

GIFTS: "What's Your Superpower?": Connecting Entrepreneurial Mindset, DEI, and Character

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GIFTS: Connecting DEI, STEM, and Character Strengths for First Year Engineers

Introduction and Overview

The VIA Institute on Character identifies character strengths as are the parts of your personality that impact how you think, feel, and behave [1]. Many of these individual character strengths can be found in engineering and STEM more broadly in which a survey was developed to help student identify their own character strengths based on a questionnaire and connect those with exemplar figures of the character strength. These profiles diverse center STEM figures and their respected exemplar character strengths to connect the student to a corresponding STEM figure who shared the same strength. The profiles were developed through the lens of the KEEN Framework to identify how the profiles showcase curiosity, connection, and connection (the “3C’s”) through their impact to STEM and society. The activity described in this paper seeks to leverage this intersection of first year engineering, DEI in STEM, and Character Strengths to encourage students to investigate STEM figures, connect with them, and consider with the potential for the student’s contributions they could make to the world while centering their personal virtues. By assigning students this task, they will become more curious about how impactful it can be, and in some cases about their future.

Activity Description

During the second course of a first-year engineering sequence at The Ohio State University, students were asked to complete the assignment in beginning of the course to complete the VIA Institute on Character’s survey to identify salient virtues. The survey asks students a set of Likert scale questions for different scenarios and to what extent they align with the individual’s virtues. The results from the assessment is a set of 24 character strengths in order based on the participants responses [1]. Once the VIA assessment was complete, students shared their top three-character strengths and were asked to investigate STEM profiles that are exemplar figures of that character strength within their professional practice. These profiles included a summary of the figures’ life and impact, cases on how they have demonstrated their character strength and the value they created and examples of their curiosity and connections. Students reflected on the activity and were asked to consider the value they created by connecting their character strengths with other STEM figures.

Recommendations

The activity presents a unique opportunity for educators to connect STEM leaders with students value through the lens of DEI by showcasing that personal virtues can be centered within the STEM workforce. The activity can be done throughout the semester (beginning, middle, or end) and could be done several times to not only connect students with their character strengths but also to explore how those may shift throughout the semester in these first-year engineering contexts. In the future, this assignment should be tasked several times throughout the semester: one at the beginning, middle, and end creating a different character profile each time based on their top three-character strengths. Additionally, students should complete an end of semester survey about how this assignment affected the rest of their first-year engineering experience and their sense of belonging in the classroom.

References

[1] “The VIA Institute on Character”. Free Strengths Survey. <https://www.viacharacter.org/> (accessed Apr. 15, 2024)