Quality Education Fund (QEF) Application with Grant Sought Exceeding \$200,000

Part C: Project Details

Project Title: Promoting an incLUsive Society towa	rds older adults with physical disabilities through disabilit
simulation education (PLUS)	
Project Team:	
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Priority Theme Covered: Positive Values	

Proposed Project Period: 01/01/2022 – 31/12/2023 (24 months)

A. Needs Assessment and Applicant's Capability

The **P**romoting an incLUsive Society towards older adults with physical disabilities through disability simulation education (PLUS) project is proposed by The Nethersole School of Nursing under the Faculty of Medicine of The Chinese University of Hong Kong. With an excellent reputation in teaching and research, our School strives to advance various aspects of our society by serving the community with compassion. We have consistently received praise and recognition globally, notably ranking No.1 in Asia and No.21 in the world according to the QS World University Rankings 2020 by Subject 2020 – Nursing.

Aiming to benefit our community by enhancing student education and social inclusiveness in Hong Kong, we have developed a package consisting of a well-structured curriculum and tailor-made teaching materials delivered via a 3-day Convention under the PLUS project. Through this project, we endeavour to empower teachers and secondary students to support older adults with physical disabilities and enable these students, as the future pillars of our society, to receive education to acquire positive values and attitudes.

It is widely known that education plays a significant role in changing students' attitudes towards people with disabilities. Tackling prejudice through education is crucial in ensuring that our society truly consists of an inclusive environment. Moreover, with regards to the school-based curriculum in Hong Kong, there is a lack of general positive attitudes education and opportunities for students to connect with people with disabilities. Such a project would therefore be able to cater for this gap in the existing curriculum by providing students an opportunity to enrich their Other Learning Experiences, particularly in terms of Moral and Civic Education and Community Service, through the current curriculum. By equipping students with positive values like respect and care for others, social responsibility and integrity, secondary schools would be able to better prepare the students to contribute positively to society on leaving for university and through their future careers.

Our School is well prepared and highly qualified to implement this project. We have previously mobilised secondary and university students to provide health advice and care support to older adults such as the

programme. The

has served 13,778 older adults since 2015 via 220 outreach sessions. We also have abundant experience in conducting similar knowledge enhancement projects in the community, such as health promotion projects engaging trained volunteers in the community to enhance self-care in older adults and people with chronic illnesses including stroke, diabetes and cardiovascular diseases. Additionally, the project team has extensive experience building web-based e-learning resources, namely websites, animated videos and E-booklets targeting university students and people with disabilities in the community. Related topics to this project included communication with older adults with hearing impairments, websites with videos and information for enhancing self-management and rehabilitation among people with diabetes, stroke or chronic obstructive pulmonary disease.

B. Goals and Objectives

(1) Goals:

Short-term goal: To improve secondary school students' positive values and attitudes and nurture their respect and care ability for older adults with physical disabilities through disability simulation education, instilling in them the importance of an inclusive society for older adults with physical disabilities.

Long-term goal: To build a more inclusive society for older adults with physical disabilities in Hong Kong. (2) Objectives:

Through the PLUS project, we aim to achieve the following objectives:

1. To develop a multi-modal resource package about developing secondary students' knowledge, skills and confidence in communicating with and caring for older adults with physical disabilities;

- 2. To develop a 3-day PLUS Convention to provide secondary students with information about the health needs and support required for older adults with physical disabilities;
- 3. To build a team of secondary teachers to serve as facilitators in the PLUS Convention for fostering a school environment more conducive to the promotion of positive values towards older adults with physical disabilities;
- 4. To build a team of secondary students to promote and normalise interaction and socialisation with older adults with physical disabilities, and to promote the importance of an inclusive society for this priority group; and
- 5. To determine the effects of the PLUS Convention on secondary students' attitudes towards older adults with physical disabilities, their satisfaction with life and satisfaction with the PLUS Convention.

C. Targets and Expected Number of Beneficiaries

- Target: A total of six secondary schools in Hong Kong have agreed to participate in the project.



- Target group: Secondary students
- Expected direct beneficiaries: 1,000 students (S1 S3) (100 200 students per school)
- Expected indirect beneficiaries: 10 teachers per school, 10 volunteers with physical disabilities, and 300 older adults with physical disabilities attending a residential care home

D. Innovation

A socially inclusive society is defined as one where all people feel valued, their differences are respected, and their basic needs are met so they can live in dignity [1]. Physical disability is defined as a limitation on a person's physical functioning, mobility, dexterity or stamina [2]. Physical disabilities include impairments affecting people's participation in daily living, such as musculoskeletal conditions, neurological conditions, respiratory conditions, and blindness. The increase in life expectancy is the main cause of the growth of the population with increasing health needs [3]. As the size of the aged population has increased in Hong Kong, the disability trends among the ageing population have also triggered public concern [4]. Negative attitudes are recognised as a major barrier to full social inclusion of people with disabilities [5]. Recent studies suggest that students' attitudes towards people with disabilities may be improved by various educational programmes, such as direct contact with them, simulation exercises or by a combination of these strategies [6-8].

