

Adult Learning at Field Stations: Informal Outreach Programming and Professional Development

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Background & Problem

- Field stations are well situated to provide informal adult outreach programming that supports environmental literacy, STEM learning, and exposure to ongoing scientific research.
- To date, the variety of informal outreach programming for adults has not been systematically documented.
- While research has been done on personnel working in informal environmental education and interpretation (Skanavis & Giannoulis, 2009; Taylor & Caldarelli, 2004), no body of literature exists that specifically explores how the credentialing and professional development of field station personnel manifests in outreach practices.
- By exploring the current state of adult outreach programming at field stations, we can assess the needs of field station personnel and how we may advance the efficacy of adult outreach at field stations.

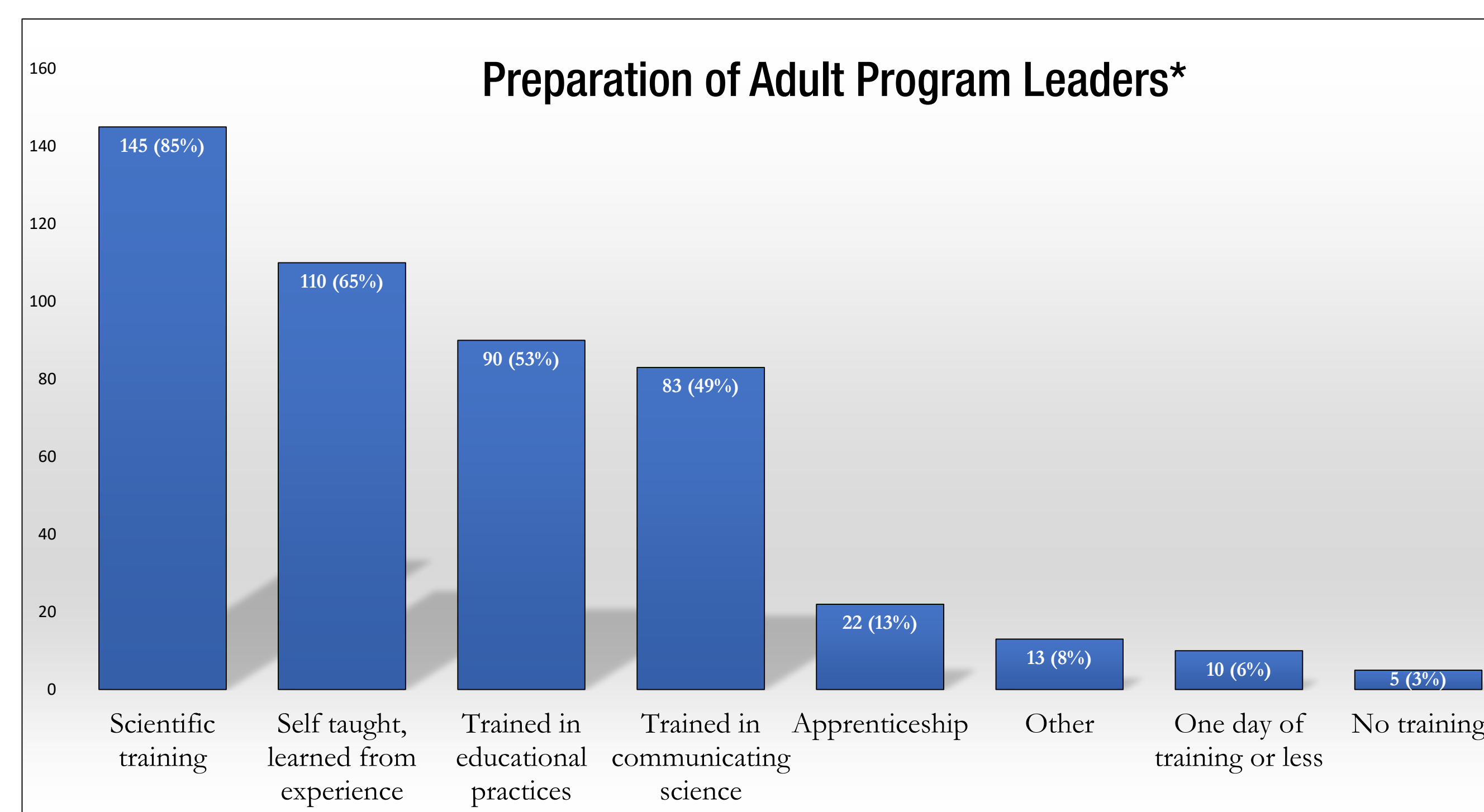
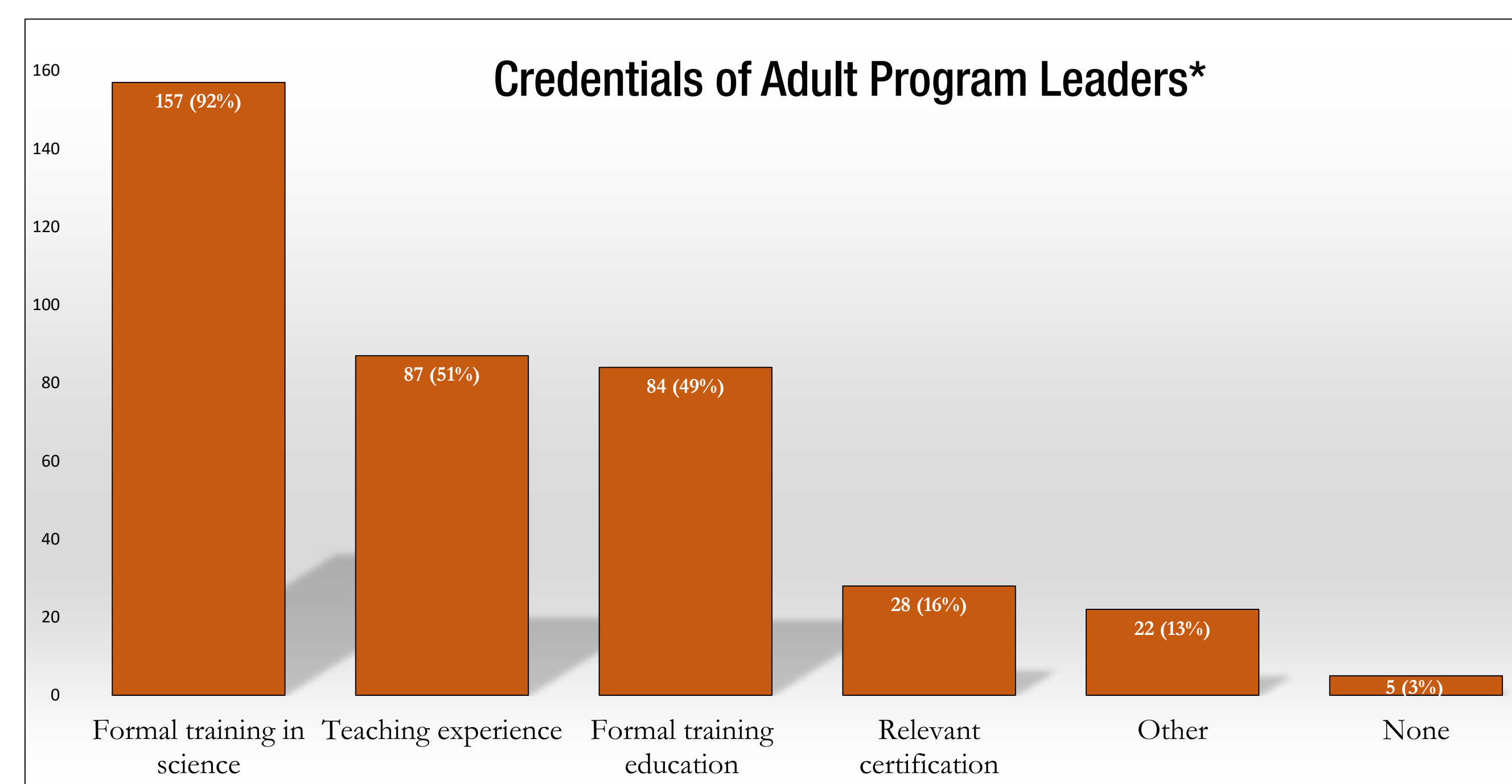
Methods

