

JANUARY 2022

# VOSAP ignite NEWSLETTER

The first newsletter made by the VOSAP Ignite volunteers!



VOSAP Technical Support

## How Can A Disadvantaged Individual Rise Above The Prejudice And Preconceived Notions About Their Abilities?

BY JAZMINE CABALUNA

Last year, in the midst of the quarantine, I, like many others, longed for an escape from the repetitiveness. The days seemed to meld together into one, like a dream from which one wishes to escape. I knew that I needed to do something to get back into the swing of daily life. With that single goal in mind, I started participating in art competitions.

One of these competitions was hosted by a non-profit organization named Voice of Specially-Abled People (VOSAP). Based in California, this organization aims to redefine the meaning of a 'disabled' individual. No longer called 'disabled', but instead a person with strength and fortitude far greater than any of us could ever imagine, or in other words, specially-abled.

I participated, creating a piece whose topic revolved around the term 'disability'. To my surprise, I had won the award of country representative for Canada. Of course, this was, in and of itself, an exciting journey. And after doing a few interviews with VOSAP, I bid them adieu and went on with life as school started once again.

That was nearly two years ago, yet I continue to stay in frequent contact with VOSAP.

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### IGNITE PROGRAM

Ignite volunteers raised a combined total of \$7,500 in December 2021

252 buildings rated on their accessibility

98 volunteering pledges shared

### VOSAP

Launch of world's first virtual exhibition of Assistive Tech products, with 16 exhibitors from 4 countries

Drive-Thru COVID-19 Vaccinations

International Art from Heart contest, powered by VOSAP

500 people received the gift of vision and became further enabled via surgical interventions

Highlights of VOSAP Activities and Impact



Why? Well, though the prize may have been what enticed me to join in the first place, I stayed because of the people and relationships I had formed with this organization. I seldom see such talented and hardworking individuals working to further a cause that many may not think about when looking at non-profits.

As a result, I only saw it befitting for this article to be based on Mr. Pranav Desai, founder of VOSAP. A few weeks ago, I had the opportunity to interview him. Prior to the meeting, I had done some of my own research, hence I was already partly aware of his accomplishments. Despite all of this, however, I was awestruck at the individual with whom I was speaking. His challenges and story; his life and his impact. He had inspired me while doing the competition all those years ago, yes; but learning about his life only increased my fascination and drive to continue working with the organization.

The following is the culmination of our interview, and I truly hope you will be as inspired while reading this as I was while writing this.

Born in India in 1969 to a “very education-focused family,” Desai started out his life as a fairly normal child. In the next few years, however, at the age of around four years old, the polio virus took over the muscle power in both of his legs. Desai notes that due to his young age at the time of the diagnosis, it did not result in “a huge adjustment [in his] life.”

But that is not to say that it did not have an impact on him at all.

Of course, like all fortunate children, the continuing and lasting prominence of school started to emerge into his life. Desai would soon “undergo a lot of challenges [...] to get an admission in regular school.” Despite the fact that his disability had no physical bearing on his brain, he was prevented from experiencing this important event. Luckily, due to the standing of his family within the community, he was able to “get admission [into] the first grade.” But, like the virus which took away much of his mobility, time too took away his ability to participate in first grade amongst the other children.

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**“It is important that [even] with disability, you cannot undermine [an individual's] ability.”**

-PRANAV DESAI



During his school years, Desai was tasked with demonstrating his ability to handle himself with normal students. He mentions the mental impact this had when he was younger, as he needed to “prove [himself] more than others.”

And so, he continued working.

Despite the challenges which faced Desai, he more than proved himself to others. His ambition and drive carried him to ranking at the top of his classes. In post-secondary, he pursued a Master of Business Administration (MBA) degree. However, despite his hard work and sacrifice, he could not pursue marketing or sales in India; his professional ability as an individual was doubted due to his physical disability.