Disability simulation offers a novel experience to Hong Kong students. To align with the current local secondary school curriculum with regards to Other Learning Experiences, our PLUS project aims to enrich the Moral and Civic Education and Community Service components, nurturing students' positive values and attitudes towards older adults with physical disabilities. We also aim to strengthen support and collaboration among all school staff and members, establishing a school environment more conducive to the promotion of such positive values. We have therefore designed a PLUS package comprising of a 3-day PLUS Convention, encompassing the following specific innovative elements:

- 1. Underpinned by a conceptual framework: We will establish a positive culture with a continuum of disability simulation education and behavioural supports based on the Schoolwide Positive Behavioural Intervention and Supports (SWPBIS) framework [9].
- 2. Offer Disability Simulation Experience: Students will be given opportunities to utilise unique commercially available kits (for example, Age Simulation Suit, Hemiplegia Simulation Suit) to simulate the changes which take place in the body due to the ageing process and hemiplegia. The simulations will allow students to empathise with how it feels to have a disability, consequently nurturing their empathy, respect, sensitivity and care towards older adults with physical disabilities. We will also invite and encourage all students to share their involvement in this project with their classmates.
- 3. **Provide Experiential Learning Experience:** Students will be provided opportunities to interact with older adults with physical disabilities, both inside and outside of the classroom. In preparation for this, our team members will impart students with a variety of skills and information on how to support and care for older adults with physical disabilities beforehand. We will then invite older adults with disabilities from the community or nursing homes to a Service-learning Seminar to share their experiences. We will also arrange Community Contact Sessions, giving students opportunities to directly meet and socialise with older adults with disabilities.

4. Supplement with a comprehensive e-Learning resource package: An e-learning platform in the form of a website will be constructed to follow the progress of the project and offer students a one-stop location to access information and learning materials. Information learnt throughout the PLUS Convention will be uploaded onto the website. Videos will also be taken of the different activities and uploaded for students' reference and the reference of other schools who may wish to implement this project.

References

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E. Conceptual Framework

Promoting the harmonious coexistence of various populations, including respecting the differences in older adults with physical disabilities, is essential for developing an inclusive society. People with disabilities are an important part of the society. Their diversity and complexity require greater social inclusion to help them integrate into society, particularly with the physical and psychological barriers they face requiring more social support and tolerance. Social inclusion is a prerequisite for integrating people with disabilities into society [10].

Attitudes towards people with disabilities are major determinants of social inclusion as negative attitudes can detrimentally affect many aspects of their life. In our society, older adults with physical disabilities face much discrimination and prejudice from people, including children and adolescents [11]. While Hong Kong is regarded as a convenient place to live in and accessibility for people with physical disabilities has been improving, people with disabilities constantly battle insensitivity, bigotry and intolerance from others, with people refusing to adapt to their situations and help them utilise the facilities available. This leads to many difficulties for people with disabilities in carrying out even normal daily activities, such as taking public transport and visiting public spaces like parks [12]. Thus, changing adolescents' negative attitudes towards older adults with disabilities by improving their understanding of them and fostering positive values and attitudes will likely lead to greater social inclusion.

Simulation is a method of addressing this problem. Simulations are instructional scenarios where the learner is placed in a 'world' defined by the teacher [13]. Simulations based on disability experiences involve 'experiencing' a physical impairment for a limited amount of time, learning what it may be like to have a disability. Such disability awareness education can effectively stimulate and sustain learners' interest and liven up the classroom environment. As a result, simulation-based teaching methods followed by a discussion exploring what has been learnt can be utilised to achieve desired curriculum objectives associated with increasing people's awareness of disabilities in a school setting [14].

This PLUS project is based on the theories of the Schoolwide Positive Behavioural Intervention and Supports (SWPBIS) multitiered framework [15]. SWPBIS is a universal behavioural theory that is used by many schools to establish a positive social culture with a prevention-oriented approach that supports the development of appropriate behaviours in all students. The core features of the SWPBIS theory are as follows:

1. Select behavioural expectations;

- 2. Develop systems to support implementation and sustainability and establish school-wide or universal systems of support;
- 3. Implement evidence-based practices to increase a positive social climate;
- 4. Monitor progress and make effective data-based decisions based on the school context.

Based on the SWPBIS theory, we have developed our PLUS Convention as follows:

- 1. The primary tier involves the identification of behavioural expectations (e.g. positive attitudes, respectfulness, responsibility, and care for others).
- 2. Once behavioural expectations are identified, the PLUS team, a team composed of members of the project team and the school community (e.g. teachers, students), is established.
- 3. The third tier consists of targeted PLUS activities offered to all students via the 3-day PLUS Convention, targeting the behavioural expectations.
- 4. Finally, the last tier comprises the monitoring of the PLUS project progress by team members and effective data-based decisions and evaluations based on the reflections of target students.

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F. Implementation Plan with Timeline

The project will consists of five phases over 24 months.

Period (MM/YYYY)	Key project activities		
Year One - Phase 1 [~ 8 months]			
01/2022 - 08/2022	Planning and resources preparation		
	- Develop the multimodal resource package		
	- Develop the PLUS Convention protocol and training package for student helpers		
	and volunteer older adults with physical disabilities		
	 Apply for ethics approval for conducting the evaluation study Recruit a full-time research assistant 		
	- Recruit and train student helpers and volunteers		
	- Liaise with collaborating schools and organisation for scheduling and collecting		
	suggestions		
	- Conduct a pilot study		
Phase 2 (Sc	hools 1 & 2) [~ 4 months]		
09/2022	- Train facilitators (teachers)		
	- Invite students to participate and conduct baseline assessment		
09/2022-11/2022	- Deliver the 3-day PLUS Convention		
12/2022	- Conduct follow-up assessment		
Year Two - Phase 3 (So	Year Two - Phase 3 (Schools 3 & 4) [~ 4 months]		
01/2023	- Train facilitators (teachers)		
	- Invite students to participate and conduct baseline assessment		
01/2023 - 03/2023	- Deliver the 3-day PLUS Convention		
04/2023	- Conduct follow-up assessment		
Phase 4 (Schools 5 & 6) [~ 4 months]			

05/2023	- Train facilitators (teachers)	
	- Invite students to participate and conduct baseline assessment	
06/2023 - 08/2023	- Deliver the 3-day PLUS Convention	
08/2023	- Conduct follow-up assessment	
Phase 5 [~ 4 months]	
09/2023 - 12/2023	- Conduct data analysis	
	- Deliver a sharing workshop for educators from all participating schools	
	- Prepare reports and disseminate results	

Details of the key project activities:

resources.

