# International Telementor Program Program Evaluation for Student and Mentor Surveys Longmont, Colorado (Saint Vrain School District) August 2013- June 2014

### **Full Program Assessment**

#### Saint Vrain School District Comprehensive Report

Chance W. Lewis Bettie Ray Butler University of North Carolina Charlotte

Chance W. Lewis, Ph.D. is the Carol Grotnes Belk Distinguished Professor of Urban Education and Director of The Urban Education Collaborative in the College of Education at The University of North Carolina at Charlotte. Dr. Lewis can be reached by e-mail at chance.lewis@uncc.edu or on the web at http://www.chancewlewis.com.

Bettie Ray Butler, Ph.D. is an assistant professor of urban education in the College of Education at The University of North Carolina at Charlotte.

#### **EXECUTIVE SUMMARY**

#### **Program Overview**

The International Telementor Program (ITP) creates matches between industry professionals from ITP sponsor companies and students while targeting specific communities around the world. ITP creates project-based online mentoring for students and teachers in classroom and home school environments with a focus on serving a diverse student population. Since 1995, over 28,000 students have been served through nine countries.

#### Parameters of this Program Evaluation Research

This independently conducted program evaluation covers the time period of August 2013 – June 2014 by participating students and mentors. Specifically, this program evaluation research includes student results from the aforementioned years at Trail Ridge Middle School and Timberline PK-8. This program evaluation report is divided into three specific areas: (a) student relationships with mentors, (b) impact in core content areas and (c) overall experience in the ITP program.

#### **Student Relationships with Mentors**

Based on the comments in this report, students reported positive relationships with mentors in the ITP programs. More specifically, students documented that their mentors were primary reasons for the academic success and renewed interest in their education. Based on the positive relationships with their mentors, students highlighted the following comments:

- "It was nice to work with someone that you connect with and as well as someone who gives you great feedback and information. I liked to work with a professional."
- "The best part about working with my mentor was all the help I got and the things I learned. Since my mentor had first hand experience with my topic, I gained a lot of information. I also grew as a student in many ways, and I loved that I could count on my mentors honest opinion."

#### Impact of the International Telementor Program (ITP) on Academic Standards

After a thorough review of the results of students in the St. Vrain School District involved in the ITP program, the data in this report documents that these students have shown success in a number of areas that directly tie to the Common Core standards, selected State academic standards, and other related standards in the school district. As an example, the St. Vrain school district notes the following academic standards for students:

Introduce students to a variety of specialized STEM experiences and areas of STEM programming that encourages exploration in more depth

Increase awareness of STEM careers and fields and develop awareness of academic requirements for Post-Secondary Opportunities

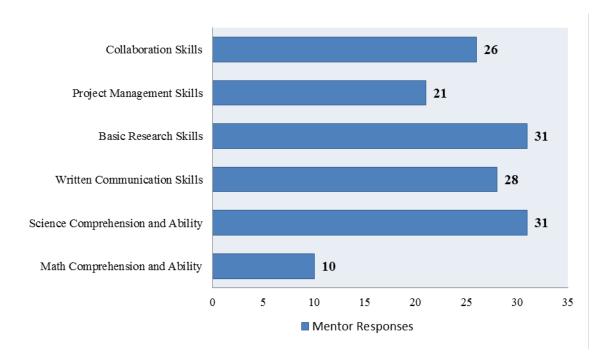
Provide a teaching and learning environment in which content and skills of science, technology, engineering and mathematics (STEM) are integrated (using the standards outlined in each content area)

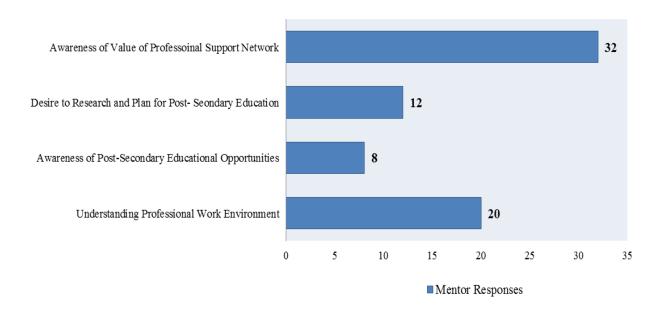
Incorporate the design thinking process, a strategy for integrating problem solving, into classrooms, schools and the workplace

Provide STEM programming to all students in a variety of courses, along with extended learning opportunities

The International Telementor Program (ITP) students illustrated stellar performance in these selected key areas as reported by their mentors:

Most Influenced Student Skill Areas, Telementor 2013-2014





In addition to these results, teachers in St. Vrain highlighted several comments that are found in the **Appendix [See Appendix].** However, we highlight the details of one teacher here in the Executive Summary.

#### **Teacher Reflection from Anna Mills (Teacher)**

## Introduce students to a variety of specialized STEM experiences and areas of STEM programming that encourages exploration in more depth.

The telementor program introduces students to real world STEM experiences. Our project last spring was based on the Colorado Flood that occurred earlier that year. The students were able to explore any avenue of their choice. Each group of students decided on a different project theme within the umbrella of the Colorado Flood of 2013. After they choose a theme, they had to research critical problems within that area and discover the solutions being used at that time. The students contacted organizations and leaders who were working on their issue and they had to write a scientific research paper about their theme and the work being done. Following, they created a public service announcement to make their community aware of the problems and needs from the flood disaster. The culminating piece was our field trip to Rodger's Grove in Longmont, Colorado. As a class we helped clean up river beds that were destroyed during the flood. As you can see, the telementor program introduced my students to a wide variety of STEM experiences.

## Increase awareness of STEM careers and fields and develop awareness of academic requirements for post-secondary opportunities.

Telementoring is a constant stream of introductions to STEM careers. Students have an individual mentor that they communicate with twice a week. The mentor supports the student throughout the project but also introduces them to their career and various other STEM fields. Below is a current conversation from a mentor to his student:

"Before we get started, I want to tell you a little about myself and how I choose and obtained an engineering career... I am 34 years old and live in Southeastern Pennsylvania. As a child, I always

wondered how to make things such bridges, cars and chemicals. After taking my high school AP chemistry courses, I decided to pursue a degree in chemical engineering based on input from my Chemistry teacher. During my time at Drexel University, I interned for three companies working in labs and factories. During the summer between my junior and senior year, I worked for Merck doing lab work to support packaging design. That internship lead to my job as a formulation engineer for Merck. These internships provided me with hands-on job training and a chance to see what it would be like to work in the pharmaceutical industry. Additionally, they gave me a chance to interact with professionals in the industry and learn from their experiences. These conversations were critical in helping me to decide to take a job immediately after college rather than going on for my Ph.D. Currently, I'm a Senior Process Engineer at Merck. I support the manufacturing of human health products."

And that.... is just one conversation. These conversations are happening with every student involved in telementoring. It gives me goosebumps to think about all of the opportunities and careers our students are introduced too

## Provide a teaching and learning environment in which content and skills of science, technology, engineering and mathematics (STEM) are integrated (using the standards outlined in each content area.

My specific curriculum and STEM are integrated perfectly through telementoring. As a science teacher it is a very easy to incorporate science, technology and math but the difficult piece is engineering and the common core. Using the telementor program I can excel my students in science, technology and math because I make the project specific to my curriculum. I also, incorporate English by asking the students to write a scientific research paper. I met with the English department to follow their same procedures so that the students are double dipped and see the importance of writing in other subject areas. The telementor program is the perfect fit for engineering implementation because the students use the entire design process in their project. I will explain this further in the next question. Telementoring is a great fit for all classes.

## Incorporate the design thinking process, a strategy for integrating problem solving, into classrooms, schools, and the workplace.

The telementor program is the perfect fit for engineering implementation because the students use the entire design process in their project. They create empathy for their user, in my case, it was their communities who were impacted by the flood. They define their project on their own and they take ownership for doing that. Our students become wholeheartedly invested because they are the one who created their project theme. They ideate when they research and discuss proposals for innovative solutions. Finally, the students prototype and test when they present their research and solutions to an audience.

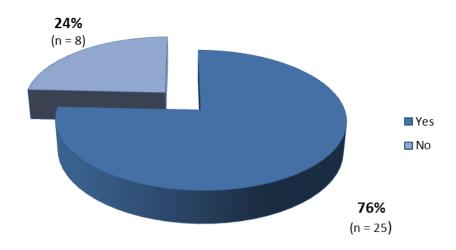
## Provide STEM programming to all students in a variety of courses, along with extended learning opportunities.

Absolutely, the telementor program provides extended learning and STEM opportunities in a variety of ways. STEM is introduced in the classroom, through conversations with their mentor, in their specific project and field work. I had students continue on with their project after the grades and presentations were all said and done. They were so emotionally driven by their work that they wanted to continue on. That is powerful.

Based on the results highlighted in further detail in this report, data shows that the International Telementor Program is filling an important gap in St. Vrain school district in Longmont, CO in meeting the needs to become productive global citizens in society.

#### **Student Quantitative Results**

Students were asked during this program evaluation process if they were taking greater control of their academic success as a result of being in this program. According to Figure 7 in this report, over 76% of students involved in this project at the selected schools are now taking more ownership of their academic futures.



This data should be exciting for the ITP program and all of the constituents involved given that these students are now excited about their educational endeavors. Additionally, students are seeking to understand ways they can change the world through their pursuit of knowledge in their hands-on projects with their mentors.

#### **Summary and Connections to Common Core Standards**

In summary, after evaluating the student survey responses from the aforementioned time period, it appears that the ITP program has been highly successful in assisting students to become more 'proactive learners. With a large number of students involved in this program, all data indicates that this program is doing very well in relation to impact on student growth.

In relation to the Common Core Standards, the external evaluators have found that the ITP program is one of the leading mentoring programs in the world that not only allows students to reach and exceed Common Core Standards. Through our extensive research and knowledge in the field of education, the ITP is a national-leader in applying Common Core standards to career and postsecondary planning. By providing real-world applications of the learning experiences

with experienced mentors across the globe, ITP students are destined to receive an educational experience that will be life-transforming.

#### **About the Researcher**

Chance W. Lewis, Ph.D. is the Carol Grotnes Belk Distinguished Professor and Endowed Chair of Urban Education at the University of North Carolina at Charlotte. Also, he is the Director of the Urban Education Collaborative. If there are any questions related to the research results, Dr. Lewis can be contacted at (704) 743-4207 or by e-mail at chance.lewis@uncc.edu.

#### Teacher Perceptions of the ITP Program within St. Vrain School District

To assist with the evaluation process, teachers directly involved with the International Telementor Program (ITP) within St. Vrain School District located in Longmont, Colorado were asked to identify areas where they witnessed significant improvement for student participants. Listed below is a snapshot of the teachers' perceptions of the areas that were improved as a result of the ITP program's impact.

#### Teacher A Comments

#### Areas Improved:

- Math Comprehension and Ability
- Registration for Advanced Math Courses
- Science Comprehension and Ability
- Registration for Advanced Science Courses
- Communication Skills (Written and Oral)
- Subject Grades
- Standardized Test Scores
- Critical Thinking Skills
- Teamwork
- School Attendance
- Self-Directed Learning
- Integration of Knowledge across Subject Areas and Interest Areas
- Knowledge of the Workplace
- Desire to become a Proactive Learner
- Desire to Go to College

#### Content Areas Not Improved:

None identified

#### Student Perceptions of the Nutrition-Science Research Project

**School**: Trail Ridge Middle School **Project Date**: 10/3/13 – 5/16/14

**Teacher**: Marnie Steele

# Students: 33

#### **Student Responses**

#### Working Relationship with Mentor

#### Q1: Please describe the best part about working on this project with your mentor

#### Selected Student Responses:

"It was nice to work with someone that you connect with and as well as someone who gives you great feedback and information. I liked to work with a professional."

"The best part about working with my mentor was all the help I got and the things I learned. Since my mentor had first hand experience with my topic, I gained a lot of information. I also grew as a student in many ways, and I loved that I could count on my mentors honest opinion."

"The best part of working with my mentor on this project was getting really good feedback on my topic. I learned a lot from my mentor and I thought that was cool."

Students from Trail Ridge Middle School highlighted that the experience with their mentor on this particular project was very enjoyable. Students noted that they were excited to have mentors that offered their assistance with useful feedback. Additionally, they noted that working with someone who was knowledgeable and professional was another enjoyable component of the program.

#### Q2: Please share any other academic areas where you'd like to receive help from a mentor

#### Selected Student Responses:

"I would like to have more mentor help in classes like Social Studies and Language Arts. It would help a lot on projects and essays."

"I think a mentor for math would be just as helpful."

"I would like to be able to communicate with my mentor in all the subjects. She helped me a lot with science, and now I enjoy it more than I did before. I think that if I could have a mentor for all the subjects it would be easier and more fun than usual."

"I would love to be able to communicate with mentors in all subjects and possibly electives and STEM classes."

"Social Studies/History because we could do great projects just like we did in science and a lot of students might need it while they could have so much fun doing it."

In Question 2 Trail Ridge Middle School students working on this project were asked about other academic areas where they wanted assistance. A sampling of student responses was focused on the academic area of Math. Additional areas included Social Studies, History, Language Arts, STEM-based classes, and general electives. These responses indicate that students perceive their mentor as a person that can provide additional assistance in other content areas.

#### O3: What advice would you give your mentor as he/she works with a new student

#### Selected Student Responses:

"I think that if you ask them more about things they like they will be more interested in the real project. Talk more about hobbies so they send more frequent emails to you."

"Have them share personal things so you feel more connected to each other."

"I would tell my mentor to try and be very specific. She was a little vague with what she told me and I was a little confused sometimes."

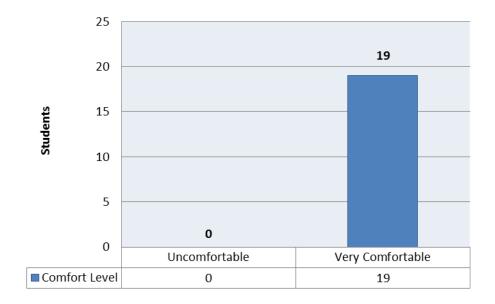
"Keep on encouraging students to give the best they have, and when they slack off, encourage them to stop slacking. You also did great getting to know me, and it made this program so much more enjoyable and easy."

Question 3 asked students to provide advice to mentors as they work with new students in the future. Based on the sampling of the responses, students noted that mentors should connect with students beyond the class project and provide continuous encouragement. Students also recommended that mentors provide greater specificity in their communication. This data highlights that students view communication with their mentors as especially important to their success in the program.

Q4: How comfortable were you communicating with your mentor about your project?

Total Number of Student Respondents = 33

Figure 1. Student Comfort Level with Mentor, Telementor 2013-2014



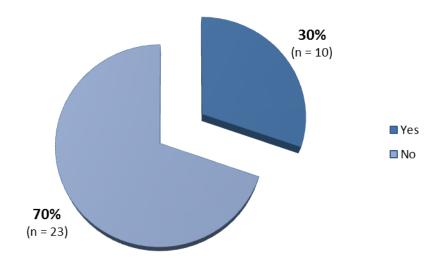
Question 4 asked students about their level of comfort with their mentors. The data provided in Figure 1 only highlights the data that was provided on the ends of the spectrum on the Likert-scale. Based on the results, nineteen (19) of the thirty-three (33) students involved in this project indicated that they were very comfortable communicating with their mentors about their particular project. This is encouraging for the ITP as it seeks to build into the future.

#### **Student Perceptions of Connections to Content Area Courses**

**Q5**: I have a better understanding of the importance of doing well in math.

Total Number of Student Respondents = 33

Figure 2. Better Understanding of the Importance of Doing Well in Math, Telementor 2013-2014

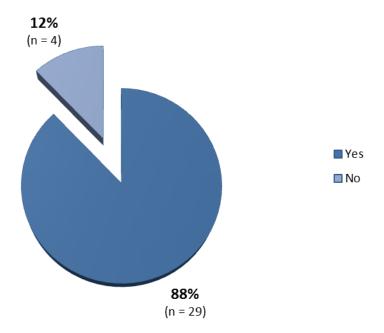


In Question 5, students were asked in a Yes/No question format if they had a better understanding of doing well in math as a result of this project. Based on the results, twenty-three (23) or 70% of the student respondents reported that they did not have a better understanding of the importance of doing well in math. However, ten (10) or 30% of the student respondents reported that they did recognize the importance of doing well in math. These results should be taken lightly as not all students see the connection between their projects and doing well in a core content area such as mathematics.

**Q6**: I have a better understanding of the importance of doing well in science.

Total Number of Student Respondents = 33

Figure 3. Better Understanding of the Importance of Doing Well in Science, Telementor 2013-2014

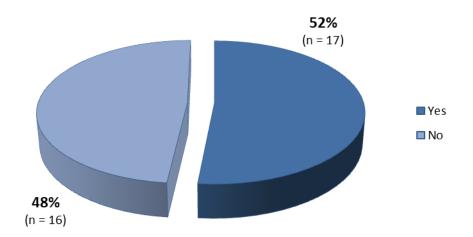


Question 6 asked the student respondents on this project if they had a better understanding of the importance of doing well in science. In analyzing the results in Figure 3, twenty-nine (29) or 88% of the student respondents reported that they had a better understanding of the importance of doing well in science as a result of this project. However, four (4) or 12% of the student respondents reported that they did not recognize the importance of doing well in science. These positive responses highlight that students are making the necessary connections between project outcomes and doing well in core content areas.

Q7: I have a better understanding of the importance of doing well in reading and writing.