Soon, after graduating, he moved to America, an action which changed more than just where he lived.

“I saw [how accessible America was], and [the infrastructure] was far better [...]. I could successfully go around the whole country on my own without any dependency.”

This revelation gave him an idea: the ability for change. If this change in accessibility could unlock his potential, what could it do for others? After all, India has a much larger population than America. So, Desai was presented with a massive ‘what if’. What if he were to make India just as accessible? How many more individuals’ potential would be unlocked?

“India needs much more accessibility; only 5% of places there are accessible,” Desai told me.

Armed with this new goal, Desai strove to incite change. Soon, with the aid of like-minded individuals, Desai founded VOSAP, a non-profit international organization which aims to re-define the meaning of disability. No longer are such individuals ‘disabled,’ but instead specially-abled with abilities, drive, and passion far beyond any expectations.

Despite the prejudice which Mr. Desai faced in his life, he continued to prove himself time and time again that he is more than capable to carry himself and his work. Though I may not face a disability myself, one does not need one to see his desire for change. He, much like many other specially-abled individuals, faced and subsequently climbed mountains to reach their goals. As of now, he balances both VOSAP’s activities and his own job at NTT DATA as the Head of Sales of a business unit for all of North America.

Of course, driving worldwide change by itself is a tall order. No one man, specially-abled or not, could handle such a colossal task. That is where the thousands of volunteers come in: individuals with the passion to make a difference in the world. Desai described the role of volunteers:

“We are, right now, a family of 11,000 volunteers. It’s not me alone now. It is all of you. That is the purpose! I created this organization [for] a mass movement of like-minded individuals [to] institutionalize the vision I have so that it survives beyond me.”

Finally, this goes back to the title question of how does an individual work past prejudice about their abilities? Desai’s answer: hard work and passion. You must prove to those who doubt you that you are so much more than just some stereotype, that you are an individual capable of doing great things. We cannot let a preconceived notion dictate what and who we are. I too share this sentiment and believe that this mantra should apply for everyone, specially-abled or not. After all, how do we break down these prejudices if we ourselves do not take a stand and prove who is truly ‘incapable’ on pure ability alone? ■

# Biomedical Engineering and the Assistive Tech Sector

BY JAZMINE CABALUNA

When I was younger, the question “what do you want to be when you grow up?” was nothing more than a harmless question to start banter. It was simple and inoffensive and lighthearted. I would always answer the stereotypical responses: “doctor!” or possibly “lawyer!” if I felt a differing answer was necessary.

Nowadays, I’m not too keen to answer. As graduation and the subsequent turn to adulthood continues to strengthen its hold on my psyche, closing in as the days tick by, I become more and more frightened of the possibilities. Although there is no such thing as choosing the “wrong” career, the multitude of choices has always left me questioning. But, how can you be anxious if you’ve got parents talking to you about their friend’s children’s career? Doesn’t that just make you feel so excited for the future and the prospect of permanent work?

Normally these discussions would garner nothing more than a roll of my eyes, but once, they mentioned an interesting career. Biomedical engineering: a fairly new field of engineering where you innovate potential solutions to better the health and well-being of individuals who have been impacted by disabilities. In other words, you create new ways of remedying disabilities people may have by improving on or developing new assistive technologies (think prosthetic devices or other such aids).

After taking part in VOSAP’s Gala earlier this month, I realize how important this career is as it is the career those who wish to make assistive devices go into. As such, for those curious in pursuing such an occupation, I will explain why biomedical engineering should be seen as an interesting and viable career for everyone as it fosters an individual’s creativity while also providing the opportunity to greatly impact the lives of others.

Biomedical engineering is a way for an individual to turn their creativity into a well-paying, impressive career. Ever since I was younger, I’ve always loved to build and create; it has always been a prominent aspect of my life. For those who have read this far, that means it has probably been a big part of your life as well. Yet, despite my passion, I had never really deemed it as career-worthy. However, after some of my own research, I truly realized how much this field fosters the creativity of those who pursue it. While you develop and innovate for a just and worthy cause, you are forced to think outside of the box. And, unlike the small inventions which I developed in my earlier years, this career and what you make has the ability to dramatically impact the lives of others.

