



OPERATIONS MANUAL

VAST

OPERATIONS MANUAL

VERSION 2 – 2022

Authors

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The foundation of VAST occurred with the support of



**DALHOUSIE
UNIVERSITY**

FACULTY OF MEDICINE



SCSC^{HF}

Scottish Centre for Simulation and Clinical Human Factors



WFSA
WORLD FEDERATION OF SOCIETIES OF
ANAESTHESIOLOGISTS



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In developing VAST's resources, consultation and collaboration was sought from colleagues working across a diverse range of settings. This process has been invaluable in shaping VAST's courses and the authors are extremely grateful for their input.

Dr Adam Mossenson
Founder and Managing Director – VAST Ltd

Disclaimer

The authors have endeavoured to provide accurate and up-to-date information. This resource may contain errors. Ultimate clinical responsibility rests with the individual practitioner, not the authors. Health care providers must use their clinical judgement, check local guidelines and be aware that treatment modalities may vary across and within countries.

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Preface

First piloted in Rwanda in January 2018, VAST supports delivery of simulation-based education in resource-limited settings. Vital Anaesthesia Simulation Training (VAST) Ltd, is a not-for-profit company, and registered charity. VAST offers a range of training and mentorship opportunities to develop simulation capacity. Implementing the various elements of VAST's training requires significant planning and preparation. The VAST Operations Manual aims to help to guide this process. This manual is an adjunct to the VAST Course Manual, VAST Facilitator Course Manual, and VAST Wellbeing Manual which are used to conduct the VAST Course, VAST Facilitator Course and VAST Wellbeing respectively.

Contents

Item	Page
VAST Terminology	2
Principles	4
VAST's Facilitator Pathway (VAST FP)	5
Implementing VAST in a new location:	
- Local knowledge, engagement, the first course	6
- Volunteer agreement	6
- Budget	7
- Participants and facilitators	7
- Logistics (venue, equipment, printing, catering, travel and accommodation)	8
- Continuing professional development (CPD) credit	9
- Carbon offsetting and environmental impact	9
- The VAST Foundation Year (VAST FY)	9
- Limitations	10
Course countdown	11
VAST resources	12
Course updates	14
Managing a multi-professional group	14
Monitoring and evaluation	15
Appendices:	
1. VAST implementation template	16
2. VAST equipment list	17
3. Course reporting	20



VAST TERMINOLOGY

Courses and roles within VAST



VAST Course (VC)

A 3-day program that provides participants with immersive, simulation-based training. Using low-cost materials and thoughtful design, the course is highly portable and deliverable across diverse settings. Driven by the need to increase access to safe surgery and anaesthesia, the clinical content centres on essential surgical procedures that need to be performed in district hospitals. There is also dedicated focus on developing participants' non-technical skills. The VC accommodates learners from anaesthesia, surgery, general medicine, nursing, and midwifery.



VAST Facilitator Course (VAST FC)

A 2- to 3-day workshop where participants are orientated to key simulation theory and processes for simulation scenario design, delivery and debriefing. Trainee-facilitators are provided ongoing mentorship to build their skills and confidence in simulation facilitation. VAST FC is delivered in all new locations where the VC is offered. It can also be a standalone course. The intention is to build capacity in a local network of educators for ongoing sustainable delivery of simulation programs. The VAST FC accommodates learners from any clinical background with an interest in developing skills in simulation facilitation.



VAST Instructor Course (VAST IC)

A 3-day workshop that includes content from the VAST FC and covers the additional roles and responsibilities of an 'instructor', including course oversight, mentorship, teaching the VAST FC and implementing VAST in a new location.



VAST Foundation Year (VAST FY)

A 48-week curriculum of weekly active learning sessions for teaching early anaesthesia trainees the fundamentals of anaesthesia practice. The VAST FY predominantly uses interactive workshops and simulation. The VAST FY is supported by VAST's learning platform, and can be made available to VAST facilitators who are motivated to integrate simulation-based education into their anaesthetic teaching programs.



VAST Wellbeing (VAST WB)

A 1-day course designed to stimulate multi-disciplinary health care providers to develop strategies for promoting personal and professional wellbeing and for preventing burnout in the workplace.



VAST TERMINOLOGY

Courses and roles within VAST



Roles

Trainee-facilitator: Requires support and ongoing mentorship to confidently and independently deliver and debrief simulation sessions

Facilitator: Can deliver and debrief simulation sessions independently

Instructor: An experienced facilitator, who is familiar with all aspects of course delivery and organisation. Instructors are able to conduct facilitator training, implement courses in new regions, be responsible for course quality, conduct post-course evaluation, and provide a course report

Mentor: A facilitator or instructor who has volunteered to assist with ongoing faculty development after a VAST Facilitator Course

Simulation coordinator: Provides support with managing course logistics and equipment. A healthcare background is not mandatory.

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<https://donate.vastlearning.org>



Principles

All of VAST's training materials are licensed under the Creative Commons attribution, non-commercial, no derivatives, 4.0 International License. VAST Ltd is a not-for-profit organisation for which providing training cannot be used for commercial gain.

