

IMMERSIVE TRAINING FOR NURSES TO MASTER RESUSCITATION SKILLS

CONTEXT

This challenge is part of the **innovPlus Challenge 2023 Run 2**, organised by the Institute for Adult Learning's inlab. As part of the iN.LEARN 2.0 initiative, innovPlus facilitates the rapid development and pilot deployment of prototypes that can address learning challenges and exploit opportunities for better Learning and Development (L&D) and Continuing Education and Training (CET) outcomes, including design, delivery and assessment.

innovPlus is organised as a competition for training providers, organisations with L&D departments, learning experts, solutionists and technology partners to collaborate and present a holistic solution to real learning challenges faced by the training provider, organisation and/or groups of learners. Please refer to [Annex A](#) for more background on innovPlus.

CHALLENGE OWNER

The Challenge Owner is a hospital in the public healthcare sector that offers acute medical services and promotes holistic, patient-centred care to the community. It is also committed to medical research and education for the continual upskilling and training of medical professionals, as well as clinical innovation to enhance healthcare professionals' competencies, so that they can deliver better care for patients.

CURRENT SITUATION

The Challenge Owner offers the Managing Life Threatening Emergencies (MLTE) course for two groups of registered nurses. One programme caters for registered nurses with at least two years of clinical experience to refresh their knowledge and skills in managing patients presented with clinical emergencies. This programme is intermediate level and aims to bridge the gap between the Basic Cardiac Life Support (BCLS) and the advanced-level Life Support Course for Nurses (LSCN), which are required certification courses for nurses to be trained in resuscitation and emergency management skills. The other programme is modified to suit the Challenge Owner's Graduate Nurses Integration Programme (GNIP) for newly graduated nurses, which takes place twice a year.

PAST AND CURRENT SOLUTIONING EFFORTS

There are 4 to 5 runs of the MLTE (GNIP) programme conducted per year. The programme comprises both online and classroom learning:

- **Phase 1 (2 weeks):** Learners must complete self-directed learning of a theoretical course on resuscitation and a 30-item multiple-choice questionnaire via an online e-learning portal to assess their base knowledge.
- **Phase 2 (1.5 days):** Learners undergo 1.5 days of in-person lectures, group discussion, hands-on skills practice and structured skills competency-based assessment in a controlled classroom setting, with an average class size of 25 learners. This includes a multiple-choice test based on what is covered in the lessons. Nurses are required to score at least 70% in the multiple-choice test to complete MLTE.

The training is conducted by experienced nurses from the nursing education department. Currently, 10 clinical instructors are involved per run of MLTE, with a total of 528 man-hours required each year.

CHALLENGE/GAP/UNREALISED POTENTIAL

The occurrence of real-life resuscitation situations is unpredictable, and each situation may present with different preceding signs and symptoms. Performing resuscitation effectively requires quick decision-making and collaboration within a multidisciplinary team (including nurses, doctors) under high pressure, where skills such as teamwork, leadership/role delegation and communication are critical. Nurses would also need to be able to identify early signs of patient deterioration, perform escalation of the situation and interventions in a timely manner, and participate confidently in resuscitation. However, MLTE's current assessment method using a structured skill competency-based checklist is insufficient to assess nurses' holistic performance in a team setting during an actual resuscitation situation.

As resuscitation situations do not arise often, it is difficult for nurses to apply what they have learnt shortly after course completion. There is also limited hands-on practice time available during MLTE training. Due to the lack of practice opportunities and an ever-increasing time gap between learning and application, nurses may potentially lose their skills, knowledge and confidence to perform resuscitation over time.

CHALLENGE STATEMENT

How might we provide nurses with an immersive simulation-based training environment to master and build up confidence in resuscitation skills?

WHAT ARE WE LOOKING FOR?

The Challenge Owner is looking for an immersive simulation-based training solution to enhance the existing resuscitation training programme for nurses, increase their competency levels in resuscitation skills, and help build their confidence to manage life-threatening emergencies in real-life scenarios. The solution should provide scenarios for nurses to independently practise skills within their scope, including practical skills (e.g. drug management, airway management, CPR), identifying patients' symptoms, critical thinking, decision-making, collaboration, communication and leadership.

