

Vital Anaesthesia Simulation Training (VAST) LTD

Annual Report Jul 22-Jun 23









MANAGING DIRECTOR'S REPORT

In the 2022-23 reporting period, there has been a resurgence in VAST's activity. With the easing of the COVID-19 pandemic, the opportunity for in-person training returned. Many people, previously trained as VAST facilitators, expressed feeling "rusty" post-pandemic and desired to refresh dormant skills. The SIMposium saw 42 healthcare providers from 12 countries come together for refresher training in Rwanda. This program has had dramatic downstream effects; participants of the SIMposium have gone on to lead subsequent courses in Australia, Ethiopia, Honduras, India, Rwanda, Senegal, Tanzania and to introduce VAST in Latin America.

In our last annual report, we discussed the extensive curriculum development and digital transformation of VAST. The most recent addition to VAST's programs is VAST Wellbeing, a one-day course focused on safeguarding healthcare provider wellbeing and burnout reduction. The program was piloted in the late 2022 for two cohorts in Rwanda, where a mixed methods study was conducted to explore the course impact. We consider that VAST Wellbeing is a much-needed short course for healthcare providers working in low-resource settings.

Now five years into running VAST programs, it is time to take stock. As an organisation, we are now equipped with the infrastructure and digital resources to continue to grow at scale. We have a dedicated and highly skilled volunteer network, eager to support ongoing course conduct. Over the next year, our focus will be on strengthening faculty development, with refinement of how we train and build simulation facilitation skills. We are, however, faced with ongoing challenges related to sourcing funding to achieve our goals and reach our full potential. Specifically, we now require a small amount of stable administrative support our expanding program delivery.

I want to take this opportunity to thank all involved across the full extent of our activities. The past year has been a wonderful year of consolidation and we look forward to ongoing growth in 2023-2024.

Dr Adam Mossenson

VAST Founder and Managing Director





Safe anaesthesia and effective peri-operative team function across the globe



To enable delivery of high-quality simulation-based medical education, improving anaesthesia and peri-operative safety, regardless of the context



- 1. **Respect** by fostering an environment where all are treated with courtesy and appreciation
- 2. **Collaboration** by supporting meaningful and enduring partnerships
- 3. **Empowerment** by focusing on skills transfer and leadership development
- 4. Sustainability to maximise impact, by prioritising long-lasting and cost-effective initiatives



"I was challenged in a skill set I didn't know I had, and by the end of the course I was left feeling inspired."



Five billion people lack access to safe, affordable surgical and anaesthetic care when needed. An average of 800 women die every day from preventable causes related to pregnancy and childbirth.

Upwards of 70% of all adverse events in healthcare occur due to failures in non-technical skills, such as team communication and situational awareness.

Simulation allows teams to train, rehearse and optimise their performance without risk to patients. Major barriers that limit use of this practice-changing and lifesaving learning methodology in low-resource settings, include:

- Cost
- No contextually relevant training
- Lack of experienced educators.

VAST was founded in 2017 to help address these barriers. VAST focuses on building a local educator pool with the knowledge, skills, and suitable teaching resources to conduct high-quality simulation based education. This valuable training is offered to healthcare teams which include nurses, midwives, anaesthesia providers, surgeons, general doctors, and trainees.



"You can change the world's behaviour with simulation and a non-technical skills course!"



AT A GLANCE

We partner with the World Federation of Societies of Anaesthesiologists (WFSA) and national anaesthesia societies to conduct our programs in a collaborative and locally driven fashion.



61 Courses delivered since pilot in 2018



7 Active research projects



964 Total participants



202 Trained as facilitators



5 Unique programs



128 Learners online per month



30 Countries with participants





VAST COURSE

Three days of team training designed to teach core peri-operative practices and non-technical skills. This course can be delivered almost anywhere, and uses readily available resources. Scenarios cover essential clinical challenges facing peri-operative healthcare teams around the world.

FACILITATOR COURSE

Depending on the context, over two or three days, this course develops the core skills required for effective simulation scenario design, facilitation, and debriefing. In new regions, a VAST Facilitator Course is run in conjunction with the VAST Course to build local capacity and ensure sustainability of simulation programs.

INSTRUCTOR COURSE

Over three days, the Instructor Course covers the content in the VAST Facilitator Course, as well as additional training in program oversight, logistics, mentorship, and implementation in each new location.

