

Construction Simulator

December 2017

The Construction Simulator was a pre-employment transition service activity initiated to help bridge the gap between potential interest in construction careers with improved knowledge and hands on experiences. The IVRS administrator facilitated a contract with Hawkeye Community College and made arrangements with area office and school locations to obtain approval for the simulation to occur in their area. The resource managers then coordinated with local high school and transition alliance program staff to solicit participants and organize the local event. This was planned, at the time, to be a one-time event, and no other efforts have been planned to replicate the events.

March 2017

The Construction Simulator was successfully carried out through the summer and fall of 2016. On a scale of 1-5 with 5 being the highest, the overall experience rating for the Simulator was high at 4.2. This was the highest score ranking of any of the questions, so the students appeared to enjoy it. The rating before and after the experience in relationship to interest in the Construction Field was also interesting as it went from 3.2 to 3.7. Some of that could be due to the Simulator or just additional exposure to the Construction field from the overall experience. Question #5 was related to did your experience with the Simulator assist in determining your career interest and this was ranked at 3.4 which I thought was lower than I expected, given that the students said their overall interest in the Construction field was 3.7. This might be due to the education efforts that were occurring around the Simulator.

In terms of individual school district scores, couple of items that stood out to me were:

1. Valley's scores were generally the lowest in each category of all the schools.
2. Iowa City and Council Bluff's had the highest scores on the area of the Construction Simulator assisting in determining career interest. (3.9)
3. The greatest gain between interest before and after was 11 points in Cedar Rapids. Next was 7 points at Ottumwa, Waterloo, and Charles City. Iowa City only gained one point and Dubuque Hempstead went down one point (that was a small sample size as the results were calculated separately from Dubuque school system as they came in a different times).
4. The overall rating of the Construction Simulator experience was highest in Cedar Rapids, Davenport, (at 4.5), the lowest was Ankeny at 3.9.

The cost of providing this project was \$20,500. We had approximately 560 students participate across the State of Iowa in this transition activity.

CEO trailer traveling across the state to multiple IVRS locations, to demonstrate for high school students with disabilities how to operate heavy equipment and welding simulators:

9/1/16 Council Bluffs – Tucker Center
9/7/16 WCAO – Ankeny Centennial High School
9/8/16 WCAO – Des Moines
9/13/16 Sioux City – North High School
9/19/16 WAO – Waterloo
9/20/16 Dubuque
9/21/16 Davenport
9/22/16 Burlington - Burlington High School
9/23/16 Ottumwa - Ottumwa High School
9/26/16 FDAO – Fort Dodge Senior High School
9/27/16 NCAO – Ames High School
9/28/16 MCAO – Charles City High School
9/29/16 Cedar Rapids
9/30/16 Iowa City

Construction Simulator 2016

STATE-WIDE	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	
2. How would you rate your experience with the Construction Simulator?	4.2	
3. How interested were you in the Construction field before the experience?	3.2	
4. How interested are you in the construction field after this experience?	3.7	
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	

Ottumwa	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.8
2. How would you rate your experience with the Construction Simulator?	4.2	4.2
3. How interested were you in the Construction field before the experience?	3.2	3.2
4. How interested are you in the construction field after this experience?	3.7	3.9
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.4

Ankeny	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.5
2. How would you rate your experience with the Construction Simulator?	4.2	3.9
3. How interested were you in the Construction field before the experience?	3.2	3.1
4. How interested are you in the construction field after this experience?	3.7	3.6
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.1

Council Bluffs	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.8
2. How would you rate your experience with the Construction Simulator?	4.2	4.4
3. How interested were you in the Construction field before the experience?	3.2	3.3
4. How interested are you in the construction field after this experience?	3.7	3.9
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.9

Valley	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.5
2. How would you rate your experience with the Construction Simulator?	4.2	4.2
3. How interested were you in the Construction field before the experience?	3.2	2.7
4. How interested are you in the construction field after this experience?	3.7	3.1
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	2.9

Cedar Rapids	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	4.3
2. How would you rate your experience with the Construction Simulator?	4.2	4.5
3. How interested were you in the Construction field before the experience?	3.2	3.2
4. How interested are you in the construction field after this experience?	3.7	4.3
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.7