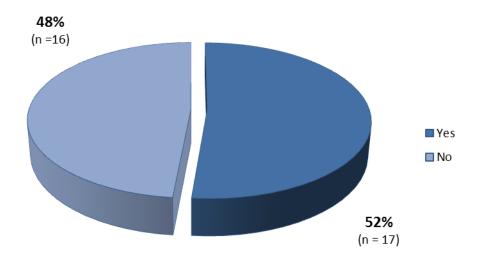
Total Number of Student Respondents = 33

Figure 4. Better Understanding of the Importance of Doing Well in Reading/Writing, Telementor 2013-2014



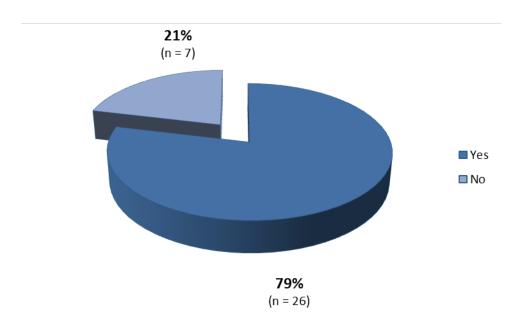
In a similar question, students were asked if they had a better understanding of doing well in reading and writing. Figure 4 highlights some ambivalence about the aforementioned areas. Sixteen (16) or 48% of the student respondents reported that they did not recognize the importance of doing well in reading and writing as a result of this project. However, seventeen (17) or 52% of the student respondents reported that they had a better understanding of the importance of doing well in this area. These responses suggest that there is a need for the ITP, along with teachers and mentors, to emphasize the importance of content courses as they work with students on these projects. The data is not clear as to how or if students are making connections between their respective projects and the content areas of reading and writing.

Figure 5. Improvement in Writing Skills, Telementor 2013-2014



Question 8 asked the student respondents on this project if their writing skills had improved as a result of working on their project with their mentor. In analyzing the results in Figure 5, seventeen (17) or 52% of the student respondents reported that their writing skills had improved as a result of this project. However, sixteen (16) or 48% of the student respondents reported that their writing skills had not improved while working on this project. Again, these results highlight the need for the IPT program, along with teachers and mentors, to emphasize the importance of working with these students to recognize the type of growth they have gained during these projects.

Figure 6. Improvement in Teamwork Skills, Telementor 2013-2014

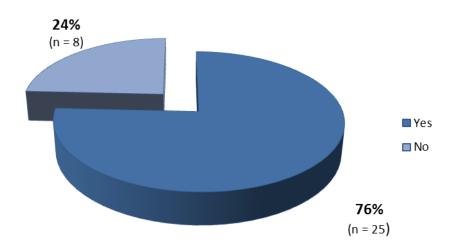


In Question 9, students were asked in a Yes/No question format if they had noticed an improvement in their teamwork skills working on this project. We see approximately 79% with favorable responses related to an increase in teamwork skills. Based on the results, twenty-six (26) or 88% of the student respondents reported that they had improved teamwork skills. However, seven (7) or 21% of the student respondents reported that they did not improve their teamwork skills. The findings on this question are overall positive. Students at Trail Ridge Middle School understood and recognized improvement in their teamwork skills.

Q10: I'm taking more responsibility for my own academic success.

Total Number of Student Respondents = 33

Figure 7. Taking More Responsibility for Academic Success, Telementor 2013-2014

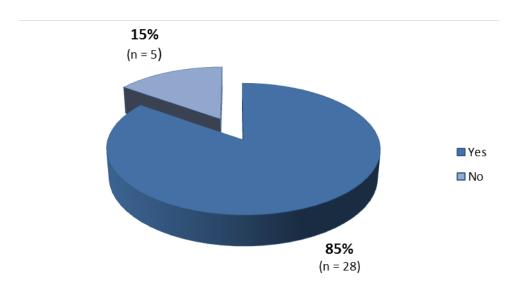


Question 10 is one of the more important questions asked of students in this survey. The goal of students taking control of academic success is very important to the ITP. In Figure 7, we find that twenty-five (25) or 76% of student respondents are reporting that they are now taking more control of their own academic success. Eight (8) or 24% reported they have not taken more control of their academic success at this point. Altogether, this data should be encouraging for the ITP and all of the constituents given that the majority of the students, after completing this project, are excited about their educational endeavors.

Q11: I plan to further my education beyond high school (trade school, community college, university).

Total Number of Student Respondents = 33

Figure 8. Education Plans Beyond High School, Telementor 2013-2014

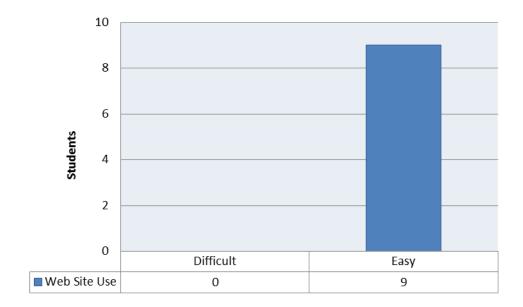


Student respondents in Question 11 of the survey were asked if they had planned to further their education beyond high school as a result of being involved in the ITP. Twenty-eight (28) or 85% indicated that they had planned to pursue some postsecondary option. Five (5) or 15% noted they had not planned to pursue postsecondary opportunities at the time of the survey. Given these results, students in the ITP have decisively indicated that postsecondary options are in their future. It is highly recommended that the ITP continue to build upon this momentum for students and incorporate all the different types of postsecondary options that are available for students.

Q12: What was your overall experience using the International Telementor Program Web site?

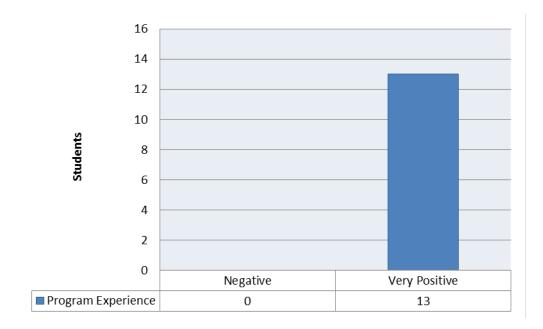
Total Number of Student Respondents = 33

Figure 9. Overall Experience Using the International Program Web site, Telementor 2013-2014



In Question 12 students respondents were asked about their overall experience using the ITP website. In a positive sense, nine (9) students reported that they had an easy experience using the program website. No students reported that the website was difficult to use. The ITP should continuously upgrade the website for greater accessibility and ease of use.

Figure 10. Overall Program Experience, Telementor 2013-2014

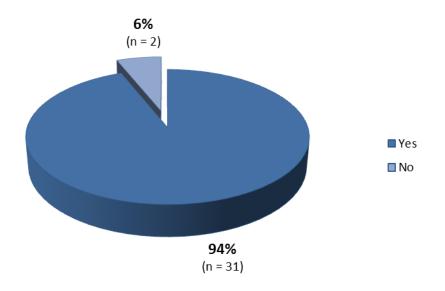


In Question 13 student respondents were asked about their overall experience in the ITP. Thirteen (13) students reported they had a very positive experience in the ITP. No students reported any negative experiences. It is highly recommended that the ITP continue to monitor student perceptions of the ITP as it continues to grow.

Q14: Would you be interested in receiving mentoring support from professional in the future?

Total Number of Student Respondents = 33

Figure 11. Interest in Receiving Future Professional Mentoring Support, Telementor 2013-2014



#### Q15: Please describe why or why not. (Reference to Question 14)

#### Selected Student Responses:

"I would like to because it was a very fun and motivating experience to work with someone across the world. It was easier when I had a professional to help me throughout my project."

"I may, but I don't really think I will need it later."

"My mentor experience was really good and it helped me grow as a student so having the chance to do it again would be great."

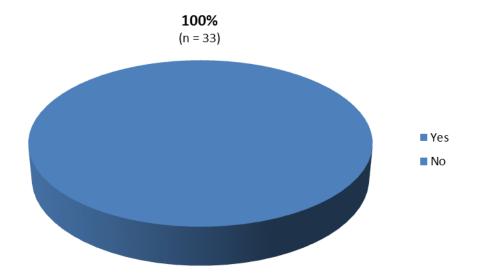
In Questions 14 and 15 student respondents were asked about their interest in receiving future mentoring support in the ITP. Thirty-one (31) or 94% of the student respondents reported that they were open to receiving mentoring in the future in this program (see sampled explanations provided in Question 15). Two (2) or 6% of the student respondents noted that they did not have an interest in receiving future mentoring (see sampled explanations provided in Question 15). It is highly recommended that the ITP continue to aggressively match the students who have an

interest in receiving mentoring with available mentors so they can continue to reach their academic goals.

Q16: Was this the first time you have been part of a formal mentoring program?

Total Number of Student Respondents = 33

Figure 12. First-Time Participants in a Formal Mentoring Program, Telementor 2013-2014



Question 16 provides pertinent data for the ITP. Figure 12 notes that all thirty-three (33) or 100% of the student respondents were first-time participants in this formal mentoring program. This data is very important given that these students have only been exposed to this mentoring program. This exposure will allow students to grow and potentially demonstrate improvement in their academic areas in the future.

#### Q17: Please describe the most difficult parts of working on this project with your mentor.

#### Selected Student Responses:

- "Some times I would forget to communicate but it was very helpful when they added email notifications."
- "The most difficult part was probably e-mailing my mentor twice a day because we also had to work on our presentations, and our other science unit."
- "The most difficult part of this project was keeping up with emailing my mentors twice a week. Some weeks it was easy to keep up but some it was not."
- "At first, my mentor could not look at my presentations on a google doc."

#### Q18: Did we miss something?

#### Selected Student Responses:

- "I think that a mobile app for telementor would help us all stick on top of emails and would help a lot."
- "I think that if there are multiple ways to contact our mentors, it would increase the amount of communication and maybe decrease the amount of stress it may put on some students."
- "There is nothing I can think of that you missed. Overall, I loved this program."
- "No, you didn't miss anything."

#### Mentor Responses on the Nutrition-Science Research Project

**School**: Trail Ridge Middle School **Project Date**: 10/3/13 – 5/16/14

Teacher: Marnie Steele

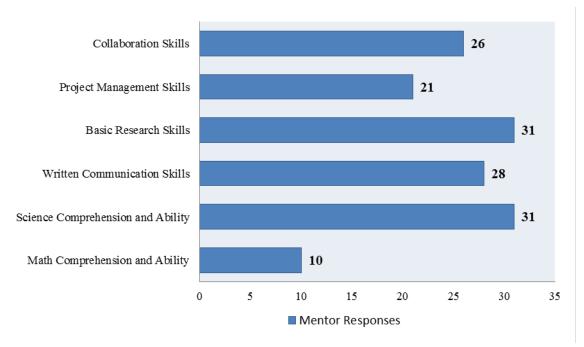
# Mentors: 32

#### **Mentor Responses**

Q1: Please indicate the student skill areas that you feel you influenced through this project.

Total Number of Student Respondents = 32

Figure 1. Most Influenced Student Skill Areas, Telementor 2013-2014

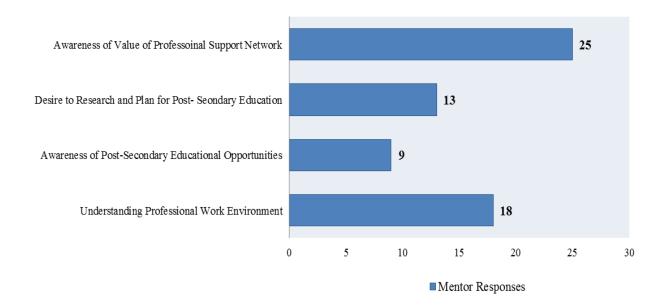


In Question 1 mentors were asked to indicate the student skill areas that they felt they influenced through this project. According to Figure 1, 26 mentor indicated they influenced *collaboration skills*; 21 mentors indicated *project management skills*; 31 *basic research skills*; 28 *written communication*; 31 *science comprehension* and 10 *math comprehension*. Based on these results, mentors highlighted that they believed there mentorship on this project improved some significant skill areas. However, the data does show that the lowest area of influence was the area of math comprehension. It is highly recommended that the ITP continue to work with mentors on effective ways to influence math comprehension through project-based learning.

Q2: Please indicate if your mentoring support aided your student in the following areas.

Total Number of Student Respondents = 32

Figure 2. Areas Aided by Mentoring Support, Telementor 2013-2014



Question 2 asked mentors to indicate if their mentoring support aided their students in the areas highlighted in Figure 2. According to Figure 2, 25 mentors indicated their mentorship aided students in the awareness of the value of a professional support network; 13 indicated their mentorship supported a desire to research and plan for post-secondary education; 9 indicated an awareness of post-secondary educational opportunities; and 18 indicated that their mentorship supported an understanding of the professional work environment. Based on these results, mentors highlighted that they provided support in significant areas. It is highly recommended that the ITP continue to build on these strengths with mentors to further enhance the students' experience.

Q3: The <u>average</u> quality of the messages received from students throughout the project.<sup>1</sup>

(3.69)

1 = "Poor Quality" 5 = "Above Average Quality"

In Question 3 mentors were asked about the quality of messages received from students throughout the project. Based on a scale of 1 = "Poor Quality" and 5 = "Above Average Quality," the mentors' average quality rating was 3.69. This data indicates that mentors believed the messages received from students throughout the project was of average quality. Based on this information, the ITP should work with students on their writing skills to improve the quality of messages sent to mentors.

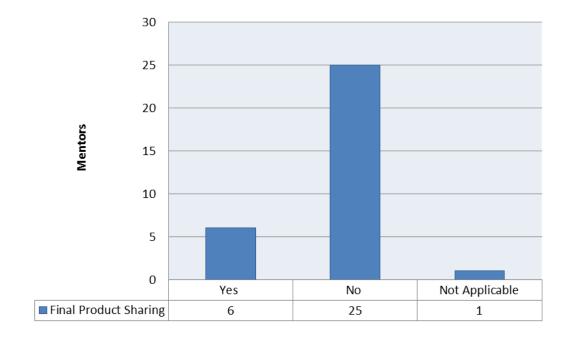
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<sup>&</sup>lt;sup>1</sup> Individual data on mentor responses were not provided in the *Mentor Survey Summary*.

**Q4**: Did you student share a final project (presentation, research report, plan, etc.) with you for this project?

Total Number of Student Respondents = 32

Figure 3. Student Sharing of Final Product with Mentor, Telementor 2013-2014



Question 4 asked mentors if their students shared a final project (presentation, research, report, plan, etc.) with them for this project. According to Figure 3 the majority of mentors (25) indicated that their students did not share their final project with them at the conclusion of the program. Based on these results, the ITP should build in a requirement that students should share their final projects with the mentors who have assisted them with project creation.

**Q5**: <u>Average</u> level and quality of assistance received from the teacher throughout the project.

(4.22)

**1** = "Low Quality, Infrequent"

**5** = "High Quality, Frequent"

In Question 5 mentors were asked about the level and quality of assistance received from the teacher throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," the mentors average quality rating was 4.22. This data indicates that the frequency and quality of assistance from the teacher was above average. Based on these results, the ITP should work with teachers to increase the frequency and quality of assistance provided to mentors throughout the project.

**Q6**: <u>Average</u> level and quality of assistance you received from ITP staff throughout the project.

(3.59)

1 = "Low Quality, Infrequent"

**5** = "High Quality, Frequent"

In Question 6 mentors were asked about the quality of assistance received from the ITP staff throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," mentors average quality rating was 3.59. This data indicates that the frequency and quality of assistance received from the ITP staff was of average quality. Based on these results, the ITP should work with their staff on increasing the frequency and quality of assistance provided to the mentors.

#### Q7: Things either the teacher or the ITP staff do to make a similar project more successful.

#### Selected Mentor Responses:

"Create more formal graded checkpoint projects (i.e. summaries or powerpoint of various stages of project)."

"More guidance earlier in the project would have been helpful."

"So there were times I received notices that I needed to send my mentee a note because I had gone over the number of days allotted. I would like this counter to not include weekends for us and holidays."

"Loved the weekly messages from the teacher! Those are most helpful. I loved getting a reminder email Tuesday to write if I had not already."

## Q8: Feedback regarding the quality of the student's final project as well as suggestions for improvement.

#### Selected Mentor Responses:

"I had high hopes at the beginning of the project but communication regarding progress in their research, research design and simply trying to figure out what they wanted to accomplish was difficult at best. From communication from Marnie I know they had received great instructions and direction. My student was very personable but had trouble figuring out what his group was doing."

"Really great work! More emphasis needed on professional writing (i.e. not using words like, kind of, really, etc)"

"It went well. I think the experiment in this case was not set up as well as it could have been. The original timelines for experiments wasn't clear in terms of when the class schedule was during the day, how the students would conduct their experiment - how much time they had to conduct their experiment or gather data each day would have been helpful. In this case, if I had access to that information early on I would have directed the student to simplify their experiment even more. Changes were driven by the teacher that impacted the ability to do this because changes were made late and not communicated clearly. Overall, this was probably too big a project for a first time, still a good learning experience all around."

**Q9**: Overall experience in the program.

(4.31) 1 = "Negative"

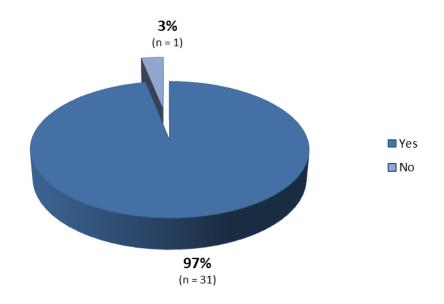
5 = "Positive"

In Question 9 mentors were asked about their overall experience in the program. Based on a scale of 1 = "Negative" and 5 = "Positive," mentors average overall experience was 4.31. This data indicates that the mentors' overall experience was above average. Based on these results, the ITP should work with mentors on ways to continually improve their experience in the program.

Q10: Would you consider mentoring new students in the future?

Total Number of Student Respondents = 32

Figure 4. Future Mentor Considerations, Telementor 2013-2014



#### Q11: Why or why not? (Reference to Question 10)

Selected Mentor Responses:

"Very rewarding for a small investment of time."

"I like providing role modeling and I also learn a lot from the students."

"It's nice to stay engaged in science and education when I would otherwise be so far removed, and seeing progress over the year is rewarding..."

Question 10 asked mentors if they would consider mentoring new students in the future. Thirtyone (31) or 97% of the 32 mentor respondents noted that they would mentor new students in the future. Selected responses from the mentors suggest that they believed their experience in the program was rewarding. Only one (1) or 3% of the remaining 32 mentors indicated that they did not have an interest in mentoring new students in the future. Based on these results, it is highly recommended that the ITP develop an exit survey with mentors who do not plan on mentoring new students in the future to ascertain the reasons for such a decision.

#### Q12: The most rewarding aspect of participating.

#### Selected Mentor Responses:

"Seeing the final presentation and receiving the thank you note. It would be neat in the future if the presentation night could be webcast so that mentors could watch as well."

"When things click for the student, and they realize that they are capable of something new."

