

Beyond Knowledge Scores: Student Reflections After a Middle School Dermatology Education Intervention



Piper J. Harper, B.S.H.P.¹; Meredith Steuer, M.D.²
¹Morehouse School of Medicine | ²Department of Dermatology, Emory University School of Medicine



BACKGROUND

Traditional educational assessments measure what students know, but may not fully capture how they connect new information to their everyday lives.

In dermatology education, these connections may extend to personal health practices, self-image, and perceptions of careers in medicine. Written reflections provide an opportunity to explore these dimensions directly through students' own perspectives.



OBJECTIVE

To examine themes in middle school student reflections after a dermatology education intervention and explore whether educational impact extended beyond factual knowledge across different school contexts.

STUDY DESIGN



Secondary qualitative descriptive analysis



Anonymous post-session reflections from seventh-grade students



Good Skin, Great Confidence intervention conducted at one Title I and one non-Title I middle school in Georgia



Three AAD Good Skin Knowledge modules: Intro to Skin, Sun Safety, Love the Skin You're In



Reflections coded line-by-line using five themes: Knowledge acquisition, behavior change/application, confidence/self-perception, engagement/interest, representation/career exposure



Multiple codes were allowed per reflection



Theme frequencies summarized overall and by session/school context

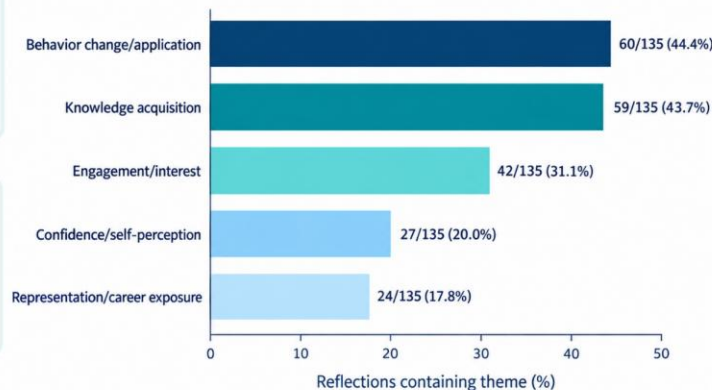


Fisher's exact tests used for between-school comparisons within each session

135 TOTAL STUDENT REFLECTIONS

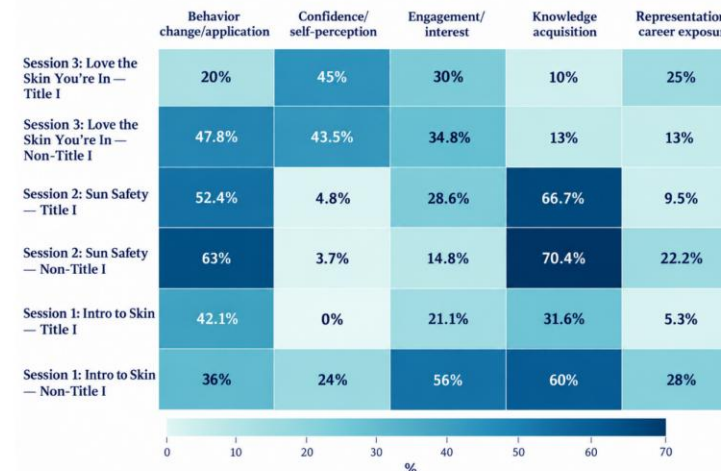
Overall Frequency of Student Reflection Themes

Theme frequency reported as n/N (%) across all reflections



Student Reflection Themes by Session and School Context

Percentage of reflections containing each theme



Engagement/interest

"It's really interesting learning something new especially because it's something in medicine."



Confidence/self-perception

"You shouldn't try to fit into a box, be yourself."



Representation/career exposure

"It felt good to learn from medical students... seeing people who look like me impacted me because I was proud."



Behavior change/application

"Tanning beds increase the risk of skin cancer by 75%, it prevents me from using one."



Knowledge acquisition

"I learned that there are multiple types of skin cancer... I want to learn what types/brands of sunscreen is best for darker skin. I want to make sure my skin is taken care of."

Between-School Comparisons Within Each Session (Fisher's Exact Test)

Outcome	Session 1: Intro to Skin			Session 2: Sun Safety			Session 3: Love the Skin You're In		
	Title I	Non-Title I	p-value	Title I	Non-Title I	p-value	Title I	Non-Title I	p-value
Behavior change/application	8/19 (42.1%)	9/25 (36.0%)	0.760	11/21 (52.4%)	17/27 (63.0%)	0.560	4/20 (20.0%)	11/24 (45.8%)	0.111
Knowledge acquisition	6/19 (31.6%)	15/25 (60.0%)	0.076	14/21 (66.7%)	19/27 (70.4%)	1.000	2/20 (10.0%)	3/24 (12.5%)	1.000
Engagement/interest	4/19 (21.1%)	14/25 (56.0%)	0.030*	6/21 (28.6%)	4/27 (14.8%)	0.297	6/20 (30.0%)	8/24 (33.3%)	1.000
Confidence/self-perception	0/19 (0%)	6/25 (24.0%)	0.029*	1/21 (4.8%)	1/27 (3.7%)	1.000	9/20 (45.0%)	10/24 (41.7%)	1.000
Representation/career exposure	1/19 (5.3%)	7/25 (28.0%)	0.111	2/21 (9.5%)	6/27 (22.2%)	0.437	5/20 (25.0%)	3/24 (12.5%)	0.436

*Statistically significant (p < 0.05); reported p-values are unadjusted for multiple comparisons.

CONCLUSION

Learning extends beyond the classroom.

Student perspectives add a dimension of educational impact that traditional knowledge assessments may overlook.

Integrating reflective assessments into dermatology outreach may provide a more comprehensive understanding of how young learners engage with skin health, connect education to personal practices, and envision themselves in medicine.