



鄭慕賢博士 (Dr. Cheng Mo Yin, Vivian)

- 擁有約 30 年的創造力（和科學/STEAM）教育的教學和研究經驗！專業從事創造力及高階思維教學及研究，包括跨學科概念及系統思維等。
- 30 年香港教育大學(教大)講師及助理教授工作經驗，教授創造力, STEM/STEAM, 物理、科學、常識、通識教育的教學方法。已榮譽退休，現職香港教育大學科學及環境學系客座講師及顧問。
- 11 年中學物理（及計算機和數學）教學經驗，高級學位教師，並擔任物理科負責人。
- 教大「創造力和 STEM/STEAM」副修課程創辦人、統籌人及主要講師 10+ 年。有約 200+ 名畢業生，帶領該副修課程的團隊成員獲得 2018 年「團隊教學獎」。
- 在教大(3 年一次)的「教學與課程」領域 表現評估，所有被評為「卓越」。
- 在教大開發了 20+ 門新課程（包括 創造力、思維教育、物理法、科學、常識、通識的教學方法、STEM/STEAM 教育、機器人技術等。學生包括本科生、在職教師再培訓及碩士課程等等。
- 獲香港大學科學學士(物理)、香港中文大學哲學碩士（教育）及香港浸會大學哲學博士（教育）。
- 經常為教育局以及許多中小學主持創造力、科學、STEM/STEAM 老師工作坊，曾為課程發展議會資優教育委員會委員。
- 為香港多個大型創造力（和科學/STEAM）教育計畫的負責人，並積極從事多項有關創造力及科學教育的研究及推廣工作。
- 著作包括 100+ 書籍/書章/期刊論文/會議論文等。出版教師參考書籍包括《通過跨學科 STEM+A 學習培養創造力》(電子書)、《環保創意 (STEM) 教育—理論與實踐》(書及網頁)、《創造力培育：科學教育改革》(書及光碟)、《創造力培育》(三書兩光碟)、《開發教學創造力》、《小學教師創意集》等，以及五個非常豐富的教師參考網頁。



# CV of Dr. Cheng, Mo Yin, Vivian 鄭慕賢

(edited on Oct 2024)



## CV summary:

- Worked 30 years in Dept of Science and Environmental Studies, Education University of Hong Kong (EdUHK) (as Lecturer, Assistant Professor, Adjunct Assistant Professor). Retired last June 2023 (now serving as Guest Lecturer and Consultant in EdUHK)
- Have wide teaching and research experiences in **Creativity (and Science/STEAM)** education for about 30 years in EdUHK
- Founder, coordinator, and major lecturer of “**Creativity and STEM/STEAM**” **Minor of EdUHK** for 10+ years, had about 200+ graduates, leading team members of this Minor to gain “Team Teaching Award” 2018.
- Ranked **EXCELLENT** in the “Teaching and Curriculum” area in ALL performance reviews (once 3 years) in EdUHK
- Had developed **20+ new courses** in EdUHK (including **Physics** method, **GS** method, LS method, Creativity/Thinking education, STEM/STEAM education, Robotics and etc., from undergraduates, in-service teacher retraining to Master level), and had taught all of them (see below for the list)
- Training teachers in **Physics** T&L method (senior secondary level), and **Science** T&L method (junior sec level) for about 10 years in EdUHK; training teachers **General Studies** T &L Method for about 20 years
- Had published **100+** papers/book chapters/conference papers (all on creativity/science education)
- **Taught 11 years in 3 secondary schools**, as senior graduate master, panel of **Physics**, head of staff development team (had taught **Physics to A-Level for 10 years**, also taught computer and maths)

Academic qualifications : B.Sc.(Hon), PGDE (Education), M.A.(Education), PhD.(Education)

## Working experiences:

- 1984-1995 **Physics** teacher, