the intervention, they wrote to go to school and to go to college.

All of these responses shows that there has been some clarity for this student in terms of their career path. They received an understanding of health care field with many possible career path rather than a doctor or a surgeon. Another important information was that this student was not aware of the option schools in the district that caters to their interest. They learned in the individual meeting with the researcher, that they could apply to Health and Science school for their high school education.

Participant	Pre-worksheet responses	Post-worksheet responses
2		Plan to attend community college to study culinary skills to work in a field such as a restaurant. Will be employed in food industry

Will be employed in the army and serving as a doctor.	working in a bakery section.
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There have been several changes in the pre- and post-worksheet data. Some of their favorite subjects prior to intervention were drama, math and PE whereas after intervention it was reported as math, humanities and science. Remarkably, humanities and science were under least favorite subjects previously. This participant changed their career interest from that of a doctor to a cook or culinary artist. It seems that there might be some realistic thinking in terms of career planning. Earlier they had mentioned that in order to achieve their dreams they have to "get a degree and do good in school so I can go to medical school". Now, they are reporting that "go to college and study what I need to get the job I want".

Participant	Pre-worksheet responses	Post-worksheet responses
3	Plan to attend a college to work in a field such as cooking college.	Plan to attend cooking school to work in a field such as cooking college.
	Will be employed as a doctor.	Will be employed in social work field helping others.

As noticed, there is a discrepancy in this participant's report. There is discrepancy between education and the employment in both pre- and post- worksheet. It seems that student might be unclear about what this worksheet is asking them to report. Or the student might be unclear about their career options and needs more intensive training.

Participant	Pre-worksheet responses	Post-worksheet responses
4	school with good grades and make my decision for what I want to be to	Plan to attend the air force to work in a field such as health and medicine, then become eligible to get money for college education for studying counseling.

1	1 1 1 1:00	Will be employed in air force and then counseling.

This participant shows similar consistent interest in the field of defence and counseling. In the post worksheet they have mentioned going to air force and then to college to get a degree in counseling. I response to the question, what do they want to learn more about, this participant earlier mentions that they want to learn "how to actually dance; how to deal with myself better; and how to keep myself motivated to do my best and not give up and believe in myself." Whereas post intervention they have reported that they want to learn more about "myself, my heritage//culture and my life options". It seems that this participant is raising some reflective questions that is more specific to self-awareness, cultural awareness and options in their life. In another question about further steps, post intervention, they seem to show clear idea of moving from high school to air force to college education. They understand that air force will help them to pay for their college education after interacting with one of the college mentor.

Participant	Pre-worksheet responses	Post-worksheet responses
5	Plan to attend military school to work in a field such as Marines. Will be employed in the Marines.	Plan to attend high school then PSU and then the Air Force to work in a field such as Armed Forces. Will be employed in Air Force protecting the nation.

This participant had shown an interest in joining Armed Forces before the intervention. Later in the post report they make it clear about their career pathway. They retained the same interest with a change in the branch, however, more important factor is their understanding of working through the high school and possibly college to join the Forces at a better rank. Another change

that was reported in the post data was around the school subjects. They had included Science under the favorite subject and had removed reading from the list of subjects they do not like. Earlier they were interested in knowing more about how hard is Army, how many years of training and also what happens if you die. Later their question was more specific around what kind of grades are required for Air Force. Thus, showing the connection between grades and career choice

Participant	Pre-worksheet responses	Post-worksheet responses
6	Plan to attend military school to work in a field such as Army. Will be in the Army serving the country.	Plan to attend high school, community college and 4 years university to work in a field such as Air Force. Will be employed in Air Force as an Officer.

This participant had also shown an interest in joining Armed Forces before the intervention. Later in the post report they make it clear about their career pathway. They retained the same interest with a change in the branch, however, more important factor is their understanding of working through the high school, community college and possibly college to join the Forces at a better rank of that of an Officer. Another important information about this participant was that they wanted to join Air Force to shoot people during war. This came out during post-data and it was further discussed with them. It seems that at this stage they were influenced by external messages from war news and have not understood their career choice in a realistic sense.

