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Uncovering the Value of In-Person Field Trip Experiences for Students

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Abstract: Field trips are considered an essential experience in school. While their benefits for various outcomes are well documented, less research exists on how students perceive the value of field trips. We conducted an initial study with 39 tenth-grade students who attended a field trip to the Amazon rain forest. Students completed a paper-and-pencil survey at the end of the field trip. Results suggest that when reflecting on the field trip, students tend to prioritize their internal experiences over external features. These findings invite consideration of field trips' potential for supporting components beyond knowledge, such as socio emotional learning. This study contributes to our understanding of how students construct meaning from field trips experiences and may inform future design of field trips to maximize their beneficial impacts.

Introduction

Many schools have students take in-person field trips (FTs) ranging from day trips to farms in pre-school, to overnight programs in higher levels and geology trips in college. The benefits of field trips have been studied using frameworks of knowledge acquisition, connectedness, and stewardship, among others (Ardoin et al., 2018; Mullenbach et al., 2019). For instance, we know that after attending a field trip, students report higher levels of nature stewardship (Rijal et al., 2018) and increased connectedness to nature (Van De Wetering et al., 2022).

However, there is limited research on how students construct meaning from field trip experiences. In this research, we ask: What experiences do students emphasize in their own recollections. Specifically, what is their relative emphasis on internal psychological states like perseverance as compared to external features such as spectacular waterfalls? When students participate in field trips, they transition from a familiar environment (the classroom) to a relatively novel and rich environment (the field site). In both contexts, students encounter both external stimuli (new environments, activities) and internal stimuli (their own thoughts, emotions, and bodily responses). Do students find the value of field trips primarily in knowledge gained (e.g., learning about new animal species or cultures) or in the psychological experiences and dispositions they employ to adapt to unexpected situations?

We further examined which experiences students view as beneficial for their learning when they return to school. We surmised that the way students experience a field trip could influence its perceived value and how they connect it to school learning.

Methods

Participants and Procedures

Thirty-nine tenth-grade students from a school in Bogotá, Colombia, participated in a five-day field trip to the Amazon rainforest. The study was approved by Stanford's Institutional Review Board. The field trip was a school-sponsored activity operated by a Colombian outdoor education company. Students engaged in different activities including cultural exchanges with local communities, jungle hikes, and wildlife observation. At the end of the program students individually completed a paper-and-pencil survey. Field assistants were trained in research ethics and data collection protocols. To ensure fidelity of implementation, we created a manual with guidelines for data collection.

Measures

We administered two different measures for this study: 1. Value of experience (open-ended responses): Students responded to open-ended questions about the value of their field trip experience. We analyzed responses using grounded theory analysis (Thornberg & Charmaz, 2014; Willig, 2014) to identify emergent themes; 2. Field trips benefits (Likert-scale items): students rated 11 items in a four-point Likert scale (1 = strongly disagree to 4 = strongly agree) assessing field trip benefits including connectedness, emotions, personal growth, and social interactions. For example: "*I shared a positive emotion with someone else.*"

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Results

Results are organized around the three research questions. One question explored how students translate the value of a field trip experience into recommendations for another group of students. To address this, we asked students to share specific advice to other students. Table 1, section 1.1. presents the most frequently mentioned categories that emerged from students' responses, organized in alphabetical order. Percentages are calculated for emergent category and represent the proportion of students who mentioned that category in their response. Another question is related to where students found value of their experiences for school. Section 1.2. (Table 1) presents the most frequent categories of response in alphabetical order.

Table 1

Emergent Categories for Giving Advice to Other Students and School Learning

1.1. *Giving Advice to Other Students*					
Positive attitudes	*Reflection*	*Relationship skills*	*Self-awareness*	*Self-management*	*Trip logistics*
61.54%	33.33%	12.82%	12.82%	64.10%	2.56%
1.2. *Categories for School Learning*					
Content knowledge	*Self-awareness*	*Self-management*	*Social awareness*		
33.33%	33.33%	23.08%	33.33%		

For the last question, we asked if mentioning specific categories was associated with some particular benefits that students may have gained during the trip. To answer this question, we combined data from the two measures. We found that suggesting a positive attitude in the advice to others is positively associated with: feeling a stronger connection to other people that are part of the FT (r = .32, p = .045), as well as with sharing a positive (r = .33, p = .038) and negative (r = .34, p = .034) emotion with someone else. Giving advice related to self-management is positively associated with a higher level of agreement about learning something about oneself (r = .44, p = .004), learning something about someone else (r = .37, p = .020), and experiencing a positive emotion with someone else (r = .36, p = .023). Interestingly, there was a negative correlation between students' agreement on sharing responsibility toward a group goal (r = -.55, p = .000) or learning something about someone else (r = -.59, p = .000) and their tendency to provide recommendations related to trip logistics. Students who disagreed more on these aspects were more likely to offer advice on practical matters such as what to bring and time management.

Discussion and scholarly significance

Field trips are complex cognitive experiences where external and internal components of experience interact to shape students learning (Richmond et al., 2018). Results from this initial study reveal that when students describe the value of a field trip, the majority emphasize impacts on their internal psychological experiences rather than external content acquisition.

Additionally, our analysis revealed significant associations between students' internal psychological experiences and their social engagement with peers during the field trip. While previous research has established how social interaction influences reasoning and behavior, these findings extend this understanding by demonstrating the role of peer engagement in the construction of personal experiences during a field trip (e.g., Spang et al., 2025). This study examined a single field trip location with a specific age cohort, limiting generalizability. One potential limitation of the results is that we asked students to give advice about a field trip to a place they had never been. This may have led them to write about their internal states, because they had little knowledge of the Alaskan environment.

References

Ardoin, N. M., Bowers, A. W., Roth, N. W., & Holthuis, N. (2018). Environmental education and K-12 student outcomes: A review and analysis of research. *The Journal of Environmental Education*, *49*(1), 1–17. https://doi.org/10.1080/00958964.2017.1366155

Mullenbach, L. E., Andrejewski, R. G., & Mowen, A. J. (2019). Connecting children to nature through residential outdoor environmental education. *Environmental Education Research*, *25*(3), 365–374. https://doi.org/10.1080/13504622.2018.1458215

Richmond, D., Sibthorp, J., Gookin, J., Annarella, S., & Ferri, S. (2018). Complementing classroom learning through outdoor adventure education: Out-of-school-time experiences that make a difference. *Journal of*

Adventure Education and Outdoor Learning, *18*(1), 36–52. https://doi.org/10.1080/14729679.2017.1324313

Rijal, M., Saefudin, & Amprasto. (2018). Field trip method as an effort to reveal student environmental literacy on biodiversity issue and context. *Journal of Physics: Conference Series*, *1013*, 012020. https://doi.org/10.1088/1742-6596/1013/1/012020

Spang, L., Greisel, M., & Kollar, I. (2025). Great minds think alike—how homogeneous problem perceptions are associated with successful regulation in collaborative learning groups. *Journal of the Learning Sciences*, 1-42.

Thornberg, R., & Charmaz, K. (2014). Grounded Theory and Theoretical Coding. In U. Flick (Ed), *The SAGE handbook of qualitative data analysis*, *5*, (pp. 153-169). SAGE Publications Ltd. https://dx.doi.org/10.4135/9781446282243.n11

Van De Wetering, J., Leijten, P., Spitzer, J., & Thomaes, S. (2022). Does environmental education benefit environmental outcomes in children and adolescents? A meta-analysis. *Journal of Environmental Psychology*, *81*, 101782. https://doi.org/10.1016/j.jenvp.2022.101782

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