The solution should meet the following criteria:

- Realistic and immersive. Able to realistically simulate and replicate the complexity and stressful environment of resuscitation situations, including the resuscitation set-up (e.g. placement of equipment and administration of medication, position of patients and resuscitation team), and external factors like noise and communications (e.g. between resuscitation team members, patients' relatives). This can include the use of voice and haptics to enhance user experience.
- Customisable scenarios and difficulty levels. Allow varying resuscitation scenarios to be uploaded, customised and added on/updated, with scenarios of differing difficulty levels that cater to nurses from different specialties. Allow the simulations to be customisable for other clinical topics beyond resuscitation in the future (e.g. administration of intravenous medication).
- Prompts and feedback. Provide feedback, cues and hints at critical points during simulations to allow for better self-directed learning. At higher difficulty levels, the number of prompts and hints should be less than at lower difficulty levels.
- Gamification. Incorporate elements of gamification to increase user engagement.
- Data capture and reporting. Able to capture data on nurses' performance, record their number of attempts of the simulations, and generate reports with insights for instructors.
- Real-time multi-user mode for collaborative learning. Allow multiple users to log into the training environment at once and play different roles in the resuscitation situation as a team, to practise collaboration and teamwork.

- Real-time observation. Allow the option for instructors to observe training simulations in real-time while remaining unobtrusive and incognito.

OVERALL PERFORMANCE REQUIREMENTS

- Duration of training. Each simulation should take around 20 minutes.
- User-friendly. The solution should be easy to use, so as to be accessible to a diverse range of users and motivate learners to be self-directed.
- Web- and mobile-friendly. The solution's tools should be able to be accessed on desktops and mobile, where possible.
- Compatibility. The solution should be compatible with the Challenge Owner's (i.e. hospital's) server.

TARGETED LEARNERS/USERS

Primary and Secondary targeted learners / users of the envisaged solution (including estimated numerical figures)

- Estimated 100 primary users per year, comprising newly graduated nurses enrolled in the GNIP.
- Estimated up to 40,000 secondary users, comprising students, nurses and other healthcare professionals in both public and private sectors (including around 2,000 nurses employed by the Challenge Owner and around 5,000 nurses working under the Challenge Owner's healthcare cluster).

MEASURES OF SUCCESS

- Increased confidence levels. Achievement of at least 80% self-reported confidence rating of 4 and above in performing resuscitation or managing deteriorating patients, which will be measured via the Resuscitation Self-Efficacy Scale or the MLTE course evaluation form.
- Increased competency levels. 100% passing rate that is measured through instructors' observations and data collected using the solution's assessment rubric.
- Reduced number of instructors needed. The number of clinical instructors and man-hours required for training should be reduced by at least 30%, with reduced need for instructor intervention during the course.
- User satisfaction rating. Nurses and instructors will be surveyed on their level of satisfaction with the solution and MLTE programme, and user satisfaction will be measured by at least 80% positive feedback received.

Prospective Solution Partners who choose to apply for this challenge must be registered and operating in Singapore. The prototype needs to be demonstrated in Singapore. The Solution Partner should allow the solution to be tested for at least 9 months with at least 100 users before further refinement and potential deployment.

POSSIBLE USE CASES

1. Realistic simulation training. Aline is a newly graduated nurse who is taking the MLTE programme. She is tasked by her training instructor to use the solution on her own to practise a resuscitation scenario. In the simulation environment, she experiences a realistically stressful situation complete with background noise and miscommunication from her teammates. At first, she makes a wrong assessment about the patient's condition from the symptoms presented, but she is able to correct it after some hints and prompts from the solution. After the simulation, the solution generates a report showing the actions she has taken and the steps she had missed out. With the feedback given by the solution on her performance, Aline learns from the experience and gains confidence in performing different resuscitation skills after several practices.

2. **Enhanced effectiveness of training programme.** Rashida, the MLTE programme instructor, reviews the generated reports of nurses who have just completed training with the solution. She can see the number of attempts and amount of time taken by each nurse for the resuscitation simulation, as well as their errors and steps omitted. With the insights from the reports, she highlights to the team the areas which they need to work on and points to take note of. She is also able to modify the curriculum of the training programme to include these areas of emphasis, and to use the classroom training hours more effectively.

