

A feasibility study to evaluate the implementation of a virtual community health worker training among high school students participating in a summer STEM enrichment program



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INTRODUCTION:

- A community health worker (CHW) is a member of the community whom one intends to serve.¹
- CHWs are paid workers or volunteers working in liaison with the local health care system by providing education, outreach and, resources to community members to promote access to healthcare.²
- Morehouse School of Medicine (MSM) developed a virtual CHW training program curriculum for high school students and young adults.^{3,4}
- The MSM CHW summer training program consists of shadowing experience and self-guided and interactive sessions performed virtually.³
- The University of Maryland Baltimore (UMB) Continuing Umbrella of Research Experiences (CURE) program has been training the CURE scholars to become Community Health Workers (CHW) by introducing the MSM CHW training program in the summer STEM enrichment program of 2020.
- The CURE Connections (C2) summer STEM enrichment program is a 6 weeklong program.
- Modified version with more hands-on activities (Figures 1 and 2.) was implemented in 2021.
- Hands-on activities are fun and effectual ways to learn,⁵ propagating learning by doing.
- Hands-on sessions transform passive learners into active participants.⁶
- The purpose of this study is to evaluate and compare scholar experiences with the virtual MSM CHW training program between the scholars of the 2020 and 2021 batch after implementing more hands-on sessions.

METHODS:

MSM CHW Curriculum

- The scholars from 2020 (Year 1) were required to complete all the 18 modules from the MSM CHW curriculum on the Canvas app.
- The 2021 (Year 2) summer program required scholars to complete 12 modules.

Participants

- Convenience and quota sampling procedures employed.
- Interview participants consisted of scholars from both Year 1 and 2.
- IRB consent was obtained.
- Four scholars belonged to Year 1 and two scholars to Year 2.

Interview

- One-on-one semi-structured interview for 15-20 minutes.
- Open-ended and closed-ended questions.
- The interview questions addressed the scholars' experience and feedback pertaining to the overall summer program, Morehouse modules, and recommendations to improve the program for future scholars.
- Interview recording deleted after transcription.
- Open coding was done, followed by more focused coding that merged all the open codes.
- Thematic analysis done, and themes were developed from the generated codes.