There are key principles that support effective delivery of the VAST's courses:

- Implementation planning and initial delivery should occur with close coordination of experienced VAST facilitators and instructors
- A local lead should work closely with the VAST leadership to help:
 - o Steer decision making regarding timing of courses, locations and suitable participants
 - o Identify potential facilitators and simulation coordinators
 - o Navigate approvals, endorsements, funding opportunities and logistics
- Each course requires a VAST Instructor who is responsible for ensuring quality control and mentorship. The instructor will help the local lead in generation of the course report
- VAST's courses should be delivered by those who have undergone VAST instructor or facilitator training
- Participant and facilitator numbers should be consistent with the recommendations detailed in this manual
- Delivery of the courses should largely be in keeping with the instructions in the teaching materials. There may be some requirement for adaptation and flexibility depending on the local context.

Handover of ongoing simulation activities to local facilitators:

- Sustainability and longevity are promoted when the goal is handover of ongoing delivery to a local network of VAST facilitators
- The duration and process for handover will vary across different settings
- Continued engagement in VAST's 'community of practice', will occur through mentorship, research, additional training opportunities, monitoring and evaluation
- Ongoing assessment of trainee-facilitators' needs must occur as part of this process

Reporting back to VAST:

- After a course has been completed, a course report is required
- This helps VAST demonstrate its impact and supports our continuous growth and improvement as a training provider
- The person/s responsible for writing the course report should be identified ahead of time
- When writing the course report, please reach out to admin@vastlearning.org for access to end of day evaluations and course feedback from the participants.

Limitations in delivery:

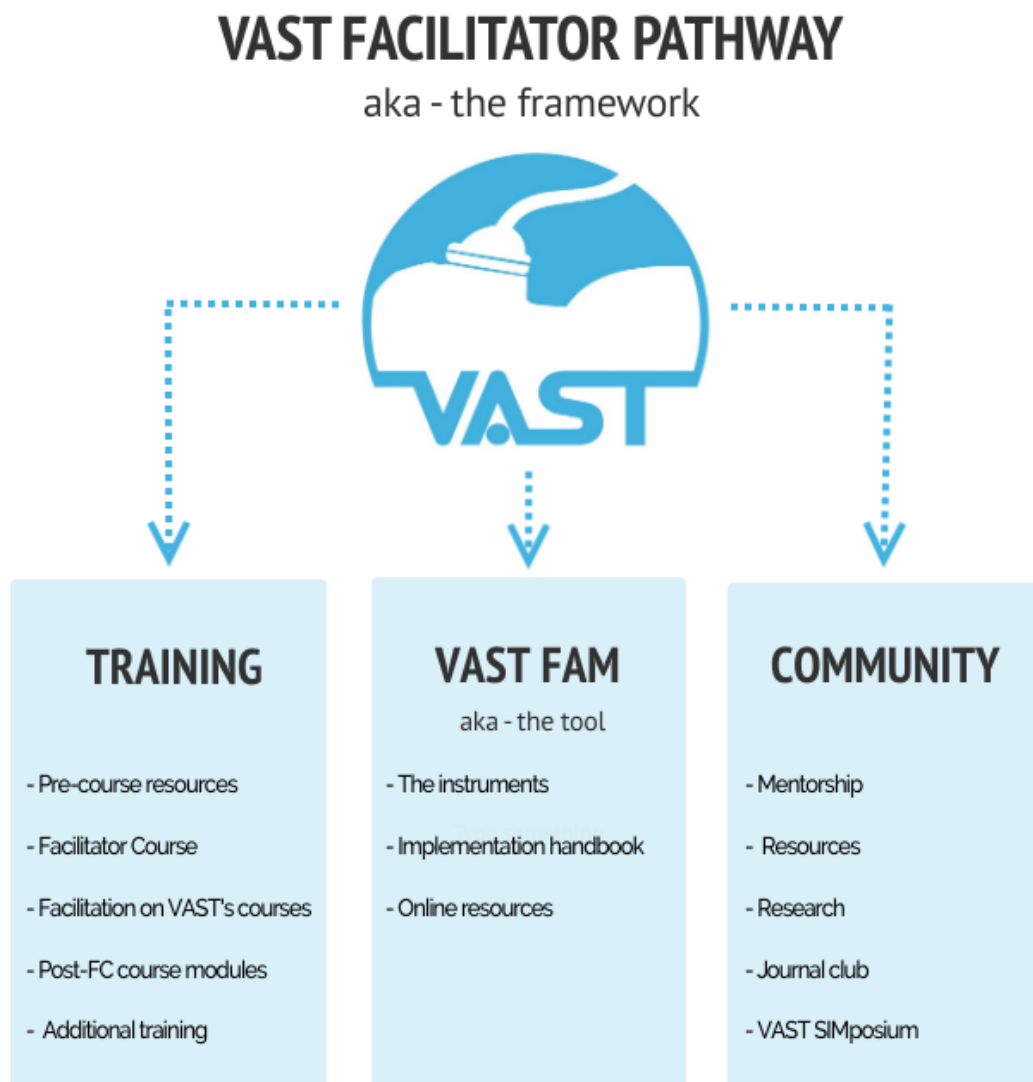
- The safety of VAST's volunteers is a priority
- There is limited capacity to deliver VAST in countries with a high degree of risk for travel, especially with advisories against all travel
- Refer to the implementation of VAST in a new region section for more information on how VAST can be supported in these regions.