Throughout the project, the applicant shall be responsible for the safety of the participants and take safety measures. The Guidelines on Outdoor Activities and other related safety guidelines shall be observed.

Kev activities Responsible **Expected outcomes &** Content & Duration personnel **Objectives targeted** Facilitator Facilitators include all school-based teachers A project **Expected outcomes:** training participating in the PLUS project. assistant with Facilitators understand the goals All facilitators will attend a 2.5-hour education a Bachelor's of the project and familiarise 1 session session presented by members of the research degree themselves with strategies for (for 2.5 hours) orienting and supporting A part-time team. students during the PLUS The purpose of this session is to introduce the registered goals of the PLUS project, the main interventions nurse who is Convention. This will also involved, define their roles in the project and benefit teachers, further а teach them strategies for orienting and supporting developing their professional professional competence and helping ensure the students. with an Discussions will also be held with the schoolthat they are capable of undergraduat based teachers to introduce to them strategies to e degree in continuing PLUS activities after enable them to adapt to and connect the project Nursing and the completion of this project. activities with their current school-based experienced curriculum. in teaching **Objectives targeted:** School and working teachers will be able to receive with older training in providing skills and adults with knowledge on the social physical inclusion of older adults with disabilities. physical disabilities to students in order to independently lead relevant activities in the future. Project **PLUS** The first day of the PLUS Convention will aim to **Expected outcomes:** Convention provide students with an extensive introduction to assistants. (1) Inclusivity Education Day 1: PLUS the needs and situations of older adults with facilitators Workshop Introduction physical disabilities, including their social and a This will equip students with the Day inclusion in Hong Kong. The day will be divided registered necessary introductory skills and knowledge before undergoing into three sections: nurse will be disability simulation education, (1) Morning: Inclusivity Education Workshop Inclusivity present to Education Facilitators will give students an overview of the guide and preparing them to fully grasp the whole Convention and provide them with basic Workshop lead the benefits of the simulations. It knowledge that would facilitate their learning will also prepare them to 3 hours different through the Convention. Details of the content respectfully engage with people sessions. with disabilities. include: Servicelearning (a) Purpose of the PLUS project; Older Seminar (b) Background information about individuals volunteers (2) Service-learning Seminar with physical disabilities, including the with physical Students will be able to 2 hours challenges faced and the importance of disabilities understand the impact of accepting and respecting all individuals; will also be disability on older adults by Interview (c) Rationale of disability simulation education; speaking to people with first-**Preparation** invited to hand experiences with 2 hours (d) Orienting students to their new roles; share in the (e) Role-playing strategies with coaching and Servicedisabilities. Through this feedback: learning session, students will be able to Seminar. further understand the (f) Goal-setting and reflection strategies; (g) The importance of respectful language; experiences of older people with (h) Discussions on when and how to seek disabilities and gauge the impact of their own actions, no matter assistance: (i) Inviting questions from students. unintended, on the self-(2) Afternoon: Service-learning Seminar confidence and feelings of social Older volunteers with physical disabilities from acceptance and inclusion of

the community or nursing homes will be invited to

Year One to Year Two - Phases 2-4:

people with disabilities.

		[[
	share their experiences. Participating students will		
	be asked to sit in a circle along with the volunteers		(3) Interview Preparation
	to more openly facilitate discussions. The seminar		Through this time, it is expected
	will cover:		that students will be well-
	(a) Life of older adults with physical disabilities		prepared for the Community
	in Hong Kong;		Contact Session requiring them
	(b) Positive behaviour supports;		to interview an older adult with
	(c) Eligibility categories of disability-specific		physical disabilities the next
	information, such as musculoskeletal		day. They will also be able to
	disorders, neurological disorders and visual		better understand what will be
	impairment.		expected of them and think
	(3) Late afternoon: Interview Preparation		about applying the strategies
	Participating students will be introduced to the		discussed in the Inclusivity
	interview activity as part of one Community		Education Workshop in the
	Contact Session to be conducted on Day 2. They will then be provided with time to discuss with		morning during the interview.
	each other and prepare questions to ask the older		Objectives targeted: Through
	volunteer with disability. More information on		this day, we aim to provide
	this is provided in the section below on Day 2 .		students sufficient basic
			knowledge and understanding of
			older adults with physical
			disabilities and help them take
			the first steps towards enhancing
			their attitudes, such as empathy,
			sensitivity and respect for them.
PLUS	The second day of the PLUS Convention will aim	Project	Expected outcomes:
Convention –	to offer various activities to boost and reinforce	assistant,	(1) Disability Simulation
Day 2:	sensitivity and empathy in students towards older	facilitators	Workshop
Sensitivity	adults with physical disabilities. The day will be	and a	Students will be allowed to
Education Day	divided into three sections:	registered	personally experience age and
	(1) Morning: Disability Simulation Workshop	nurse will be	disability-related physical
Disability	Students will be divided into groups to utilise	present to	changes with the simulation
Simulation	unique, commercially available kits to simulate	guide and	suits, increasing their
Workshop	the changes which take place in the body in bones,	lead the	understanding, empathy and
3 hours	joints, sight, and hearing due to the ageing process	different	comfort level towards older
	and the symptoms of hemiplegia, such as paralysis	sessions.	adults with physical disabilities.
Community	or impairment of one side of the body. On	011	Their understanding of the
Contact	wearing the ageing and hemiplegia simulation	Older	challenges faced by them and
Session –	suits, they will be asked to role play numerous	volunteers	sensitivity to their particular needs would also be enhanced
Interview	routine daily tasks to experience the effect of the	with physical disabilities	
with Older Adult with	suits on their mobility, hearing and vision. They will record their ability to complete the tasks, the	will be	by to an extent, realistically learning the inconvenience of
	challenges they faced and their feelings on a	involved in	disabilities, which are only
Physical Disability	worksheet after each task. Tasks will include:	the	understandable through
3 hours	(a) Walk across the room;	Community	experience. We expect that this
5 110415	(a) wark across the room,(b) Go up and down stairs without help;	Contact	type of education would help
Discussion	(c) Balance on one foot;	Session.	students consolidate the
Session	(d) Stand up from a seated position;	50551011.	knowledge they have learnt
1.5 hours	(e) Sit down on a low chair;		through the Inclusivity
1.0 110415	(f) Pick up a toothbrush and pretend to brush		Education Workshop and
	your teeth;		Service-learning seminar on Day
	(g) Button and unbutton a jacket;		1, further positively affecting
	(b) Carry a heavy shopping bag from one side of		their initial attitudes towards
	the room to another;		people with disabilities.
			people with disaonnues.