"Seeing my student get excited about his research and presentation. Hearing that my feedback made a difference to his experience and the quality of his final project."

#### Q13: The most difficult aspect of participating.

#### Selected Mentor Responses:

"Some weeks there didn't seem to be much for the mentor to help out with. It would be helpful to have more formal checkpoints that the mentor could help with."

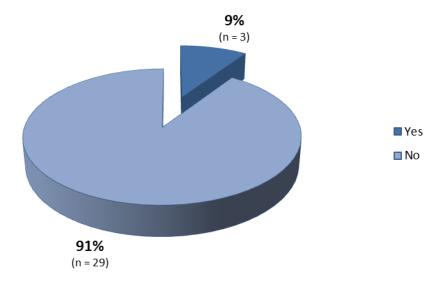
"Lack of guidance early in the semester on what was expected"

"It was hard to keep up with the twice-weekly communications, especially when there was no feedback from the student."

Q14: First time you've been part of a formal mentoring program.

Total Number of Student Respondents = 32

Figure 5. First-Time Mentors, Telementor 2013-2014



Question 14 asked mentors if this was the first time they had been a part of a formal mentoring program. Twenty-nine (29) or 91% of the 32 mentor respondents indicated that this was not their first time participating in a formal mentoring program. Three (3) or 9% of the remaining 27 mentor respondents indicated that this was their first experience in a formal mentoring program. Based on these results, it is highly recommended that the ITP continue to recruit new mentors for student projects.

#### Student Perceptions of the Colorado Flood Recovery- Science Research Project

**School**: Trail Ridge Middle School **Project Date**: 2/5/14 – 5/23/14

**Teacher**: Anna Mills

# Students: 38

#### **Student Responses**

#### Working Relationship with Mentor

#### Q1: Please describe the best part about working on this project with your mentor

Selected Student Responses:

"The best part of working with my mentor was communicating with the mentor."

"The best part of working on this project with my mentor was he asked me lots of questions so I would think deeper."

"The best part of working on this project with my mentor was probably being able to connect with my mentor twice a week. It gave me an experience that I never would have gotten inside the classroom without my mentor."

Students from Trail Ridge Middle School highlighted that their experience with the mentor on this particular project was very enjoyable. Students noted that they were excited to have mentors that challenged them to think deeper. Additionally, they noted that communicating with their mentor twice a week was another enjoyable component of the program.

#### O2: Please share any other academic areas where you'd like to receive help from a mentor

Selected Student Responses:

"Maybe having a mentor for social studies or math would help."

"I would love to do this with Language Arts."

"The one academic area where I think I should improve on is in writing."

"In stem..."

In Question 2 Trail Ridge Middle School students working on this project were asked about other academic areas where they wanted assistance. A sampling of student responses was

focused on the academic area of Math. Additional areas included Social Studies, Language Arts, and STEM-based classes. These responses indicate that students perceive their mentor as a person that can assist with science, as well as, provide additional assistance in other content areas.

#### Q3: What advice would you give your mentor as he/she works with a new student

Selected Student Responses:

"I would tell my mentor to respond to the e-mails more often."

"I would tell my mentor to keep asking questions, and help them think deeper."

"I would ask my mentor to try to get back to me a little sooner with her emails..."

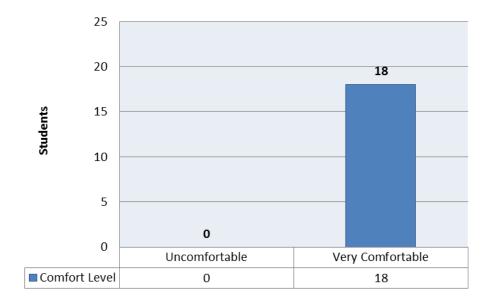
"I would use some easier words in his emails. They might be a little to advance for some kids."

Question 3 asked students to provide advice to mentors as they work with new students in the future. Based on the sampling of the responses, students noted that mentors should establish clear communication and respond to their emails in a timely manner. Students also recommended that mentors ask questions to help them to think more critically. This data highlights that students view communication with their mentors as especially important to their success in the program.

Q4: How comfortable were you communicating with your mentor about your project?

Total Number of Student Respondents = 38

Figure 1. Student Comfort Level with Mentor, Telementor 2013-2014



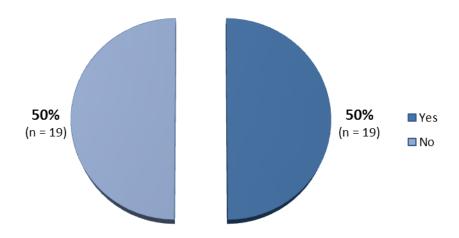
Question 4 asked students about their level of comfort with their mentors. The data provided in Figure 1 only highlights the data that was provided on the ends of the spectrum on the Likert-scale. Based on the results, eighteen (18) of the thirty-eight (38) students involved in this project indicated that they were very comfortable communicating with their mentors about their particular project. This is encouraging for the ITP as it seeks to build into the future.

## **Student Perceptions of Connections to Content Area Courses**

**Q5**: I have a better understanding of the importance of doing well in math.

Total Number of Student Respondents = 38

Figure 2. Better Understanding of the Importance of Doing Well in Math, Telementor 2013-2014

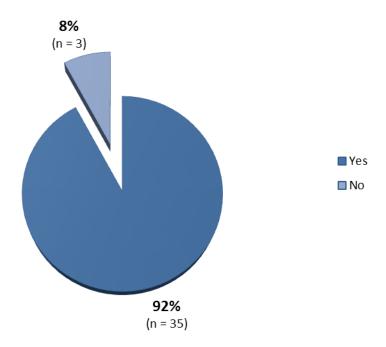


In Question 5, students were asked in a Yes/No question format if they had a better understanding of doing well in math as a result of this project. Based on the results, nineteen (19) or 50% of the student respondents reported that they did not have a better understanding of the importance of doing well in math. The other half or remaining nineteen (19) student respondents reported that they did recognize the importance of doing well in math. These results should be taken lightly as not all students see the connection between their projects and doing well in a core content area such as mathematics.

**Q6**: I have a better understanding of the importance of doing well in science.

Total Number of Student Respondents = 38

Figure 3. Better Understanding of the Importance of Doing Well in Science, Telementor 2013-2014

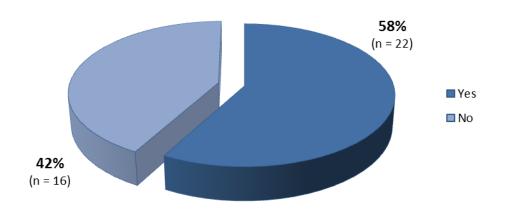


Question 6 asked the student respondents on this project if they had a better understanding of the importance of doing well in science. In analyzing the results in Figure 3, thirty-five (35) or 92% of the student respondents reported that they had a better understanding of the importance of doing well in science as a result of this project. However, three (3) or 8% of the student respondents reported that they did not recognize the importance of doing well in science. These positive responses highlight that students are making the necessary connections between project outcomes and doing well in core content areas.

Q7: I have a better understanding of the importance of doing well in reading and writing.

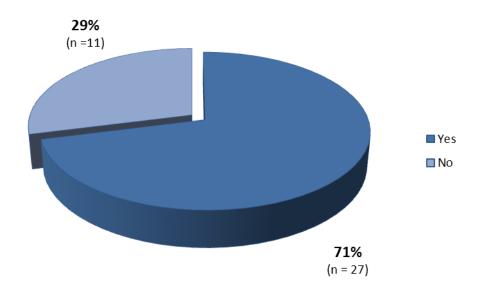
Total Number of Student Respondents = 38

Figure 4. Better Understanding of the Importance of Doing Well in Reading/Writing, Telementor 2013-2014



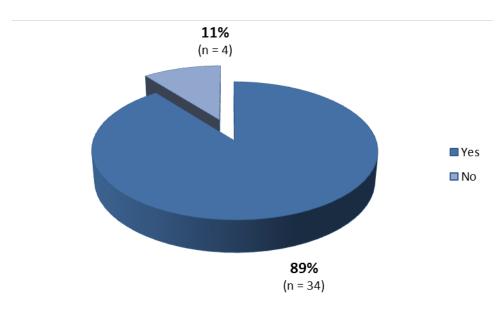
In a similar question, students were asked if they had a better understanding of doing well in reading and writing. Figure 4 highlights some ambivalence about the aforementioned areas. Sixteen (16) or 42% of the student respondents reported that they did not recognize the importance of doing well in reading and writing as a result of this project. However, twenty-two (22) or 58% of the student respondents reported that they had a better understanding of the importance of doing well in this area. These responses suggest that there is a need for the ITP, along with teachers and mentors, to emphasize the importance of content courses as they work with students on these projects. The data is not clear as to how or if students are making connections between their respective projects and the content areas of reading and writing.

Figure 5. Improvement in Writing Skills, Telementor 2013-2014



Question 8 asked the student respondents on this project if their writing skills had improved as a result of working on their project with their mentor. In analyzing the results in Figure 5, twenty-seven (27) or 71% of the student respondents reported that their writing skills had improved as a result of this project. However, eleven (11) or 29% of the student respondents reported that their writing skills had not improved while working on this project. These results highlight the need for the IPT program, along with teachers and mentors, to continuously emphasize the importance of working with these students to recognize the type of growth they have gained during these projects.

Figure 6. Improvement in Teamwork Skills, Telementor 2013-2014

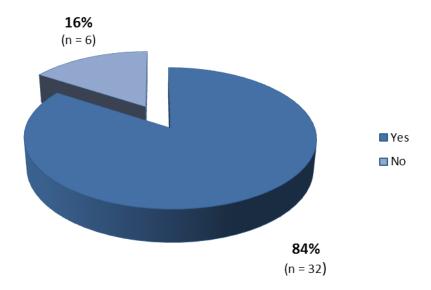


In Question 9, students were asked in a Yes/No question format if they had noticed an improvement in their teamwork skills working on this project. We see approximately 89% with favorable responses related to an increase in teamwork skills. Based on the results, thirty-four (34) or 89% of the student respondents reported that they had improved teamwork skills. However, four (4) or 11% of the student respondents reported that they did not improve their teamwork skills. The findings on this question are overall positive. Students at Trail Ridge Middle School understood and recognized improvement in their teamwork skills.

Q10: I'm taking more responsibility for my own academic success.

Total Number of Student Respondents = 38

Figure 7. Taking More Responsibility for Academic Success, Telementor 2013-2014

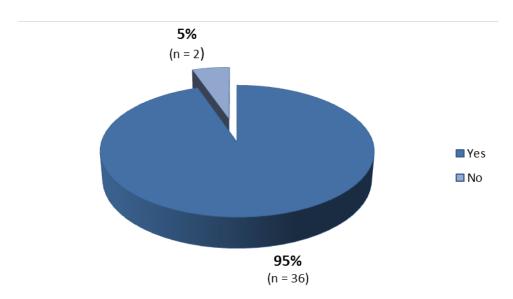


Question 10 is one of the more important questions asked of students in this survey. The goal of students taking control of academic success is very important to the ITP. In Figure 7, we find that thirty-two (32) or 84% of student respondents are reporting that they are now taking more control of their own academic success. Six (6) or 16% reported they have not taken more control of their academic success at this point. Altogether, this data should be encouraging for the ITP and all of the constituents given that the majority of the students, after completing this project, are excited about their educational endeavors.

Q11: I plan to further my education beyond high school (trade school, community college, university).

Total Number of Student Respondents = 38

Figure 8. Education Plans Beyond High School, Telementor 2013-2014

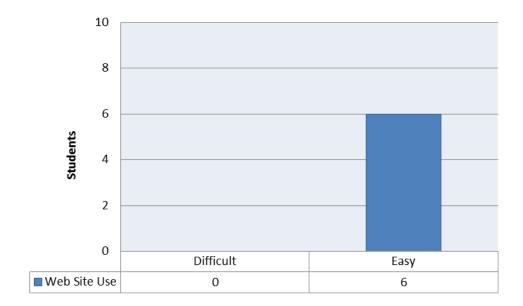


Student respondents in Question 11 of the survey were asked if they had planned to further their education beyond high school as a result of being involved in the ITP. Thirty-six (36) or 95% indicated that they had planned to pursue some postsecondary option. Two (2) or 5% noted they had not planned to pursue postsecondary opportunities at the time of the survey. Given these results, students in the ITP have decisively indicated that postsecondary options are in their future. It is highly recommended that the ITP continue to build upon this momentum for students and incorporate all the different types of postsecondary options that are available for students.

Q12: What was your overall experience using the International Telementor Program Web site?

Total Number of Student Respondents = 38

Figure 9. Overall Experience Using the International Program Web site, Telementor 2013-2014

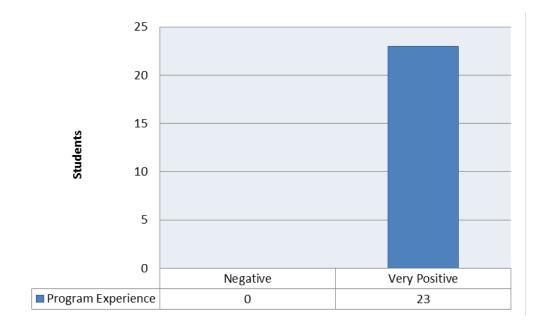


In Question 12 students respondents were asked about their overall experience using the ITP website. In a positive sense, six (6) students reported that they had an easy experience using the program website. No students reported that the website was difficult to use. The ITP should continuously upgrade the website for greater accessibility and ease of use.

Q13: Please rate your overall experience in the program.

Total Number of Student Respondents = 38

Figure 10. Overall Program Experience, Telementor 2013-2014

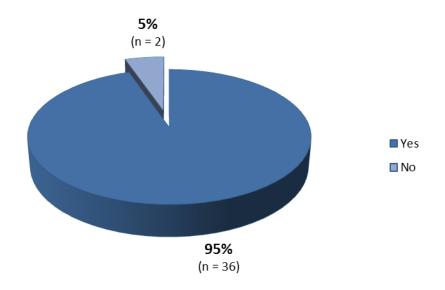


In Question 13 student respondents were asked about their overall experience in the ITP. Twenty-three (23) students reported they had a very positive experience in the ITP. No students reported any negative experiences. It is highly recommended that the ITP continue to monitor student perceptions of the ITP as it continues to grow.

Q14: Would you be interested in receiving mentoring support from professional in the future?

Total Number of Student Respondents = 38

Figure 11. Interest in Receiving Future Professional Mentoring Support, Telementor 2013-2014



## Q15: Please describe why or why not. (Reference to Question 14)

## Selected Student Responses:

"Yes because they get to help you on any questions feedback or problems you have. You can also be better at understanding what you are learning."

"No because although I loved the program I don't think I would do it again."

"I would like to have mentors in the future because it was a big help and great effect on my work and I learned to email local experts and I would like to learn even more from having a mentor"

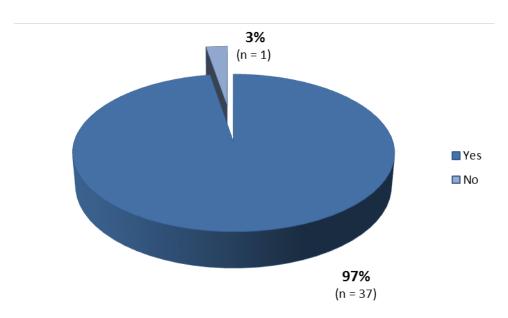
In Questions 14 and 15 student respondents were asked about their interest in receiving future mentoring support in the ITP. Thirty-six (36) or 95% of the student respondents reported that they were open to receiving mentoring in the future in this program (see sampled explanations provided in Question 15). Two (2) or 5% of the student respondents noted that they did not have an interest in receiving future mentoring (see sampled explanations provided in Question 15). It is highly recommended that the ITP continue to aggressively match the students who have an

interest in receiving mentoring with available mentors so they can continue to reach their academic goals.

Q16: Was this the first time you have been part of a formal mentoring program?

Total Number of Student Respondents = **38** 

Figure 12. First-Time Participants in a Formal Mentoring Program, Telementor 2013-2014



Question 16 provides pertinent data for the ITP. Figure 12 notes that thirty-seven (37) or 97% of the student respondents were first-time participants in this formal mentoring program. Only one (1) student respondent reported that they had previously participated in a formal mentoring program. This data is very important given that the majority of the students have only been exposed to this mentoring program. This exposure will allow students to grow and potentially demonstrate improvement in their academic areas in the future.

## Q17: Please describe the most difficult parts of working on this project with your mentor.

## Selected Student Responses:

"The most difficult part about working on this project with my mentor, was partly communicating. Since we have different time zones and schedules it was hard to keep track of the emails."

"The most difficult part of working with my mentor was probably trying to find websites for information..."

"Writing the essay!!!"

"The most difficult part was the communication part.."

## Q18: Did we miss something?

Selected Student Responses:

"I don't think you missed anything."

"The comment I would say to improve the experience would allow the mentors to email their students as soon as they pick them. (They weren't allowed to for us)."

#### Mentor Responses on the Nutrition-Science Research Project

**School**: Trail Ridge Middle School **Project Date**: 10/3/13 – 5/16/14

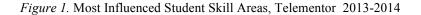
Teacher: Anna Mills

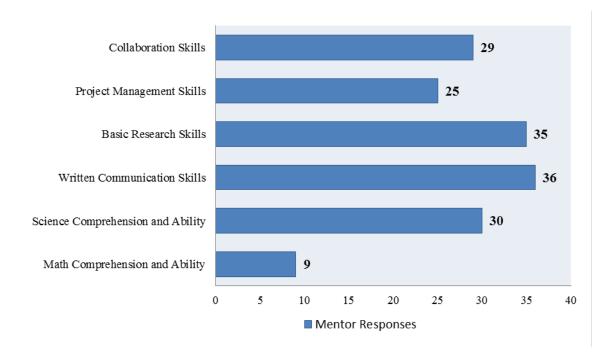
# Mentors: 37

## **Mentor Responses**

Q1: Please indicate the student skill areas that you feel you influenced through this project.