VAST's Facilitator Pathway

VAST has an evolving Facilitator Pathway that aims to support facilitators along what Cheng et al.¹ describe as a “journey of discovery, growth and maturity”. In VAST’s terminology, this represents the progression from trainee-facilitator, to facilitator and onwards to instructor.

VAST’s Facilitator Pathway aims to have 3 integrated components:

1. Blended training opportunities (e-learning paired with face-to-face training)
2. An ability for feedback and self-reflection on facilitation utilising a competency-based framework
3. A community of practice that includes mentorship, and opportunities for advanced training and application of skills in varying contexts.



¹ Cheng A, Eppich W, Kolbe M, Meguerdichian M, Bajaj K, Grant V. A Conceptual Framework for the Development of Debriefing Skills: A Journey of Discovery, Growth, and Maturity. *Simulation in Healthcare*. 2020;15(1).

Implementing VAST in a new location

Organisation and logistics	
<i>Local knowledge</i>	Prior to implementation planning, it is essential that a representative from VAST understands the local context and discusses implementation planning with senior staff in country. This understanding may already be in-place through longstanding relationships, however a planning visit by a representative may be required.
<i>Engagement</i>	Engagement of the local anaesthesia societies, training partners and government is central to planning sustainable course delivery. In the early stages of implementation planning for VAST, it should be a priority of the local lead/s to reach out to their respective organisations to get endorsement and support for the delivery of VAST.
<i>The first course</i>	<p>The first course in a new region is unique and requires dedicated planning in the selection of course participants and facilitators.</p> <p>VAST Course:</p> <ul style="list-style-type: none"> - The first course should focus on recruiting senior anaesthesia providers, nurses, midwives and surgeons - The goal is to promote VAST amongst these influential clinicians, encourage their 'buy-in' to the program and have them promote VAST's integration into educational strategies in the region. <p>VAST Facilitator Course:</p> <ul style="list-style-type: none"> - The VAST FC should be delivered prior to the first VAST Course - Aim to have 4-6 'trainee-facilitators' attend the first Facilitator Course - Select experienced teachers who are interested in developing skills in simulation-based education. - Generating a strong group of trainee-facilitators is essential to driving the program forward and enabling earlier handover - Where possible, aim to engage a multidisciplinary facilitator group - Throughout all VAST Courses, facilitators should identify participants with capacity and interest in facilitator training. These participants should be flagged for future VAST FCs. <p>Select facilitators and instructors by looking for those with the following:</p> <ul style="list-style-type: none"> - Skills and experience with implementation of VAST in a new region - Those seeking to fulfil a mentorship role - Those with a connection with the local context, and who can, ideally, can speak the local language.
<i>Volunteer agreement</i>	All volunteers associated with VAST will be asked to review and agree to VAST's Code of Conduct. This will be shared as a short resource via VAST's learning platform.