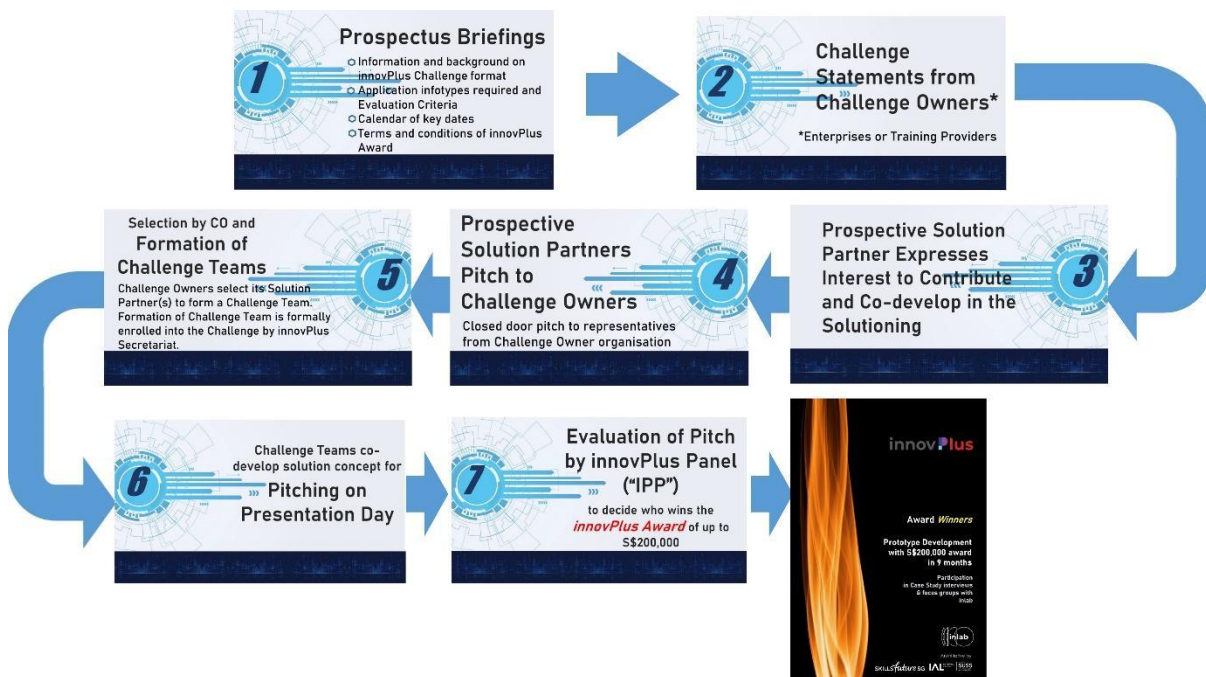
WHAT'S IN IT FOR YOU

- Up to S\$200,000 of prototyping grant (innovPlus Grant) for each winning Challenge Team of the innovPlus Challenge 2023 Run 2 (see Award Model) to develop and trial an innovative, feasible and scalable prototype that advances CET practice and learning outcomes
- Access to mentors, domain experts, co-working space and innovation lab from IAL inlab
- Access to IMDA’s innovation consultancies (e.g. Design Thinking, Digital Storytelling, UI/UX) and PIXEL corporate innovation hub (e.g. hot-desking, project studios, ARVR, usability, 5G test labs) for prototyping and commercialisation
- Co-innovate with the Challenge Owner with access to their expertise, facilities, and human resources in developing the solution, and potential to scale the successful solution for commercialisation

INNOVPLUS COMPETITION PHASE PROCESS FLOW

Diagram 1 illustrates the innovPlus process flow in the competition phase and the requirements for active involvement of each party. Stage 3 indicates the current stage of the competition, where Prospective Solution Partners are to express interest to contribute and co-develop solutions with the Challenge Owner through IMDA’s Open Innovation Platform.

Diagram 1 - innovPlus Competition Phase Process Flow



The Challenge Owner will evaluate all proposals by Prospective Solution Partners received on the OIP based on the evaluation criteria below, and invite shortlisted partners to a second stage evaluation in the form of a pitch (Stage 4 of Diagram 1).

Solution Fit (30%)	<u>Relevance</u> : To what extent does the proposed solution address the problem statement effectively?
Solution Readiness (20%)	<u>Maturity</u> : How ready is the proposed solution to go to the market? <u>Scalability</u> : Is there any evidence to suggest capacity to scale? Does the proposed solution offer potential to also help other enterprises facing similar challenges (i.e. broader application, adaptation and transferability)?
Solution Advantage (30%)	<u>Pedagogical Design</u> : What sound pedagogical design approaches underpin the proposed solution to enhance effectiveness of learning or desired learning outcomes? <u>Cost Effectiveness and Innovativeness</u> : Is the solution cost effective and truly innovative? Does it make use of new technologies in the market, and can it potentially generate new IP? How sustainable and affordable is the estimated cost for pilot trial, deployment, software support and post-pilot rollout?
Company Profile (20%)	<u>Business Traction</u> : Does the product have user and revenue traction? Is the company able to demonstrate financial capability and resources to complete the prototype? <u>Team Experience</u> : Do the team members possess strong pedagogy and scientific/technical background?

Thereafter, the Challenge Owner will decide on the Solution Partner to form a Challenge Team to co-develop the idea into a potential solution (Stage 5 in [Diagram 1](#)). The Challenge Team will pitch their solution in the final round of the competition, known as the innovPlus Presentation Day. On that day, the Challenge Teams will present how the envisaged solution could deliver the stated learning outcomes with a presentation and demonstration to the innovPlus Panel (Stage 6 in [Diagram 1](#)). The innovPlus Panel shall have the final decision on whom the eventual Grant awardees shall be (Stage 7 in [Diagram 1](#)). Please refer to the Terms and Conditions in [Annex B](#) for further details.