Davenport	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	4.1

Davenport	State-Wide Average	School District Average
2. How would you rate your experience with the Construction Simulator?	4.2	4.5
3. How interested were you in the Construction field before the experience?	3.2	3.4
4. How interested are you in the construction field after this experience?	3.7	3.9
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.5

Sioux City	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.3
2. How would you rate your experience with the Construction Simulator?	4.2	4.0
3. How interested were you in the Construction field before the experience?	3.2	3.2
4. How interested are you in the construction field after this experience?	3.7	3.4
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.3

Waterloo	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.9
2. How would you rate your experience with the Construction Simulator?	4.2	4.2
3. How interested were you in the Construction field before the experience?	3.2	3.1
4. How interested are you in the construction field after this experience?	3.7	3.8
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.8

Dubuque	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.9
2. How would you rate your experience with the Construction Simulator?	4.2	4.2
3. How interested were you in the Construction field before the experience?	3.2	3.4

Dubuque	State-Wide Average	School District Average
4. How interested are you in the construction field after this experience?	3.7	3.8
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.8

Dubuque Hempstead	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	4.3
2. How would you rate your experience with the Construction Simulator?	4.2	4.2
3. How interested were you in the Construction field before the experience?	3.2	2.3
4. How interested are you in the construction field after this experience?	3.7	2.2
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.3

Charles City	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.8
2. How would you rate your experience with the Construction Simulator?	4.2	4.0
3. How interested were you in the Construction field before the experience?	3.2	2.8
4. How interested are you in the construction field after this experience?	3.7	3.5
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.3

Burlington	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	3.9
2. How would you rate your experience with the Construction Simulator?	4.2	4.3
3. How interested were you in the Construction field before the experience?	3.2	2.9
4. How interested are you in the construction field after this experience?	3.7	3.5
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.1

Iowa City	State-Wide Average	School District Average
1. Based on the information you received leading up to the Construction Simulator was the experience what you expected?	3.8	4.3
2. How would you rate your experience with the Construction Simulator?	4.2	4.0
3. How interested were you in the Construction field before the experience?	3.2	4.1
4. How interested are you in the construction field after this experience?	3.7	4.2
5. Did your experience with Construction Simulator assist in determining your career interest?	3.4	3.9

August 2016

Construction Simulators

This is an innovative effort to influence students with disabilities exposure to career pathways in the construction and heavy equipment field. We are utilizing PETS dollars to rent from Hawkeye Community College a Tractor/Trailer that has computer simulation equipment providing a hands on experience for students. This activity can be complimented with various classroom and work readiness activities involving local businesses to expand employment career interest areas.

Course Name: CEO Simulation trailer

Course Objective: CEO trailer traveling across state to multiple Voc Rehab locations, mostly to teach high school students how to operate the simulators.

Dates & Times: Operating times 9am-3pm each day, plus one hour set up and one hour tear down

Location:

- 9/7/16: WCAO – Ankeny Centennial High School
- 9/8/16: WCAO – Des Moines
- 9/12/16: Council Bluffs – Tucker Center in Council Bluffs
- 9/13/16: Sioux City – North High School
- 9/14/16: FDAO – Fort Dodge Senior High School
- 9/15/16: NCAO - Ames High School
- 9/16/16: MCAO – Charles City High School
- 9/19/16: WAO – Waterloo West High School
- 9/20/16: Dubuque – Dubuque Hempstead High School
- 9/21/16: Davenport – Davenport North High School
- 9/22/16: Burlington – Burlington High School
- 9/23/16: Ottumwa – Ottumwa High School
- 9/29/16: Cedar Rapids – Prairie High School
- 9/30/16: Iowa City – City High School

Two RTTC Staff

Instructor:

Participants: 7 people per hour Maximum Number: 15 people per hour if both instructors are present

Materials: All materials, fees, hotels, gas, food, and other charges are included

This is being done to provide career awareness and job exploration for secondary school students with disabilities. The students will be receiving secondary school services through an IEP or 504 Plan and will have expressed some type of interest in the construction environment. This training will provide exposure through hands on experience with various construction/heavy equipment operation and assist students in identifying occupational interests.

Desire outcomes are:

Increase understanding of construction/heavy equipment operation employment positions and work tasks, skills and abilities needed to be successful

Provide hands on experience increasing self-awareness of employment interests, skills and abilities.

Improve awareness of job functions and skills necessary to operate heavy equipment and distinguish skill levels and abilities needed for different equipment.