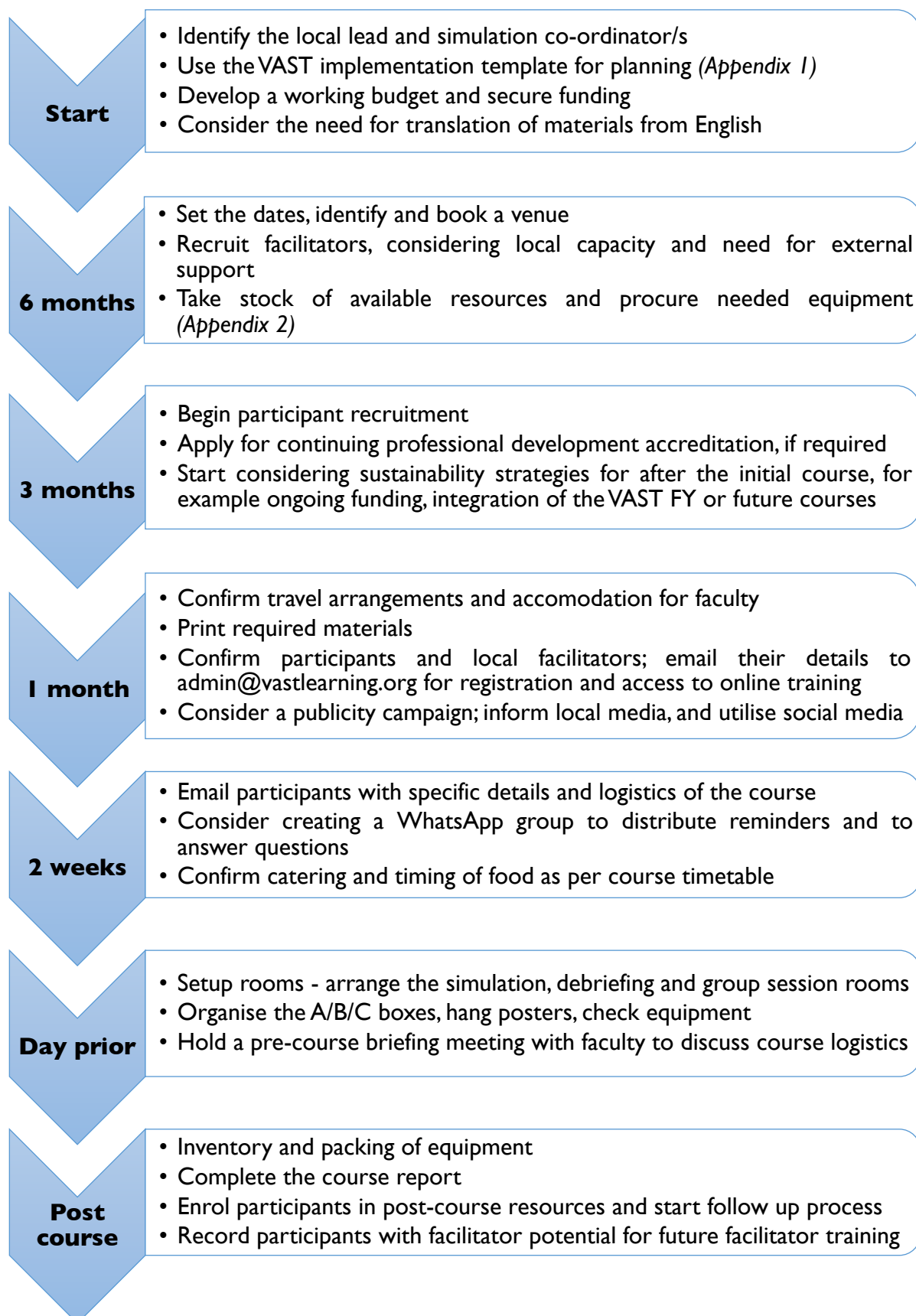
<p><i>Budget</i></p>	<p>VAST implementation planning should focus on a funding model that will support delivery of VAST in an ongoing fashion. The funding model and funds required for the initial courses will vary from those required for ongoing course delivery. Although the VAST Course uses simple materials, there is a need to consider funding for basic mannikins (e.g., intubating heads), simple equipment, iPads to function as simulated patient monitors, access to VAST's learning platform, instructor travel, venue and catering. Course costs will vary from one region to another depending on existing infrastructure. If mannikins are already available, the venue is free, and limited travel is required, the course costs will be mainly access to the learning platform, printing and catering.</p> <p>Establish your working budget as one of the first steps in course planning. Identify:</p> <ul style="list-style-type: none"> - Sources of funds, including government and non-government support - Opportunities for external grant application - Available local equipment and resources <p>VAST is a not-for-profit company; course facilitators donate their time on a voluntary basis and are not paid a salary or honorarium. Facilitators can be reimbursed for costs associated with course attendance and delivery. Course participants may be asked to contribute towards the running costs of the course. This will depend on the region in which the course is being run and should not preclude potential participants attending the course.</p> <p>When considering your budget, account for the following items (see <i>below for more details</i>):</p> <ul style="list-style-type: none"> - Facilitators - Participants - Venue - Equipment - Learning platform - Printing - Catering - Travel and accommodation - Applying for continuing professional development (CPD) credits - Carbon offsetting
<p><i>Participants</i></p>	<p>The VAST Course can be run for one group of 7 or two concurrent groups of 7 (total 14) people, if space and resources allow. Each simulation group should comprise of seven participants, with:</p> <ul style="list-style-type: none"> - 3-4 anaesthesia providers - 2-3 nurses or midwives - 1 surgeon or medical officer <p>Identify the local model of anaesthesia service provision:</p> <ul style="list-style-type: none"> - <i>For example, are there anaesthesia assistants or technicians that support the anaesthesia provider?</i> <ul style="list-style-type: none"> ○ If so, aim to include them in the participant group

