

**Using the Global Competence Aptitude Assessment for Measuring Student Development  
during Education Abroad Experiences**

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### Introduction

Today's agricultural students are tomorrow's future workforce. Employees today must welcome and understand the interrelationship of globalization (Zuo et al., 2019). Zuo et al. (2019) emphasize future agriculturalists must be adaptable to change, whether domestic or abroad. Higher education should prepare students to become globally competent citizens (Kuh, 2008; National Research Council, 2009; Stearns, 2009; Tarrant et al., 2014). Many college and university travel abroad programs' primary goals include student growth in cultural experience and global citizenship (Hoeflinger, 2012; Tarrant et al., 2014). The Global Competence Aptitude Assessment (GCAA®) is a model that can be used in education to examine students, faculty, and staff's global competence which has been developed and modified by the work of Hunter (2004).

### How it Works & Study Details

The GCAA® Model is composed of eight dimensions, which are divided into internal and external dimensions (Global Competence, 2023). The internal dimension includes the aspects of self-awareness, attentiveness to diversity, risk-taking, and open-mindedness (Global Competence, 2023). The external dimension is made up of the concepts of global awareness, historical perspective, intercultural capability, and collaboration across cultures (Global Competence, 2023). The GCAA® assessment can be used in many settings, including education. Students would take the student assessment that has been developed. The assessments are designed to have four areas within them to measure global competence. "The assessment items are based on all the regions of the world, with particular emphasis placed on those countries that make significant contributions to the world's population and economy for practical yet comprehensive measurement of global competence" (GCAA® Design, 2023, p. 1). We have implemented a pre-and post-assessment strategy to measure students' global competence before and after a short-term study abroad program. GCAA® provided a pre- and post-format for us to use for our study with varying questions. Students from two universities traveled to Greece and Kenya in the summer of 2023. The pre-assessment was given three to five weeks before students' departure, and the post-assessment was given four weeks following their return to their home states.

### Results to Date & Implications

To date, our research has been conducted with 31 students ( $N = 31$ ) who have been engaged in a short-term study abroad program. Because participation in this research was optional, researchers had 22 students ( $N = 22$ ) participate in the pre-assessment. Their group mean for internal readiness was 70.9 ( $M = 70.9$ ) with a standard deviation of 6.1 ( $SD = 6.1$ ). The group mean for external readiness was 62.9 ( $M = 62.9$ ), with a standard deviation of 16.9 ( $SD = 16.9$ ). Participation in the post-assessment decreased, with only 18 students completing it ( $N =$

18). The post-assessment data showed a group mean of 71.5 ( $M = 71.5$ ) with a standard deviation of 7.9 ( $SD = 7.9$ ) for international readiness and a group mean of 61.1 ( $M = 61.1$ ) with a standard deviation of 15.1 ( $SD = 15.1$ ) for external readiness.

Through this data, researchers are able to collectively see how students' global competence mean scores change based on their participation in a short-term study abroad program. It is critical to note that with an  $N$  less than 10, it is challenging to analyze comparative data based on the information learned in the GCAA® facilitator training session. However, it is not just their participation that impacts these scores based on the eight dimensions of the GCAA® model. Critical engagement in the process is essential to show development among students' internal development and the cognitive processes of the participants.

### **Future Plans & Advice to Others**

The research team plans to use the GCAA® in the future when measuring a student's global competence. It was evident through our findings and following the certification training that seeing “significant” growth is uncommon when measuring students who have just short-term experiences (two weeks or less) in the country. Therefore, in the future, researchers plan to use this assessment tool to measure students who are participating in study abroad experiences that last between four weeks to a semester.

Researchers recommend that others who might want to use this tool incorporate this into a course or build it as part of the study abroad program to ensure full participation. This now only provides data to you as the instructor or researcher. This assessment shows individuals areas where they can continue to grow, develop, and strengthen their global competence. As this was a separate study and not connected to the courses that the study abroad program was attached to, this made it difficult for researchers to obtain participants. Having it embedded within the curriculum or program plan will increase participation and provide more accurate data on the entirety of the group.

### **Costs & Resources Needed**

The use of the GCAA® does come with a cost, and in our case, our research was supported by the Department of Agricultural Education and Communications. In order to use the GCAA®, one member of your team must be certified through Global Competence Associates. The GCAA® certification is a three-week training program, which costs \$750 for individuals involved in education. The assessments also come with a cost, and the price varies by the number of assessments that individuals purchase. In our case, since we did a pre-and post-assessment, we had to purchase double the assessments since each student would take two. Therefore, we purchased 66 assessments. This came as a total investment of about \$2,137, including the costs of the assessment, the additional purchase of demographic data, and a service fee. While there are costs associated with the use, this tool can provide valuable data to researchers and participants on global competence and areas where individuals can focus attention to work toward improving and strengthening their global and cultural competence in the future.

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