



# **SLLO NEWSLETTER**

**MARCH 2022** 

#### Highlights -



Result Announcement: World Youth Artificial Intelligence X Robotic Car Competition



PolyU Shares How Service-Learning Is Being Used to Promote Civic Learning, Global Learning, and Internationalisation in the University Social Responsibility Network (USRN) Webinar Series



Call for Papers: Applied Research in Quality of Life Journal Special issue on Service-Learning in Asia-Pacific Higher Education Institutions: Programme Development, Assessment, and Evaluation

# **Result Announcement:**

# World Youth Artificial Intelligence (A.I.) imes Robotic Car Competition

This project commenced in September 2021 and brought together two PolyU service-learning subjects (COMP2So1 Technology Beyond Borders: Service Learning across Cultural, Ethnic and Community Lines and BME2S04 Reducing the Scientific Divide in Primary and Secondary Students through STEM Projects), 327 PolyU students, over 800 students from nine Hong Kong primary schools and 100 online learners from Vietnam and South Africa. Finally, the project has come to a close with the World Youth Artificial Intelligence X Robotic Car Competition in February 2022.

327

PolyU Students

Hong Kong primary students

Hong Kong primary schools

online learners from Vietnam & South Africa



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# We congratulate the following winners from the different categories for their excellent performance:

#### The Challenge Cup (Team Ranking)

Student teams from each participating unit used their **tailor-made robotic car** to push the unhealthy food items out of a colon-like racetrack within three rounds. Then, they used their **self-developed A.I. object recognition programme** to recognise the food and calculate the risk index for colorectal cancer. The team with the lowest risk index won.



Ranking	Participating Unit	Participants	Risk Index
1	Tuen Mun Government Primary School	李思萱 麥沚洳 譚詩韻 李敬熙 鄺俊曦 李家熹 林燦興 蕭芷彤 趙芯怡	55
2	Tuen Mun Government Primary School	陳政彰 陳子亮 陳俊廷 陳彥同 張杞悠 鍾卓琳	90
3	Tak Sun School	黃澤銘 蔡晉豪 李煒然 黃信穎 岑奕進 劉振浩 陳梓揚 許俊傑 連鎧謙 潘柏均	95
4	Tuen Mun Government Primary School	黃梦綺 高樂澄 林柏穎 李翊甄 梁正朗 梁家昌 李浠瞳 李美鳳 陶子天 陶子潔	105
5	T.W.G.H's Tang Shiu Kin Primary School	雷佳瑤 楊詠喬 胡思源 陳政蒨 陳浩信 吳灝軒	120



#### The Challenge Cup (School Ranking)

The sum of risk indexes generated by the best three teams from each participating unit. The unit with the lowest risk index won.

Ranking	Participating Unit	Risk Indexes of the Best Three Teams	Index Sum
1	Tuen Mun Government Primary School	55, 90, 105	250
2	Tak Sun School	95, 120, 140	355
3	T.W.G.H's Tang Shiu Kin Primary School	120, 120, 155	395
4	PLK Chong Kee Ting Primary School	125, 130, 145	400
5	C.C.C. Heep Woh Primary School	145, 155, 155	455

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# Design Award - Robotic Car

Participants optimised their **robotic cars** in terms of **functionality**, **creativity** and **appearance** for the competition using **recyclable materials**. The Judging Panel selected the best design.

Ranking	Participating Unit	Participants	Product
1	PLK Chong Kee Ting Primary School	黎澄 楊麒騫 楊珮淇 張芷僑 沈卓謙 丁羽晴 彭彦斌	The state of the s
2	Tak Sun School	李瀚鏜 陳駿彥陳知言 陸軒諾黃昊	
3	C.C.C. Heep Woh Primary School	陳悅 朱永恒梁冠博 王彥澤	
4	Shatin Tsung Tsin School	陳婧妍 陳怡妃 葉向晴 黎洛希 林語澄 李兆朗 李汶殷	
5	South Africa Township Children	Hlunawani Malwandla Mabowa Mitchelle Mafu Babalwa Makhubelu Tshiamo Ndabandaba Tlakale	

### Design Award - Coding for A.I. Programme

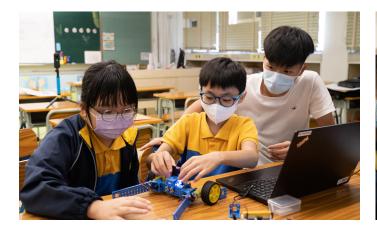
Participants optimised their A.I. programme for food recognition in terms of functionality and creativity for the competition using Scratch and Teachable Machine. Sprites, backdrops, and storyline were added to furnish the programme. The Judging Panel selected the best design.