	<ul style="list-style-type: none"> - What is the level of surgical sub-specialisation? <ul style="list-style-type: none"> o Aim to invite surgeons with relevant skills to day of VAST whereby their skills can be utilised - See the notes below on managing a multi-professional group <p><u>Communication:</u></p> <ul style="list-style-type: none"> - Once the participants are identified, email admin@vastlearning.org with a spreadsheet of the first name, last name, email address and clinical role of the participants - Consider starting a group chat for each group (i.e. WhatsApp group).
Facilitators	<p>For a <u>course of 14 participants</u>, aim to have a minimum of:</p> <ul style="list-style-type: none"> - 3-4 Facilitators, including: <ul style="list-style-type: none"> o At least one instructor - 1 Simulation Co-ordinator - Trainee-facilitators - A local lead (this may be a trainee-facilitator or a facilitator)
Venue	<p>Space requirements for a VAST Course <u>with two simulation groups</u>:</p> <ul style="list-style-type: none"> - One large room for group sessions: <ul style="list-style-type: none"> o Enough seating for 20 people o A wall / screen to project on to o Audio-visual facilities - 2 x simulation spaces with room for: <ul style="list-style-type: none"> o A stretcher o Two small tables o 10 people (Participants and facilitators) - 2 x debriefing spaces: <ul style="list-style-type: none"> o Ideally these are distinct spaces close to, but removed from the simulation space o Chairs for all participants and faculty o A whiteboard / large notepad for debriefing - A breakout space: <ul style="list-style-type: none"> o For breaks and lunch - Toilet facilities nearby
Equipment	<p>VAST utilises simple and robust equipment to deliver immersive simulation outside the confines of a dedicated simulation space.</p> <p>Refer to Appendix 2 for the VAST equipment list.</p> <p>Aim to establish a VAST storage box; roughly 60cm x 30cm x 40cm, plastic labelled box with a lid that can house all the simulation equipment required to deliver VAST for one simulation room.</p> <p>Prior to and following each VAST Course, the VAST equipment checklist, which is in the simulation resources folder, should be used to ensure a complete set of equipment exists for the next course.</p>

<i>Printing</i>	<p>Printed materials are required for the courses. Some materials can be printed once and kept for future courses (i.e. simulation scenario materials), while other materials will need to be printed for each course (i.e. participant handbooks and VAST ID Clips).</p> <p>When establishing VAST in a new region, it may be simpler and cheaper for international facilitators to bring the one-time-only course materials with them. However, local options for printing ongoing course materials should be explored to make delivery more sustainable and to support local business.</p>
<i>Catering</i>	Refer to the course timetables to co-ordinate the timing of tea breaks and lunch. The timetables are found in the course manuals.
<i>Travel and accommodation</i>	Factor into your budget the travel and accommodation costs for local and international faculty and, where relevant, participants.
<i>CPD Credit</i>	The local lead should determine if attaining CPD credits is a priority for course participants. Early co-ordination with the appropriate agency is important to allow sufficient time for granting CPD accreditation to upcoming VAST Courses.
<i>Carbon offsetting + Environmental impact</i>	<p>The climate crisis necessitates us to be conscious of our environmental impact. It is highly encouraged to include scope in the budget for carbon offsetting, particularly for international flights.</p> <p>Other simple ways to minimise the environmental impact of the courses include, but are not limited to:</p> <ul style="list-style-type: none"> - Asking participants to bring re-usable water bottles - Providing water from a bulk container rather than small bottles - Avoiding plastics where possible - Treating teaching materials with care to allow for re-use - Minimising printing and utilising electronic resource sharing as much as practical - Sourcing resources from companies with sound environmental practices
<i>The VAST Foundation Year</i>	<p>If there is anaesthesia training occurring in a region, it is worth considering if the VAST Foundation Year (VAST FY) is of added value. Planning to implement the VAST FY as part of the offering of the VAST Course and VAST FC has several potential benefits:</p> <ul style="list-style-type: none"> - Regular opportunities to build experience and confidence with simulation facilitation both for local facilitators and learners - Curriculum integration of simulation into anaesthesia training <p>Sharing of resources and management of enrolments for the VAST FY occurs through VAST's learning platform.</p> <p>If the VAST FY is introduced, there is still a role for delivery of the VAST Course. Often, there are perioperative healthcare providers that have limited access to professional development, for example, those in, those in district hospitals.</p>

<p><i>Limitations</i></p>	<p>A range of variables influence the ability to provide VAST's courses in new regions. Prioritisation and utilisation of VAST's volunteers and resources is at the discretion of the VAST's board of directors. This is a process that will continue to evolve.</p> <p>There is limited capacity to deliver VAST in countries with a high degree of risk for travel and especially with active advisories against all travel.</p> <p>Options to support VAST and simulation training more broadly in regions whereby the implementation of VAST cannot currently be supported include, but are not limited to:</p> <ul style="list-style-type: none"> - Enrolment of participants in future VAST Courses in neighbouring countries - Engagement of future leads in a VAST Instructor Courses held at centralised locations - General support and advice on implementation planning of simulation training - Access to free-online resources, for example VAST's scenario bank, available online at https://vastcourse.org/scenariobank/
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Course countdown



VAST resources

VAST manages access to teaching resources through its learning platform.