- Field station personnel completed a survey about their station's outreach efforts.
- Participants were recruited through the OBFS member list; snowball sampling was utilized to increase participation.
- Survey results were analyzed using descriptive statistics.
- Preliminary findings include information from 164 field stations regarding 329 outreach programs, of which 93 field stations and 170 outreach programs serve adults.

Results

Which field station personnel lead adult outreach programs? 76% are field station staff, 71% are professional scientists, 44% are professional educators, 31% are volunteers, 21% are graduate students, and 9% are uncategorized.

Most Common Program Types	Number of Programs*
Lecture(s)	91 (54%)
Field trip(s)	78 (46%)
Guided tour(s)/walk(s)	75 (44%)
Special event(s)	52 (30%)
Data collection and sharing (e.g. citizen science, BioBlitz)	45 (26%)



*n = 170

Discussion

- Professional credentials and the roles of leaders for adult programs vary widely.
- Top program types for adults use instructor-centered learning formats where participants are passive recipients of knowledge/information. Active learning approaches appear underutilized.
- Many field station personnel have limited professional development training to implement outreach programs (self-taught, learning from experience).
- Some stations rely on volunteers and students to lead and implement programs; the support systems for these individuals are unclear.

Conclusions

- Field station outreach exists at the intersection of science and education practices. Further exploration is needed to integrate the two fields in this context.
- Volunteers, interns, students, and other short-term personnel involved in outreach need clear support systems.
- Personnel who design and deliver programs require relevant professional development opportunities. Such opportunities would support the professionalization of field station outreach.
- Field station personnel should be involved in the design and planning of professional development opportunities to ensure they are relevant and applicable to the context of field stations.

References

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