AWARD MODEL

Up to S\$200,000 of prototyping grant (innovPlus Grant) will be awarded to each winning Challenge Team of the innovPlus Challenge 2023 Run 2 for the development and pilot deployment of a prototype solution. The grant will NOT be inclusive of any applicable taxes and duties that any of the parties may incur. Guidelines on the grant disbursement quantum, milestones, timeline and supported cost items are stated in the Terms and Conditions under [Annex B](#).

*Note that a finalist (prospective Solution Partner) who is selected to undertake the prototype will be required to enter into an agreement with Challenge Owner(s) that will include more detailed conditions pertaining to the POC/prototype.

Teams with public research performers are required to seek an endorsement from their respective Innovation and Enterprise Office (IEO) and submit the IEO form together with the proposal.

SUBMISSION GUIDELINES AND DEADLINE

The proposal must include the following:

- Completed and countersigned innovPlus Expression of Interest (“EOI”) Form
- 1 deck of slides in PDF format explaining the proposed solution, how it addresses the challenge statement and meets the desired performance requirements. To include

information such as the proposed data inputs, system that the proposed solution will run on, potential benefits, the envisaged learning innovation, and the team's implementation plan

- Video or pictures (300dpi) of any prototype or simulation, if applicable
- ACRA Business Profile (2022 or most recent) with certificate confirming registration of business
- Track record of the company (including financial capability to complete the project) / CV of the team

All submissions must be made by **11 August 2023, 1600 hours (SGT/GMT +8)**. inlab and IMDA may extend the deadline of the submission at their discretion. Late submissions on the OIP, or submissions via GeBIZ, will not be considered.

Annex A – About innovPlus

1. iN.LEARN 2.0 is an initiative launched by SkillsFuture Singapore to drive innovation in the Training and Adult Education (“TAE”) sector from ideation to commercialisation through its three key programmes – the innovPlus, innovSpur and Sandbox. It will focus on four key areas:
 - i. increasing the uptake of online and blended learning by individuals;
 - ii. amplifying enterprises’ adoption of innovative learning technology;
 - iii. developing effective remote assessment and proctoring solutions for individual and enterprise-led training; and
 - iv. developing effective placement solutions that tighten the industry-training nexus.

2. As part of iN.LEARN 2.0, innovPlus contributes to the initiative by facilitating the rapid development and pilot deployment of prototypes that can address learning challenges and exploit opportunities for better Learning and Development (“L&D”) and Continuing Education and Training (“CET”) outcomes, including design, delivery and assessment. It is organised as a competition for training providers, organisations with Learning and Development (“L&D”) departments, learning experts, solutionists and technology partners to collaborate and present a holistic solution to real learning challenges faced by the training provider, organisation and/or groups of learners. innovPlus could cover any/all of the following areas of innovation:
 - Pedagogy / Learning Design and Delivery
 - Learning technology
 - Training management
 - Application of skills and workplace performance
 - Assessment and credentialing
 - Remote assessment and proctoring
 - Hybrid Mode
 - Adaptive Learning
 - Blended Learning
 - Workplace Learning

3. innovPlus comprises three rounds of evaluation:
 - i. inlab of Institute for Adult Learning (IAL) will assess if the stated Challenge Statement meets the eligibility criteria and competition guidelines stated in the Terms and Conditions under [Annex B](#).
 - ii. Participating organisations as Challenge Owners (“CO”), who are seeking solutions to their learning challenges, will hear pitches from prospective Solution Partners (“SP”) on how their challenges can be overcome and select the partners whose ideas they assess to best meet their needs. The Challenge Owners and their selected Solution Partner(s) will then form a Challenge Team (“CT”) to co-develop the ideas into a potential solution.
 - iii. The Challenge Teams pitch their solutions in the final round of the competition, known as the innovPlus Presentation Day. On that day, the teams will present how the envisaged solution could deliver the stated learning outcomes with a presentation and demonstration to the innovPlus Panel (“IPP”).

4. innovPlus is conducted once every six months. Prototyping grants, each up to **S\$200,000**, could be awarded to the winning concepts to develop a prototype¹ for pilot testing with actual learners/users² within a maximum duration of 9 months³.

¹ A *prototype* is defined as an original and novel model, form or solution, with its primary utility being to advance more effective learning. The key operators in this definition, ‘original’, ‘novel’, and ‘more effective learning’, must be clearly conveyable and verifiable.

² *Actual learners/users*, is defined as the persons, intended by the learning challenge, who would benefit from, either by way of learning enabled by or by use of the outputs of, the developed prototype. Pilot testing shall encompass minimally 30% of the **targeted learner/user population**, or 100 learners/users, whichever is lower.

