Centre for Learning Sciences and Technologies
學習科學與科技中心

http://clst.fed.cuhk.edu.hk/

Recognition

Prof. Morris Jong (Director) and Prof. Thomas Chiu (Associate Director) of the Centre for Learning Sciences and Technologies (CLST) have been named on Stanford University's 2022 list of the Top 2% Most-Cited Scientists. The ranking is based on the "updated science-wide author databases of standardized citation indicators" prepared by a group of researchers at Stanford, covering 22 scientific fields and 176 sub-fields around the world.

Reference:
https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4

Prof. Morris Jong
Director of the CLST

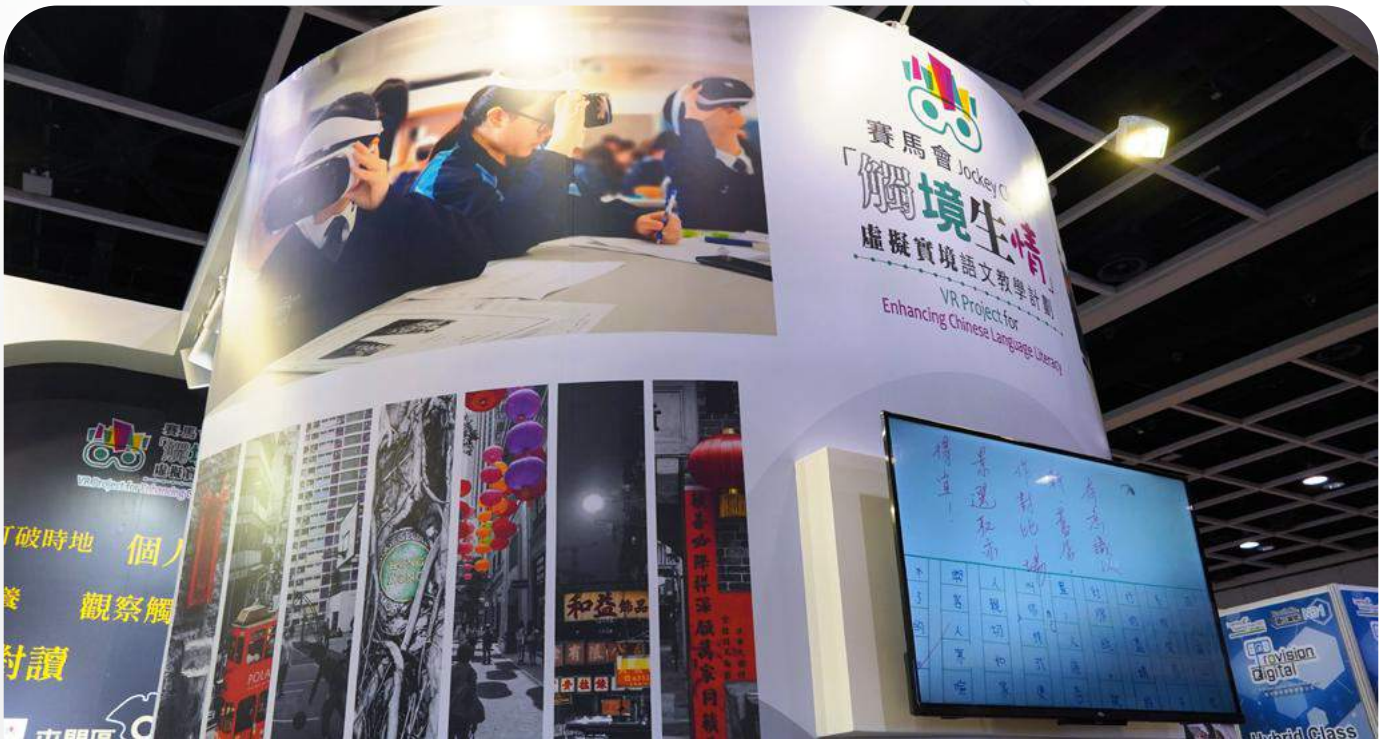
Prof. Thomas Chiu
Associate Director of the CLST

Learning and Teaching Expo 2021

In December 8-10 last year, we joined this annual mega event in the education industry at the Hong Kong Convention and Exhibition Centre. It presented a great opportunity for us to showcase the fruits of our two groundbreaking projects – (i) Jockey Club VR Project for Enhancing Chinese Language Literacy [http://www.jc-vr-chinese.hk/] and (ii) Jockey Club Community Care and STEM in Action Project [https://jc-cc-stem.hk/], which are funded with a total of HK$43.48 million by The Hong Kong Jockey Club Charities Trust.