Description of the VAST resources	
VAST Course Manual	Assists in conducting the VAST Course
VAST Participant Handbook	Given to VAST Course participants
VAST Facilitator / Instructor Course Manual	Assists in conducting the VAST FC and VAST IC
VAST Facilitator Handbook	Given to VAST FC participants
VAST Wellbeing Manual	Assists in conducting VAST Wellbeing
Simulation equipment	All the required equipment for running the VAST Course is detailed in <i>Appendix 2 – Equipment list</i>
Simulation resources folder	<p>The simulation resource folder contains:</p> <ul style="list-style-type: none"> - Materials required for simulation scenarios: <ul style="list-style-type: none"> ○ Coded briefing cards for participants ○ Coded patient documentation ○ Coded photos of pathology and imaging ○ Observer briefing cards - VAST equipment inventory - VAST documentation inventory <p>There must be one simulation resources folder in each simulation room for facilitator use throughout the courses.</p>
Presentations	<p>All presentations are stored electronically and can be accessed through VAST's learning platform.</p> <p>They will need to be downloaded prior to use during the courses.</p> <ul style="list-style-type: none"> - PowerPoint presentations all have facilitator notes - There are PDF files in the PowerPoint folders that can be downloaded or printed to help prepare for session delivery
ID Clips	<p>ID Clips serve several functions throughout the course:</p> <ul style="list-style-type: none"> - They incorporate the VAST pre-anaesthesia check and crisis management card - They are used to co-ordinate allocation of participants into simulation groups and identify the lead participant for scenarios

	<ul style="list-style-type: none"> - Currently these are sourced centrally and stored in Canada and Australia. Co-ordinate with the visiting faculty to ensure there are enough ID Clips to for participants in all courses.
<i>Participant registration template</i>	<p>The registration template is used:</p> <ul style="list-style-type: none"> - To sign in participants on each day the VAST Course - On day 1 to allow facilitators to: <ul style="list-style-type: none"> o Pre-allocate participants to simulation groups o Assign a lead participant for the day's scenarios - At the end of day 1 and 2 to co-ordinate allocations for the following days - To identify scenarios with a non-anaesthesia provider lead and allocate this role accordingly
<i>Facilitator allocation template</i>	Is used to allocate facilitators and trainee facilitators to sessions they will delivery to allow advance preparation
<i>Certificates</i>	<p>Electronic course certificates are automatically generated through the learning platform when participants complete their final end of day evaluation.</p> <p>If hard copy certificates are expected or required, please email admin@vastlearning.org as part of the implementation planning:</p> <ul style="list-style-type: none"> - There is scope to add in logos of local anaesthesia societies and sponsors of the course
<i>Additional printed resources</i>	There is a range of additional printed resources that will be required for each course, for example posters. Access to these files will be made available via the learning platform.

Course updates

There will be periodical review and revision of VAST's resources. The materials shared in the learning platform will be the most up to date version. Your feedback and reflections on the training and its materials help us to continue to refine our teaching materials and processes.

Managing a multi-professional group

It is important to aim for a multi-professional group of participants in order to:

- Make scenarios feel realistic, with participants playing their actual clinical role
- Generation meaningful discussions in the debrief
- Create solutions to challenges that include all members of the team.

Consider the following for the various non-anaesthesia provider participants:

Anaesthesia assistants or technicians:

- In some settings, anaesthesia providers have an assistant or technician working with them
- If this is the case in the area of course delivery, invite assistants and technicians as additional participants to the course
- Promote discussion about the non-technical skills and teamwork between the lead anaesthesia provider and the assistant in the debrief.

Nurses and or midwives:

- There are specific roles designed for nurses or midwives
- Ensure these roles are allocated to nurses or midwives appropriately
- Promote discussion about the team work and behaviours observed between anaesthesia, surgery and nursing staff in the debrief
- Note – the nurses and midwives will be a minority by numbers in comparison to anaesthesia providers. This may be intimidating. Constant assessment and maintenance of a supportive learning environment is essential.

Surgeons:

- Identify the level of training and role of the surgeon in the area of course delivery (e.g., general surgeon who delivers all surgical services versus subspecialist care)
- If care is provided by a general surgeon, it is worthwhile encouraging the surgeon to attend for the full three days of VAST
- If care is provided by subspecialist surgical providers, consider inviting:
 - o Day 1 VAST – one general surgeon per simulation group
 - o Day 2 VAST – one obstetrician per simulation group
 - o Day 3 VAST – one paediatric surgeon per simulation group.
- If a participant only attends for parts of the training, ensure one facilitator takes them aside for a thorough pre-brief and orientation to the simulation space. A good opportunity to do this is during the morning reflection and the learning from the prior day.

Additional participants not immediately involved in the scenario:

- Engage these participants during the briefing phase of the scenario by distribution of the observer briefing card
- Highlight specific non-technical skills for them to observe
- Draw on their observations during the debrief

Monitoring and evaluation

The process for monitoring and evaluation of VAST's courses is constantly evolving.

Data collection and routine course evaluation currently includes:

- Participant registration prior to the course via a link sent through email
- End of day evaluation form completed on VAST's learning platform
- Listing Action Items from VAST Courses and creating implementation plans for changes to be made
- Encouraging participants and trainee facilitators to utilise log-books:
 - o Log-books are incorporated into the VAST and VAST FC participant handbooks
- Follow-up through VAST's learning platform 4-6months post after the course to evaluate knowledge translation into clinical practice

Generation of a course report and publishing this, including participant feedback, occurs on VAST's website. Please see appendix 3 for advice on course reporting.