FOUNDATION YEAR

A 48-session curriculum of active learning designed to teach the fundamentals of safe anaesthesia practice to junior trainees.

WELLBEING

A one day program for inter-professional healthcare providers, introducing skills for personal and professional wellbeing, and how to recognise and prevent burnout. These tools are useful for maintaining a healthy and resilient workforce, and promoting patient safety.



To date, our activities have largely been funded through discrete project grants and collaboration with national anaesthesia societies. Our strength lies with an ever-growing team of dedicated volunteers who are passionate about making simulation-based education available where it is most needed. When international volunteers are invited to a new region, they work with local healthcare educators to build capacity for simulation facilitation. After a VAST Facilitator Course, newly trained facilitators are mentored in delivering the VAST Course to inter-professional healthcare teams. Our work is made possible with significant in-kind contribution, and low overhead costs. The stories below represent some of VAST's recent global activity.



INDIA + NEPAL - Following three sets of courses with the in-country support of international instructors, Drs Upadhye, Nath, Naik, and Kamabathula have started independently training other facilitators in Pune and Hyderabad. Feedback from these courses has been extremely positive. This team is now planning regional expansion of VAST's programs. Drs Vaik and Kamabathula will be part of a team introducing VAST in Nepal, at the request by Dr Shrestha, the academic head of anaesthesia at the Bir Hospital in Kathmandu.

"I have learnt so many skills from this course and will try my best to incorporate them into my practice. I have also met so many amazing people who have taught me so much, for which I will forever be thankful."



FIJI - Following two sets of courses in Fiji, one with participants from nine Pacific Island nations trained in simulation facilitation, the Fijian team, led by Drs Onisimo and Biribo, is now conducting VAST Courses and simulation training independently. Ongoing course delivery is supported by a recurring grant from the Australian Society of Anaesthetists.

RESEARCH - VAST has an active research agenda, and strives to keep its programs evidenced-based, up-to-date. Current and research projects involve designing and evaluating a tool for feedback and performance assessment for simulation facilitation in lowresource settings. Case study research is underway to look at the influence of context on delivery of the VAST Foundation Year in India, Tanzania, Nepal, and Rwanda.





LATIN AMERICA - Dr Haylock-Loor, the Director of Programs at the World Federation of Societies of Anaesthesiologists considered it important to introduce VAST training in Latin America. She took initiative to organise both a VAST Facilitator Course and VAST Course in Honduras in December 2022 and invited eight education and simulation leads from six Latin American countries to attend. The group of new facilitators participated in additional training in Guatemala, in June 2023, and are now planning wider VAST dissemination, beginning in Central America, where there is the greatest need, and later in South America.



VAST's activities are driven by dedicated healthcare professionals that volunteer to share their knowledge, skills, and time in-kind. This is the lifeblood of the organisation. These volunteers are supported by a small, highly dedicated and cost efficient organisational team. All nominated positions on the VAST Board, and VAST Steering Committee are held in a voluntary and unremunerated fashion.

VAST's Board of Directors are:

- Dr Adam Mossenson (Founder and Managing Director), Perth, Australia
- Dr Tom Druitt (Secretary), Brisbane, Australia
- Dr Roger Goucke (Treasurer), Perth, Australia
- Dr Gaston Nyirigira, Kigali, Rwanda
- Michelle Murray, Comeauville, Canada
- Dr Patricia Livingston, Mahone Bay, Canada.

VAST Steering committee co-chairs:

- Dr Gaston Nyirigira and Dr Jon Bailey (Halifax, Canada).

Specific projects are conducted by VAST volunteers with grants and research funding from a variety of partners:

- The World Federation of Societies of Anaesthesiologists
- The Australian and New Zealand College of Anaesthetists
- The Australian Society of Anaesthetists
- The Canadian Society of Anesthesiologists International Education Foundation
- Royal College of Physicians and Surgeons Canada | Royal College International
- Mercy Ships
- Curtin University, Perth, Western Australia
- Dalhousie University, Halifax, Nova Scotia Canada

Direct financial and in-kind support from:

