

A Longitudinal Investigation of Soft Skill Development of Agricultural Education Students

INTRODUCTION

The National Research Council's 2009 and 2012 reports called for the development of 21st century skills among U.S. students (Roberts et al, 2016). To address this need, numerous research studies have analyzed soft skill development and its relationship with experiential learning and agricultural education.

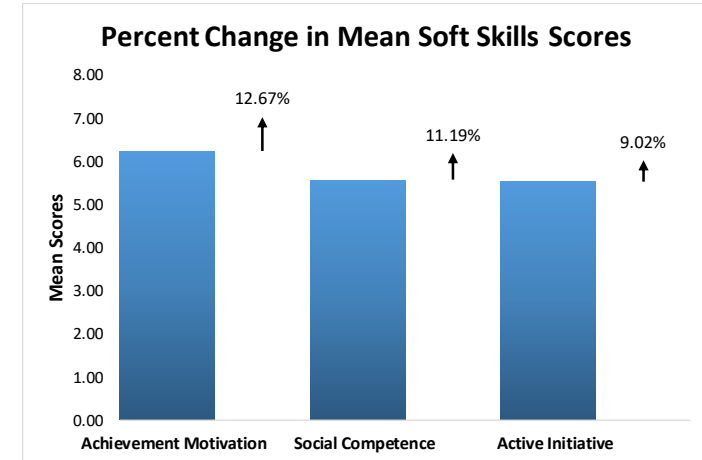
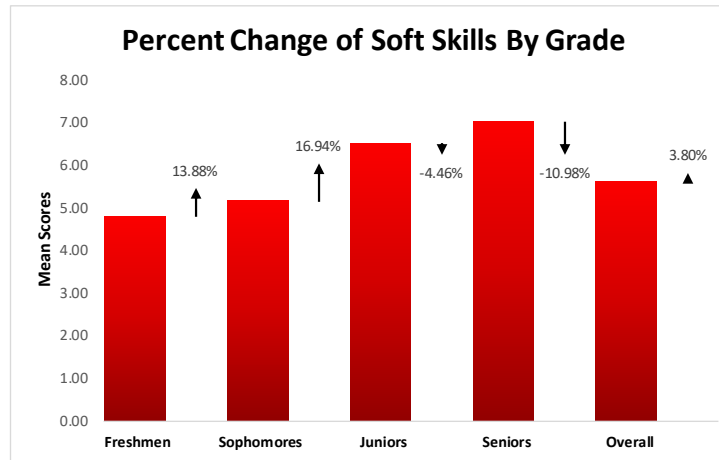
This longitudinal research study sought to determine changes in soft skills development by high school students enrolled in agricultural education programs over a four-year period from 2016 to 2020. The study also analyzed the difference in soft skill development between students who were at varying grade levels 9th-12th. Soft skills were measured using the Life Effectiveness Questionnaire-H (LEQ-H). "The Life Effectiveness Questionnaire Version H was developed by Neill, Marsh and Richards (1997) for the purpose of measuring the changes associated with adventure or other experiential education intervention programs" (McLeod & Craig, 2004, p. 4).

METHODOLOGY

- The researchers conducted a longitudinal study of agriculture education students from five schools.
- Students volunteered to complete the LEQ-H in mid-August, 2016 with the second round of survey data collected in the Fall of 2020.
- The 24 item, 8-factor model measures the following constructs: Time Management, Social Competence, Achievement Motivation, Intellectual Flexibility, Task Management, Emotional Control, Active Initiative, and Self Confidence (Kechagias, 2011).
- After failed attempts to reach students through their teachers due to the pandemic, the LEQ-H was administered online using Qualtrics.
- The survey participants range in grade level 9th through 12th and have pursued different educational/career paths after graduation.
- By analyzing individual scores and group level data researchers determined changes in soft skill development over the four-year period.

REFERENCES

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Life Effectiveness Questionnaire (LEQ-H)	
Soft Skills Factors	Description
Time Management	Makes optimum use of time.
Social Competence	Personal confidence and self-perceived ability in social interactions.
Achievement Motivation	Motivated to achieve excellence and put the required effort into action to attain it.
Intellectual Flexibility	Can adapt his/her thinking and accommodate new information from changing conditions and different perspectives.
Task Leadership	Can lead other people effectively when a task needs to be done.
Emotional Control	Maintains control when he/she is faced with potentially stressful situations.
Active Initiative	Likes to initiate action in new situations.
Self Confidence	Confidence in his/her abilities and the success of their actions.

RESULTS

- Of the 164 FFA members who participated in the 2016 survey, eight (5%) FFA members completed the 2020 survey.
- Individual results identified an overall mean increase in soft skills of 5.73 (3.8%), indicating that students enrolled in agriculture courses from 2016 to 2020 did improve their soft skill development.
- The largest overall improvement occurred in Achievement Motivation (12.67%), Social Competence (11.19%), and Active Initiative (9.02%).
- Major improvements occurred with 9th graders with Time Management (14%), Social Competence (25.45%), Achievement Motivation (16.18%), Intellectual Flexibility (34.62%), Active Initiative (25.93%), and Self Confidence (10.92%).
- Percent change in overall soft skills per grade level include the following, freshman (13.88%), sophomores (16.94%), juniors (-4.46%), and seniors (-.98%).

CONCLUSIONS

- Agricultural Education Programs could benefit from highlighting the need for 'soft' skills, as well as 'hard' or technical skills.
- Students could improve their soft skills development through continued enrollment in agricultural education courses.
- Continued involvement in FFA activities and periodic soft skill assessments to track students' soft skill development could better prepare students to meet the challenges of the 21st Century.