³ 6 months to complete a workable Proof of Concept with User Acceptance Test, and an additional 3 months to show scaling up of prototype (where applicable) and usability to 30% of targeted learner/user population or 100 learners/users (whichever is lower).

Annex B – innovPlus Challenge and Award Official Terms and Conditions

As part of participating in innovPlus and submitting the innovPlus application form, all participating organisations and individuals agree to accept the following terms and conditions governing the innovPlus Challenge (and all its associated processes) and the innovPlus Grant offer (if applicable):

DESCRIPTION OF THE GRANT

1. The innovPlus Challenge (“innovPlus”) is a competitive learning innovation grant challenge that awards a prototyping grant of up to S\$200,000 to winning organisations to develop and trial an innovative, feasible and scalable prototype that advances CET practice and learning outcomes. The innovPlus Challenge is organised by inlab of the Institute for Adult Learning (“IAL”), and is organised twice a year. Winning submissions will be as determined by the innovPlus Panel (“IPP”) (defined below) in accordance with the prevailing Evaluation Criteria and Terms and Conditions as administered by the innovPlus Secretariat. The innovPlus Grant is funded by SkillsFuture Singapore (“SSG”) and is administered by SUSS-IAL, by appointment of SSG. IAL is an autonomous institute of Singapore University of Social Sciences (“SUSS”).

ELIGIBILITY

2. The innovPlus Challenge is open to organisations that are a registered business entity in Singapore (a valid ACRA or UEN identifier will be required for application), to participate as prospective Challenge Owners. Government Agencies and Statutory Boards are not eligible to participate⁴. Only Singapore-registered business entities may apply to participate as a prospective Solution Partner.
3. Challenge Owner organisation and its choice of Solution Partner(s) shall form a Challenge Team.
4. Challenge Owner organisation⁵ can be granted the innovPlus Grant for up to a maximum of two grants at any time within three years from date of the first award. The clock will reset after sitting out of two innovPlus Challenge runs.
5. Solution Partner organisation can be granted the innovPlus Grant for up to a maximum of three grants at any time within three years from date of first award. The clock will reset after sitting out of two innovPlus Challenge runs. Additionally, each Solution Partner is allowed to enrol in a maximum of two Challenge Teams in each eligible run.

HOW TO PARTICIPATE

6. To participate in the innovPlus Challenge, applicants may apply as either a Challenge Owner or as a Solution Partner. Application must be made using only the following official innovPlus application forms:
 - a. innovPlus Challenge Statement Application Form (for prospective Challenge Owner);
 - b. innovPlus Expression of Interest (“EOI”) Form (for prospective Solution Partner, with respect to the specific Challenge Statement published);

⁴ [Govt Agencies list: gov.sg](http://gov.sg) | [Ministries \(sgdi.gov.sg\)](http://sgdi.gov.sg)

[Statutory Board list: gov.sg](http://gov.sg) | [Statutory Boards \(sgdi.gov.sg\)](http://sgdi.gov.sg)

⁵ Second Grant Award must be to another Department/Division/Business Unit of the awarded organisation.

- c. Part 1 of innovPlus Challenge Team Formation Submission Form (for enrolment of team formation);
- d. All parts of innovPlus Challenge Team Formation Submission Form; and
- e. Projected budget and project schedule using prescribed innovPlus templates.

Only application forms downloaded from the official innovPlus webpage on SUSS-IAL's website will be accepted into the innovPlus Challenge. Completed forms must be submitted by email to the innovPlus Secretariat and inlab at the email addresses specified in the header section of all application forms. Only fully completed application forms received by the stipulated respective deadlines for each stage of the innovPlus will be considered for acceptance and enrolment into the innovPlus Challenge.

A submission may, in Secretariat's sole and absolute discretion, be rejected if it fails to follow the technical, creative, and legal requirements specified on the innovPlus webpage, the official innovPlus Infokit and in these Official Terms and Conditions. Applications that do not follow all of the instructions, provide the required information in their application form, or abide by these Official Terms and Conditions or other instructions of Secretariat may be disqualified at Secretariat's sole and absolute discretion. All entries that are late, illegible, incomplete, damaged, destroyed, forged or otherwise not in compliance with the Official Terms and Conditions may be disqualified from the innovPlus at Secretariat's sole and absolute discretion. Applications generated by script, macro or other automated means and entries by any means which subvert the entry process are void. All entries become the physical property of SUSS-IAL and Secretariat and will not be acknowledged or returned. Assurance of delivery of entries is the sole responsibility of the Applicant.