- Zento Group
- Anaes-Assist
- Private donors



Balance Sheet

Vital Anaesthesia Simulation Training (VAST) Ltd As at 30 June 2023

	30 JUN 2023
Assets	
Bank	
Business Acc 5104 (gift)	10,369.54
Business acct 9294 (everyday)	21,184.34
Total Bank	31,553.88
Fixed Assets	
Less: Accumulated Depreciation on Plant and Equipment - IT Assets	(610.00
Plant and Equipment - IT Assets	610.0
Total Fixed Assets	
Total Assets	31,553.8
Liabilities	
Current Liabilities	
Payables - Other - Facilitator Stipends	1,272.2
Total Current Liabilities	1,272.2
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Total Liabilities	1,272.2
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Net Assets	·
Net Assets	30,281.59
Net Assets Equity	1,272.25 30,281.55 17,450.76 12,830.83



Profit and Loss

Vital Anaesthesia Simulation Training (VAST) Ltd For the year ended 30 June 2023

	2023
Trading Income	
Donations - Australian	9,870.73
Fees and Charges	22,909.89
Grants	20,000.00
Contributions in kind	(170,700.00)
Business and Program Specific Support - Contributions in Kind	170,700.00
Total Trading Income	52,780.62
Program Costs	
Program Costs General	
Program Costs General: Program Support - Logistics officer	1,501.45
Program Costs General: Program Support - Operations officer	1,673.00
Program Costs General: Software expenses: Learning platform	9,571.19
Program Costs General: Software expenses: Website	224.90
Program Costs General: Supplies - Badge reels / nametags	1,722.14
Program Costs General: Supplies - Scrub Caps	720.00
Total Program Costs General	15,412.68
Program Costs Specific	
India, Pune (VW, FC, VC) Feb 2023	
Program Costs Specific: India, Pune (VW, FC, VC), Feb 2023 - Accommodation	3,310.83
Program Costs Specific: India, Pune (VW, FC, VC), Feb 2023 - Airfares	5,898.07
Program Costs Specific: India, Pune (VW, FC, VC), Feb 2023 - Ground transport	1,322.22
Program Costs Specific: India, Pune (VW, FC, VC), Feb 2023 - Visas	114.93
Total India, Pune (VW, FC, VC) Feb 2023	10,646.05
Rwands, Rwanda Resus Study (VC x 3) May-June 2023	
Program Costs Specific: Rwanda, Rwanda Resus Study (VC x 3), May-June 2023 - Ground transport	434.49
Program Costs Specific: Rwanda, Rwanda Resus Study (VC x 3), May-June 2023 - Catering	1,107.94
Program Costs Specific: Rwanda, Rwanda Resus Study (VC x 3), May-June 2023 - LMIC facilitator stipends	1,303.46
Program Costs Specific: Rwanda, Rwanda Resus Study (VC x 3), May-June 2023 - Other	(191.17)
Program Costs Specific: Rwanda, Rwanda Resus Study (VC x 3), May-June 2023 - Research	515.95
Program Costs Specific: Rwanda, Rwanda Resus Study (VC x 3), May-June 2023 - Teaching materials	69.52
Total Rwands, Rwanda Resus Study (VC x 3) May-June 2023	3,240.19
Senegal, Mercy Ships courses (FC, VC, VW) Feb 2023	
Program Costs Specific: Senegal, Mercy Ships courses (FC, VC, VW), Feb 2023 - Ground transport	80.68
Program Costs Specific: Senegal, Mercy Ships courses (FC, VC, VW), Feb 2023 - LMIC facilitator stipends	3,230.06
Program Costs Specific: Senegal, Mercy Ships courses (FC, VC, VW), Feb 2023 - Teaching materials	135.79
Total Senegal, Mercy Ships courses (FC, VC, VW) Feb 2023	3,446.53
Senegal, Mercy Ships courses (WW, VC) May 2023	
Program Costs Specific: Senegal, Mercy Ships courses (VW, VC), May 2023 - LMIC facilitator stipends	1,209.74
Total Senegal, Mercy Ships courses (VW, VC) May 2023	1,209.7
Total Program Costs Specific	18,542.5
Total Program Costs	33,955.2
ross Profit	18,825.39
perating Expenses	5.50
Bank Charges	UID.
Computer + Software Expenses	878.0
Realised Currency Gains	491.1
Total Operating Expenses	1,374.63
et Profit	17,450.76
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"I felt so nice to be a part of the VAST learners today, because people from all over the world had attended. It gave me an insight into how everyone handles their own emergencies. This will broaden my perspective..."





