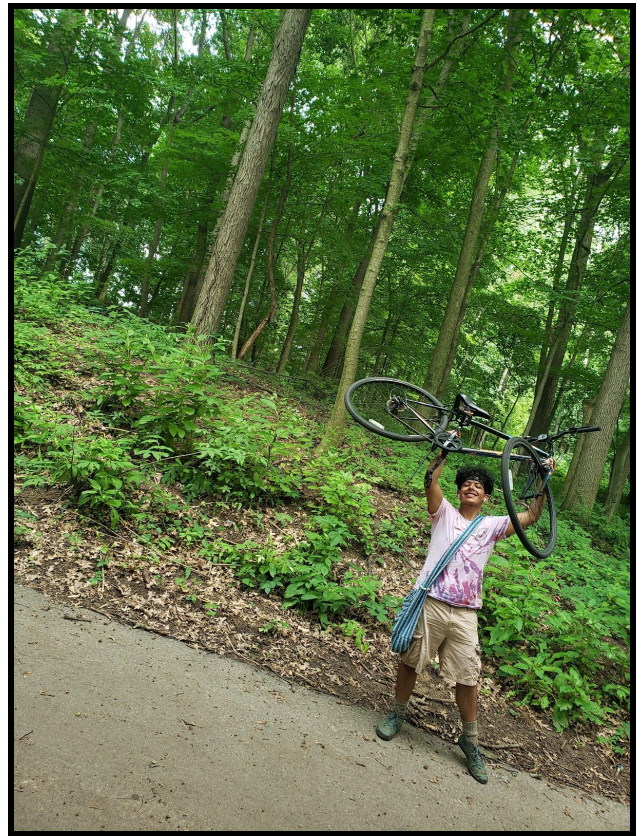


# Angel Ramirez, FURSCA 2020

## Introduction

As the Albion College F.U.R.S.C.A summer program comes to an end, I begin the mental preparation to soon begin the last fall semester of my undergraduate career. In the meantime, enjoying Albion's unpredictable evening weather has become my favorite pastime. Cruising through campus has never been more satisfying- I can only encourage individuals to ride down Cass St. to gaze at the canvas like sunsets that fill the summer sky. When the weather is right, through the cloudless sky, the bright shades of smokey yellow, along with the hazy blue and pink colors, compliment the amber red aura of the sun fading down the horizon. Evenings like those continue to grow my amusement and gratification towards the natural world. With the same gratitude, I direct my appreciation and a "thank you", to the many donors and sponsors whose thoughtful contributions enhance and promote the continuation of undergraduate research here at Albion College. This summer, 18 endowed funds provided significant support for student researchers- and a special thank you to the Trustee Discretionary Fund for supporting my research.



This is my second summer doing research here at Albion College. In the summer of 2019, I facilitated the Teenagers Exploring Nature program (T.E.N program) at the Whitehouse Nature Center as part of my F.U.R.S.C.A project - *Leadership Development with an Environmental Perspective*. This summer, my research was "slightly" altered. Due to the wild spread of the virus and state mandated safety guidelines, the T.E.N program was cancelled, but thankfully- with support from my research and academic advisor Dr. Suellen Hanke- the transition to remote research was not a great inconvenience. In addition to the program, I had planned on using one of the lessons from the T.E.N program to present at the Michigan Association for Environmental and Outdoor Education (MAOEE) conference, which had to be cancelled as well.

After cancelling the T.E.N program, I felt hopeless on promoting education to all the potential program participants. But just as my program, many other education programs in Albion and surrounding communities were going through similar changes due to the pandemic. This inspired me to document and analyze those changes. Writing a senior thesis became a clearer milestone to implement the findings of my investigation. I knew that the COVID-19 pandemic was an evolving theme, so I decided to analyze its effects on youth education.

## Findings

As a result of national efforts to control the spread of the virus, schools closed, states mandated lockdowns, and most educational programs moved online. But when analyzing those changes, the pandemic showed a deeper story of inequality. The demand for online learning systems, for example, amplified pre-existing inequalities in the education system. Before Covid-19 was categorized as a pandemic, the Pew Research Center's analysis of the Census data found that the lowest-income households had the lowest home broadband subscription rates. About one-third (31.4%) of households whose incomes fall below \$50,000 and with children ages 6 to 17 do not have a high-speed internet connection at home. This low-income group makes up about 40% of all families with school-age children in the United States, according to the bureau's American Community Survey<sup>1</sup>(Reference Figures 1 & 2). The lack of access to high-speed internet, fueled by a global pandemic, now has students and educators from underserved communities on a greater disadvantage to their more affluent peers. Due to the lack of resources to assist with the transition to online learning, millions of students across the nation were left with limited choices- one being, to conclude their academic year months before their peers. In addition to reviewing more articles, journals, and data for cases like the "homework gap" and the "achievement gap", I decided to conduct interviews of program educators- many who have been actively working in the front lines assisting families and students- so that I can better understand their perceptions and experiences through the beginning of the pandemic.