Additionally, applicants shall attend the activities organised by the innovPlus Secretariat to improve the capability of the Challenge Teams in identifying the root cause to their challenge and developing the appropriate solutioning. These include the innovPlus Prospectus Briefing, workshops and coaching sessions, and any other sessions deemed relevant to innovPlus participation. Failure to do so could lead to disqualification from the competition.

SUBMISSION GUIDELINES

7. Submission for evaluation by IPP pursuant to the award of the innovPlus Grant, will be in the following three parts:
 - a. Paper submission via the official innovPlus Challenge Team Formation Submission Form and the projected budget and project schedule, by the stipulated deadline, of no less than 21 calendar days before Presentation Day. The paper submission is to be in English. The paper submission must answer the prompting guides as set out in the innovPlus Challenge Team Formation Submission Form;
 - b. Presentation, in English, by (up to) five members of the Challenge Team to the IPP on Presentation Day (as informed by Secretariat) of no more than 25 minutes. This will be a closed-door pitch to only the IPP in the Pitching Room; and
 - c. Demonstration of any concept mockup/wireframe (where applicable) and engagement with IPP at the Challenge Team booth (in the public area) for up to 15 minutes. Challenge Teams may opt to engage with IPP in the private Pitching Room instead. Teams choosing this option must notify Secretariat during the Final Event Briefing before commencement of Presentation Day.

The Challenge Team must have all rights, clearances, permissions, approvals and/or consents necessary for their Submission, including, but not limited to, music rights, releases from all persons listed in the submission, location releases for all recognisable locations, and releases from all and any person who participated in the production of the Submission. In the event that the Challenge Team does not have the appropriate rights, the Submission may be disqualified at the Secretariat's sole discretion. SUSS-IAL reserves the right to disqualify any entries if it views their materials to contain contents (e.g. text, sound or images) that in SUSS-IAL's opinion to be offensive, inappropriate, or that will cast innovPlus, Innovation Centre, SUSS-IAL or SUSS in a negative light.

The above specified three parts shall collectively form the Submission of each enrolled Challenge Team, and shall be the basis by which each Challenge Team is evaluated for the Grant. Challenge Teams awarded the Grant, shall be held accountable to the Submission, and be funded to deliver, complete or report on all parts of this Submission, to qualify for a claim on the Grant. Should the Challenge Team be unable to deliver on the Submission, the Team agrees for SUSS, acting through IAL, to recover any grant already disbursed, and any liquidated damages resulting from the disbursement, so decided at the absolute discretion of SUSS-IAL.

EVALUATION OF SUBMISSIONS

8. On Presentation Day, all Submissions will be evaluated by the innovPlus Panel ("IPP"), which consists of a panel of institutional/industry/pedagogy experts based on the following evaluation criteria:
 - a. Concept
 - Why the challenge should be addressed or taken on;
 - How the proposed solution addresses the challenge / opens up opportunity for better quality CET outcomes and delivery; and
 - What objectives, goals and desired outcomes could be achieved.
 - b. Innovation
 - How it goes beyond known / existing solutions with (a) clear innovative value and (b) absolute valued added;
 - What spin-offs may be generated e.g. in user / learning experiences for **other** CET professionals, learners and / or organisations; and
 - What sound pedagogical design approaches underpinned the proposed solution to enhance effectiveness of learning or desired learning outcomes.
 - c. Impact and Scalability
 - Includes evaluation processes, success indicators and impact measurements;
 - Demonstrates feasibility of implementation organisation-wide, sector-wide or sizeable segments of the workforce; and
 - Offers potential to also help other enterprises facing similar challenges (i.e. broader application, adaptation and transferability)
 - d. Project and Implementation Team
 - Consists of members from different disciplines
 - Demonstrates commitment to develop the prototype as envisioned
 - Has a credible and realistic plan, budget and schedule to complete project in specified duration (maximum of 9 months)

- Has a clear identification of all stakeholders involved in the project, with the relevant and necessary competencies and track records to ensure successful project delivery
 - Presence of a dedicated project manager to oversee implementation and manage the project, including progress reporting, budget management, resource management, etc
- e. Implementation Sustainability
- Extent of thinking and/or planning for roll-out of solution to rest of organisation, including possible costs and resources required
 - Indication of project team’s continued involvement in the roll-out plan

9. IPP shall have the final decision on whom the eventual Grant awardees shall be. The IPP may declare void any entry should they consider that there are no entries reaching the required standard, whereupon they can award prizes or not as they deem fit. No correspondence will be entered into or comment issued on any matters concerning the evaluation of entries, and no reasons be given for any decision made by the IPP.

10. Awards conferred are not transferable under any circumstances. In the event a winning team is unable and/or unwilling to accept the award or withdraw for whatever reason, SUSS-IAL reserves the right to award it to the next highest scoring team that meets the qualifying criteria.