Members of VAST's volunteer network are continuously exploring opportunities for formal research and evaluation of the impact of VAST's training. If you would like to explore options for research associated with course delivery, consider this as a component of the implementation plan.

Appendix I – Course implementation template

Overview																										
<i>Details of course/s</i>																										
<i>Proposed dates</i>																										
<i>Proposed venue</i>																										
<i>Funding source + budget</i>																										
<i>Projected costs</i>	<table border="1"> <thead> <tr> <th>Item</th> <th>Cost (currency)</th> </tr> </thead> <tbody> <tr><td>Venue</td><td></td></tr> <tr><td>Catering</td><td></td></tr> <tr><td>CPD accreditation</td><td></td></tr> <tr><td>Travel</td><td></td></tr> <tr><td>Accommodation</td><td></td></tr> <tr><td>Equipment</td><td></td></tr> <tr><td>Print materials</td><td></td></tr> <tr><td>Learning platform access</td><td></td></tr> <tr> <td>Total</td> <td>\$</td> </tr> <tr> <td>VAST organisational sustainability (7%)</td> <td></td> </tr> <tr> <td>Sum total</td> <td>\$</td> </tr> </tbody> </table>	Item	Cost (currency)	Venue		Catering		CPD accreditation		Travel		Accommodation		Equipment		Print materials		Learning platform access		Total	\$	VAST organisational sustainability (7%)		Sum total	\$	
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	Print materials																									
	Learning platform access																									
	Total	\$																								
	VAST organisational sustainability (7%)																									
Sum total	\$																									

Faculty		
	Name	Email
<i>Local lead/s</i>		
<i>Simulation co-ordinator/s</i>		
<i>Course Instructor</i>		
<i>Local facilitators</i>		
<i>Trainee facilitators</i>		
<i>International facilitators</i>		

Equipment	
<i>Equipment required</i>	

Notes

Appendix 2 - VAST Course equipment list

The equipment list below is for **one simulation group**:

- Parallel simulation groups can be run in order to accommodate more participants
- Other than the laptop and projector, personnel and equipment will need to be multiplied by the number of parallel simulation groups.

Category	Detail
Personnel	<p>Simulation group size should be limited to 7 participants</p> <ul style="list-style-type: none"> - 2 facilitators are required for each simulation group - Mentorship and co-facilitation with trainee-facilitators should occur <p>In addition to the facilitators, a simulation coordinator is recommended:</p> <ul style="list-style-type: none"> - Responsibilities include setup and change over between scenarios - Checking equipment completeness and function - This role can be conducted by an additional facilitator or a simulation technician
General	<p>Laptop Projector and cable for laptop Speaker White board or large paper for debriefing Markers USB or computer loaded with course materials and presentations</p> <p><u>Printed materials:</u></p> <ul style="list-style-type: none"> - VAST Course Manual - VAST Course scenario documentation - VAST Facilitator / Instructor Course Manual - VAST Participant Handbooks - VAST Facilitator Handbooks - VAST ID clips, including: <ul style="list-style-type: none"> o Pre-anaesthesia and crisis management aide-memoire o Plastic name badge holder (<i>can be used in the future for a work ID card</i>) o Blank name badge - Hard copy course certificates (<i>not routinely required</i>) - Blank sticky labels for writing scenario roles - Supplementary resources: <ul style="list-style-type: none"> o Equipment checklist o Scenario documentation inventory o Participant registration template o Facilitator allocation template <p><u>Wall posters:</u></p> <ul style="list-style-type: none"> - SBAR for handover - AMPLE for history - A to E for examination - ANTS framework - WHO Surgical Safety Checklist (WHO SSC) - Basic Assumption - Distil the conversation <p>Blu-Tack or adhesive for hanging posters Post-it® notepads (4 inch x 6 inch) Masking tape Large storage box for equipment pack-down</p>
Mannikins	<p>Adult intubation trainer Paediatric intubation trainer (age ~ 3 years) Infant mannikin</p>