Total Number of Student Respondents = 37





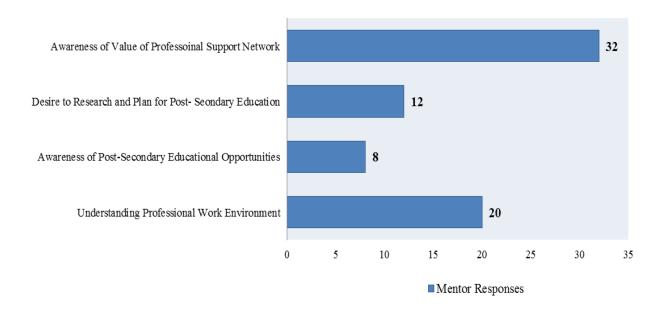
In Question 1 mentors were asked to indicate the student skill areas that they felt they influenced through this project. According to Figure 1, 29 mentor indicated they influenced *collaboration skills*; 25 mentors indicated *project management skills*; 35 *basic research skills*; 36 *written communication*; 30 *science comprehension* and 9 *math comprehension*. Based on these results, mentors highlighted that they believed there mentorship on this project improved some significant skill areas. However, the data does show that the lowest area of influence was the area

of math comprehension. It is highly recommended that the ITP continue to work with mentors on effective ways to influence math comprehension through project-based learning.

Q2: Please indicate if your mentoring support aided your student in the following areas.

Total Number of Student Respondents = 37

Figure 2. Areas Aided by Mentoring Support, Telementor 2013-2014



Question 2 asked mentors to indicate if their mentoring support aided their students in the areas highlighted in Figure 2. According to Figure 2, 32 mentors indicated their mentorship aided students in the awareness of the value of a professional support network; 12 indicated their mentorship supported a desire to research and plan for post-secondary education; 8 indicated an awareness of post-secondary educational opportunities; and 20 indicated that their mentorship supported an understanding of the professional work environment. Based on these results, mentors highlighted that they provided support in significant areas. It is highly recommended that the ITP continue to build on these strengths with mentors to further enhance the students' experience.

Q3: The <u>average</u> quality of the messages received from students throughout the project.<sup>2</sup>

(3.81)

1 = "Poor Quality" 5 = "Above Average Quality"

In Question 3 mentors were asked about the quality of messages received from students throughout the project. Based on a scale of 1 = "Poor Quality" and 5 = "Above Average Quality," the mentors' average quality rating was 3.81. This data indicates that mentors believed the messages received from students throughout the project was of average quality. Based on this information, the ITP should work with students on their writing skills to improve the quality of messages sent to mentors.

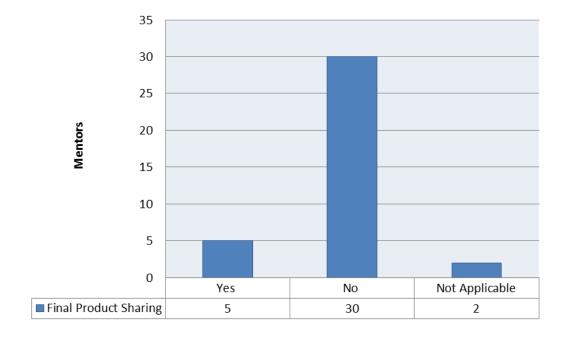
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<sup>&</sup>lt;sup>2</sup> Individual data on mentor responses were not provided in the *Mentor Survey Summary*.

**Q4**: Did you student share a final project (presentation, research report, plan, etc.) with you for this project?

Total Number of Student Respondents = 37

Figure 3. Student Sharing of Final Product with Mentor, Telementor 2013-2014



Question 4 asked mentors if their students shared a final project (presentation, research, report, plan, etc.) with them for this project. According to Figure 3 the majority of mentors (30) indicated that their students did not share their final project with them at the conclusion of the program. Based on these results, the ITP should build in a requirement that students should share their final projects with the mentors who have assisted them with project creation.

**Q5**: <u>Average</u> level and quality of assistance received from the teacher throughout the project.

(4.14)

1 = "Low Quality, Infrequent"5 = "High Quality, Frequent"

In Question 5 mentors were asked about the level and quality of assistance received from the teacher throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," the mentors average quality rating was 4.14. This data indicates that the frequency and quality of assistance from the teacher was above average. Based on these results, the ITP should work with teachers to increase the frequency and quality of assistance provided to mentors throughout the project.

**Q6**: <u>Average</u> level and quality of assistance you received from ITP staff throughout the project.

(3.92)

1 = "Low Quality, Infrequent"

**5** = "High Quality, Frequent"

In Question 6 mentors were asked about the quality of assistance received from the ITP staff throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," mentors average quality rating was 3.92. This data indicates that the frequency and quality of assistance received from the ITP staff was of average quality. Based on these results, the ITP should work with their staff on increasing the frequency and quality of assistance provided to the mentors.

## Q7: Things either the teacher or the ITP staff do to make a similar project more successful.

## Selected Mentor Responses:

"Stay on schedule as much as possible, and keep the steps / requirements reasonable. This project had too many steps."

"The messages were effective and the timeline worked well. It did feel that the project was two-phased and sort of dropped (changed) towards the end. improving the transition might help."

"I would not change a thing ,this project was very well put together and along with the communication."

"think field work in the beginning would have helped the students to narrow down their hypothesis. Before starting it would have been nice for all the student to have an opportunity to volunteer time and get feedback from the experts."

# Q8: Feedback regarding the quality of the student's final project as well as suggestions for improvement.

## Selected Mentor Responses:

"I think they grasped some of the high level topics that are related to flood restoration efforts. Perhaps giving some more specific details of their research within the presentation would have been good to do."

"I thought the final project was great! The web site which my student help to build worked well. The fact that the teacher paired her up with a student which did research similar to my students was a great idea. It worked well because the web site now is much more informational."

"I didn't see a final project. However, this kid was VERY enthusiastic and engaged throughout the term, so I feel confident that she benefited from the experience. She wrote to me multiple times a week, and was extremely responsive to my suggestions. She was really a pleasure to work with."

**Q9**: Overall experience in the program.

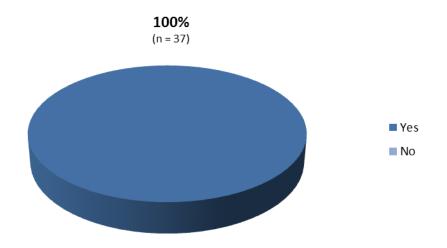
(4.22)

1 = "Negative"

**5** = "Positive"

In Question 9 mentors were asked about their overall experience in the program. Based on a scale of 1 = "Negative" and 5 = "Positive," mentors average overall experience was 4.22. This data indicates that the mentors' overall experience was above average. Based on these results, the ITP should work with mentors on ways to continually improve their experience in the program.

Figure 4. Future Mentor Considerations, Telementor 2013-2014



## Q11: Why or why not? (Reference to Question 10)

Selected Mentor Responses:

"I have been a mentor working for this program for a number of years. It's a very satisfying experience for me to work with these young kids and to help them reach their goals."

"Absolutely. Loved the experience."

"I think mentoring is an important responsibility that professionals in a given field have to expose students to real world issues and the realities of working in a certain field."

Question 10 asked mentors if they would consider mentoring new students in the future. Thirty-seven (37) or 100% of all the mentor respondents noted that they would mentor new students in the future. Selected responses from the mentors suggest that they enjoyed their experience in the program. Based on these results, it is highly recommended that the ITP continue to survey mentors in an effort to better understand the reasons for their decision to mentor students in the future.

## Q12: The most rewarding aspect of participating.

Selected Mentor Responses:

"I loved seeing the emails from my student each week and her enthusiasm for the project was contagious! She did all the work, but I enjoyed talking with her about the project from start to finish!"

"Tapping the energy of kids to build a professional passion."

"It's always rewarding to work with kids. You never know what aspect of the interactions will be helpful to them... and you may never know... but it's an honor to be in a position to help them."

## Q13: The most difficult aspect of participating.

Selected Mentor Responses:

"Not receiving responses from the student that indicated the best way I could assist."

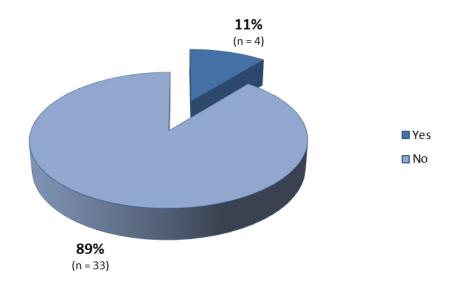
"The only difficult part of this program was tracking changes to the schedule..."

"Lack of communication - partly my fault as well!"

Q14: First time you've been part of a formal mentoring program.

Total Number of Student Respondents = 37

Figure 5. First-Time Mentors, Telementor 2013-2014



Question 14 asked mentors if this was the first time they had been a part of a formal mentoring program. Thirty-three (33) or 89% of the 37 mentor respondents indicated that this was not their first time participating in a formal mentoring program. Four (4) or 11% of the remaining 37 mentor respondents indicated that this was their first experience in a formal mentoring program. Based on these results, it is highly recommended that the ITP continue to recruit new mentors for student projects.

#### **Student Perceptions of the Investing 101 Project**

**School**: Trail Ridge Middle School **Project Date**: 9/23/13 – 12/19/13

Teacher: Kara Jostes

# Students: 18

#### **Student Responses**

## Working Relationship with Mentor

## Q1: Please describe the best part about working on this project with your mentor

#### Selected Student Responses:

"The best part of working on this project was messaging my mentor. It was fun learning about new things like stock markets. Sending messages to my mentor was the best of working with my mentor this quarter."

"The best part of the Telementoring program was the Vocabulary Sort. I think so because it was the easiest activity and that it helped me grow in my knowledge of stock market terms and vocabulary. I think that was the best part of the Telementoring program."

"The best part about the project and working with my mentor is... I had a chance to learn amazing things about the stock market. Now I know about the other companies and how they get more money as it rises or it dies. That was my best time in the telementor program!!!!!!."

Students from Trail Ridge Middle School highlighted that their experience with the mentor on this particular project was very enjoyable. Notably, students were excited to communicate with their mentors. Additionally, they commented that learning about the stock market was another enjoyable aspect of the program.

## Q2: Please share any other academic areas where you'd like to receive help from a mentor

#### Selected Student Responses:

"I would want this program for Science, Language Arts, and robotics..."

"I would like help with social studies and math."

In Question 2 Trail Ridge Middle School students working on this project were asked about other academic areas where they wanted assistance. A sampling of student responses was

focused on the academic area of Science. Additional areas included Social Studies, Language Arts, and Robotics (STEM-based classes). These responses indicate that students perceive their mentor as a person that can provide additional assistance in other content areas.

#### Q3: What advice would you give your mentor as he/she works with a new student

#### Selected Student Responses:

"My advise [advice] is to use words that are easier for students to read and understand more of what they are saying."

"I would want my mentor to ask more questions about us so that we create a better bound. I would also want him to explain more for example, he would tell me to put down a tittle bar on Excel but he didn't tell me how to."

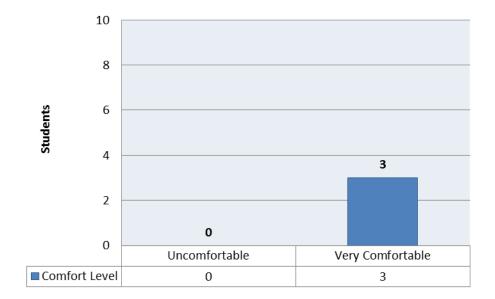
"I would give the mentor advice about the detail they put into their messages. In some recent message they put a lot of detail into it, and I couldn't understand the basic concept my mentor was trying to tell me. I couldn't get what she was saying so I did the assignment incorrectly. In conclusion, I would suggest that the mentors should level down their messages with the detail just a bit."

Question 3 asked students to provide advice to mentors as they work with new students in the future. Based on the sampling of the responses, students noted that mentors should establish clear communication. Students also recommended that mentors build relationships with students. This data highlights that students view communication with their mentors and relationship building as especially important to their success in the program.

**Q4**: How comfortable were you communicating with your mentor about your project?

Total Number of Student Respondents = 18

Figure 1. Student Comfort Level with Mentor, Telementor 2013-2014



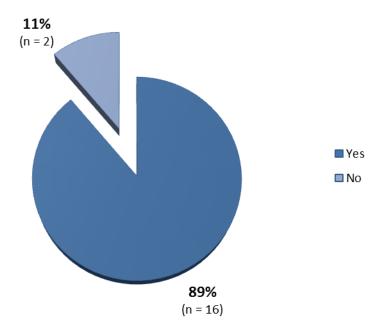
Question 4 asked students about their level of comfort with their mentors. The data provided in Figure 1 only highlights the data that was provided on the ends of the spectrum on the Likert-scale. Based on the results, three (3) of the eighteen (18) students involved in this project indicated that they were very comfortable communicating with their mentors about their particular project. None of the student respondents indicated that they were uncomfortable. This is encouraging for the ITP as it seeks to build into the future.

## **Student Perceptions of Connections to Content Area Courses**

**Q5**: I have a better understanding of the importance of doing well in math.

Total Number of Student Respondents = 18

Figure 2. Better Understanding of the Importance of Doing Well in Math, Telementor 2013-2014

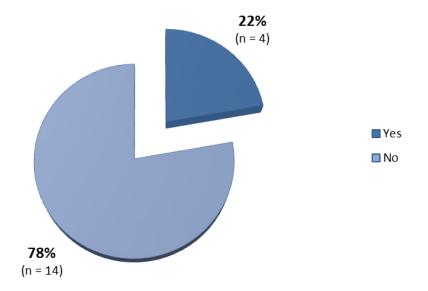


In Question 5, students were asked in a Yes/No question format if they had a better understanding of doing well in math as a result of this project. Based on the results, only two (2) or 11% of the student respondents reported that they did not have a better understanding of the importance of doing well in math. The remaining sixteen (16) student respondents reported that they did recognize the importance of doing well in math. These results are promising as there is a clear connection between student projects and doing well in a core content area such as mathematics for the majority of student respondents.

**Q6**: I have a better understanding of the importance of doing well in science.

Total Number of Student Respondents = 18

Figure 3. Better Understanding of the Importance of Doing Well in Science, Telementor 2013-2014

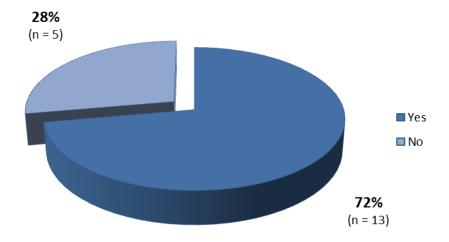


Question 6 asked the student respondents on this project if they had a better understanding of the importance of doing well in science. In analyzing the results in Figure 3, four (4) or 22% of the student respondents reported that they had a better understanding of the importance of doing well in science as a result of this project. However, fourteen (14) or 78% of the student respondents reported that they did not recognize the importance of doing well in science. The data is not clear as to how or if students are making connections between their respective projects and the content area of science. It is recommended that the ITP work aggressively with students to help them make the necessary connections between project outcomes and doing well in core content areas.

Q7: I have a better understanding of the importance of doing well in reading and writing.

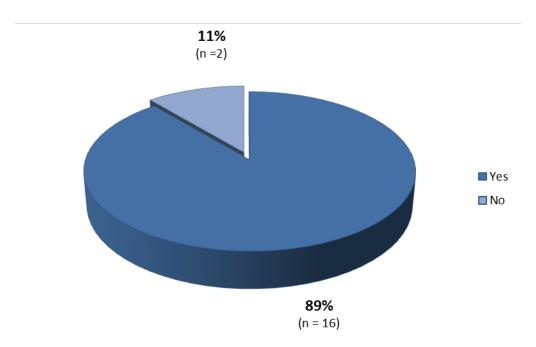
Total Number of Student Respondents = 18

Figure 4. Better Understanding of the Importance of Doing Well in Reading/Writing, Telementor 2013-2014



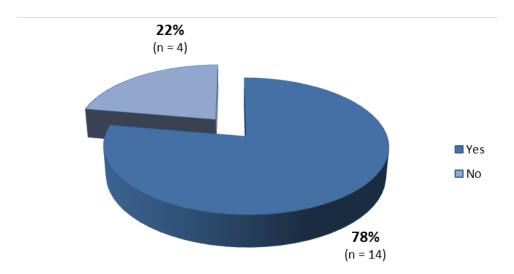
In a similar question, students were asked if they had a better understanding of doing well in reading and writing. Figure 4 highlights some positive findings about the aforementioned areas. Only five (5) or 28% of the student respondents reported that they did not recognize the importance of doing well in reading and writing as a result of this project. However, thirteen (13) or 72% of the student respondents reported that they had a better understanding of the importance of doing well in this area. While positive, these responses suggest that there is a need for the ITP, along with teachers and mentors, to emphasize the importance of content areas as they work with students on these projects.

Figure 5. Improvement in Writing Skills, Telementor 2013-2014



Question 8 asked the student respondents on this project if their writing skills had improved as a result of working on their project with their mentor. In analyzing the results in Figure 5, sixteen (16) or 89% of the student respondents reported that their writing skills had improved as a result of this project. Only two (2) or 11% of the student respondents reported that their writing skills had not improved while working on this project. Though positive, these results highlight the need for the IPT program, along with teachers and mentors, to continuously emphasize the importance of working with these students to recognize the type of growth they have gained during these projects.

Figure 6. Improvement in Teamwork Skills, Telementor 2013-2014

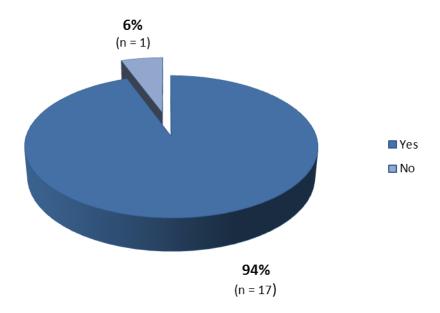


In Question 9, students were asked in a Yes/No question format if they had noticed an improvement in their teamwork skills working on this project. We see approximately 78% with favorable responses related to an increase in teamwork skills. Based on the results, fourteen (14) or 78% of the student respondents reported that they had improved teamwork skills. Only four (4) or 22% of the student respondents reported that they did not improve their teamwork skills. The findings on this question are overall positive. Students at Trail Ridge Middle School understood and recognized improvement in their teamwork skills.

Q10: I'm taking more responsibility for my own academic success.