Biomedical engineering gives you the opportunity to change the lives of many. I, like so many others, think of the medical field as being mostly occupied of doctors or nurses. Of course, there are subsections of these occupations, but they always fell under these same umbrella terms. What truly intrigues me about biomedical engineering is how, though it remains as part of the field of medicine, it is vastly different in what it entails. You develop and innovate for the better future of others. A doctor or nurse may be the individual who administers the remedies, but a biomedical engineer is the one that creates the remedies. In other words, it is just as important, if not more so, in the field of medicine.

Additionally, not only do you have the ability to save lives, but you can also improve the quality of life of others. Unfortunately, many diseases or disorders are debilitating and incurable, forcing the individual to live with it for the rest of their life. In these scenarios, akin to the worst nightmare of many, a doctor or nurse can do little to aid. Of course, they can keep the patient alive, but little more than that. A biomedical engineer has the ability to help such individuals, to give them a better life than what they currently have. Though the career may be unsung by many, one cannot understate the impact it has made on the lives of countless individuals.

As technology grows and becomes more complex, biomedical engineers can develop newer, more effective solutions to make an impact on society as a whole. Though I am not currently in the career of biomedical engineering, it has been a pleasure researching what the job entails. Despite this, however, I still remain in my cycle of indecisiveness, hence I am still iffy about whether I will pursue it in the future. It is viable, though! Nevertheless, even if I don’t pursue it, I am incredibly thankful to live in a time where a career like this, something I would only imagine in my wildest dreams, is something that I could go into and get paid for. I implore those who are too looking for their future career to give this intriguing, challenging, yet important career a look. Who knows? Maybe you too will create a device whose impact will thrive far beyond you. ■



Assistive devices are devices designed to help specially-abled people with their everyday tasks such as walking, communicating, etc. Some examples of assistive devices are wheelchairs, prosthetic limbs, and hearing aids. However, as time progresses, these devices are not only becoming increasingly affordable and available to the public, but also increasingly innovative. As of this decade, several assistive devices have become modernized. Wheelchairs are now electrified so that one can control their movement using a joystick while prosthetic limbs can now mimic actual human limbs (e.g., via bending, specific movements).

This article will discuss trends of assistive devices, in terms of the modernization/innovation, and then will detail the innovations in five standout assistive devices.

### Improvements In Specificity

Many of the assistive devices of this decade (and most likely the next) are following a specific pattern: they are becoming more specific in their actions and more tailor-made to individuals. Some examples of this pattern are seen in prosthetics. Several prosthetics are becoming more and more individualized to the specially-abled person to which they are fitted. Instead of an arm made of wood, the prosthetic would now be most likely made of a synthetic material and be able to conform to the motions of a standard human arm. These prosthetics would also not be one-size-fits-all, but would be matched to the length of the other limb to ensure uniformity.

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# Trends in Assistive Device Technologies + 5 Technologically-Innovative Assistive Devices to Appreciate

BY PRATYPUS MOHAPATRA



## Disability-Related Holidays

### Current Month

Jan 4 | World Braille Day

Jan 31 | World Leprosy Day

### Next Month

Feb 1-7 | White Cane Week (Canada)

Feb 28 | Rare Disease Day

## Improvements In Technology

There is a further improvement in assistive devices of this decade: they are becoming more technologically advanced. For example, wheelchairs, for which one would have had to manually turn the wheels, now have joystick controls to enable simpler, one-handed operation. Not only are assistive devices being electrified, but they are also becoming intelligent. Artificial intelligence is now being used to create devices for the blind that would replace their traditional walking cane or seeing-eye dog. Glasses, for example, now have multiple sensors to sense real-time occurrences such as cars moving about the streets, people walking nearby, etc.