(j) Open a bottle of water and drink from it;	(2) Community Contact Session – Interview with a
(k) Take out money from a wallet;(l) Read a news article and circle all the word	Older Adult with Physica
	Disability
"the" in it;	By interacting directly wit
(m) Use a phone to call a groupmate who is far	older adults with physical
away in the room;	disabilities and hearing the
(n) Listen to a short story from a groupmate and	stories and experiences di
explain what you have heard;	from them, students would
(o) Tie shoelaces;	enabled to learn how to be
(p) Write your name and draw your favourite	communicate with and sur
animal on a piece of paper;	them. Hence, their respect
(q) Use the toilet;	compassion and understan
(r) Eat a meal, simulated using a pack of chips.	towards them and willingr
At the end of the simulation session, all students	make adaptations to facilit
will be given a questionnaire to evaluate their	their integration and social
disability simulation experience.	inclusion would be increased
(2) Afternoon: Community Contact Session –	
Interview with an Older Adult with Physical	(3) Discussion Session
Disability	A discussion session is
The Community Contact Sessions will focus on	necessary for questions an
enhancing interaction and socialisation between	summarise students' learni
secondary students and older adults with physical	from the day's activities in
disabilities. They will comprise of two activities,	clear and concise manner.
with the first being an interview with an older	speaking to facilitators, the
adult with a physical disability.	registered nurse and other
Students will work in pairs and be assigned to	students about their feeling
interview an older adult with a physical disability	from the experiences, stud
from the community or a nursing home. They will	will gain clarity and more
be given the afternoon to visit a nursing home or	extract lessons from the
the living areas of the volunteers with physical	activities to apply to their
disabilities and will have 60 minutes to interact	lives even after the Conver
with the volunteers, speaking to them in their	
normal living environments about their lives,	Objectives targeted: Afte
challenges, experiences and how they achieve	gaining basic knowledge a
their goals. During this time, they will be	understanding of the exper
encouraged to get to know the volunteers	and needs of older adults v
personally and ask questions, some of which may	physical disabilities on Da
be considered inappropriate in other settings.	Day 2 would focus on
(3) Late afternoon: Discussion Session	enhancing positive attitude
At the end of the day, a discussion session will be	including understanding,
organised for students to share and discuss their	sensitivity, empathy and re
learning from the day's activities.	towards the needs of older
Discussion questions with regards to the	with physical disabilities
Disability Simulation Workshop will include:	through more hands-on, re
1. How did you feel about the disability?	experiences. The objective
2. What are the main challenges an older adult	assessing students' satisfa
with this disability must face every day?	with the disability simulat
3. How can you support someone with this	activities will also be fulfi
disability?	via the completion of a
Discussion questions with regards to the	questionnaire. Besides, thi
Community Contact Session Interview include:	would successfully start to
	students to view and treat

	1. What new things did you learn from the interview?		adults with physical disabilities the same as other people,
	 What preconceptions did you have about interacting with older adults with disabilities 		reducing feelings of discrimination or discomfort
	before the interview? Did they change? If so, how?		towards them and normalising interaction with them.
	3. How can you apply your new learnings to your daily life?		
PLUS	The last day of the PLUS Convention will focus	Project	Expected outcomes:
Convention -	on boosting socialisation between older adults	assistants,	(1) Community Contact
Day 3:	with physical disabilities and secondary students	facilitators	Session – Outdoor Experience
Socialisation	and consolidating the knowledge and skills gained	and a	This would normalise
& Consolidation	from the Convention. The day will be divided as follows:	registered nurse will be	interactions between secondary students and older adults with
Consolidation	Tonows.	present to	physical disabilities and help
Community	(1) Morning-afternoon: Community Contact	guide and	them find commonalities within
Contact	Session – Outdoor Experience	lead the	their differences. Consequently,
Session –	The second Community Contact Session activity	different	bias or prejudice towards older
Outdoor	will be an outdoor activity allowing secondary	sessions.	adults with physical disabilities
Experience	students to go out and socialise with older adults		will be reduced among students,
5 hours	with physical disabilities in a relaxed setting. This	Older	further enhancing mutual respect
T ! 1	will consist of a short, easy hike on the	volunteers	and understanding and lowering
Final	. In this way, we expect students	with physical	any discomfort between older
Discussions and	to learn to see people with disabilities as everyone else, treating them with respect and compassion	disabilities will be	adults and students.
Evaluation	but not very differently from others.	involved in	(2) Final Discussions and
3 hours	but not very differently from others.	the	Evaluation
	(2) Afternoon-late afternoon: Final Discussions	Community	Students will be able to
	and Evaluation	Contact	reinforce their learnings from
	In this final session of the PLUS Convention,	Session.	not only the Outdoor Experience
	students will first reflect and discuss their recent		but the whole of the PLUS
	Outdoor Experience with older adults with		Convention. As a result, it can
	physical disabilities. Discussion questions will		be ensured that we are able to
	include:		pass on the desired knowledge
	1. Did you learn anything new in the recent Outdoor Experience?		and skills to the students through this project.
	2. Has your perception of older adults with		
	physical disabilities changed in any way?3. Have you learnt any strategies/ways to interact		Students will also be able to start working on their
	or socialise with older adults with physical		presentations for the Student
	disabilities?		Sharing Session to be held at
			their schools. Facilitators would
	Next, final discussions on the PLUS Convention		be able to guide them in order to
	will be held. Students will be informed of the		ensure that students are clearly
	Student Sharing Session to be held in their schools		able to relay their experiences to
	to share their experience with their fellow		their schoolmates to encourage
	schoolmates. They will then be given time to		future participation in this
	work on a 10-15-minute presentation, consisting		project.
	of PowerPoint slides or a short video to share their		Logily, we will be able to
	experience in their Disability Simulation Workshop groups. The following questions will		Lastly, we will be able to receive evaluations from
	be provided for discussion and to include in		students on this project to assess
	students' school presentations:		whether it the activities have
	statents sensor presentations.		been helpful in promoting
			been neipiur in promoting