#### Total Number of Student Respondents = 18

Figure 7. Taking More Responsibility for Academic Success, Telementor 2013-2014

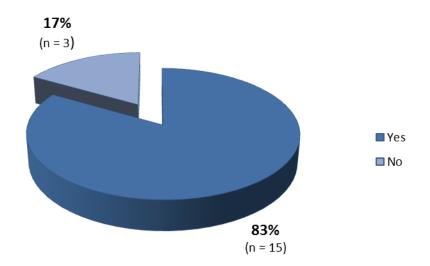


Question 10 is one of the more important questions asked of students in this survey. The goal of students taking control of academic success is very important to the ITP. In Figure 7, we find that seventeen (17) or 94% of student respondents are reporting that they are now taking more control of their own academic success. Only one (1) student respondent reported they have not taken more control of their academic success at this point. Altogether, this data should be encouraging for the ITP and all of the constituents given that the majority of the students, after completing this project, are excited about their educational endeavors.

Q11: I plan to further my education beyond high school (trade school, community college, university).

Total Number of Student Respondents = 18

Figure 8. Education Plans Beyond High School, Telementor 2013-2014

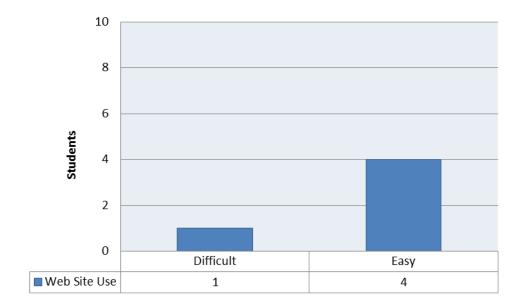


Student respondents in Question 11 of the survey were asked if they had planned to further their education beyond high school as a result of being involved in the ITP. Fifteen (15) or 83% indicated that they had planned to pursue some postsecondary option. Three (3) or 17% noted they had not planned to pursue postsecondary opportunities at the time of the survey. Given these results, students in the ITP have decisively indicated that postsecondary options are in their future. It is highly recommended that the ITP continue to build upon this momentum for students and incorporate all the different types of postsecondary options that are available for students.

Q12: What was your overall experience using the International Telementor Program Web site?

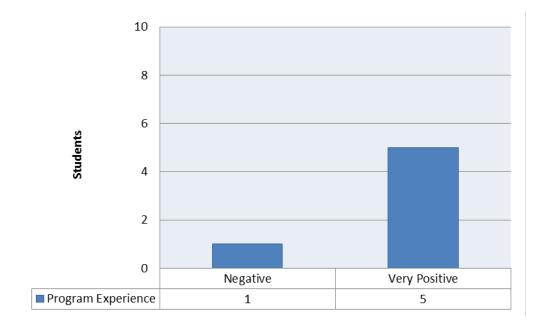
Total Number of Student Respondents = 18

Figure 9. Overall Experience Using the International Program Web site, Telementor 2013-2014



In Question 12 students respondents were asked about their overall experience using the ITP website. In a positive sense, four (4) student respondents reported that they had an easy experience using the program website. Only one (1) student reported that the website was difficult to use. The ITP should continuously upgrade the website for greater accessibility and ease of use.

Figure 10. Overall Program Experience, Telementor 2013-2014

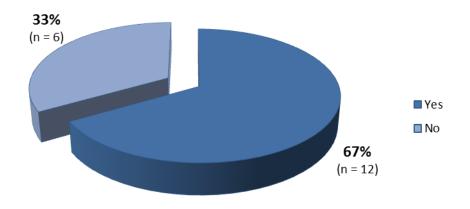


In Question 13 student respondents were asked about their overall experience in the ITP. Five (5) students reported they had a very positive experience in the ITP. However, one (1) student reported that their overall experience was negative. It is highly recommended that the ITP continuously monitor student perceptions of the ITP as it continues to grow.

Q14: Would you be interested in receiving mentoring support from professional in the future?

Total Number of Student Respondents = 18

Figure 11. Interest in Receiving Future Professional Mentoring Support, Telementor 2013-2014



## Q15: Please describe why or why not. (Reference to Question 14)

Selected Student Responses:

"I would because it has really helped with doing better with my work..."

"I wouldn't like to get mentoring support from professionals. the reason is say that is because i don't have time for it..."

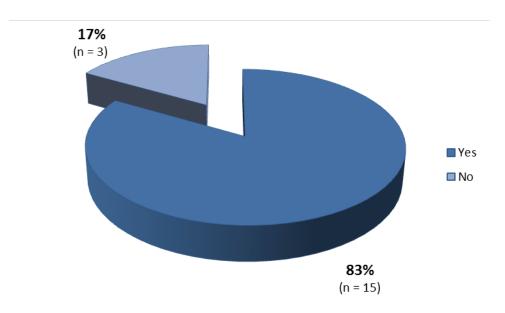
"I would be interested because math gets Harder and HARDER and math is something I really need help with. Therefore, I think I am going to need help later on."

In Questions 14 and 15 student respondents were asked about their interest in receiving future mentoring support in the ITP. Twelve (12) or 67% of the student respondents reported that they were open to receiving mentoring in the future in this program (see sampled explanations provided in Question 15). Six (6) or 33% of the student respondents noted that they did not have an interest in receiving future mentoring (see sampled explanations provided in Question 15). It is highly recommended that the ITP continue to aggressively match the students who have an interest in receiving mentoring with available mentors so they can continue to reach their academic goals.

Q16: Was this the first time you have been part of a formal mentoring program?

Total Number of Student Respondents = 18

Figure 12. First-Time Participants in a Formal Mentoring Program, Telementor 2013-2014



Question 16 provides pertinent data for the ITP. Figure 12 notes that fifteen (15) or 83% of the student respondents were first-time participants in this formal mentoring program. However, three (3) student respondents reported that they had previously participated in a formal mentoring program. This data is very important given that the majority of the students have only been exposed to this mentoring program. This exposure will allow students to grow and potentially demonstrate improvement in their academic areas in the future.

## Q17: Please describe the most difficult parts of working on this project with your mentor.

## Selected Student Responses:

"The most difficult part was researching the companies stock and there history with the stock."

"The most difficult part of working with a mentor was that there wasn't always feedback. I didn't always get to know what my mistakes were because I didn't always get a message back. I guess I would have like it more if I had got that support that I was missing."

"The most difficult part of working on this project was researching 3-5 stocks."

"The difficult part of this project was doing the yahoo finance part with the copying and pasting. I had to highlight every single closing price and press control C and control V. It hurt my left hand a lot. In conclusion, yahoo finance was the hardest part of this project."

# Q18: Did we miss something?

## Selected Student Responses:

"Next time you guys choose to work with kids again you guys should probably make sure the kids are comfortable with what mentor they have and comfortable by enjoying the projects. Those projects were good but it would also be nice to do a hands on project."

"My only comment I have on this experience with Telementoring is that mentors need to make their messages a bit shorter. Some of the mentors send like a ten page message that would take two days to read. Overall, Telementoring was a fun project that I really enjoyed a lot. I hope to do it again soon."

## Mentor Responses on the Nutrition-Science Research Project

**School**: Trail Ridge Middle School **Project Date**: 9/23/13 – 12/19/13

**Teacher**: Kara Jostes

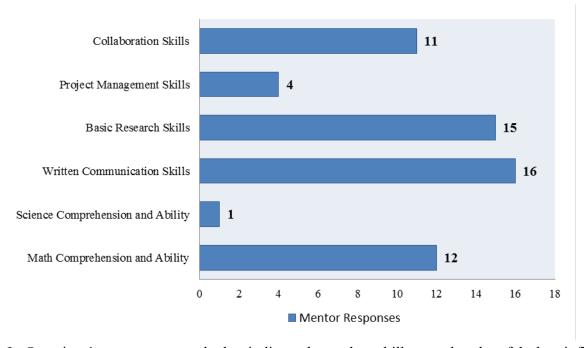
# Mentors: 17

## **Mentor Responses**

Q1: Please indicate the student skill areas that you feel you influenced through this project.

Total Number of Student Respondents = 17

Figure 1. Most Influenced Student Skill Areas, Telementor 2013-2014

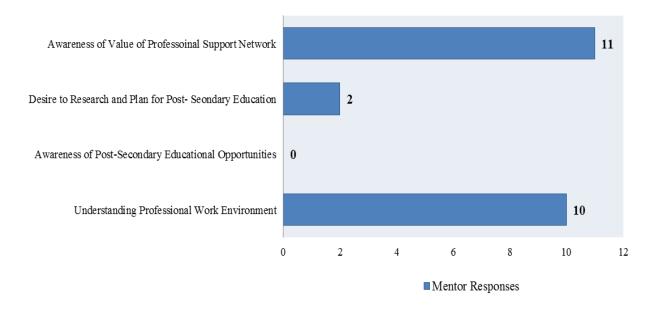


In Question 1 mentors were asked to indicate the student skill areas that they felt they influenced through this project. According to Figure 1, 11 mentor indicated they influenced *collaboration skills*; 4 mentors indicated *project management skills*; 15 *basic research skills*; 16 *written communication*; 1 *science comprehension* and 12 *math comprehension*. Based on these results, mentors highlighted that they believed there mentorship on this project improved some significant skill areas. However, the data does show that the lowest area of influence was the area of science comprehension. It is highly recommended that the ITP continue to work with mentors on effective ways to influence science comprehension and ability through project-based learning.

**Q2**: Please indicate if your mentoring support aided your student in the following areas.

Total Number of Student Respondents = 17

Figure 2. Areas Aided by Mentoring Support, Telementor 2013-2014



Question 2 asked mentors to indicate if their mentoring support aided their students in the areas highlighted in Figure 2. According to Figure 2, 11 mentors indicated their mentorship aided students in the awareness of the value of a professional support network; 2 indicated their mentorship supported a desire to research and plan for post-secondary education; and 10 indicated that their mentorship supported an understanding of the professional work environment. None of the mentors indicated that their mentorship aided in an awareness of post-secondary educational opportunities. Based on these results, mentors highlighted that they provided support in significant areas. It is highly recommended that the ITP continue to build on these strengths with mentors to further enhance the students' experience.

Q3: The <u>average</u> quality of the messages received from students throughout the project.<sup>3</sup>

(3.18)

1 = "Poor Quality" 5 = "Above Average Quality"

In Question 3 mentors were asked about the quality of messages received from students throughout the project. Based on a scale of 1 = "Poor Quality" and 5 = "Above Average Quality," the mentors' average quality rating was 3.18. This data indicates that mentors believed the messages received from students throughout the project was of average quality. Based on this information, the ITP should work with students on their writing skills to improve the quality of messages sent to mentors.

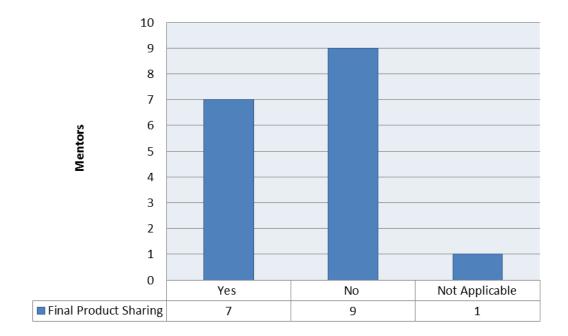
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<sup>&</sup>lt;sup>3</sup> Individual data on mentor responses were not provided in the *Mentor Survey Summary*.

**Q4**: Did you student share a final project (presentation, research report, plan, etc.) with you for this project?

Total Number of Student Respondents = 17

Figure 3. Student Sharing of Final Product with Mentor, Telementor 2013-2014



Question 4 asked mentors if their students shared a final project (presentation, research, report, plan, etc.) with them for this project. According to Figure 3 nine (9) mentors indicated that their students did not share their final project with them at the conclusion of the program. Based on these results, the ITP should build in a requirement that students should share their final projects with the mentors who have assisted them with project creation.

**Q5**: <u>Average</u> level and quality of assistance received from the teacher throughout the project.

(3.82)

1 = "Low Quality, Infrequent"5 = "High Quality, Frequent"

In Question 5 mentors were asked about the level and quality of assistance received from the teacher throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," the mentors average quality rating was 3.82. This data indicates that the frequency and quality of assistance from the teacher was of average quality. Based on these results, the ITP should work with teachers to increase the frequency and quality of assistance provided to mentors throughout the project.

**Q6**: <u>Average</u> level and quality of assistance you received from ITP staff throughout the project.

(3.88)

1 = "Low Quality, Infrequent"

**5** = "High Quality, Frequent"

In Question 6 mentors were asked about the quality of assistance received from the ITP staff throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," mentors average quality rating was 3.88. This data indicates that the frequency and quality of assistance received from the ITP staff was of average quality. Based on these results, the ITP should work with their staff on increasing the frequency and quality of assistance provided to the mentors.

## Q7: Things either the teacher or the ITP staff do to make a similar project more successful.

## Selected Mentor Responses:

"The overall objectives seemed a bit aggressive and had to be scaled back, not surprising given the high variance in skills among the students. I think that may have confused the students a bit, with the several changes in scope."

"The project scope was changed quite dramatically. It is very difficult to follow such a change in the project and expectations from what is communicated originally. From there it followed that trying to help someone learn Excel via a distance is very different than learning about the stock market."

"Perhaps hold a brainstorming session to address the issue of frequent absences from students - talk about ideas for incentives to improve attendance, etc."

# Q8: Feedback regarding the quality of the student's final project as well as suggestions for improvement.

## Selected Mentor Responses:

"I thought he did an excellent job. He was interested and engaged. I had the impression that he really enjoyed the work and was exposed to skills (excel charting) that he will use going forward."

"The students final project met my expectations. He produced a high quality product that was free of any errors."

"I think this project and the changes in scope it significantly dampened my enthusiasm for working with 6th graders. A project needs to be scoped properly for the student grade level and not changed so much on the fly."

**Q9**: Overall experience in the program.

(4.06)

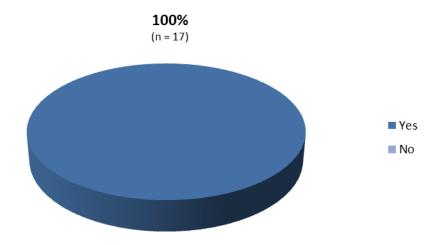
1 = "Negative"

**5** = "Positive"

In Question 9 mentors were asked about their overall experience in the program. Based on a scale of 1 = "Negative" and 5 = "Positive," mentors average overall experience was 4.06. This data indicates that the mentors' overall experience was above average. Based on these results, the ITP should work with mentors on ways to continually improve their experience in the program.

Total Number of Student Respondents = 17

Figure 4. Future Mentor Considerations, Telementor 2013-2014



# Q11: Why or why not? (Reference to Question 10)

Selected Mentor Responses:

"Enjoy mentoring."

"Very rewarding to see how excited they are about sharing information with you."

"I enjoyed helping the student on the project and felt that I could apply my own knowledge relatively easily."

Question 10 asked mentors if they would consider mentoring new students in the future. Seventeen (17) or 100% of all the mentor respondents noted that they would mentor new students in the future. Selected responses from the mentors suggest that they enjoyed their experience in the program. Based on these results, it is highly recommended that the ITP continue to survey mentors in an effort to better understand the reasons for their decision to mentor students in the future.

## Q12: The most rewarding aspect of participating.

## Selected Mentor Responses:

"It's always nice to get positive feedback from the students and help them grasp concepts they didn't understand before."

"I always enjoy interacting with youth and sharing my own knowledge, experience, etc. with them"

"Their enthusiasm is rewarding, so is finding a way to simplify a difficult concept so that they can get an insight."

## Q13: The most difficult aspect of participating.

## Selected Mentor Responses:

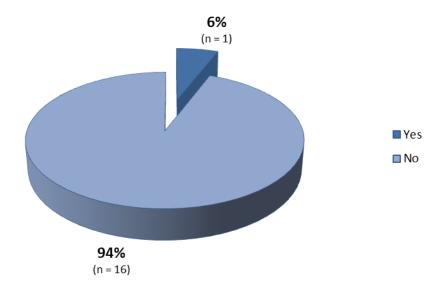
"I am not especially good at scaling back my communication to fit the needs of a middleschool student. I have to really concentrate on my word choice."

"It's always difficult to step it down to the appropriate level, but I think I was able to do that."

"It's difficult when the student is often absent and therefore has low participation."

Total Number of Student Respondents = 17

Figure 5. First-Time Mentors, Telementor 2013-2014



Question 14 asked mentors if this was the first time they had been a part of a formal mentoring program. Sixteen (16) or 94% of the 17 mentor respondents indicated that this was not their first time participating in a formal mentoring program. Only one (1) of the remaining 17 mentors indicated that this was their first experience in a formal mentoring program. Based on these results, it is highly recommended that the ITP continue to recruit new mentors for student projects.

## Student Perceptions of the College and Career Readiness Project

School: Timberline PK-8 Project Date: 2/5/14 – 5/24/14

**Teacher**: Ashley McIntyre

# Students: 19

## **Student Responses**

## Working Relationship with Mentor

## Q1: Please describe the best part about working on this project with your mentor

## Selected Student Responses:

"Having someone help me achieve the goals. I had a hard time thinking of my self [myself] in the future, thanks to my mentor that is no longer a problem."

"The best part of working on this project with my mentor was getting to hear the different steps they had to take in high school and college to get into their career. Also hearing of how they didn't know what they wanted to be until their senior year in high school."

"The best part of working with my mentor was the information my mentor provided me with, and the knowledge I needed to preform [perform] well after I finish my education."

Students from Timberline PK-8 highlighted that their experience with the mentor on this particular project was very helpful. As a point of reference, students mentioned that they were able to communicate with their mentors. Additionally, they noted that learning about the stock market was an enjoyable component of the program.

## Q2: Please share any other academic areas where you'd like to receive help from a mentor

#### Selected Student Responses:

"I like to receive help from a mentor in math, science, and social studies as well. Having help in all classes would be very useful if you don't understand something and you can't get a hold of your teacher."

"I would like to have my mentor help me with STEM projects as well because my mentor and I could both learn a lot from it."

In Question 2 Timberline PK-8 students working on this project were asked about other academic areas where they wanted assistance. A sampling of student responses was focused on the academic area of Math. Additional areas included Social Studies, Science, and STEM-based

classes. These responses indicate that students perceive their mentor as a person that can provide additional assistance in other content areas.