OTHER REQUIREMENTS ON PRESENTATION DAY

11. In addition to the closed-door pitch to IPP, all Challenge Teams are to deliver a presentation of their proposed solution concept and prototype trial plan to the public audience attending the Presentation Day event. This presentation should be no more than 25 minutes long.

12. All Challenge Teams are also to set up and man a booth on-site during Presentation Day, to share their proposed solution with the public attendees, who may have missed the Team’s presentation and/or wish to engage with the Team to hear or discuss the proposed solution in greater detail. Secretariat will share information on the logistical provisions for the booth with Challenge Teams after they are enrolled into the Challenge.

QUANTUM AND ADMINISTRATION OF THE GRANT

13. Winners of the innovPlus Challenge shall qualify to draw down on a pre-approved innovPlus Grant (“Grant”) of up to S\$200,000, with a mandatory co-contribution of at least 10% of total prototype development cost, which can be in monetary form or in-kind⁶.

14. The maximum grant amount of each award shall be exercised through a Letter of Award (“LOA”) between Singapore University of Social Sciences (“SUSS”) and the Challenge Owner organisation. Secretariat will consult the winning Challenge Team in working out and finalising the maximum grant amount and detailed budget for approval by SUSS-IAL, to constitute the LOA.

15. The Grant shall be disbursed in 4 tranches, strictly adhering to the stipulated milestone and timeline in the table below:

Tranche & Grant Quantum	Milestone	Milestone Timeline	Typical Grant amount
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⁶ To be supported with evidence for actual hourly rate charged (either with the payslip or a salary statement from HR)

1 st : 30% of maximum grant amount	Effect of LOA by signature of SUSS-IAL and Challenge Owner organisation	Start of prototype development	up to S\$60,000
2 nd : 20% of maximum grant amount	Mid-Term Progress Report, Presentation and required claim documents	3 months after start of prototype development	up to S\$40,000
3 rd : 20% of maximum grant amount	1 st part of Final Summative Report, Prototype completion, Presentation and required claim documents	Not more than 6 months after start of prototype development	up to S\$40,000
4 th : 30% of maximum grant amount	2 nd part of Final Summative Report, Pilot completion and Evaluation, Final Presentation and required claim documents	6 to 9 months after start of prototype development	up to S\$60,000

Besides the first advance disbursement of 30%, subsequent funds will only be disbursed on the submission and approval of the required reports and expenses incurred according to the approved budget. Proof of payment needs to be furnished before the claim can be approved.

CONDITIONS AND REQUIREMENTS OF AWARDED CHALLENGE TEAM AND PROTOTYPE

16. The innovPlus Grant is awarded on the basis of the presented prototype solution (and its proposed functionalities, features, capabilities, outputs and deliverables) and the envisioned scalability and roll out of the prototype to its intended users. As the implementation team as submitted in the application is evaluated as a criterion, any change to the composition of the Challenge Team after award of Grant must be submitted in writing, through Secretariat, for SUSS-IAL’s prior approval. Failure to do so could lead to automatic disqualification.
17. The awardees of the innovPlus Grant accepts the grant by signing a Letter of Award (“LOA”) within 8 weeks from Presentation Day, comprising the terms and conditions governing the grant, including piloting the prototype with learners, submitting a pre- and post-evaluation report of the prototype’s strengths and weaknesses and conferring non-exclusive, irrevocable, free right and license to the use of the prototype and all intellectual property and information generated resulting from the performance of the Project to SUSS-IAL for non-commercial, academic, research and development purposes, including, but not limited to, the purposes of proliferating the knowledge gained therefrom to the training and adult education (TAE) community. For the avoidance of doubt, the terms of the National IP Protocol⁴ shall apply. For the avoidance of any doubt, the terms and conditions in the LOA are strictly non-negotiable.
18. In general, the prototype development grant offered in the innovPlus Grant will support the following cost items:

- Fees of expert services from entities (organisation or individual) outside the composition of the Challenge Team, that are required in the areas of technical and development work, or for purposes such as research or advice, shall be limited to a cap of 10% of the approved grant amount;
- Professional services as charged to the Challenge Owner organisation by the Solution Partner(s) of the Challenge Team;
- Supplies that are necessary for the overall operation, development and pilot of the awarded solution;
- Equipment that have direct contribution to the overall operation, development and pilot of the awarded solution;
- Software and / or other licensing that are essential for the project and for the duration of the project; and
- Others – items not in the above list but necessary for the conduct and successful delivery of the project could be included in the funding request, subject to the approval of IAL.

19. The grant will not support cost items that do not contribute directly to prototype development such as marketing, networking and publicity. It will also not support capital equipment not essential to the project, maintenance cost for software licensing, GST, and travel (local and overseas).

