



## Design Thinking Programme at Hougang Secondary School Builds Deaf Awareness and Community Impact Through Real-World Co-Design

### Description

**Singapore, 2026** – Creativeans, in collaboration with [Hougang Secondary School](#), DesignSingapore Council ([DSG](#)), [SG Enable](#), and the Singapore Association for the Deaf ([SADeaf](#)), completed a five-session **Design Thinking Real World Co-Design** programme titled **“Designing Youth Awareness for the Deaf Community.”** The initiative invited participants to explore how design thinking can be used to raise awareness and understanding of the Deaf community among their peers, while developing ideas that promote inclusion, empathy, and meaningful community impact. The programme engaged **40 participants**, comprising **33 students and 7 educators**.

Built around the challenge statement, **“How might we enable youths to better understand and empathise with the Deaf and hard-of-hearing community in Singapore, discovering the joys and challenges of inclusive communication?”**, the programme guided participants through a structured journey using Creativeans’s [EDIT Design Thinking®](#) framework: **Empathise, Design, Ideate, and Test**. Students were introduced to Deaf culture, communication, and inclusion before moving into value proposition development, ideation, prototyping, testing, and final presentation.

A defining feature of the programme was SADeaf's active role as **co-creator**. In Workshop 1, SADeaf conducted a **Deaf Awareness Programme**, giving participants first-hand exposure to Deaf culture, communication methods, sign language, and everyday accessibility challenges. In Workshop 4, SADeaf representatives worked directly with all student groups during prototyping and testing, providing feedback on whether the ideas were practical, relevant, and respectful to the needs of the Deaf community. In Workshop 5, a SADeaf representative also joined the final presentation as one of the judges.

This co-creation model ensured that the programme remained grounded in lived experience rather than assumptions. Through direct interaction with the Deaf community, students learnt not only about communication barriers and accessibility needs, but also about the importance of designing with sensitivity and respect. SADeaf's involvement helped participants strengthen their value propositions, refine their concepts, and improve the realism of their final prototypes.

The student ideas reflected a broad and thoughtful understanding of community needs. Across the final presentations, participants proposed concepts grouped into four main themes: **Communication & Translation, Independence & Daily Support, Social Support & Community Connection, and Youth Awareness & Inclusive Learning**. Ideas included accessible apps, sign-to-speech and speech-to-sign tools, digital calling features, wearable communication devices, interpreter-booking platforms, buddy systems, and inclusive learning concepts such as sign language games and short-form content. These proposals demonstrated that students were not only responding creatively to the challenge, but also thinking seriously about how design can improve community understanding and everyday accessibility.

Survey findings from the programme point to meaningful growth in empathy and design thinking confidence. Across all participants, the percentage who agreed that they understood what design thinking is about rose from **56.76% to 75.00%**, while empathy increased from **56.76% to 77.50%**. Among students specifically, empathy rose from **54.84% to 75.76%**, making it one of the strongest areas of growth. The final report noted that these shifts suggest the programme helped participants move beyond assumptions and develop more informed, user-centred ideas through direct engagement with SADeaf and hands-on community-focused activities.

The programme also produced strong qualitative feedback from both participants and partners. Hougang Secondary School described the programme as **“a meaningful and enriching learning experience for our students,”** while noting that Creativeans created a supportive environment that encouraged creativity and collaboration.

Student reflections showed that the experience did more than introduce a new process, it changed how they saw the Deaf community and their own role in supporting others. One student shared, **“I learnt how the deaf perceived the world is very different from the people who can hear.”** Another student reflection noted that the programme helped them empathise more deeply and think about how design can be used to help others.

From SADeaf's perspective, the quality of the students' engagement and ideas stood out. A SADeaf representative said, **“they really impressed me,”** and observed that students were

developing solutions **“alongside the deaf community rather than just designing based on their own assumptions.”** The same feedback also stressed that practical, respectful, and community-informed design is essential in any inclusion project.

For Creativeans, the programme demonstrates how **design thinking**, when applied through a real-world co-design process, can become a meaningful tool for **deaf awareness**, empathy-building, and community impact. By bringing together youths, educators, community organisations, and co-creators, the initiative created a platform where learning extended beyond the classroom into real social understanding and collaborative problem-solving. It also highlights the importance of involving the community not only as beneficiaries, but as active partners in shaping more relevant and inclusive outcomes.

Creativeans extends its appreciation to **Hougang Secondary School, DesignSingapore Council (DSG), SG Enable, and SADeaf** for making the programme possible. Together, the partnership reflects a shared commitment to using education, community collaboration, and design thinking to build a more inclusive and understanding society in Singapore.