## Q3: What advice would you give your mentor as he/she works with a new student

## Selected Student Responses:

"Only accept a student if that student is interested in the career that you are doing at the moment."

"I think that she could better address her likes and dislikes about the career area. Another thing she could do is tell more about her experience in the career."

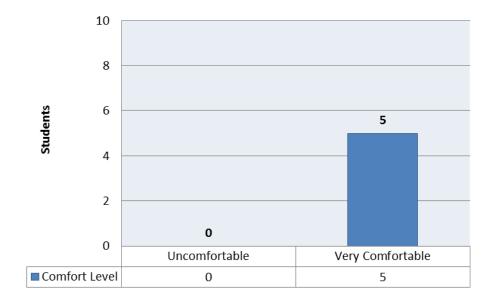
"Some advice for a new student is to chose [choose] a student in your career field, and to be relaxed with them. Don't be all business with them. Try to at least talk somewhat[t] about how they are doing but you still want to focus on the project."

Question 3 asked students to provide advice to mentors as they work with new students in the future. Based on the sampling of the responses, students noted that mentors should establish clear communication. Students also recommended that mentors work with students whom are interested in their career. This data highlights that students view communication with mentor-student matching as especially important to their success in the program.

Q4: How comfortable were you communicating with your mentor about your project?

Total Number of Student Respondents = 19

Figure 1. Student Comfort Level with Mentor, Telementor 2013-2014



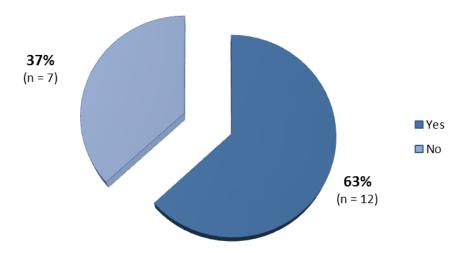
Question 4 asked students about their level of comfort with their mentors. The data provided in Figure 1 only highlights the data that was provided on the ends of the spectrum on the Likert-scale. Based on the results, five (5) of the nineteen (19) students involved in this project indicated that they were very comfortable communicating with their mentors about their particular project. None of the student respondents indicated that they were uncomfortable. This is encouraging for the ITP as it seeks to build into the future.

## **Student Perceptions of Connections to Content Area Courses**

**Q5**: I have a better understanding of the importance of doing well in math.

Total Number of Student Respondents = 19

Figure 2. Better Understanding of the Importance of Doing Well in Math, Telementor 2013-2014

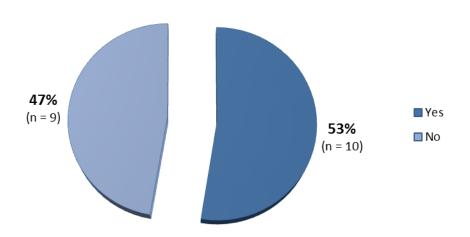


In Question 5, students were asked in a Yes/No question format if they had a better understanding of doing well in math as a result of this project. Based on the results, seven (7) or 37% of the student respondents reported that they did not have a better understanding of the importance of doing well in math. The remaining twelve (12) student respondents reported that they did recognize the importance of doing well in math. While these results are promising, the ITP, along with teachers and mentors, should continuously seek to establish a clear connection between student projects and doing well in a core content area such as mathematics.

**Q6**: I have a better understanding of the importance of doing well in science.

Total Number of Student Respondents = 19

Figure 3. Better Understanding of the Importance of Doing Well in Science, Telementor 2013-2014

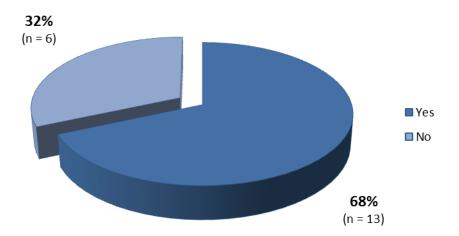


Question 6 asked the student respondents on this project if they had a better understanding of the importance of doing well in science. In analyzing the results in Figure 3, ten (10) or 53% of the student respondents reported that they had a better understanding of the importance of doing well in science as a result of this project. However, nine (9) or 47% of the student respondents reported that they did not recognize the importance of doing well in science. The data is not clear as to how or if students are making connections between their respective projects and the content area of science. It is recommended that the ITP work aggressively with students to help them make the necessary connections between project outcomes and doing well in core content areas.

Q7: I have a better understanding of the importance of doing well in reading and writing.

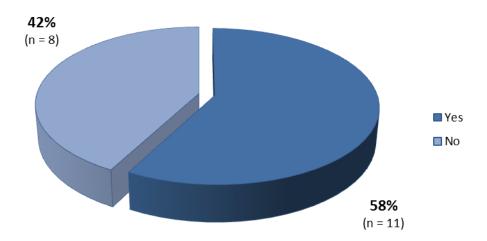
Total Number of Student Respondents = 19

Figure 4. Better Understanding of the Importance of Doing Well in Reading/Writing, Telementor 2013-2014



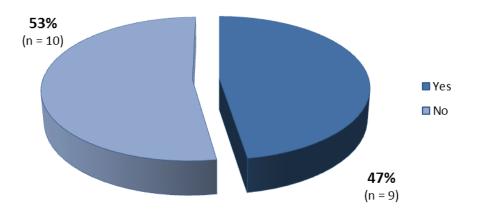
In a similar question, students were asked if they had a better understanding of doing well in reading and writing. Figure 4 highlights some positive findings about the aforementioned areas. Six (6) or 32% of the student respondents reported that they did not recognize the importance of doing well in reading and writing as a result of this project. However, thirteen (13) or 68% of the student respondents reported that they had a better understanding of the importance of doing well in this area. While positive, these responses suggest that there is a need for the ITP, along with teachers and mentors, to emphasize the importance of content areas as they work with students on these projects.

Figure 5. Improvement in Writing Skills, Telementor 2013-2014



Question 8 asked the student respondents on this project if their writing skills had improved as a result of working on their project with their mentor. In analyzing the results in Figure 5, eleven (11) or 58% of the student respondents reported that their writing skills had improved as a result of this project. However, eight (8) or 42% of the student respondents reported that their writing skills had not improved while working on this project. These results highlight the need for the IPT program, along with teachers and mentors, to continuously emphasize the importance of working with these students to recognize the type of growth they have gained during these projects.

Figure 6. Improvement in Teamwork Skills, Telementor 2013-2014

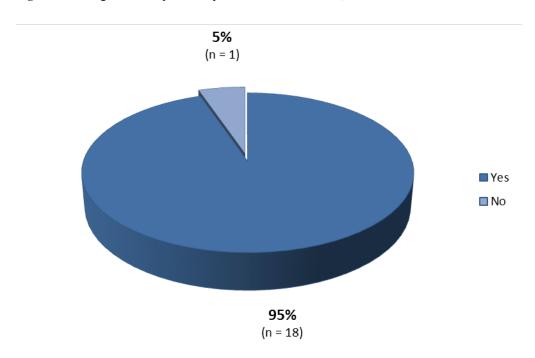


In Question 9, students were asked in a Yes/No question format if they had noticed an improvement in their teamwork skills working on this project. We see only 47% with favorable responses related to an increase in teamwork skills. Based on the results, nine (9) or 47% of the student respondents reported that they had improved teamwork skills. However, the majority of the student respondents (10) reported that they did not improve their teamwork skills. The findings on this question are unclear. The ITP, along with teachers and mentors, should assist students at Timberline PK-8 with understanding and recognizing how the project works to imporve their teamwork skills.

Q10: I'm taking more responsibility for my own academic success.

## Total Number of Student Respondents = 19

Figure 7. Taking More Responsibility for Academic Success, Telementor 2013-2014

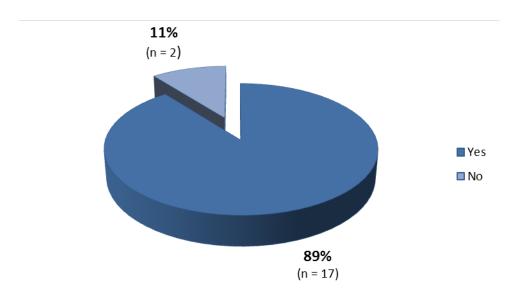


Question 10 is one of the more important questions asked of students in this survey. The goal of students taking control of academic success is very important to the ITP. In Figure 7, we find that eighteen (18) or 95% of student respondents are reporting that they are now taking more control of their own academic success. Only one (1) student respondent reported they have not taken more control of their academic success at this point. Altogether, this data should be encouraging for the ITP and all of the constituents given that the majority of the students, after completing this project, are excited about their educational endeavors.

Q11: I plan to further my education beyond high school (trade school, community college, university).

## Total Number of Student Respondents = 19

Figure 8. Education Plans Beyond High School, Telementor 2013-2014

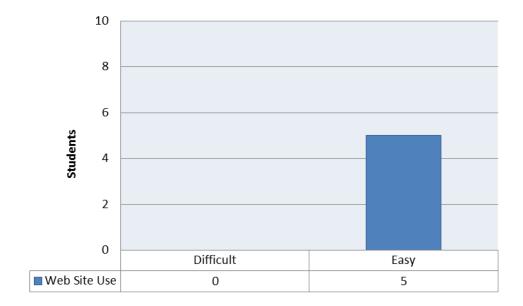


Student respondents in Question 11 of the survey were asked if they had planned to further their education beyond high school as a result of being involved in the ITP. Seventeen (21) or 89% indicated that they had planned to pursue some postsecondary option. Two (2) or 11% noted they had not planned to pursue postsecondary opportunities at the time of the survey. Given these results, students in the ITP have decisively indicated that postsecondary options are in their future. It is highly recommended that the ITP continue to build upon this momentum for students and incorporate all the different types of postsecondary options that are available for students.

Q12: What was your overall experience using the International Telementor Program Web site?

Total Number of Student Respondents = 19

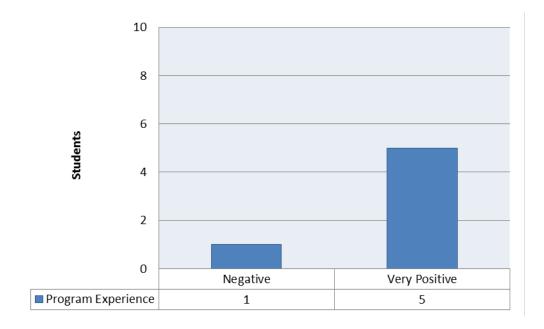
Figure 9. Overall Experience Using the International Program Web site, Telementor 2013-2014



In Question 12 students respondents were asked about their overall experience using the ITP website. In a positive sense, five (5) student respondents reported that they had an easy experience using the program website. None of the student respondents reported that the website was difficult to use. The ITP should continuously upgrade the website for greater accessibility and ease of use.

# Total Number of Student Respondents = 19

Figure 10. Overall Program Experience, Telementor 2013-2014

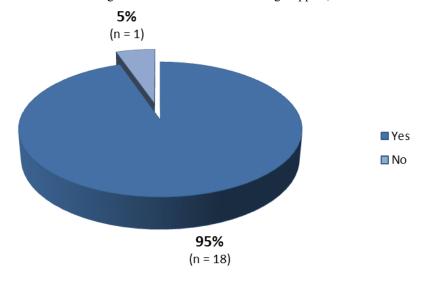


In Question 13 student respondents were asked about their overall experience in the ITP. Five (5) students reported they had a very positive experience in the ITP. However, one (1) student reported that their overall experience was negative. It is highly recommended that the ITP continuously monitor student perceptions of the ITP as it continues to grow.

Q14: Would you be interested in receiving mentoring support from professional in the future?

Total Number of Student Respondents = 19

Figure 11. Interest in Receiving Future Professional Mentoring Support, Telementor 2013-2014



## Q15: Please describe why or why not. (Reference to Question 14)

Selected Student Responses:

"I think it could help me get connected and possibly open up new opportunities, like get an internship and other things."

"I just dont [don't] want anymore [any more] help until I'm in college or have a job"

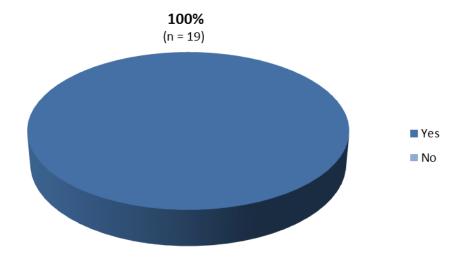
"I would because this time I got a lot of help, and would grateful for help in the future."

In Questions 14 and 15 student respondents were asked about their interest in receiving future mentoring support in the ITP. Eighteen (18) or 95% of the student respondents reported that they were open to receiving mentoring in the future in this program (see sampled explanations provided in Question 15). Only one (1) of the student respondents noted that they did not have an interest in receiving future mentoring (see sampled explanations provided in Question 15). It is highly recommended that the ITP continue to aggressively match the students who have an interest in receiving mentoring with available mentors so they can continue to reach their academic goals.

Q16: Was this the first time you have been part of a formal mentoring program?

Total Number of Student Respondents = 19

Figure 12. First-Time Participants in a Formal Mentoring Program, Telementor 2013-2014



Question 16 provides pertinent data for the ITP. Figure 12 notes that all nineteen (19) or 100% of the student respondents were first-time participants in this formal mentoring program. None of the student respondents reported that they had previously participated in a formal mentoring program. This data is very important given that the all of the students have only been exposed to this mentoring program. This exposure will allow students to grow and potentially demonstrate improvement in their academic areas in the future.

## Q17: Please describe the most difficult parts of working on this project with your mentor.

## Selected Student Responses:

"The most difficult part of working on this project with my mentor was sometimes not being able to understand what they were sometimes trying to say."

"The most difficult part of the project was having a mentor that didn't work in my field."

"he most difficult part of this was that my mentor was not in the same field as me."

"Sharing documents and uploading them didn't always work."

## Q18: Did we miss something?

## Selected Student Responses:

"It would be helpful if the mentor was in the same career as the student."

"Again, it would be more helpful if maby [maybe] we choose a career that we want and then from that choice of career; our mentors can be chosen within our area of interest."

"One of the things I didn't like was the fact that hardly anyone had a mentor that was in their career choice field. It would be a lot better if you could get the majority of people a mentor who has the same job that you want."

## Mentor Responses on the Nutrition-Science Research Project

School: Timberline PK-8 Project Date: 2/5/14 – 5/24/14

**Teacher**: Ashley McIntyre

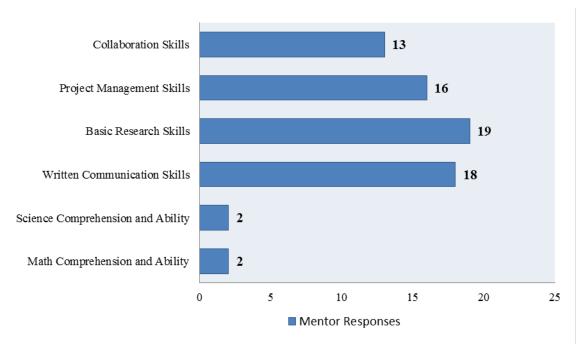
# Mentors: 21

## **Mentor Responses**

Q1: Please indicate the student skill areas that you feel you influenced through this project.

Total Number of Student Respondents = 21

Figure 1. Most Influenced Student Skill Areas, Telementor 2013-2014

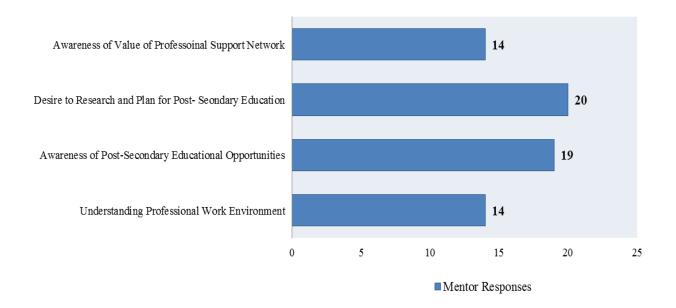


In Question 1 mentors were asked to indicate the student skill areas that they felt they influenced through this project. According to Figure 1, 13 mentors indicated they influenced *collaboration skills*; 16 mentors indicated *project management skills*; 19 *basic research skills*; 18 *written communication*; 2 *science comprehension* and 2 *math comprehension*. Based on these results, mentors highlighted that they believed there mentorship on this project improved some significant skill areas. However, the data does show that the lowest areas of influence were in math and science comprehension. It is highly recommended that the ITP continue to work with mentors on effective ways to influence math and science comprehension and ability through project-based learning.

Q2: Please indicate if your mentoring support aided your student in the following areas.

## Total Number of Student Respondents = 21

Figure 2. Areas Aided by Mentoring Support, Telementor 2013-2014



Question 2 asked mentors to indicate if their mentoring support aided their students in the areas highlighted in Figure 2. According to Figure 2, 14 mentors indicated that their mentorship aided students in the awareness of the value of a professional support network; 20 indicated their mentorship supported a desire to research and plan for post-secondary education; 19 indicated their mentorship aided an awareness of post-secondary educational opportunities; and 14 indicated that their mentorship supported an understanding of the professional work environment. Based on these results, mentors highlighted that they provided support in significant areas. It is highly recommended that the ITP continue to build on these strengths with mentors to further enhance the students' experience.

Q3: The <u>average</u> quality of the messages received from students throughout the project.<sup>4</sup>

(3.24)

1 = "Poor Quality" 5 = "Above Average Quality"

In Question 3 mentors were asked about the quality of messages received from students throughout the project. Based on a scale of 1 = "Poor Quality" and 5 = "Above Average Quality," the mentors' average quality rating was 3.24. This data indicates that mentors believed the messages received from students throughout the project was of average quality. Based on this information, the ITP should work with students on their writing skills to improve the quality of messages sent to mentors.

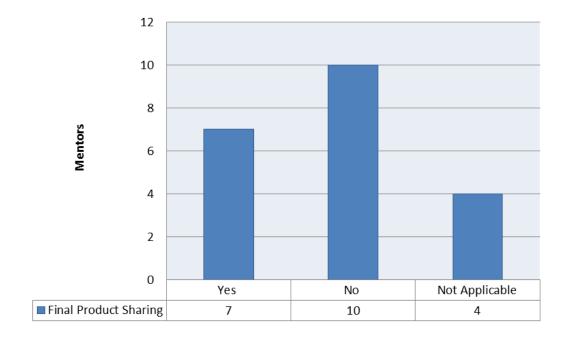
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<sup>&</sup>lt;sup>4</sup> Individual data on mentor responses were not provided in the *Mentor Survey Summary*.