Monitors	SimMon App loaded on 2 devices (iPad + iPad or iPad + iPhone) https://itunes.apple.com/ca/app/simmon/id364731597?mt=8
Simulation equipment	<p>Organise equipment into 4 boxes or tubs:</p> <ul style="list-style-type: none"> - Boxes 1,2 and 3 are for use during all scenarios <ul style="list-style-type: none"> o Boxes 1, 2 and 3 should be located near the anaesthetic workstation - Box 4 contains <u>extra equipment</u> that is only required for certain scenarios <p><u>Box 1 - Airway equipment:</u></p> <ul style="list-style-type: none"> - Oral airway (3,4,5), nasal airway - Yankauer sucker, laryngoscope, laryngoscope blade (Mac 3) - ETT size 4, 5, 6, 7, 8, bougie, stylet - LMA (size 3 – ideally 2nd generation) - Tie, 20ml syringe <p><u>Box 2- Breathing equipment:</u></p> <ul style="list-style-type: none"> - Self-inflating bag (adult, paediatric, neonate) - Mapleson F circuit (Ayres T-piece) - Mask (adult, paediatric, neonate) - Nasal prongs, O₂ mask - Pulse oximeter probe (does not need to function) <p><u>Box 3 – Circulation equipment and medications:</u></p> <ul style="list-style-type: none"> - IV cannulae (14, 16, 18, 20, 22G) - 1 litre IV fluid bag (empty) – <i>Hartmann's solution or Normal Saline</i>, tubing - 500ml IV fluid bag (empty) - <i>Hartmann's solution or Normal Saline</i> with drug additive label - Oxytocin 40 IU, tubing - 500ml IV fluid bag (empty) – 5% dextrose or labelled as 5% Dextrose - Tourniquet, tape - BP cuff, stethoscope, ECG leads - Small separate box or container for medications: <ul style="list-style-type: none"> o Labelled empty syringes – ketamine, thiopentone, propofol, succinylcholine, rocuronium, morphine, fentanyl, midazolam, adrenaline, atropine, ephedrine, ondansetron, antibiotic, oxytocin, ergometrine, carboprost, labetalol, hydralazine, MgSO₄, lignocaine, Tetanus immunisation o Labelled empty tablet containers – misoprostol, nifedipine, methyl dopa <p><u>Box 4 – Extra equipment:</u></p> <ul style="list-style-type: none"> - Surgical drape and clips x2 - Surgical gown x 2, gloves, hats - Surgical instruments (<i>a small range of general instruments</i>) - Patient gown - Spare scrubs (<i>note - participants are instructed to wear their own scrubs</i>) - C-spine collar - Pre-cut shirt and pants, reassembled with Velcro - Sheets for gravid uterus - 'Blood'-soaked pads: <ul style="list-style-type: none"> o Simple blood: Add a few drops of red food colouring in water o More realistic blood: Add 1 tablespoon of flour to 250mls of water. Simmer over a low heat for 30minutes. Allow to cool. Add red food colouring and ½ a drop of blue food colouring. Mix well. Keep refrigerated. Discard at the end of each Course. - Clean dressings for paediatric burns <p><u>Neonatal resuscitation equipment:</u></p> <ul style="list-style-type: none"> o Neonatal self-inflating bag, neonatal mask o Suction (bulb or suction device)

	<ul style="list-style-type: none"> ○ Cord clamp or tie ○ Scissors ○ Towel <p><u>Non-technical skills workshop equipment:</u></p> <ul style="list-style-type: none"> ○ A watch or timer ○ Three objects of different physical properties, for example: <ul style="list-style-type: none"> ▪ Object 1: A small figurine or doll ▪ Object 2: A soccer ball ▪ Object 3: A balloon <p><u>Additional large equipment:</u></p> <ul style="list-style-type: none"> - Stretcher or operating room table - Pillow x 2 - Sheet x 2 - Small table x 2 (For surgical and anaesthesia equipment) - IV pole x 2 - Wedge or pillow for uterine displacement
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Appendix 3 – Course reporting overview

The course report provides an important overview of the activities that VAST has delivered. It allows for sharing details on where, how and to who training is conducted. The course report is an important forum for demonstrating the impact of VAST's training and discussing any lessons learnt or implications for the future.

All of VAST's course reports are uploaded onto an interactive map on our website. Please refer to these past reports for ideas and inspiration. They can be found at <https://vastcourse.org/upcoming-events-2/>

When you are writing the course report, consider covering the following headings:

<i>Executive summary</i>	Provide a high-level overview of the course. Should be no longer than a page. Consider using the headings <i>Situation, Background, Assessment, Recommendations</i> to structure the summary.
<i>Context and background</i>	Provide a short description on: <ul style="list-style-type: none"> - Interesting details regarding course implementation - Who the key stakeholders were - Contextual background, for example specifics on the model of perioperative service provision / makeup of perioperative teams, levels of training and prior experience with simulation.
<i>Funding and supporters</i>	Opportunity to acknowledge sources of funding and support that enable the course to be delivered.
<i>Facilitators and participants</i>	Outline who was involved from as participants and facilitators. Include a description of relevant details, including clinical role and workplace.
<i>Venue and logistics</i>	Provide a short summary on the venue and any important logistics such as access to equipment.
<i>Summary of evaluations</i>	You will be provided with a complete record of the participant evaluations of the course. Here, aim to pull out the key themes expresses in the participant evaluations.
<i>Action Items</i>	During each course, we list the Action Items, potential areas for change in their workplace identified during debriefing. A photo of these action items should be taken during the course and they should be listed here.
<i>Challenges and lessons learnt</i>	This is an opportunity to share any challenges faced whilst delivering the training as well as to detail key lessons that will help streamline the next courses offered.
<i>Future directions</i>	Detail the future plan for VAST in the region. Ideally, include a discussion on sustainability and future funding opportunities.
<i>Appendix 1 – Course photos</i>	Pictures paint a thousand words. Please attach a selection of the most powerful photos from the course.
<i>Appendix 2 – detailed evaluations</i>	You will be provided with a complete record of the participant evaluations of the course. Attach them here.