The following are five examples of standout technologically-advanced assistive tech devices, ranked in order from fifth place to first place, based on the level of innovation.

### #5 | Google Glass

The fifth-most innovative device on this list is the Google Glass. While the project was shut down due to privacy concerns, the fundamental idea of the glasses remains the same. Anyone can wear the glasses, from the visually impaired, to someone with no arms. These glasses basically act as a hands-free device that can recognize various objects in real time, issue alerts, aid individuals with communication issues (e.g., individuals with dyslexia, autism), and basically do everything else that a phone can and much more. These glasses make great use of miniaturizing the technology found on a phone or camera, and make great use of artificial intelligence to aid a specially-abled person with their day-to-day tasks.

### #4 | Open Sesame

The fourth-most innovative device on this list is not even a device. Instead, it's an app that can be downloaded on almost any smartphone. Open Sesame uses the front camera of the device to recognize eye movements/motions in order to allow for hands-free control. This is mostly beneficial for people with paralysis and is similar to technology used in hospitals. The greatest part about Open Sesame is that it is more affordable than any other assistive device suited for the same purpose because it can be accessed on the devices specially-able people already possess.

### #3 | Google Live Captioning/Google Transcribe

Third in line is also not an actual device, but is intended to be used with most smart devices, much like Open Sesame. Google Live Captioning, although a recent technology, has recently made a great impact. Like captioning for YouTube videos, Live Captioning takes any audio file from any device, and with proper consent, activates the microphone in any device as a mediator so that, during live conversations, accurate captions can be provided for the hearing-impaired.

### #2 | WeWalk

The second-most innovative device is the WeWalk cane. This cane is an innovative approach to helping the blind. It takes the normal walking cane that blind individuals sweep to detect obstacles with, and smartens it. The WeWalk cane uses a wide array of sensors and data to detect several obstacles on the ground level. Furthermore, this cane can also detect (via the use of ultrasonic sensors) several obstacles at eye-level, so that blind individuals do not have to rely on someone to guide them at eye-level as well. Speaking of guides, the WeWalk cane also incorporates a GPS and speaker so that various points-of-interest can be identified (such as certain exits for the subway or bus, or even a fast-food joint!).

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# Now introducing cool new VOSAP activities for everyone!

Bored? Want to do something fun?

Try some of our new VOSAP activities! Every edition of the Ignite Newsletter has a new activity for you to try! For this edition, we present to you the first VOSAP-related DIY papercut lightbox!

Using multiple hand-cut layers (you do this yourself), a lightbox creates beautifully stunning designs when lit from the back! To try it out for yourself, see the end of this newsletter to find your lightbox designs and instructions!

## #1 | Voice Assistants

Finally, the most innovative device on this list is offered by multiple companies, and can be used by anyone... Voice assistants, such as Apple Siri, Google's OkGoogle, and the more famous Amazon Alexa can help anyone do pretty much anything. These voice assistants can help flip a switch (no matter how far away it is), can help book transportation, describe certain objects (assuming relevant input is provided), and help perform an innumerable number of varied tasks.

## Conclusion

Ultimately, and as you can probably tell by now, assistive devices are everywhere, and are getting even smarter. As a takeaway, remember that these devices once started as simple as possible, not with sensors or technical doodads, but physical objects doing physical things. The transformation of the cane into the WeWalk cane is a prime example of the evolution of assistive devices to become life changing. And so, as I leave you all today, I urge you to challenge yourself: find an assistive device you think is worth improving, and try to improve it, in any way you wish. Then, all you have to do is share the idea with your peers. If you wish to advocate for it, then you may see it grow and change countless lives. So please, start imagining, try inventing, and see countless lives improving.

You can make all the difference. ■

# Interview With A Teacher's Assistant

BY JAZMINE CABALUNA

Teachers and educators truly are unsung heroes in our society.