The Jockey Club VR Project for Enhancing Chinese Language Literacy aims at harnessing virtual reality (VR) technologies to enhance the effectiveness of learning and teaching Chinese language. Equipped with VR gadgets, students can explore scenarios outside classrooms without temporal and spatial limitation. By immersing themselves in the virtual environments, students will find it easier to build connections, develop affection, stimulate thinking and feelings, which are all valuable ingredients for Chinese writing.

The Jockey Club Community Care and STEM in Action Project maximizes the opportunities of students and schools to apply the latest STEM knowledge and skills within the community. The project supports junior form students to innovate new technological ideas and products which benefit and support the underprivileged in the community via a quadripartite professional partnership among the university, schools, social service organizations and entrepreneurs in Hong Kong.



The project team members, together with teachers and students from the project schools, manned the booth and explained to the visiting public how VR and STEM technologies could be harnessed to improve the effectiveness of teaching and the living quality of the disadvantaged. Over 5,000 visitors expressed keen interest in its projects and received briefings about the project highlights from the team members. Through our warm reception and caring interactions, we brought attention and joy to the visiting public, who gave us a lot of praises, recognitions as well as smiles in return.

In addition to the booth exhibition, the project teams delivered talks about "Theory into Practices: Jockey Club Community Care and STEM in Action Project" and "Jockey Club VR Project for Enhancing Chinese Language Literacy: Online VR-supported Learning and Teaching of Chinese Writing in the Context of COVID-19" in the seminars of Future Learning Theatre and Education in the Post-pandemic Era. Among the notable speakers was the Centre Director, Professor Morris Jong.

Recently Funded Projects

Project Title	Period	Amount (HKD)	Funding Source	Principal Investigator
Jockey Club "Enhancing Chinese Language Literacy through Educational Virtual Reality" Project: Phase II	07/2022–09/2025	34,460,000	Hong Kong Jockey Club Charities Trust	Prof. Morris Jong
Creative Tourism and Media Production Programme for Gifted Primary Students	02/2022–05/2023	1,199,986	Gifted Education Fund	Prof. Morris Jong
Innovative Media Production and Cultural Research Programme for Gifted Students	02/2021–07/2022	2,636,876	Gifted Education Fund	Prof. Morris Jong
HK as an Outdoor Museum: EduVenture Supports Non-Chinese Speaking Students in Learning Chinese Culture	04/2021–09/2022	397,750	University Grants Council	Prof. Morris Jong
Developing EduVenture Teaching Resources	08/2022–07/2026	79,925	Hong Kong Family Welfare Society	Prof. Morris Jong
Coding Education for Teachers of Primary Schools: A Preliminary Study on Drones Coding Technology	08/2022–05/2023	138,000	Education Bureau	Prof. Morris Jong
Coding Education for Teachers of Primary Schools: Micro:bit for Robotics	05/2022–02/2023	249,550	Education Bureau	Prof. Morris Jong
Workshops for English Language Teachers to Enhance Capacity in Implementing e-Learning in the English Language Curriculum	10/2021–09/2022	138,000	Education Bureau	Prof. Morris Jong
Supporting Parents on e-Learning	10/2021–09/2022	131,440	Education Bureau	Prof. Morris Jong
Mathematical Skills in STEM Education for Primary Schools	07/2021–01/2023	379,500	Education Bureau	Prof. Morris Jong

Recent Publications in Journals

1 Huang, B., Jong, M. S. Y., Tu, Y. F., Hwang, G. J., Chai, C. S., & Jiang, M. Y. C. (2022). Trends and exemplary practices of STEM teacher professional development programs in K–12 contexts: A systematic review of empirical studies. *Computers and Education*, 189, Article 104577. https://doi.org/10.1016/j.compedu.2022.104577

2 Huang, H., Hwang, G. J., & Jong, M. S. Y. (2022). Technological solutions for promoting employees' knowledge levels and practical skills: An SVVR-based blended learning approach for professional training. *Computers and Education*, 189, Article 104593. https://doi.org/10.1016/j.compedu.2022.104593