 What is the definition of the word, "disability"? 	positive attitudes and values towards older adults with	
2. What are some examples of physical	physical disabilities in students.	
disabilities?	This would be useful in further	
3. What are some ways in which you might have	improving the project activities	
· · ·	to maximise effectiveness and	
been unintentionally insensitive to older		
4. people with disabilities?	impact.	
5. What new information and skills did you learn	Objections to restards On Deep 2	,
from the PLUS project?	Objectives targeted: On Day 3),
6. What are some ways to apply the lessons from	we will further target the	
the PLUS Convention and be more sensitive to	objective of promoting	
others in the future?	socialisation and interaction	1
	between secondary students and	
Finally, at the end of this session, students will be	older adults with disabilities via	
presented with two questionnaires to assess their	the Community Contact Session	
attitudes towards older adults with physical	Through the discussion session	
disabilities as a result of the PLUS Convention.	afterwards, we will aim to	
	ensure that all of our proposed	
Meetings will be held with the school-based	objectives are met through this	
teachers of each participating school to discuss	convention and act as a final	
plans for continuing adopting the project activities	push to help students realise the	3
and educational resources in connecting and	lessons they have gained from	
enhancing their current school-based curriculum;	the different PLUS activities. In	1
and plans for continual support by the research	this way, we expect that by the	
team to the participating schools after the project.	end of the convention, students'	,
	knowledge and positive attitude	es
	will be successfully boosted.	
	Lastly, by passing	
	questionnaires to students, the	
	objective of assessing the effect	t
	of the PLUS activities on	
	students will also be fulfilled.	

G. Teachers' and Principals' Involvement in the Project

	Involvement and role	
Principal	Approve the details of the project.	
Vice-principal	Allocate the human resources.	
Assistant principal	Supervise its implementation.	
Teachers	Participate in the facilitator training sessions and serve as facilitators in the PLUS activities	

H. Budget

Total Grant Sought: HK\$970,400 (round up to the nearest hundred dollar)

The applicant will ensure that all procurement of goods and services is conducted on an open, fair and competitive basis with measures taken to avoid conflict of interests in the procurement process.

Phase	Budget Item	Amount (HK\$)	Justifications
	One full-	HK\$365,400	The project assistant should have a university degree in related disciplines
YEAR 1 &	time project		and is compensated based on the staff salary guidelines outlined by the
2	assistant,		Human Resources Office of The Chinese University of Hong Kong.
Phase 1-5:	for a		He/she will play a significant supportive role in the implementation of the
Planning	continuous		PLUS project with the following specific job specifications:
and	employmen		- designing and helping to run the project;
Resources	t of 24		- preparing materials for the PLUS project;
Preparation	months		- photo-taking and recording of the activities;
_			- recruit and train student helpers;

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			- liaise with the schools and organisation to arrange project activities;
			- conduct data evaluation.
			Estimated total budget for 24 months, inclusive of monthly salary, and 5%
			of Mandatory Provident Fund (MPF):
			HK\$14,500 × 24 × 1.05
	Eight student helpers (from	HK\$92,400	Student helpers (SHs) will be compensated based on the standard remuneration rate of the Student Helper Engagement Scheme of the Office of Student Affairs of the university (An hourly rate of HK\$57.75 including 5% MPF). Eight student helpers are required to assist the project
	university) (200 hours per student)		team in various aspects of the PLUS project, including the following, for an estimated total of 200 hours per student helper over the project period:helping develop educational resources (SH 1-3);
			- video production and editing for e.g. demonstration of the simulation kits, PLUS activities, etc (SH 4-6);
			 assisting in delivery of the PLUS activities for each school (SH 1-6) (including facilitating interactive discussions among secondary school students, introducing the use of the educational resources);
			- data collection and sorting throughout and at the end of the project (SH 7 & 8).
			The two student helpers (SH 7 & 8) will help with data collection (two times
			for each school; pre- and post-intervention) and sorting, and therefore will
			not be involved in development and delivery of the intervention to remain
			unbiased during data collection.
			Estimated total budget for 200 hours at an hourly rate of HK $$57.75$ /hour: HK $$57.75 \times 200 \times 8$
	Seven	HK\$35,308	Hemiplegia Simulator Suits are required for the disability simulation
YEAR 1	Hemiplegia		activities in the Disability Simulation workshop on Day 2 of the PLUS
Phase 1:	Simulation		Convention. They simulate an incomplete unilateral paralysis caused e.g.
Planning	Suits		by a stroke and are one size fits all.
and	(1112.05.044		Seven suits are estimated to be needed to sufficiently accommodate
Resources Preparation	(HK\$5,044 × 7)		students divided into groups and ensure that they are able to benefit from a complete learning experience.
Fleparation	Seven	HK\$135,779	Ageing Simulation Suits are required for the disability simulation
	Ageing	пкэтээ,//9	activities in the Disability Simulation workshop on Day 2 of the PLUS
	Simulation		Convention. The Ageing Suit consists of a set of separate components,
	Suits		namely special goggles, hearing protection, cervical collar, weight vest,
	Suits		elbow wraps, wrist weight cuffs, special gloves, knee wraps and ankle
	(HK\$19,397		weight cuffs. It is one size fits all.
	× 7)		Seven suits are estimated to be sufficient to accommodate the number of
	.,		students.
	One	HK\$70,000	A website and animations developer would be employed on a freelance
	website and		basis and compensated based on an average cost estimated for a simple
	animations		website and animations in Hong Kong. The job specification of the
	developer		developer would include:
	Î Î		- developing an e-learning platform in the form of a website to track
			students' learning and record project progress (HK\$30,000);
			- developing animated videos as part of the educational resources
			assisting students' learning e.g. demonstrating use of simulation suits,
			needs of older people with disabilities (HK\$40,000).
	Web	HK\$10,000	An e-learning platform in the form of a website needs to be hosted for two
	hosting		years over the course of the project.
	service		Estimated web hosting fee:
			HK\$5,000 × 2