Ranking	Participating Unit	Participants	Product
1	PLK Fung Ching Memorial Primary School	謝禮謙 吳思頤 楊松淇 譚文皓 葉堦叡	<u>Link</u>
2	PLK Chong Kee Ting Primary School	馮嘉銘 林政 廖嘉欣	<u>Link</u>
3	T.W.G.H's Tang Shiu Kin Primary School	李駿 温詠童 黃俊穎	<u>Link</u>
4	Shatin Tsung Tsin School	陳樂頌 梁弘一 吳天朗 黃雪晴 何旭彤	<u>Link</u>
5	C.C.C. Heep Woh Primary School	譚逸熹 黃浩軒 羅雋皓	<u>Link</u>

### For the complete result, please visit:

https://www.polyu.edu.hk/en/sllo/programmes-and-events-calendar/world-youth-artificial-intelligence-x-robotic-car-competition/

To learn more about the making of the Competition, check out this article











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# PolyU Shares How Service-Learning Is Being Used to Promote Civic Learning, Global Learning, and Internationalisation in the University Social Responsibility Network (USRN) Webinar Series

Established in 2015 by the Hong Kong Polytechnic University (PolyU) to promote greater collaboration between worldwide universities to address global challenges, the University Social Responsibility Network (USRN), which currently consists of 19 member-institutions, brings together thought leaders to exchange ideas on the development of USR in higher education from time to time.

In Spring 2022, a three-week webinar series was organised to spotlight on the theme "Social Responsibility in Teaching and Learning — What Works?". PolyU was honored to bring her experience in service-learning (SL) to the roundtable by hosting two of the online sessions on 21 March and 4 April respectively.



21st MARCH 2022

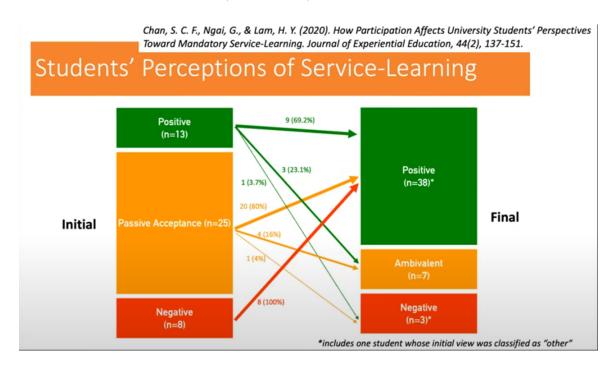
#### Civic Learning through a Service-Learning Requirement: Does It Work?

Moderated by Prof. Daniel Shek, the Associate Vice President (Undergraduate Programme) of PolyU, speakers from PolyU – Dr Grace Ngai, Head of Service-Learning and Leadership Office (SLLO) and Dr Stephen Chan, Consultant and former Head of SLLO – started the Series with the topic "Civic Learning through a Service-Learning Requirement: Does It Work?" on 21 March.

In the one-hour session, participants were led to consider the close relationship between the pedagogy of SL and the cultivation of civic responsibility among the learners. In the PolyU context, the speakers called attention to the impact of mandatory SL, which is relatively less discussed.

Specifically, in the context of having used SL as a compulsory requirement for civic learning in the undergraduate curriculum since 2012, hence graduating almost 5,000 students per year by now, the speakers introduced several in-house scholarly studies that investigate (1) how did the requirement impact students' perception on SL? (2) how long did the civic learning outcomes "stick" after their graduation.