**Q4**: Did you student share a final project (presentation, research report, plan, etc.) with you for this project?

Total Number of Student Respondents = 21

Figure 3. Student Sharing of Final Product with Mentor, Telementor 2013-2014



Question 4 asked mentors if their students shared a final project (presentation, research, report, plan, etc.) with them for this project. According to Figure 3 ten (10) mentors indicated that their students did not share their final project with them at the conclusion of the program. Based on these results, the ITP should build in a requirement that students should share their final projects with the mentors who have assisted them with project creation.

**Q5**: <u>Average</u> level and quality of assistance received from the teacher throughout the project.

(3.76)

1 = "Low Quality, Infrequent"5 = "High Quality, Frequent"

In Question 5 mentors were asked about the level and quality of assistance received from the teacher throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," the mentors average quality rating was 3.76. This data indicates that the frequency and quality of assistance from the teacher was of average quality. Based on these results, the ITP should work with teachers to increase the frequency and quality of assistance provided to mentors throughout the project.

**Q6**: <u>Average</u> level and quality of assistance you received from ITP staff throughout the project.

(3.81)

1 = "Low Quality, Infrequent" 5 = "High Quality, Frequent"

In Question 6 mentors were asked about the quality of assistance received from the ITP staff throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," mentors average quality rating was 3.81. This data indicates that the frequency and quality of assistance received from the ITP staff was of average quality. Based on these results, the ITP should work with their staff on increasing the frequency and quality of assistance provided to the mentors.

## Q7: Things either the teacher or the ITP staff do to make a similar project more successful.

## Selected Mentor Responses:

"Often being a mentor feels like a one sided conversation. Either the mentee asks for something you provide information, and you get very little response. I put a lot of time and consideration into my messages and I often only got a response to about 20% of it. Maybe the 100% made a difference but I have no idea and that's discouraging for a mentor."

"1) Ensure more class time for students to work on the project. We lost 2+ weeks to testing and then unfortunately, the teacher had a family issue and an additional 1+ week was lost (substitute could not use the computer lab). When the students only have 2 class periods a week to communicate, losing that much time is significant. My student did not have a home computer, so she could only work on the project in class, both writing to me and performing research. 2) Continue to keep mentors informed throughout the project of what the students are working on. This was done periodically, but it would have been helpful to have more insights as we were approaching the final project. 3) An example of the final project would have been helpful. 4) It would be helpful to have students share drafts of their final project (presentations) to the mentors for feedback. (Perhaps some students did this, my student did not) 5) I would encourage adding a step or two in the project where students develop questions for professionals in their field of interest to answer and then have the mentors send the questions to professionals. This has been done in other ITP projects and has been very valuable for the students."

# Q8: Feedback regarding the quality of the student's final project as well as suggestions for improvement.

### Selected Mentor Responses:

"The student did a good job on her own. She asked for very little assistance from me and it was actually difficult to work with her (not that she was difficult -- I am just used to providing more attention and input). My student took initiative and did things on her own without checking in with me or asking for help."

"Unfortunately, I have not seen my student's final project. The teacher indicated that all the presentations/videos would be posted together by 15May2014, however, I have not received anything as of 20May2014. It appears that there was an issue with uploading the presentations for each individual student. In the future, perhaps the students could use powerpoint (not sure if they used this or not) and share their presentations with the mentors. My student did share a scholarship essay and reflective essay with me. Her scholarship essay was very touching and written from the heart...."

**Q9**: Overall experience in the program.

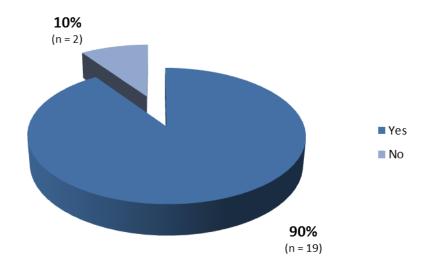
(4.05)

**1** = "Negative" **5** = "Positive"

In Question 9 mentors were asked about their overall experience in the program. Based on a scale of 1 = "Negative" and 5 = "Positive," mentors average overall experience was 4.05. This data indicates that the mentors' overall experience was above average. Based on these results, the ITP should work with mentors on ways to continually improve their experience in the program.

Total Number of Student Respondents = 21

Figure 4. Future Mentor Considerations, Telementor 2013-2014



# Q11: Why or why not? (Reference to Question 10)

Selected Student Responses:

"I believe in the program's mission."

"The only reason I might not is due to time committment [commitment] at work."

"Felt this project made a positive contribution"

Question 10 asked mentors if they would consider mentoring new students in the future. Nineteen (19) or 90% of all the mentor respondents noted that they would mentor new students in the future. Only two (2) or 10% of the mentor respondents stated that they would not consider mentoring new students. Selected responses from the mentors suggest that they enjoyed their experience in the program. Based on these results, it is highly recommended that the ITP continue to survey mentors in an effort to better understand the reasons for their decision to mentor students in the future.

## Q12: The most rewarding aspect of participating.

## Selected Student Responses:

"The engagement, although limited, was good. I was able to help him connect some dots that he hadn't in the past."

"I always get a huge amount of satisfaction from working one-on-one with a youth and knowing I have in some small way helped to shape his or her future. By far the best program I have been a part of in my adult life."

"Helping the student achieve their goal. Also learning about their interest. Just being available to help."

# Q13: The most difficult aspect of participating.

#### Selected Student Responses:

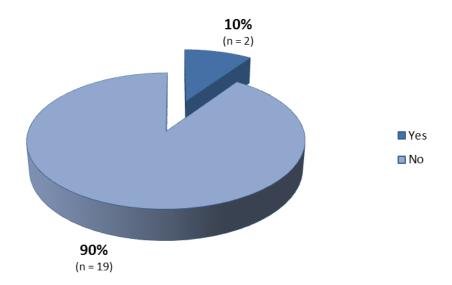
"Time commitment."

"For me, it was my student not having enough class time to really work on this project. Since she only had class time to work on it, missing about [about] 3 weeks made the project very challenging. It was also hard to be able to help her with (editing) her final project or seeing the final project."

"At first we had a lot of good communication, but half-way through that cut way back and I did not hear as much, which made it difficult to engage and stay supportive."

Total Number of Student Respondents = 21

Figure 5. First-Time Mentors, Telementor 2013-2014



Question 14 asked mentors if this was the first time they had been a part of a formal mentoring program. Nineteen (19) or 90% of the 21 mentor respondents indicated that this was not their first time participating in a formal mentoring program. Only two (2) of the remaining 21 mentors indicated that this was their first experience in a formal mentoring program. Based on these results, it is highly recommended that the ITP continue to recruit new mentors for student projects.

#### Student Perceptions of the College and Career Readiness Project

School: Timberline PK-8 Project Date: 2/5/14 – 5/24/14

Teacher: Tracy Zacavec

# Students: 14

## **Student Responses**

### Working Relationship with Mentor

# Q1: Please describe the best part about working on this project with your mentor

Selected Student Responses:

"The best part was to work with the mentor."

"The best part of working with my mentor is, when she helped me learn more about my career."

"The best part of working on this project with my mentor was sharing each others hobbies, being ourselves, helping each other, and being true to each other. As an just having while learning because that's very important."

Students from Timberline PK-8 highlighted that their experience with the mentor on this particular project was very helpful. As a point of reference, students mentioned that they were able to communicate with their mentors. Additionally, they noted that learning more about their selected career was an enjoyable component of the program.

#### Q2: Please share any other academic areas where you'd like to receive help from a mentor

Selected Student Responses:

"I think that I would need more help with stem."

"writting [writing] essays"

In Question 2 Timberline PK-8 students working on this project were asked about other academic areas where they wanted assistance. A sampling of student responses was focused on the academic area of Writing. Additional areas included STEM-based classes. These responses indicate that students perceive their mentor as a person that can provide additional assistance in other content areas.

## Q3: What advice would you give your mentor as he/she works with a new student

## Selected Student Responses:

"The advice I would give them would be to just help them in everything they need and be their selves..."

"...get to know your student."

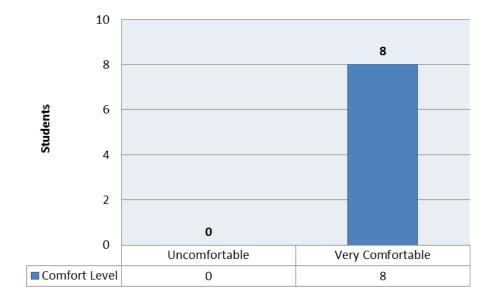
"...give more information."

Question 3 asked students to provide advice to mentors as they work with new students in the future. Based on the sampling of the responses, students noted that mentors should provide lots of assistance. Students also recommended that mentors build a relationship with their assigned students. This data highlights that students view assistance with relationship building as especially important to their success in the program.

Q4: How comfortable were you communicating with your mentor about your project?

Total Number of Student Respondents = 14

Figure 1. Student Comfort Level with Mentor, Telementor 2013-2014



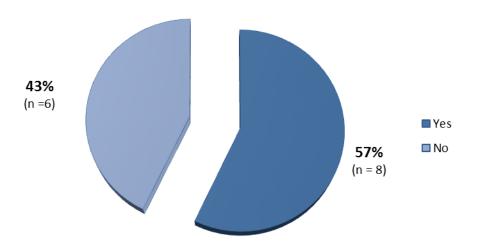
Question 4 asked students about their level of comfort with their mentors. The data provided in Figure 1 only highlights the data that was provided on the ends of the spectrum on the Likert-scale. Based on the results, eight (8) of the fourteen (14) students involved in this project indicated that they were very comfortable communicating with their mentors about their particular project. None of the student respondents indicated that they were uncomfortable. This is encouraging for the ITP as it seeks to build into the future.

## **Student Perceptions of Connections to Content Area Courses**

**Q5**: I have a better understanding of the importance of doing well in math.

Total Number of Student Respondents = 14

Figure 2. Better Understanding of the Importance of Doing Well in Math, Telementor 2013-2014

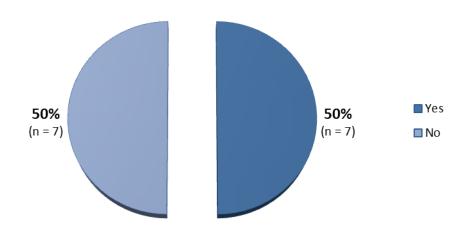


In Question 5, students were asked in a Yes/No question format if they had a better understanding of doing well in math as a result of this project. Based on the results, six (6) or 43% of the student respondents reported that they did not have a better understanding of the importance of doing well in math. The remaining eight (8) student respondents reported that they did recognize the importance of doing well in math. While these results are promising, the ITP, along with teachers and mentors, should continuously seek to establish a clear connection between student projects and doing well in a core content area such as mathematics.

**Q6**: I have a better understanding of the importance of doing well in science.

#### Total Number of Student Respondents = 14

Figure 3. Better Understanding of the Importance of Doing Well in Science, Telementor 2013-2014

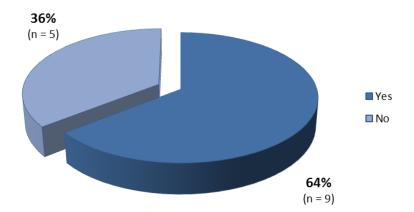


Question 6 asked the student respondents on this project if they had a better understanding of the importance of doing well in science. In analyzing the results in Figure 3, seven (7) or 50% of the student respondents reported that they had a better understanding of the importance of doing well in science as a result of this project. However, the remaining seven (7) student respondents reported that they did not recognize the importance of doing well in science. The data is not clear as to how or if students are making connections between their respective projects and the content area of science. It is recommended that the ITP work aggressively with students to help them make the necessary connections between project outcomes and doing well in core content areas.

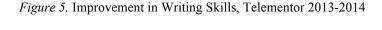
Q7: I have a better understanding of the importance of doing well in reading and writing.

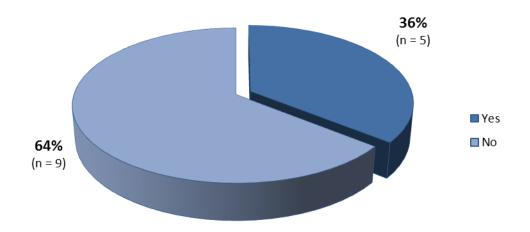
### Total Number of Student Respondents = 14

Figure 4. Better Understanding of the Importance of Doing Well in Reading/Writing, Telementor 2013-2014



In a similar question, students were asked if they had a better understanding of doing well in reading and writing. Figure 4 highlights some positive findings about the aforementioned areas. Five (5) or 36% of the student respondents reported that they did not recognize the importance of doing well in reading and writing as a result of this project. However, nine (9) or 64% of the student respondents reported that they had a better understanding of the importance of doing well in these areas. While positive, these responses suggest that there is a need for the ITP, along with teachers and mentors, to emphasize the importance of content areas as they work with students on these projects.





Question 8 asked the student respondents on this project if their writing skills had improved as a result of working on their project with their mentor. In analyzing the results in Figure 5, five (5) or 36% of the student respondents reported that their writing skills had improved as a result of this project. However, nine (9) or 64% of the student respondents reported that their writing skills had not improved while working on this project. These results highlight the need for the IPT program, along with teachers and mentors, to reiterate the importance of working with these students to assist them in recognizing the type of growth they have gained during these projects.

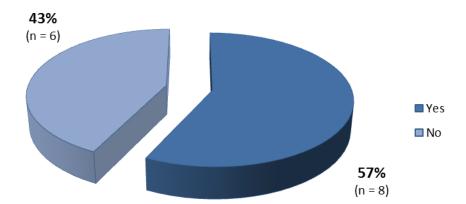


Figure 6. Improvement in Teamwork Skills, Telementor 2013-2014

In Question 9, students were asked in a Yes/No question format if they had noticed an improvement in their teamwork skills working on this project. We see 57% with favorable responses related to an increase in teamwork skills. Based on the results, eight (8) or 57% of the student respondents reported that they had improved teamwork skills. Six (6) or 43% of the student respondents reported that they did not improve their teamwork skills. The findings on this question are unclear. The ITP, along with teachers and mentors, should assist students at Timberline PK-8 with understanding how the project works to improve their teamwork skills.

Q10: I'm taking more responsibility for my own academic success.

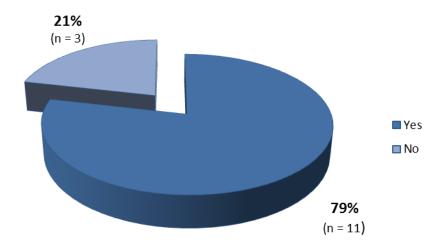


Figure 7. Taking More Responsibility for Academic Success, Telementor 2013-2014

Question 10 is one of the more important questions asked of students in this survey. The goal of students taking control of academic success is very important to the ITP. In Figure 7, we find that eleven (11) or 79% of student respondents are reporting that they are now taking more control of their own academic success. Only three (3) student respondents reported they have not taken more control of their academic success at this point. Altogether, this data should be encouraging for the ITP and all of the constituents given that the majority of the students, after completing this project, are excited about their educational endeavors.

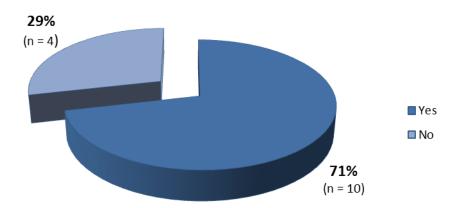


Figure 8. Education Plans Beyond High School, Telementor 2013-2014

Student respondents in Question 11 of the survey were asked if they had planned to further their education beyond high school as a result of being involved in the ITP. Ten (10) or 71% indicated that they had planned to pursue some postsecondary option. Four (4) or 29% noted they had not planned to pursue postsecondary opportunities at the time of the survey. Given these results, students in the ITP have decisively indicated that postsecondary options are in their future. It is highly recommended that the ITP continue to build upon this momentum for students and incorporate all the different types of postsecondary options that are available for students. This can be considered as a career exploration component of the program.

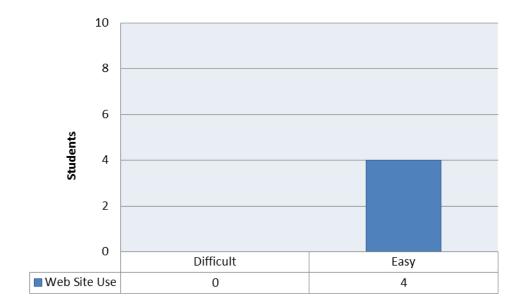
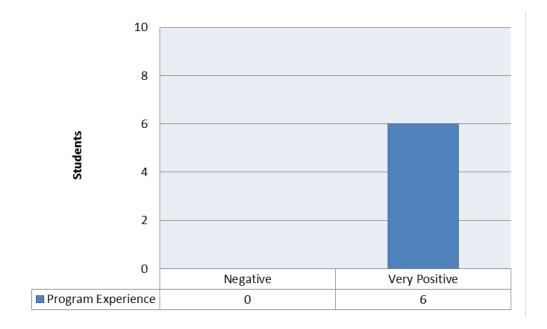


Figure 9. Overall Experience Using the International Program Web site, Telementor 2013-2014

In Question 12 students respondents were asked about their overall experience using the ITP website. In a positive sense, four (4) student respondents reported that they had an easy experience using the program website. None of the student respondents reported that the website was difficult to use. The ITP should continuously upgrade the website for greater accessibility and ease of use.

# Total Number of Student Respondents = 14

Figure 10. Overall Program Experience, Telementor 2013-2014

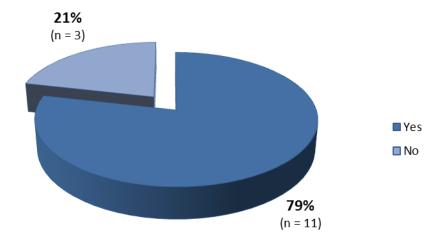


In Question 13 student respondents were asked about their overall experience in the ITP. Six (6) students reported they had a very positive experience in the ITP. None of the student respondents reported that their overall experience was negative. It is highly recommended that the ITP continuously monitor student perceptions of the ITP as it continues to grow.