	Printing, photocopyi ng and stationary	HK\$5,001	Include fees for educational resources, such as booklets, worksheets, assignments, etc. and stationaries for students, such as pens, sheets of paper, etc required in the PLUS Convention.
	Other resources for PLUS activities	HK\$5,000	Various materials, namely toothbrushes, button-up jackets, heavy shopping bags filled with books, playing cards and packets of chips, are required for students to perform the disability simulation tasks while wearing the simulation suits in the Disability Simulation Workshop on Day 2 of the PLUS Convention. These tasks are necessary for students to better empathise with the needs of older adults with disabilities by allowing them to feel what it may be like in their shoes.
YEAR 1 Phase 2: Schools 1	One part- time registered nurse (RN) (50 hours)	HK\$12,622	 The part-time RN must possess at least 2 years of post-registration clinical experience and will be compensated matching the salary scale of a RN at the Hospital Authority. His/her roles in the PLUS project will be as follows: to facilitate the activities at the PLUS Convention; to provide students with more professional knowledge and valuable information about how to care for and respect older adults with physical disabilities from first-hand experience. Estimated total part-time salary utilising the formula, Hourly rate = Monthly salary/39/4.33: HK\$42,627/39/4.33 × 50
& 2	Travel expenses (student travel expenses)	HK\$25,000	Students: Students will need to travel to outside venues for the Community Contact Sessions during the PLUS Convention. They will travel to the places of residence of older adults with disabilities to interview them and coaches will need to be rented to take students to the hiking trail and barbecue site for the Outdoor Experience. These experiences are necessary to facilitate the normalisation of interaction between secondary students and older adults with disabilities.
YEAR 2 Phase 3: Schools 3 & 4	Repeated expenses as Phase 2	HK\$37,622	Same expenses for Schools 3 & 4 students as Schools 1 & 2.
YEAR 2 Phase 4: Schools 5 & 6	Repeated expenses as Phases 2 and 3	HK\$37,622	Same expenses for Schools 5 & 6 students as Schools 1 and 2.
YEAR 2 Phase 5	Audit fee	HK\$5,000	An amount of HK\$5,000 is required for the funding as audit fee.
	University overhead charge	HK\$125,513	The project team is affiliated with The Chinese University of Hong Kong, which is a tertiary institute funded by the University Grants Committee. Overhead charges are incurred by the institute and estimated to be 15% of the total budget exclusive of contingency.
	General contingency fees	HK\$8,133	These fees will act as a safety net for any unexpected increases in costs in any of the phases due to any unforeseen situations and circumstances or differences from our estimations of costs e.g. due to increases in coach booking fees, repair costs of simulation suits as a result of accidents, etc. The contingency fees are estimated as outlined in the application guidelines, based on (all expenses, except staff costs) × 3%

	Total Grant Sought	HK\$970,400					
<u>I. Expected Project Outcomes</u> Expected tangible deliverables:							
Deliverables	tangible dell	Contents/Strategies					
Written and digital learning and teaching educational resources		Students/strategies Students will be able to utilise the resources to better track their learning progress. The resources would also assist teachers in ensuring that the intended knowledge and skills are passed onto students effectively. Additionally, these resources will be able to provide tried and tested references to other schools and institutions, allowing them to plan PLUS					
	Website	activities on their own campuses. A website will be developed to provide a one-stop e-learning platform for students, teachers and interested educators from other institutions to access all materials involved the PLUS project. Materials that will be uploaded will include learning materials and information disseminated via PLUS activities and videos recorded of the various session					
E- deliverables	Learning materials and informati on	All content from written and digital learning materials, worksheets and information shared in the PLUS activities will be uploaded as pages on the project website in an organised way. This would give easy access to the flow of the project, and the learned concepts for students and teachers, allowing the project aims to be met more effectively and efficiently. It would also provide a record of the content delivered, allowing PLUS activities to be planned by the school or other institutions in the future more easily.					
	Video lessons	All sessions of the PLUS project will be video recorded as a record of how they were conducted and for the reference of students who may wish to go back to re-learn them. Besides, by allowing direct observation of the lessons through the videos, it can be ensured that any educators who plan any future PLUS activities would be able to do so at a similar standard. Finally, the video lessons would also be able to serve the purpose of re- evaluation, giving us a chance to view the lessons more objectively at a later period and evaluate our strengths and weaknesses to improve future PLUS activities.					

Expected intangible outcomes:

Positive values and attitudes, such as respect and care for others, responsibility, sensitivity, integrity and empathy will be nurtured in students. A school environment conducive to the promotion of positive values would also be fostered through strengthening support and collaboration among stakeholders, including teachers and school staff members. In this way, a positive value atmosphere will be built at school and in the long-term in the society by facilitating social inclusion of older adults with disabilities.