The quantitative research found that students who were not civically inclined would not learn less from SL than those who are civically engaged. Moreover, those who were initially disinterested in SL could also have a positive shift in their perspectives based on their encounters in the SL experience. Together, the studies indicated that making SL a requirement would not necessarily leave a sour taste to students. Instead, mandatory SL could give all students an opportunity to decide for themselves based on true experience, which, if implemented effectively, has the potential of nurturing those who had a negative or passive-acceptance stance to be more civic-minded citizens.



nother study investigated the extent to which the SL requirement contributed to students' civic engagement after their graduation. The data collected from an alumni survey showed that students, even if they were not civically active while on campus, were more likely to stay civically active even one and a half years after graduation if they had gone through the compulsory SL experience. Adding to that, students who self-reported higher growth in civic learning outcomes were more likely to continue their endeavours in civic engagement, even two years post-graduation.

Shuheng Lin; Grace Ngai; Kam Por Kwan; Stephen C.F. Chan. "The Impact of Mandatory Academic Service-Learning on University Graduates' Continual Civic Engagement". Under Review

# Students' continued civic engagement

18 months post-graduation...

	Percentage with Post-Graduation Community Engagement <sup>1</sup>		
Participated in Community Service	3YUG, Class of 2017 (n=1171)	4YUG, Class of 2018 (n=951)	
while at PolyU?	No SL requirement	No SL Subject (n=318)	Took SL Subject (n= 633)
No	45.6%	49.4%	63.4%
Yes	76.6%	75.0%	75.2%

<sup>1</sup>Community Engagement includes donating to charity, engaging in volunteer work, or other works for the betterment of society.

Students who were civically active while at university are more likely to stay civically active after graduation

Students who were not civically active while at university, and took an SL course, are more likely to be civically active after graduation

In conclusion, the speakers wrapped up with a positive attitude towards using mandatory SL to nurture students as civic-minded citizens. They also emphasised that the key to unleash the potential of SL in changing students' perception towards community services and cultivating long-term civic engagement practices lies not in students' initial inclination but the SL experience guided by the teachers in collaboration with the community partners.

The session ended with a robust Q&A interaction where the participants were eager to learn more about the implementation of mandatory SL at PolyU in various aspects. The discussion topics included the strategies to motivate faculty's involvement, the quality control mechanisam that ensures a SL project benefit both the learners and the community partners, as well as the good practices to put forward online SL during the COVID-19 pandemic.

Check out the link to view the session recording: https://youtu.be/DtCajx504Q8

4<sup>th</sup> APRIL 2022

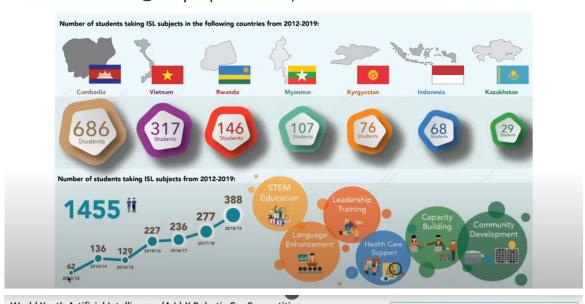
#### Service-Learning as a Vehicle for Global Learning and Internationalisation

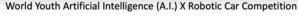
The second sharing on 4 April took a conversational deep-dive into how SL could help university students develop the intercultural competence that are important to navigating in a global setting.

Moderated by Prof. Daniel Shek, Dr Grace Ngai and Dr Stephen Chan continued to share their observation and research generated from running large scale offshore SL programmes over the last decade.

Prior to COVID-19, almost 1000 PolyU students would engage annually in offshore SL programmes to serve communities from mainland China, Cambodia to Rwanda. Although the pandemic has put physical travel into a suspension, PolyU has maintained close and effective communication with global community partners and continues to sustain its offshore SL endeavours online. Their experience in delivering online services related to STEM education, energy engineering, and refugee crisis during the outbreak proved that the change of service medium would not necessarily degrade the service deliverables. With a thoughtful usage of virtual gathering software and tools for collaborative online learning, students and service recipients co-delivered tangible learning outcomes that range from a handmade robotic car facilitating gamified learning, a solar system lighting a rural cottage, to a virtual museum preserving the experience of the displaced.

