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FROM PAPER TO GROUND, THE EVOLUTION OF MOBILITY AIDS

ONUP -
JUNE LAU



ALL IT NEEDED WAS A BREATH OF MAGIC

Although June did not have any children with disabilities around her initially, she took part in a friend's graduation project by chance, in which they redesigned walking aids for children and teens aged 10–15 with spastic diplegia or cerebral palsy, hoping to help them overcome emotional and physical barriers and enhance their social development.

“Many children with spastic diplegia or cerebral palsy in the UK study in mainstream schools. The schools are very supportive and the children get along well with their schoolmates, but they sometimes get strange looks when they use their walking aid, which makes them feel embarrassed.”

So, she and her friend wanted to design a stylish and user-friendly walking aid to motivate sick children to move around and enhance their self-image.

Spastic diplegia or cerebral palsy has many possible causes. Patients suffer from varying degrees of impairment in

limb mobility. As they cannot recover completely through treatment, they need mobility aids to cope with their daily lives; at the same time, they need to go through various training to increase their independence and mobility, and learn to deal with emotions in different situations. In Hong Kong, the ideal aim of integrated education is to help students, teachers, and parents to recognise, accept, respect, and even appreciate the differences of each individual, so as to promote personal growth and build a harmonious society. This is all very idealistic, but in the classroom, it becomes merely a paper exercise. Individual differences in students require teachers to use different teaching methods, and students cannot be expected to achieve a uniform level of learning. Ideally, schools should provide a great deal of support in terms of attitudes, facilities, and opportunities; for example, they need to address discrimination by teachers and students against students with disabilities, improve school facilities to facilitate student movement and learning, and provide sufficient

“ In 1997, the Hong Kong Government introduced the “Whole school approach to Integrated Education”; under the Disability Discrimination Ordinance, all schools are obliged to admit students with special educational needs (SEN) and provide them with appropriate support. Unfortunately, true integrated education cannot be created by a single ordinance or a single bill. June Lau, who has studied in the UK, is particularly concerned about children and teens aged 10–15 with spastic diplegia or cerebral palsy; she has redesigned walking aids for them in the hope of improving their mobility and social life through improving the hardware.

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opportunities for different students to participate in various school activities. As a matter of fact, students with spastic diplegia or cerebral palsy may not be able to cope with the school environment even in terms of the facilities for general access. “The existing walking aids are too large and bulky. Others can’t get close, and the user can’t walk backwards — they need to walk around in a huge circle just to turn around.” These limitations reduce the user’s desire to move around.

“We hope to design a walking aid that looks as cool as Iron Man’s suit for these children, so that others will be curious to learn about their needs. This will open up the conversation, increasing their social connection with different people.”

To be cool, you have to start with the design. June, her partner Sotiris Tsouris, and intern Yoyo Kwok set out to build a compact, seatable and highly mobile walking aid with a foldable seat for the user to sit down and rest when they are tired, increasing their independent mobility. The team then invited an occupational therapist to try it out and give them direct advice and criticism. “We originally

planned to use a three-wheel design for better mobility, but the occupational therapist said it would not be stable enough for children with low mobility. After a long struggle, we decided to use a four-wheel design to cater for a broader group of users.” June said that the process made her realise that she had to accept criticism in order to bring her imagination into reality. In addition to modifying the design, they also had to suspend the project due to problems in capital. “It costs \$300,000 to produce a walking aid, and we must make sure that the manufacturer will get orders for it in the future. Although many people found the walking aid great after trying it, we couldn’t find investors. There is really nothing we can do about it.” June believes that one has to make a living after all, so after calculating the opportunity cost, she decided that the best thing to do at the time was to suspend the Onup project and wait for a better opportunity.

It takes a long time to develop and improve a brand new product. Although the funding from Good Seed was just seed money, June is grateful for everything that she has encountered in the process. “I think this is the best funding because they are very supportive and willing to let us

try. Even if we fail, it’s not the end of the world, because life is made up of various failures and attempts.” Back to reality, June admitted that even the best ideas require the trust of investors as well as the belief that they can face change and implement it. Nonetheless, she was relieved to see the community become more aware of accessibility and more willing to listen to stories and projects in the past two years, so she is optimistic that one day, the project will make a comeback, improving the relationship between users and the community, thus achieving true social inclusion.

