

Informed Consent

Adult Participants

Western Governors University - Teachers College

Master of Education Instructional Design

Mary Elizabeth Mitchell

The Influence of a Training Program for Volunteer Telescope Operators on Competence and Confidence in Presenting to the Public

Introduction

Mary Elizabeth Mitchell, a graduate student at Western Governors University, is conducting a study of how volunteer confidence, competence, and motivation is affected by completion of online training curriculum in astronomy, Salt Lake Astronomical Society (SLAS) programs and resources, and techniques for community education and interpretation for the public. The SLAS Board has been consulted and informed regarding this study and has consented to use of information from SLAS about their resources and facilities and to data gathering from members and potential members who voluntarily choose to participate.

By completing the surveys and assessments associated with the online training, you consent to participate in this study. All data will be presented in aggregate form and will have no influence on your approval by SLAS telescope trainers as a SPOC telescope operator.

Description of the Project

In this action research study, participants will be asked to complete a total of 8 hours (6 hours on astronomy + 2 hours on SLAS) of asynchronous online content using their own computer or mobile device in sessions of 15-20 minutes per day over five weeks. The content covers entry-level astronomy concepts, instructions for use of entry-level telescopes owned by SLAS, SLAS history, SLAS programs, resources for the public and SLAS volunteers, and foundational teaching techniques for community education. Participants are asked to complete an 11-item confidence and motivation survey and a 10-item assessment of competence both before and after they complete the instructional curriculum. If the referenced content provides a positive impact on competence, confidence, and motivation, implementation of the content could assist SLAS with improving the availability of operators for telescopes at the SPOC and other public star parties offered by the club as well as more availability for SLAS to support requests from schools and other community organizations for astronomy education.

Benefits and Risks of the Study

Risks associated with participation in this study are minimal. There is some risk that participants will be exposed to test anxiety while completing assessments. This risk is equal to or less than exposure during typical school or employment assessments. Participants may also experience some mild concern regarding how their performance on the assessments or their answers on the surveys might influence their eligibility to operate SPOC telescopes. This risk is mitigated by the primary researcher being the on person to see any personally identifiable information and never sharing the individualized data with SLAS officers or SPOC trainers.

Possible participant benefits of the study may include increased learning about entry-level astronomy, SLAS history, programs, and resources, as well as increased knowledge and confidence in presenting as a community educator. The knowledge and skills gained in this content may help you to become more confident and competent in amateur astronomy and SLAS programs and resources. This research will help the researcher learn more about supporting community education in STEM fields. In addition, the researcher will make a recommendation to SLAS regarding educational offerings for potential volunteers which may help SLAS support confidence, motivation, and competence in order to provide a robust community education program.

Confidentiality

Participant data will remain private and confidential. No names or personally identifiable information will be shared in the final report or in any data seen by anyone with the exception of the primary researcher, who will see the email addresses associated with the participants completion of the content, including the pre-and post-assessment and the pre- and post survey. Once downloaded from the secure website, all data will be immediately anonymized by replacing email addresses with a participant number. All data and the key to the participant numbers will be kept on the primary researcher's computer, which is encrypted and password/biometric scan-protected. Once the study has been completed, all data with any personal identifiers will be permanently deleted.

Voluntary Participation and Withdrawal

Your participation in this study is completely voluntary and you have the right to withdraw at any time. Your eligibility to operate SLAS or SPOC telescopes will not be impacted in any way as a result of participation or withdrawal from this study.

If you wish to withdraw from the study at any point, you may immediately discontinue completion of the content, assessment, or survey. If you wish to have any of your data destroyed that has already been collected, contact the researcher at mmmitc35@wgu.edu. Provide notification that you no longer wish to participate in the study and whether or not you wish to have your data deleted and excluded from the final report.

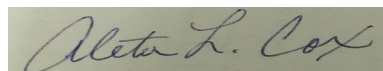
Questions, Rights and Complaints

- If you have questions about the study, contact Mary Elizabeth Mitchell at 801.865.6544 or mmmitc35@wgu.edu.
- You can contact the IRB chair regarding unresolved questions or complaints at IRB@wgu.edu
- You have the right to review the results of the study.

Consent Statement

- By signing this document, Salt Lake Astronomical Society grants permission for participant data collection and reporting necessary for this study.
- By signing this document, you voluntarily agree to participate in the study and that you have had the opportunity to have your questions answered.
- By signing, you also acknowledges that you have received a copy of this form.

Participation in the online content, assessments, and surveys constitutes consent to participate in this study.



Designated Official Signature

President, Salt Lake Astronomical Society

Title of Designated Official

Aleta L. Cox

Typed/Printed Name

7 June, 2021

Date

Participant Signature

Typed/Printed Name

Date