#### International SL@PolyU (2012-2019)









urthermore, data collected from student feedbacks showed statistically significant growth in intercultural competency – defined by having an open and curious attitude towards new things, the skills to interact with people of different perspectives, and the self-awareness of values and assumptions – among students taking part in offline and online international SL programmes.

That said, the speakers reminded listeners of the importance of providing intentional guidance to students on the definition of global citizenship and intercultural effectiveness prior to the services due to the abstractness of these concepts.

Apart from teachers' guidance, studies from SLLO also indicated that students' perceived "connectedness" with different stakeholders throughout the international service experience affected their learning gains. To elaborate, greater connectedness to the service recipients helps students attain better intellectual, social, civic and interpersonal learning outcomes, as did connectedness to their instructors. Such findings suggest how students participating in international SL programmes could benefit most from a close collaboration between PolyU instructors, local community partners (often connected through local universities), and the service community. It thus makes networking platforms for higher education institutions like USRN indispensable.

In the follow-up Q&A session, participants actively rasied questions related to role of a collaborating university, the cost of implementing online SL, the learning activities that foster connectedness with recipients, as well as the relative importance of internationalisation-related learning outcomes to subject learning outcomes in international SL programmes.

Check out the link to view the session recording: https://youtu.be/6Z57n8tZvog

# Call for Papers





Applied Research in Quality of Life Journal Special issue on Service-Learning in Asia-Pacific Higher Education Institutions: **Programme Development, Assessment, and Evaluation** 



Deadline

May 31, 2022



# Why Service-learning Matters?

Students today are growing up in a much more complex world than before. The world is increasingly intertwined, and issues in one part of the world have repercussions far beyond their region. At the same time, many issues such as global warming are creating challenges that are beyond the capabilities of any single country. For the sake of our students' wellbeing, it is imperative to educate them beyond the traditional methods. This is especially true in the Asia-Pacific context, where the dominant examination-oriented culture focuses on academic excellence (almost) to the detriment of all-rounded development.

Service-learning is a pedagogy that blends rigorous academic learning with meaningful service to the community and critical reflection to link the experience with the learning. It has been shown to contribute to a multitude of highly desirable student learning outcomes, including some, such as social responsibility and empathy, which are not easily addressed by traditional forms of learning. As a result, service-learning has become a popular pedagogy, especially in the Americas where it made a strong head-start. In both North and South America, service-learning has been commonly practiced at all levels, from elementary school to higher education. In Asia, service-learning is also gaining in popularity, as more and more higher education institutions are enthusiastically making service-learning a key educational strategy. Nevertheless, we can say that service-learning is still in its infancy in many Asian-Pacific societies.



## Service-learning in the Asia-Pacific Region

The early start and rigorous participation in North America has resulted in a large amount of service-learning literature being situated in the North American context. Many institutions, even those outside North America, define and practice service-learning based upon this literature.

Given that education, and learning, is naturally culture and context-dependent, it behooves us to consider:

- · Do our own students learn and benefit exactly in the same way from service-learning?
- · Do the currently popular practices translate well to the Asia-Pacific region?
- · Is there a need for an Asian-Pacific model or adaptation of service-learning?
- · While the whole world is struggling to tackle COVID-19 at the same time, but in differing contexts: are there any unique or noteworthy practices being developed in this region?



#### What to Submit?

This special issue seeks to explore the development of service-learning in higher education institutions in the Asia-Pacific region. We welcome submissions presenting high-quality research focused on service-learning, campus-community engagement, and the promotion of active and effective citizenship through education. In particular, we expect the submissions to focus on how service-learning promotes quality of life in different stakeholders, including: students providing the service, service recipients, as well as related organisations and communities.

Generally speaking, a manuscript should be around 6,000 to 8,000 words (including everything). All submission will be rigorously reviewed.

#### For the submission guideline, please refer to the following website:

https://www.springer.com/journal/11482/submission-guidelines

ARIQ is a QI journal under "Multidisciplinary Social Sciences" with an Impact Factor of 3.078 in SSCI (2020). It is also indexed in Scopus with a CiteScore of 3.2 and is in the 70th percentile in the category of "Life-span and Life-course Studies". The usual acceptance rate is 15%.