Q14: Would you be interested in receiving mentoring support from professional in the future?

Total Number of Student Respondents = 14

Figure 11. Interest in Receiving Future Professional Mentoring Support, Telementor 2013-2014



## Q15: Please describe why or why not. (Reference to Question 14)

#### Selected Student Responses:

"I would like to recieve [receive] more mentoring support because it is very nice to have a person by your side giving you great advice."

"Yes, because I feel like if you work with someone that knows more about business then you do, you'll get more successful in life from a professional."

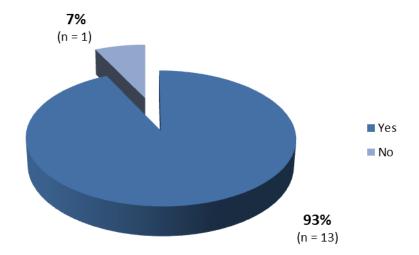
"Why I would not is because I would get help from the people that I work with."

In Questions 14 and 15 student respondents were asked about their interest in receiving future mentoring support in the ITP. Eleven (11) or 79% of the student respondents reported that they were open to receiving mentoring in the future in this program (see sampled explanations provided in Question 15). Three (3) or 21% of the student respondents noted that they did not have an interest in receiving future mentoring (see sampled explanations provided in Question 15). It is highly recommended that the ITP continue to aggressively match the students who have an interest in receiving mentoring with available mentors so they can continue to reach their academic goals.

Q16: Was this the first time you have been part of a formal mentoring program?

### Total Number of Student Respondents = 14

Figure 12. First-Time Participants in a Formal Mentoring Program, Telementor 2013-2014



Question 16 provides pertinent data for the ITP. Figure 12 notes that thirteen (13) or 93% of the student respondents were first-time participants in this formal mentoring program. Only one (1) of the student respondents reported that they had previously participated in a formal mentoring program. This data is very important given that the all of the students have only been exposed to this mentoring program. This exposure will allow students to grow and potentially demonstrate improvement in their academic areas in the future.

# Q17: Please describe the most difficult parts of working on this project with your mentor.

## Selected Student Responses:

"The most difficult parts were the essays because I haven't done many essays in my middle school year."

"The most difficult part about this project has been the fact that I sometimes wouldn't know how to reply back."

"The most difficult part was to get the messages sent in time."

# Q18: Did we miss something?

#### Selected Student Responses:

"What you missed was a little bit of more communication, some mentors took a lot of time to answer back."

"Maybe a little more help on our careers."

#### **Mentor Responses on the Nutrition- Science Research Project**

School: Timberline PK-8 Project Date: 2/5/14 – 5/24/14

Teacher: Tracy Zacavec

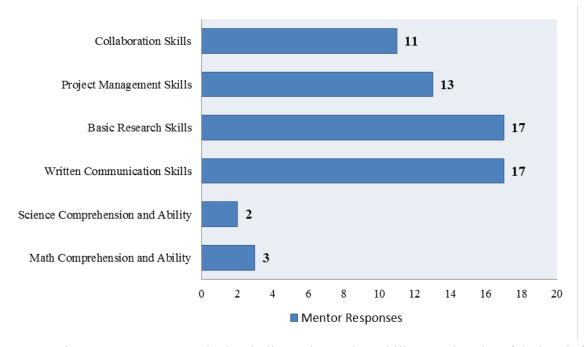
# Mentors: 18

## **Mentor Responses**

Q1: Please indicate the student skill areas that you feel you influenced through this project.

Total Number of Student Respondents = 18

Figure 1. Most Influenced Student Skill Areas, Telementor 2013-2014

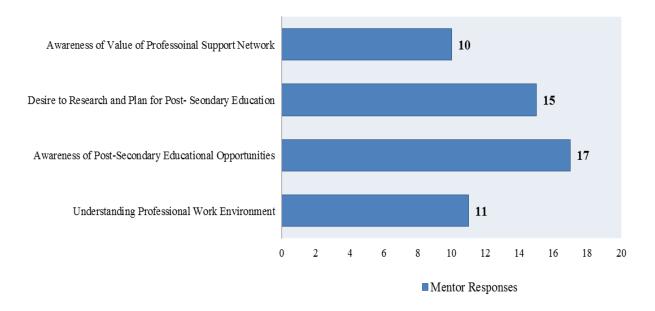


In Question 1 mentors were asked to indicate the student skill areas that they felt they influenced through this project. According to Figure 1, 11 mentors indicated they influenced *collaboration skills*; 13 mentors indicated *project management skills*; 17 *basic research skills*; 17 *written communication*; 2 *science comprehension* and 3 *math comprehension*. Based on these results, mentors highlighted that they believed there mentorship on this project improved some significant skill areas. However, the data does show that the lowest area of influence was in science comprehension. It is highly recommended that the ITP continue to work with mentors on effective ways to influence science comprehension and ability through project-based learning.

**Q2**: Please indicate if your mentoring support aided your student in the following areas.

Total Number of Student Respondents = 18

Figure 2. Areas Aided by Mentoring Support, Telementor 2013-2014



Question 2 asked mentors to indicate if their mentoring support aided their students in the areas highlighted in Figure 2. According to Figure 2, 10 mentors indicated their mentorship aided students in the awareness of the value of a professional support network; 15 indicated their mentorship supported a desire to research and plan for post-secondary education; 17 indicated their mentorship aided an awareness of post-secondary educational opportunities; and 11 indicated that their mentorship supported an understanding of the professional work environment. Based on these results, mentors highlighted that they provided support in significant areas. It is highly recommended that the ITP continue to build on these strengths with mentors to further enhance the students' experience.

Q3: The <u>average</u> quality of the messages received from students throughout the project.<sup>5</sup>

(3.44)

1 = "Poor Quality"

**5** = "Above Average Quality"

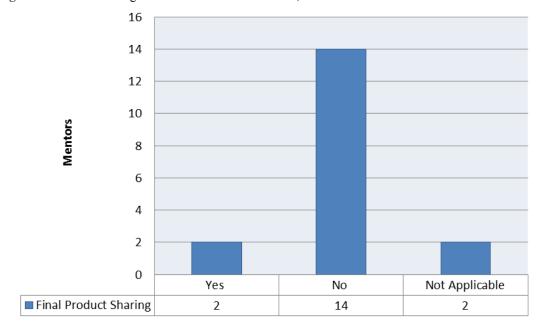
In Question 3 mentors were asked about the quality of messages received from students throughout the project. Based on a scale of 1 = "Poor Quality" and 5 = "Above Average Quality," the mentors' average quality rating was 3.44. This data indicates that mentors believed the messages received from students throughout the project was of average quality. Based on this information, the ITP should work with students on their writing skills to improve the quality of messages sent to mentors.

<sup>&</sup>lt;sup>5</sup> Individual data on mentor responses were not provided in the *Mentor Survey Summary*.

**Q4**: Did you student share a final project (presentation, research report, plan, etc.) with you for this project?

Total Number of Student Respondents = 18

Figure 3. Student Sharing of Final Product with Mentor, Telementor 2013-2014



Question 4 asked mentors if their students shared a final project (presentation, research, report, plan, etc.) with them for this project. According to Figure 3 fourteen (14) mentors indicated that their students did not share their final project with them at the conclusion of the program. Based on these results, the ITP should build in a requirement that students should share their final projects with the mentors who have assisted them in the project creation.

**Q5**: <u>Average</u> level and quality of assistance received from the teacher throughout the project.

(4.22)

1 = "Low Quality, Infrequent"5 = "High Quality, Frequent"

In Question 5 mentors were asked about the level and quality of assistance received from the teacher throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," the mentors average quality rating was 4.22. This data indicates that the frequency and quality of assistance from the teacher was above average. Based on these results, the ITP should continue to work with teachers to increase the frequency and quality of assistance provided to mentors throughout the project.

**Q6**: <u>Average</u> level and quality of assistance you received from ITP staff throughout the project.

(4.17)

1 = "Low Quality, Infrequent"

**5** = "High Quality, Frequent"

In Question 6 mentors were asked about the quality of assistance received from the ITP staff throughout the project. Based on a scale of 1 = "Low Quality, Infrequent" and 5 = "High Quality, Frequent," mentors average quality rating was 3.81. This data indicates that the frequency and quality of assistance received from the ITP staff was above average. Based on these results, the ITP should continue to work with their staff on increasing the frequency and quality of assistance provided to the mentors.

#### Q7: Things either the teacher or the ITP staff do to make a similar project more successful.

### Selected Mentor Responses:

"Once the messages from the teacher started arriving weekly, it really helped to put into context the messages from the student. Either having that, or a syllabus would enable us to understand more of what the student was told that week so we could better frame our responses."

"Maybe the teacher could share some information on the individual kids."

"Do the teachers/staff also provide attention to proper writing - grammar/spelling/diction? I think it would help if as part of the orientation or kickoff or just the first classroom meeting - this should be well articulated. If this is already done - SUPER!!"

# Q8: Feedback regarding the quality of the student's final project as well as suggestions for improvement.

### Selected Mentor Responses:

"Once I reviewed and made suggestions to Genesis' PowerPoint presentation [presentation], I would have liked to see the next iteration of it to learn how she incorporated my suggestions."

"I was pleasantly surprised by the quality of the student's final presentation and very excited to hear the positive feedback she received on her verbal presentation! The ability to organize her thoughts and present a logical plan was great to see. I was hoping to see a bit more improvement in her writing skills, as her final essay contained some of the same items I had corrected previously, but overall, the level of thought and research and time she put into the project really showed a growth."

**Q9**: Overall experience in the program.

(4.56)

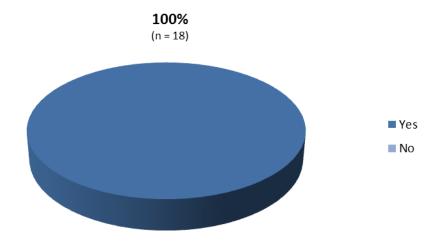
1 = "Negative"

**5** = "Positive"

In Question 9 mentors were asked about their overall experience in the program. Based on a scale of 1 = "Negative" and 5 = "Positive," mentors average overall experience was 4.05. This data indicates that the mentors' overall experience was above average. Based on these results, the ITP should work with mentors on ways to continually improve their experience in the program.

Total Number of Student Respondents = 18

Figure 4. Future Mentor Considerations, Telementor 2013-2014



## Q11: Why or why not? (Reference to Question 10)

Selected Student Responses:

"I really enjoy being a Telementor. I get enjoyment out of helping the kids."

"It's a worthwhile experience from which my student and I both benefit."

"This is a very convenient format that allows me to interact with a student with whom I might never have any contact otherwise. I love that I can log on whenever I have the free time to adequately respond, instead of being required to go to a certain place at a specific time."

Question 10 asked mentors if they would consider mentoring new students in the future. Eighteen (18) or 100% of all the mentor respondents noted that they would mentor new students in the future. Selected responses from the mentors suggest that they enjoyed their experience in the program. Based on these results, it is highly recommended that the ITP continue to survey mentors in an effort to better understand the reasons for their decision to mentor students in the future.

#### Q12: The most rewarding aspect of participating.

#### Selected Student Responses:

"Helping the student achieve their goal. Also learning about their interest. Just being available to help."

"I really enjoy learning about the student's background in a completely different environment than my own upbringing, from a different part of the US. It was also very rewarding to receive her emails and responses to my questions or feedback, showing that she truly cared."

"Teaching the kids something."

## Q13: The most difficult aspect of participating

#### Selected Student Responses:

"I wish I could meet the student! After being "pen pals" for so many months, it is difficult to know you will never meet the student. Also, I think sometimes it is hard to convey the message I want to get across in an email; without tone or inflection, or being able to gauge the student's reaction, it is more difficult to know if the message you want to convey is getting across."

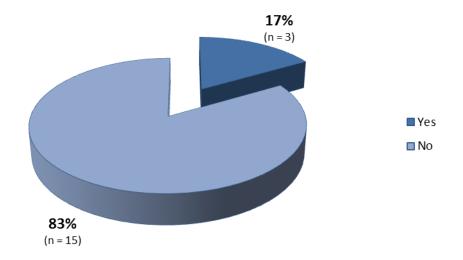
"It's always making sure to get online and send a message. It is easy to get busy with work and get behind on communicating. I try to set reminders on my calendar so I don't forget, but even then it doesn't always work."

"Sharing of information is still a struggle."

Q14: First time you've been part of a formal mentoring program.

#### Total Number of Student Respondents = 18

Figure 5. First-Time Mentors, Telementor 2013-2014



Question 14 asked mentors if this was the first time they had been a part of a formal mentoring program. Fifteen (15) or 83% of the 18 mentor respondents indicated that this was not their first time participating in a formal mentoring program. Only three (3) of the remaining 18 mentors indicated that this was their first experience in a formal mentoring program. Based on these results, it is highly recommended that the ITP continue to recruit new mentors for student projects.

#### **CONCLUSION**

This report documents data from Saint Vrain School District located in Longmont, Colorado. All data were provided by the International Telementoring Program and were based on selected quantitative and qualitative measures for this specific project. Overall, the ITP housed at *Trail Ridge Middle School* (i.e., Science Research Project and Investing 101) and *Timberline PK-8* (i.e., College and Career Readiness) were successful.

Any inquiries related to the content provided in this report should be addressed to the lead evaluator, Dr. Chance W. Lewis, Carol Grotnes Belk Distinguished Full Professor of Urban Education, Director, The Urban Education Collaborative, The University of North Carolina at Charlotte. Dr. Lewis can be reached via email at <a href="mailto:chance.lewis@uncc.edu">chance.lewis@uncc.edu</a> or at the following webpage <a href="mailto:http://www.chancewlewis.com">http://www.chancewlewis.com</a>

#### APPENDIX A

#### **Teacher Reflection – Ashley McIntyre**

Hello mentors! First, I want to extend my gratitude to each of you for volunteering your time and expertise to help guide our students toward a more clear, prepared path. This is my second year working with the College and Career Readiness project and I have to say that it was a huge success last year. The changes that I saw in my students last year were nothing short of amazing. The high school counselor sent out a message stating that she has never had a class of freshman who were more confident and prepared. I truly believe that the success of this project paired with the telementoring program is what helped these students walk into high school as prepared as they were.

Some highlights I want to share is that more students in last years' class entered STEM, VPA and the Career Development Center than any other year previous. Our students were more like a cohesive team, rather than a group of students stuck in a class together. I believe through the various modes of real-life writing, work with Louise March (our Race to the Top counselor and designer of this curriculum), and the attention to detail in understanding their options for the future, our students entered high school more mature and self-assured than most.

I look forward to working with new mentors, as well as continuing working with mentors from last year. I know that with the refinements that we made over the summer to this project, we will see amazing success again. This group is very eager and ready to jump into forming relationships with each of you in hopes of taking away from this experience, your expertise, insights, and encouragement to push just a bit more.

I will give weekly updates to each of you to share what the specific subject focus is for the week's communication. You can also look at the project outline to see what we are focusing on in class for the week (or month).

Friday's will be the primary time students will be communicating with you in class. Other than that, they are aware that they may communicate with you on their own time, but it must be through the telementoring website.

If any of you have any questions at all, please feel free to ask. I will do my very best to get back to you in a timely fashion.

Again, thank you all. I know this year will be exciting, rewarding and life changing.

#### APPENDIX B

#### **Teacher Reflection - Kara Jostes**

Telementoring has opened the door for high level integration of 21st century skills (collaboration, creativity, communication, critical thinking, character).

I did a telementoring program last year in a math class. It was hard to reach all of the standards I needed to teach over the course of the project. I believe it hit the 21st century skills well.

As far as projects this year, I just stepped into the STEM Coordinator role a month or so ago. It would be unfair for me to speak on this as I don't have enough knowledge yet on other projects and standard connections.

#### APPENDIX C

#### **Teacher Reflections – Marnie Steele**

Introduce students to a variety of specialized STEM experiences and areas of STEM programming that encourages exploration in more depth.

For our spring project, students investigated a specific nutrition question. They conducted background research, determined needed materials and developed a specific set of procedures to make an attempt to answer their questions. They then conducted the experiments, analyzed the data, and made conclusions based on the evidence they collected. Throughout this process they used all aspects of STEM. Using the scientific method and the nature of the inquiry was the science element. For technology, they created digital graphs and multimedia presentations for the presentation night for the community. For engineering, they designed their on investigations and needed to tweak/improve their plans as they worked. And math was used when figuring out how much supplies/materials they needed ordered, as well as when they analyzed their data.

Increase awareness of STEM careers and fields and develop awareness of academic requirements for post-secondary opportunities.

The weekly communication with their mentors gave them an insight to real people doing real STEM careers. They were able to ask their mentors about their jobs and what steps they needed to do to get where they were at.

Provide a teaching and learning environment in which content and skills of science, technology, engineering and mathematics (STEM) are integrated (using the standards outlined in each content area).

I think my response above also addresses this. Let me know if you need more specific standards, I could look them up at a different time.

For our spring project, students investigated a specific nutrition question. They conducted background research, determined needed materials and developed a specific set of procedures to make an attempt to answer their questions. They then conducted the experiments, analyzed the data, and made conclusions based on the evidence they collected. Throughout this process they used all aspects of STEM. Using the scientific method and the nature of the inquiry was the science element. For technology, they created digital graphs and multimedia presentations for the presentation night for the community. For engineering, they designed their on investigations and needed to tweak/improve their plans as they worked. And math was used when figuring out how much supplies/materials they needed ordered, as well as when they analyzed their data.

Incorporate the design thinking process, a strategy for integrating problem solving, into classrooms, schools, and the workplace.

Students used the design process to ideate possible research topics. We also used the the design process to practice their presentations before the official presentation night. Student presented their investigations to their classmates and we gave them feedback to help them improve and

prepare for the final one.

Provide STEM programming to all students in a variety of courses, along with extended learning opportunities.

My students asked students in my other classes to be part of their research. For example, one class participated in the effect of hydration on physical performance investigation. Another group participated in the effects of hydration on mental performance using Lumosity. By including other students from other classes, they too were positively affected by the project.