Even though I did not have to submit a new and modified proposal to the FURSCA department in order to confirm the transition to remote research, the adjustments and alterations for the proposed research had to be explained thoroughly and in detail in order to receive approval by the Albion College Institutional Review Board (IRB). This process is normal for projects where the methodology involves research participants. Once given approval, I reached out to program educators, whom I work with in the recruitment process of the T.E.N program, to schedule the interviews. From the data collected through the interviews,

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<sup>1</sup> Horrigan, John. 2015. The numbers behind the broadband 'homework gap'. Pew Research Center

it was clear that for all educators the safety and security of their program participants was their top priority. As a result, one of the youth programs planned on continuing with online sessions through the fall while others shifted to a hybrid module to accommodate for online and in person learning. From my interviews, only one program decided to go dormant for the time being. When asked about major challenges experienced by the programs due to the virus, educators said that not having a working set of guidelines and policies made program planning difficult. Lack of ventilation in the building and inability to hire more staff were additional challenges. Educators, who continued their programs online or shifted to a hybrid system, pointed out that transitioning to online learning dismisses many forms of teaching especially when it comes to programs whose purpose is for participants to experience interactive activities. As a result, educators had to implement new teaching modules to retain participant engagement and sustain the program goals. In contrast, when asked about benefits as a result of the virus, educators said that the rapid embranchement to online education allowed community programs to reach more people, which caused higher participation. Note that I will be continuing these interviews through the fall semester, so the frequency and breakdown of responses can change.

### Conclusion

The future of education will continue to change, attention to these persistent inequalities will continue, but It is uncertain when action will happen- especially as we move through a pandemic. Being an election year, the growing demand for change opens the opportunity for policy makers and activists to mitigate those effects. I am hoping that my research and thesis could be a reference to those decisions. There have been plenty of intrinsic benefits from doing this research from expanding my understanding on current issues to increasing my confidence and competence on developing and implementing research methodologies. Aside from writing a thesis, I plan to show my findings y presenting at the Elkin Isaac Research Symposium.

## Households With School-Age Children That Do Not Have Broadband Access

*Among households with school-age children ...*

% LACKING A HIGH-SPEED CONNECTION AT HOME

	All	White	Black	Hispanic	Asian
Annual income under \$50,000	31.4%	24.6%	38.6%	37.4%	15.5%
\$50,000 or greater	8.4	6.7	13.0	12.8	4.0

% WITH A HIGH-SPEED CONNECTION AT HOME

All households with school-age children	82.5%	88.0%	71.5%	72.2%	92.3%
Annual income under \$25,000	60.3	67.9	53.6	54.8	79.0
\$25,000-\$49,999	75.7	80.6	71.2	69.2	88.6
\$50,000-\$99,999	88.2	90.5	84.1	82.1	94.0
\$100,000-\$149,999	94.3	95.1	91.7	90.6	96.5
\$150,000+	96.7	97.0	93.5	93.9	97.9

Source: Pew Research Center analysis of 2013 American Community Survey (IPUMS).

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(Figure 1)

## Many school-age children live in households without high-speed internet

*% of U.S. households with children ages 6 to 17 who do not have a high-speed internet connection*

	All	White	Black	Hispanic	Asian
All households with school-age children	15%	10	25	23	5
BY ANNUAL HOUSEHOLD INCOME					
Less than \$30K	35%	28	41	38	14
\$30K-\$74,999	17%	13	21	22	7
\$75K or more	6%	4	9	9	2

Note: Race and ethnicity are based upon the race and ethnicity of the head of household. Whites, blacks and Asians include only those who reported a single race and are only non-Hispanics. Hispanics are of any race. Household income data reported for the calendar year prior to the survey year.

Source: Pew Research Center analysis of 2015 American Community Survey (IPUMS).

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(Figure 2)