J. Project Evaluation

(1) Questionnaire surveys

All secondary school students will be invited to complete questionnaire surveys, before and immediately after the PLUS Convention, to assess their changes in attitudes towards older adults with physical disabilities and their own satisfaction with life. Students will also be invited to complete the questionnaire about their satisfaction with the disability simulation experience immediately after the Disability Simulation Workshop.

i. Students' Attitudes toward People with a Disability Scale

The 47-item *Students' Attitudes toward People with a Disability Scale* will be used to assess the effectiveness of the PLUS project in enhancing students' attitudes towards older adults with physical disabilities. It was developed locally in the Baseline Survey of Students' Attitudes towards People with a Disability, a study conducted by the Equal Opportunities Commission in Hong Kong [16]. The scale was constructed by drawing references from three of the most widely used attitude scales: the Scale of Attitudes toward Disabled Persons [17], of which the Chinese version has been validated in the local context [18]; the Acceptance Scale [19]; and the Student Questionnaire [20]. It was constructed to encompass four attitude sub-scales, namely social acceptance, behavioral misconceptions, pessimism-hopelessness, and optimism-human rights. All sub-scales had Cronbach's Alpha scores ranging from 0.69 to 0.85, which supported their respectable reliability [17-20].

ii. Satisfaction With Life Scale (SWLS)

The *Satisfaction With Life Scale (SWLS)* is one of the most widely used tools to measure the concept of life satisfaction [21]. Its psychometric properties have been extensively examined in different nations. It has also been

translated and validated in numerous languages, including both Simplified and Traditional Chinese [22]. The SWLS consists of five items providing an overall judgment of life: (1) In most ways my life is close to my ideal; (2) The conditions of my life are excellent; (3) I am satisfied with my life; (4) So far I have gotten the important things I want in life; and (5) If I could live my life over, I would change almost nothing. The items are rated on a 7-point Likert scale (1 = strongly disagree – 7 = strongly agree), with a total score ranging from 5 to 35 points. A higher score indicates a higher satisfaction with life. The SWLS has a Cronbach's Alpha score of 0.87, supporting its internal consistency and reliability [21].

iii. Satisfaction with Disability Simulation Experience Scale (SDSES)

Students will also be asked to complete the Satisfaction with Disability Simulation Experience Scale (SDSES) immediately after the Disability Simulation Workshop. The SDSES is a new 18-item scale developed from the Satisfaction with Simulation Experience Scale (SSES). In this survey, students will rate their extent of agreement with the simulations using a 5-point Likert scale (1=strongly disagree - 5=strongly agree) to indicate their satisfaction with them. A higher score will indicate higher satisfaction with the simulation experience. The survey will have one open-ended question asking students to provide additional comments about their simulation experience. The scale's internal consistency reliability as a whole Cronbach's coefficient values ranges from 0.70 to 0.88 [23].

(2) Semi-structured interviews

Semi-structured interviews will be conducted with participating students, facilitators, teachers and volunteer older adults with physical disabilities to gain more in-depth feedback. Interviews will be conducted by the project team with students in focus groups, with a convenience sub-sample of participating students. Three groups of students of about 10 students each will be invited from each school. They will be selected from the high, medium and low range of scores of academic performances in the previous term. Individual interviews will be conducted with facilitators, teachers and older adults with physical disabilities.

The interviews will be conducted in a private room in the school, and each interview will take about one hour. Interviewees will be invited to share their experiences of participating in the PLUS activities, the components that they enjoyed, the most and least helpful aspects, things learned, or benefits gained, and areas for improvement of the project. Facilitators, teachers and older adults with physical disabilities will also be asked to share their experiences interacting with the students.

(3) Process evaluation

The PLUS activities will be consistently evaluated throughout the project using a variety of measures. Students' level of attendance in each of the PLUS activities will be noted. An audit of the adherence of PLUS activities to the project protocol will also be conducted and a record of the context of the physical environment will be made. Additionally, the PLUS activities will be observed by teachers and project team members to further assess the adherence of the activities to the project protocol, students' level of participation in the activities, interactions between students and facilitators and assignments completed by students.

Data analysis

Data will be presented as frequency and percentage for categorical variables and as mean and standard deviation for continuous variables. Paired t-tests will be performed to compare the means of the outcomes between the baseline and post-test. All analyses will be performed using SPSS Statistics

, and all statistical tests will be two-sided. A p value of below 0.5 will be considered statistically significant. Interview data will be transcribed verbatim from the audio recordings by an independent research assistant and analysed thematically. Sub-themes and themes that meet the objectives of the project will then be developed. References

- [16] Pearson, V., Wong, D. K. P., & Hui, H. S. K. (2003). A baseline survey of students' attitudes towards people disability. with а Hong Kong: Equal *Opportunities* Commission. Retrieved from https://www.eoc.org.hk/EOC/GraphicsFolder/InforCenter/Research/content.aspx?ItemID=6625
- [17] Antonak, R. F., & Livneh, H. (1988). The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales. Springfield, Ill.: C.C. Thomas.
- [18] Chan, F., Hua, M. S., Ju, J. J., & Chow S. L. (1984). Factorial structure of the Chinese Scale of attitudes towards disabled persons: A cross-cultural validation. International Journal of Rehabilitation Research, 7(3), 317-319. https://doi.org/10.1097/00004356-198409000-00006
- [19] Voeltz, L. M. (1980). Children's attitudes toward handicapped peers. American Journal of Mental Deficiency, 84(5), 455-464.