20. The Challenge Team is required to prove cost transparency and reasonableness on request by SUSS-IAL on all cost items it is claiming for funding.

21. No claims can be made on any items that are not in the budget submitted together with the proposal made in the Challenge Team Formation form.

22. SUSS-IAL shall not be under any obligation to make any payment to the Challenge Team on claims of:

- unsupported cost items listed in the approved budget;
- qualified expenses but which no adequate proof of expenditure and proof of payment has been furnished;
- qualified manpower costs but which no adequate proof of cost reasonableness provided upon request;
- any amount that exceeds the cost items listed in the approved budget; or
- any amount that is based on expenditure / payment not in compliance with prevailing procurement practices in terms of not being value for money.

23. The Challenge Team shall be solely responsible for its own partnership management and team work, including Intellectual Property (“IP”) arrangements and development / implementation plan.

24. The Challenge Team shall undertake that it will not infringe the intellectual property rights or any other rights of any person, and will comply with all applicable laws at all times.

25. The winning Challenge Team shall grant consent to SUSS-IAL disclosing, in such manner as SUSS-IAL deems appropriate, in its (SUSS-IAL’s) publicity materials of the team’s participation, and setting out and publishing in its publicity materials, in such manner as SUSS-IAL deems appropriate, information regarding the participation, including:

- a. the materials submitted for the innovPlus Challenge and any other information pertaining to its proposal;
- b. the contents of the findings or results, report(s) or any part thereof the awarded project; and

- c. information arising from or pertaining to the reports or any presentation, seminar, conference, or symposium conducted by the team.
26. The Challenge Team agrees to indemnify and hold harmless SUSS-IAL against any and all actions, claims, demands, and proceedings in any way arising out of or connected with SUSS-IAL's use, reproduction, publication or dissemination in the manner mentioned above, and all costs, expenses, losses and liabilities, howsoever arising.
27. The Challenge Team shall ensure that all information about the team or proposal provided to SUSS-IAL pursuant to its participation and for the subsequent purposes of or connected with making claims, are true, accurate and complete to the best of the team's knowledge. In the event that it comes to the knowledge of the team that any information already provided is or has become inaccurate, untrue, incomplete or misleading, the team shall immediately notify SUSS-IAL of such inaccuracy, incompleteness, misleading nature, or untruthfulness, and provide such information in connection therewith as SUSS-IAL may request.
28. The innovPlus Grant will be withdrawn if:
- a. the Challenge Team is unable to perform the obligations set out in the LOA; or
 - b. the Challenge Team commits a breach of any of the provisions of the LOA.

SHOWCASING OF INNOVATION DEVELOPMENT

29. The Challenge Team shall undertake to collaborate with SUSS-IAL in the development of case studies and/or research papers detailing the experience and insights gleaned from the prototype development and any trialing/pilot that ensued. No confidential or private information will be revealed through this effort.
30. The Challenge Team shall undertake to allow SUSS-IAL to disseminate the case studies and/or research papers in various formats including printed materials, online articles, video, audio, and other digital recordings to any individuals or organisations that it deems will benefit from the learning and sharing; and
31. The Challenge Team shall undertake to agree for SUSS-IAL to profile the companies and individuals involved, as well as the solution and/or prototype on the following platforms:
- a. SUSS-IAL professional development seminars and workshops;
 - b. SUSS-IAL partner showcase for a period of 12 months;
 - c. SUSS-IAL conferences and events, e.g. the Adult Learning Symposium and Learning Roadshows; and
 - d. Conferences and events SUSS-IAL is participating in and where the themes / areas covered are aligned and of interest to the participants.
32. The full and prevailing terms and conditions of the innovPlus Challenge and innovPlus Grant can be found in the Challenge Statement application form, Expression of Interest and Challenge Team

Formation submission form, and all applications submitted to the Challenge will be deemed to have accepted these terms and conditions.

33. SECRETARIAT of the innovPlus Challenge and innovPlus Grant is the inlab, acting on behalf of the Institute for Adult Learning (“IAL”), of 11 Eunos Road 8, #05-03, Singapore 408601, wherein IAL is an autonomous institute of the Singapore University of Social Sciences.

GENERAL

34. Depending on the prevailing implementation challenges and needs, innovPlus Secretariat reserves the right to amend and change the terms and conditions with approval from the Director of Innovation Centre, that complies with the intent and spirit of innovPlus.
35. SUSS-IAL reserves the right to disqualify any participant at any point in time during the innovPlus Challenge.

SUSS-IAL reserves the right to change these terms and conditions at any time without prior notice. In the event that any changes are made, the revised terms and conditions shall be posted on the innovPlus website immediately. Please check the latest information posted herein to inform yourself of any changes.