From our earliest moments to our final steps before adulthood and the business world, we are surrounded by them. To all of us, school means something, whether good or bad. We may have taken part in classes we regret, whether through the course material or through the educator. Likewise, we may distinctly remember one specific class decades later due to the teacher. Nevertheless, the point still stands: individuals who teach us make a very large impact in all of our lives. Teachers and educators understand this, and they all take the necessary steps to enrich students to grow them into passionate, driven adults. Suffice to say, the job is difficult.

And this is only talking about educators who focus on your average student! Imagine how much more demanding the job is for individuals who focus on teaching those with learning barriers and difficulties.

Earlier this month, I was gifted the opportunity to interview an educator at my school, Ms. Tamara Agkilinc, who focuses on this sector of teaching. Prior to our meeting, I was relatively sheltered in knowing much of the staff at my school as I had spent all my time in earlier years with the same handful of teachers. As a result, it was truly a pleasure and a surprise to meet with someone so driven. Granted, I already knew the difficulties of the occupation after brief research; however, I was not aware of the true passion Agkilinc held in both her job, and her students.

Agkilinc was born in Germany to a family who valued education and growth. Her father, a businessman, wanted her to pursue the same career he did. And at first, she did – getting her Bachelor and Masters of Business at the University of Michigan alongside

regular courses. Soon after graduating, around 20 years ago, she moved to Canada to continue pursuing business. I mean, who was she to stray from the plan which her family felt she should follow?

But, as life does all too often, things don't always necessarily fall into place.

Agkilinc moved back to Europe, got married and soon discovered that she is pregnant. As she describes it, it was “a complete 180 degree turn.” This child became a cornerstone in her life, as they brought about a new goal for Agkilinc. She deemed it be better to “dedicate herself to the child” than to continue pursuing business like initially planned. This turn of events thus brought about a new question: what should she pursue instead?

After some thought, Agkilinc soon found herself thinking about past passions. More specifically, her desire and drive to teach children. With this as her new goal, Agkilinc went full speed into her new path. She started attending a teachers' academy, retaking a child psychology course as she had all the other necessary degrees to become an educator. Even while pregnant, she continued working and educating herself to better not only her future, but also her child's.

While working as a Spanish and French teacher in Europe, Agkilinc soon became a member of the European Teacher Union. Yet, despite these accomplishments, she still felt that something was incomplete. Or, more specifically, inadequate – she wanted her daughter to have a Canadian future. With this in mind, she moved back to Canada after living in Europe for almost ten years.

This was an especially difficult time of Agkilinc's life. She notes how she “[needed] to start all over again to build a life for [herself and her daughter]”; the challenges were in both her life and in her attempts to get back into a teaching career. Despite all the work she spent in Europe as a teacher, it was difficult to truly get back into the teaching profession after moving. Again, becoming a teacher is no easy feat, and one needs to make sacrifices in order to become one. As such, Agkilinc would volunteer herself to the school. In other words, she was not being paid; however, her passion would, fortunately, soon be noticed.

The School Board and British Columbia Teacher Federation opened a Learning Inclusion Support Worker (LISW) position in the district at which she worked. For context, an LISW works to help those who need support in their learning. This includes all sorts of students and learners: those who have developmental disabilities like autism, those who mental illnesses like anxiety, or those who have come from neglectful households.

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For the role, Agkilinc needed to take additional ASD (Autism Spectrum Disorder) and FASD (Fetal Alcohol Syndrome Disorder) courses. Though difficult, she completed them and soon assumed the role.

She has never looked back since.

Through her work, Agkilinc had a passion to teach and “[help] kids find their path,” to “understand the way [these students] see the world”; to aid children with “autism, [self-esteem issues], learning disabilities or anxieties, [and socializing/communication difficulties].” During our interview, she notes her disappointment in the current system with regards to those possessing learning disabilities/hinderances; many such students do not have the necessary financial stability in order to be enrolled into an environment which is suited to them. Agkilinc hopes to be a part of the change in this order, to show that these individuals have just as much potential, sometimes even more so, than those without such hardships.