3 Xia, Q., Chiu, T. K. F., Lee, M., Temitayo Sanusi, I., Dai, Y., & Chai, C. S. (2022). A Self-determination theory (SDT) design approach for inclusive and diverse artificial intelligence (AI) education. *Computers and Education*, *189*, Article 104582. https://doi.org/10.1016/j.compedu.2022.104582

4 Chen, C. H., Jong, M. S. Y., & Tsai, C. C. (2022). A comparison of in-service teachers' conceptions of barriers to mobile technology-integrated instruction and technology-integrated instruction. *Australasian Journal of Educational Technology, 38*(2), 35–50. https://doi.org/10.14742/ajet.7299

5 Jong, M. S. Y., Chen, G., Tam, V., Hue, M. T., & Chen, M. (2022). Design-based research on teacher facilitation in a pedagogic integration of flipped learning and social enquiry learning. *Sustainability, 14*(2), Article 996. https://doi.org/10.3390/su14020996

6 Li, X., Jiang, M. C. Y., Jong, M. S. Y., Zhang, X., & Chai, C. S. (2022). Understanding medical students' perceptions of and behavioral intentions toward learning artificial intelligence: A survey study. *International Journal of Environmental Research and Public Health, 19*(14), Article 8733. https://doi.org/10.3390/ijerph19148733

7 Weng, X., Cui, Z., Ng, O. L., Jong, M. S. Y., & Chiu, T. K. F. (2022). Characterizing students' 4C skills development during problem-based digital making. *Journal of Science Education and Technology, 31*(3), 372–385. https://doi.org/10.1007/s10956-022-09961-4

8 Huang, B., Jong, M. S. Y., & Chai, C. S. (2022). The design and implementation of a video-facilitated transdisciplinary STEM curriculum in the context of COVID-19 pandemic. *Educational Technology and Society, 25*(1), 108–123.

9 Weng, X., Chiu, T. K. F., & Jong, M. S. Y. (2022). Applying relatedness to explain learning outcomes of STEM maker activities. *Frontiers in Psychology, 12*, Article 800569. https://doi.org/10.3389/fpsyg.2021.800569

10 Jong, M. S. Y., Song, Y., Soloway, E., & Norris, C. (2021). Teacher professional development in STEM education. *Educational Technology and Society, 24*(4), 81–85.

11 Lin, H. C. S., Yu, S. J., Sun, J. C. Y., & Jong, M. S. Y. (2021). Engaging university students in a library guide through wearable spherical video-based virtual reality: Effects on situational interest and cognitive load. *Interactive Learning Environments, 29*(8), 1272–1287. https://doi.org/10.1080/10494820.2019.1624579

12 Nalipay, M. J. N., King, R. B., Mordeno, I. G., Chai, C. S., & Jong, M. S. Y. (2021). Teachers with a growth mindset are motivated and engaged: The relationships among mindsets, motivation, and engagement in teaching. *Social Psychology of Education, 24*(6), 1663–1684. https://doi.org/10.1007/s11218-021-09661-8

13 Geng, J., Chai, C. S., Jong, M. S. Y., & Luk, E. T. H. (2021). Understanding the pedagogical potential of interactive spherical video-based virtual reality from the teachers' perspective through the ACE framework. *Interactive Learning Environments, 29*(4), 618-633. https://doi.org/10.1080/10494820.2019.1593200

14 Zhai, X. S., Chu, X. Y., Chai, C. S., Jong, M. S. Y., Istenic, A., Spector, M., Liu, J. B., Yuan, J., & Li, Y. (2021). A review of artificial intelligence (AI) in education from 2010 to 2020. *Complexity, 2021*, Article 8812542. https://doi.org/10.1155/2021/8812542

15 Lin, P. Y., Chai, C. S., & Jong, M. S. Y. (2021). A study of disposition, engagement, efficacy, and vitality of teachers in designing science, technology, engineering, and mathematics education. *Frontiers in Psychology, 12*, Article 661631. https://doi.org/10.3389/fpsyg.2021.661631

16 Li, Y., Jiao, X., Liu, Y., Tse, C. S., & Dong, Y. (2021). Age differences in facial trustworthiness judgement based on multiple facial cue. *British Journal of Psychology, 112*(2), 474–492. https://doi.org/10.1111/bjop.12472