- [20] Shapiro, N. S., & Levine, J. J. (1999). Creating learning communities: A practical guide to winning support, organizing for change, and implementing programs. San Francisco: Jossey-Bass.
- [21] Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The Satisfaction With Life Scale. Journal of Personality Assessment, 49(1), 71–75.
- [22] Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment*, 5, 164–72.
- [23] Levett-Jones, T., McCoy, M., Lapkin, S., Noble, D., Hoffman, K., Dempsey, J., ... & Roche, J. (2011). The development and psychometric testing of the Satisfaction with Simulation Experience Scale. *Nurse Education Today*, 31(7), 705-710. doi: 10.1016/j.nedt.2011.01.004

K. Sustainability of Project Outcomes

After the completion of the project, the participating school will continue to implement and optimise the PLUS curriculum. It is expected that participation in our workshops would enable the teachers to gain more experience, making them capable of independently leading future PLUS education activities. We will also share the e-deliverables resulted from the project, specifically the online learning website we have developed, with schools. The simple maintenance of the website will continue to be easily managed by our School. This would allow the impact of the project to be further sustained as different schools would be able to take reference from the initial project to continue or extend the PLUS activities. It is therefore expected that the initial project would be able to provide the support necessary for the long-term enhancement and development of the PLUS curriculum within the school, thereby cultivating an overall culture of positive value in the school.

In addition, the equipment utilised in the project will continue to be used once the PLUS curriculum is introduced in the regular curriculum. On the successful completion of this project, the instruments would even be given to the schools to continue using in PLUS or other activities. Moreover, on completion of this project, we will conduct an evaluation meeting to further discuss how to develop the school-based PLUS project and design teaching activities of different themes.

Finally, it is expected that this project would have lasting positive impacts on the volunteers with physical disabilities, having provided them a chance to utilise their experiences and skills to enhance others' skills and knowledge. Through this, older adults with disabilities would gain increased self-confidence and trust in themselves, enhancing their self-esteem, reducing any negative feelings towards themselves and assisting their sense of integration and inclusion into society.

L. Dissemination/Promotion of Project Outcomes

We plan to organise a sharing workshop for educators from all schools by the end of the project period to share our experiences. The sharing workshop will include students' learning outcomes, project content, project experience of teachers and tips for implementing PLUS project activities. Moreover, we will share the developed learning materials through an online e-platform, including the written and digital educational resources and the elearning website with video clips recorded during the project, to help other teaching units and campuses put the PLUS project into practice. Besides, the equipment used in this project would be provided to secondary schools for their own long-term use in PLUS activities or to adapt for other school activities.

- On a larger scale, we will also present and disseminate our work more widely via the following avenues: (a) professional seminars of the , where school
- principals, teachers and academics meet to discuss innovations in education;
- (b) international and local education colloquiums and forums;
- (c) oral and poster presentations in international medical/healthcare education, stroke/neurology, musculoskeletal and advanced nursing practice conferences/seminars
- (d) oral or poster presentations in local conferences, including the
- (e) publishing the study protocol and results in peer-reviewed scientific journals in the field of stroke care;
- (f) presentations and discussions in meetings with local stakeholders, including stroke team of stroke support groups and community health centres;
- (g) health-related or self-management workshops for stroke survivors in the community.

Supporting documents

1) Details of the project team



Assets Usage Plan

Category	Item /	No.	Total Cost	Proposed Plan for Deployment
(in alphabetical order)	Description	of Units		(Note)
Others	Hemiplegia Simulation Suits	7	HK\$35,308	Will be deployed to each participating secondary school respectively for conducting the PLUS activities after the project. One set will be deployed to the Nethersole School of Nursing at The Chinese University of Hong Kong for lending to other secondary schools who will conduct the PLUS activities after the project, and also for educating nursing students about the needs of people with disabilities.
	Ageing Simulation Suits	7	HK\$135,779	Will be deployed to each participating secondary school respectively for conducting the PLUS activities after the project. One set will be deployed to the Nethersole School of Nursing at The Chinese University of Hong Kong for lending to other secondary schools who will conduct the PLUS activities after the project, and also for educating nursing students about the needs of older adults.

Note: for use by school / organization / in other projects (please provide details of the department / centre to which the asset will be deployed and the planned usage of the asset in activities upon project completion).

Report Submission Schedule

Project Manageme	nt	Financial Management		
(Should be submitted via the "Ele Management System" (E		(Hard copy together with supporting documents should be submitted to the QEF Secretariat by mail or in person)		
Type of report and reporting period	Report due on	Type of report and reporting period	Report due on	
Progress Report		Interim Financial Report		
01/01/2022 - 30/06/2022	31/07/2022	01/01/2022 - 30/06/2022	31/07/2022	
Progress Report		Interim Financial Report		
01/07/2022 - 31/12/2022	31/01/2023	01/07/2022 - 31/12/2022	31/01/2023	
Progress Report		Interim Financial Report		
01/01/2023 - 30/06/2023	31/07/2023	01/01/2023 - 30/06/2023	31/07/2023	
Final Report		Final Financial Report		
01/01/2022 - 31/12/2023	31/03/2024	01/07/2023 - 31/12/2023	31/03/2024	

The organisation commits to submit proper reports in strict accordance with the following schedule:

Remarks

The project team acknowledged the five conditions as listed in Annex 1 of the approval letter dated 31 May 2021.

- / We will develop all the teaching and learning materials, and conduct training sessions to provide sufficient support for the participating schools to adapt and connect the project activities with their school-based curriculum.
- / We have elaborated the roles and responsibilities of each student helper in the budget.
- We will be responsible for the safety of the participants and take safety measures when conducting project activities. We will observe the Guidelines on Outdoor Activities and other related safety guidelines.
- We will ensure that all procurement of goods and services and appointment of project staff is conducted on an open, fair and competitive basis with measures taken to avoid conflict of interests in the procurement process.
- We will share the developed learning materials through an online e-platform, including the written and digital educational resources and the e-learning website with video clips recorded during the project, to help other teaching units and campuses put the PLUS project into practice. Besides, the equipment used in this project will be provided to secondary schools for their own long-term use in PLUS activities or to adapt for other school activities. We confirm that the copyrights of the deliverables and materials will be vested with the QEF and can be shared with other schools.