Though my meeting with Ms. Agkilinc was brief, I was blown away by her ambitious nature and go-getter attitude. Despite countless difficulties thrown at her throughout her life, she continued to make do and pursue a career that many would consider arduous or even impossible. This article is not just to highlight her achievements, however. We must also highlight the achievements of all educators focusing on those who have a difficulty learning. These are individuals with drive and patience surpassing most, yet many remain uncelebrated or forgotten by the masses.

I am incredibly thankful to have met such a charismatic, intelligent individual – one of the many unsung heroes located all around the globe. I truly hope that those who read this article will look at their educators and teachers with more regard as they truly are the bridge to our future. ■



**Mentors**



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**THANK  
YOU FOR  
READING!**

**LIGHTBOX ACTIVITY & INSTRUCTIONS BELOW! GOOD LUCK!**

## *How To Build Your Lightbox | 2 Layers Per Page | VOSAP*

### Materials:

- Printed sheets
  - o Please print on regular printer paper (8.5 inches by 11 inches)
- Styrofoam board or thick cardboard
  - o The board as to be roughly 1cm in depth
- Cardboard (can be the same type as above or smaller in depth) or cardstock
- Glue gun with extra glue sticks
- Cutting board
- Box cutter
- Ruler
- Light (this can be any type of light, but it is recommended to have a light which can be turned on and off!)

### Key definitions:

- Picture: a singular image which will be a part of a layer in your light box. Your lightbox has two pictures per printer page. You can differentiate individual pictures via a number on the top left or whether the image is surrounded by a white border.
- Layer: a picture with glued strips. Final pieces used to make the final lightbox.
- Strips: composed of Styrofoam or thick cardboard. Used to make layers.

### Pre-building steps:

- 1) Cut the pages of the sheets – remember to NOT cut the borders on the outside (they are necessary to keep the images in place!). You will need to cut the two images apart from one another on each printed page. Refer the legend below on how to cut.
  - o Full line | Cut on line
  - o Shaded line | Do not cut line (supports for the images)
  - o Shaded parts | Must be cut out (follow outside full lines to cut out)
  - o Non-shaded parts | Do not cut out, must stay attached to the border!
- 2) Cut the Styrofoam board/thick cardboard into small strips – amount dependent on how many pictures your lightbox has. Each picture requires two of the following strip types:
  - o A type: 1.2cm by 21.6cm
  - o B type: 1.2cm by 11.7cm

Building steps on next page.

## How To Build Your Lightbox | 2 Layers Per Page | VOSAP

Building steps:

- 3) Refer to the page numbers on the top left of each layer to figure out order of placement. Smaller numbers to larger numbers = back to front.
- 4) Once each layer has been cut, hot glue two A type strips and two B type strips onto each picture's border. Make sure you glue the strips on straight and they are flush with the edge of the paper. The individual pictures have now been turned into *layers*.
- 5) Layer the finished layers atop one another. Make sure the sides of the layers are flush with one another. See Figure 1.2.1 for reference (red = image, blue = strips).
- 6) Encase the finished inside layers (step 5)) in the thin cardboard/cardstock. These will be the outside walls of your lightbox; you may decorate it to your liking! Make sure to leave at minimum 2 inches of extra space behind the lightbox where you will place your light. See Figure 2.1.2 for reference.
- 7) In the back of the light box, make a door/covering to close the back opening. This is so the light remains solely within the lightbox and does not come out the back.
- 8) Place your light within the extra space in the back of your lightbox. The light should be able to shine through and create shadows within your lightbox via the layers. Move the placement of your light source to create different shadows and perspectives. Refer to the holiday-themed lightbox below to see a finished example (left unlit, right lit).