It seems that both participant 5 and 6 were inspired by one of the mentor at PSU who was also in Air Force. Later during the after-school workshop and one-on-one meetings, it was made clear to them about the difference between enlisting and joining as an officer.

Participant	Pre-worksheet responses	Post-worksheet responses
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7	 Plan to attend 4 year college to work in a field such as Veterinary.
	Will be employed in the healthcare field helping animals or people.

This participant showed consistent interest in their career choice. One thing to notice was that they figured out the need for a four year college education in order to become a Veterinarian. Secondly, they have also expanded their field of employment from only a Veterinarian to health care, possibly helping animals or humans. Earlier in their response they wanted to learn more about soccer, drama and Vet and later in the post report they have noted several questions close to their career choice. Such as, how to work with an animal, how to use technology and how to take health classes. This shows a direct connection between career choice and preparation to achieve that.

Thus, there were several common themes that emerged from this qualitative data. It was observed that most participants identified specific career steps in order to reach their goal. They showed an awareness to complete high school and identified various options such as armed forces, community college, 4-year university, and vocational school. Another theme around positive attitude towards school, core academic subjects and one's heritage was observed in their responses. Some of them showed a change in their career goal after the intervention. Further clarifications are required in order to understand this change. However, in individual instances, responses shows higher clarity about post-secondary options than before. Finally, they also seemed to understand the direct connection between grades, career planning and required trainings to their career choices. Thus, the results show that most of the students did capture the post-secondary options available to them and were able to create a career plan with the help of the researcher.

Finally, in order to reflect upon the third research question, we decided to also look at the academic grades. We looked at the grades of these students in core subject areas such as Mathematics, Science and Humanities. Although, it is not possible to establish a direct correlation between the intervention and the grades, the researcher thought it would be helpful to know the difference, if any, for future intervention.

The grades for the students have been recorded in December, February and May. The intervention happened between late February (21st) to late March (20th). So, the researcher observed the trajectory between the grades recorded from December and February (before intervention) to May (after intervention). Whereas, the trajectory of grades from December to February could be used as a reference point in absence of intervention. Again, it is impossible to establish a direct correlation between the intervention and the grades due to several factors responsible for the differences. We could still learn from the grade results.

For all the 7 participant, we selected three core subjects and gave a value of 1 point to each subjects per student. That means we have a total of 21 points for all the students. Based on the observations, there was a decrease in the grade performance by 57.14% from February to May. On the other hand, only 14.29% increase in the grade performance was noted; while 35.29% remained the same.

In order to find a reference point, two performances before the intervention were noted. It showed that between December and February grading, there was 25% increase in the grade performance and 15% decrease in the grade performance. Whereas, a large number 60% remained the same.

While this data suggests that there was a decreased in the grades of all the participants after the intervention, we note that such a decrease was predicted at the beginning of the year

due to a new report card system. In absence of a controlled study, it is difficult to ascertain what influence our intervention had in the end of the year grades.

We also note that, the data from a future study where such an intervention was not done, but using the same report system may be helpful to evaluate the influence of our intervention. It would also be helpful to study the effect of intervention within the same team of students in the school. Current participants belonged to different teams within the school and hence had different teachers. Moreover, some participant moved from one team to another in the middle of the intervention. For future study, it would be appropriate to control such variables in order to identify the relationship to the grade performance.

Thus, it seems that this research study had some influence on the students with regards to their academic goals and post-secondary planning. After meeting the college students, they expressed their desire to go for college education and deemed it as important. They learned that there are ways to achieve college education irrespective of any obstacles due to being a minority, first-generation, poor or even undocumented. This was noticed as a positive change in their attitude towards academics.

During the workshops, the students got to learn about the post-secondary options and learned more about the careers that interested them. There were intergroup differences as expected, however, this intervention started a dialogue about career and college within the group. Some of these students started to talk about their career aspirations with their parents as well. At the end of this study, 100% participants had a post-secondary plan with an aim to continue post-secondary education compared to 57.14% prior to the intervention.

This being a qualitative study it is difficult to show concrete outcomes. Moreover, this interventions being a head-start in nature, long-term observation or follow-up of the group members could reveal the significance of the influence.