Figure 1. Hands-on Kits provided for 2021 summer program



Figure 2. Hands-on Kits provided for 2021 summer program



Figure 3. Common codes that emerged from the interview

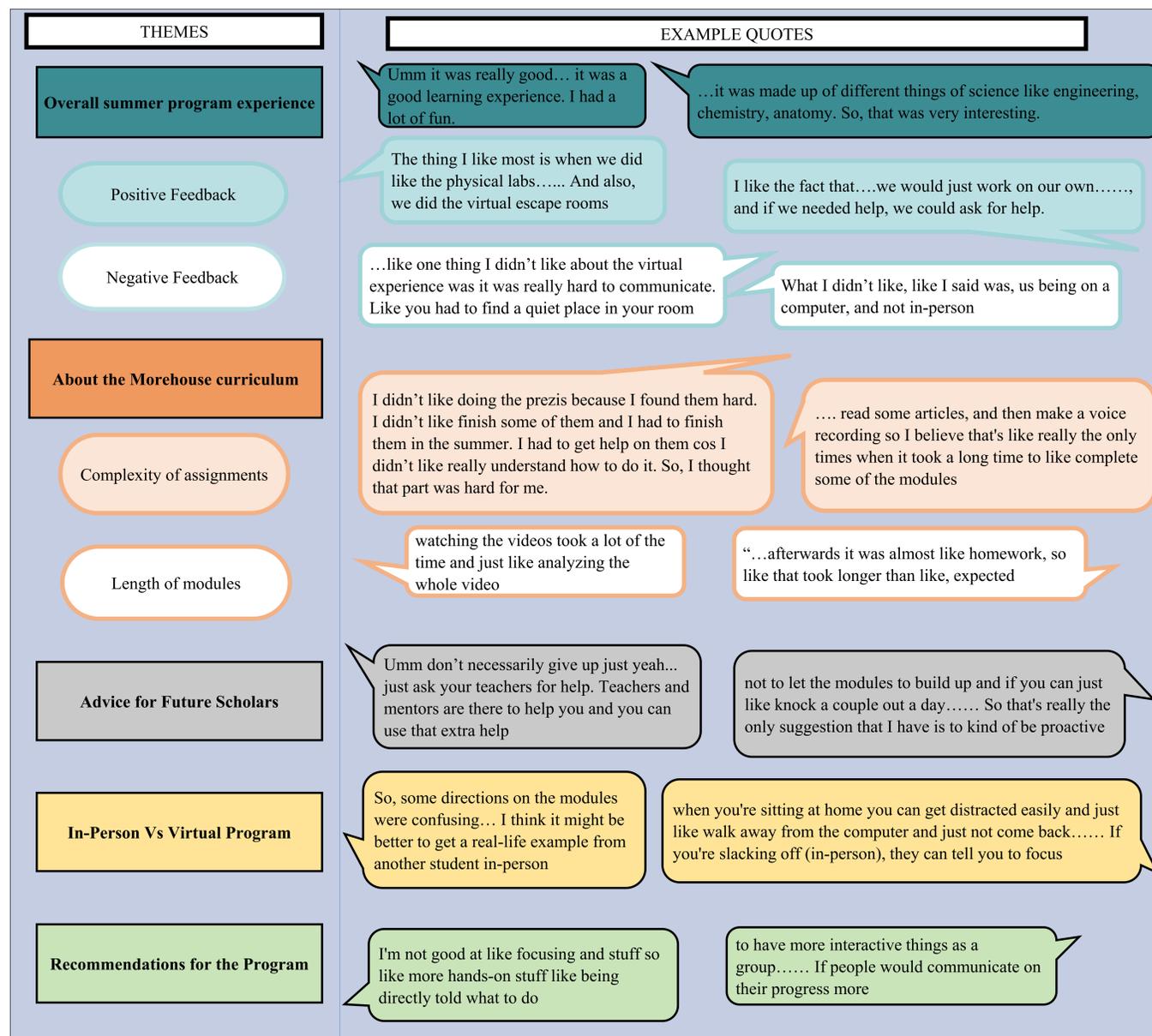


Figure 4. Themes and sub-themes with example quotes

RESULTS:

- 52 participants overall (2020 and 2021), 32 males and 20 females.
- The mean age of the participating scholars was 15 years.
- The average time spent on the canvas app was 33.37 hours.
- The time spent on the Canvas app did not correspond to the number of assignments completed.
- 6 scholars consented and participated in the qualitative interview.
- From the common codes (Figure 3.), evolved 5 overarching themes (Figure 4.).

1. Overall summer program experience.

- Mostly positive scholar feedback.
- Learned new things.

2. About the Morehouse Curriculum.

- Assignment length – Some were longer.
- Submission format – Prezi and VoiceThread were complex.

3. Advice for Future Scholars.

- Communication and being proactive are the key to success.
- Seek mentor and peer support.

4. In-Person Vs Virtual Summer CURE Program.

- The CURE summer program switched to virtual for 2020 and 2021.
- MSM CHW training program is a virtual curriculum completed through in-person or virtual UMB CURE summer program.
- Universal preference for in-person program.

5. Recommendations for the Program.

- All the scholars from the 2020 recommended to have more hands-on activities and interactive sessions.
- CURE program introduced more hands-on activities for the 2021 summer program.
- The 2021 scholars recommended finding a way to make the hands-on more interactive and progress update of co-scholars.

CONCLUSION:

- Scholars prefer to work on the virtual MSM CHW curriculum in an interactive and in-person environment.
- The Morehouse modules for the CHW training program can be used as a tool by completing the online assignments after an interactive, hands-on session with peers and mentors.
- Year 1 scholars preferred to have more hands-on activities, and Year 2 scholars welcomed the increased hands-on activities offered to them.
- The CURE summer program should be modified to include more interactive sessions and hands-on activities that can be performed in-person, provided the then pandemic regulations permit. Scholar feedback through surveys or interviews should be collected to assess if the modifications were beneficial.

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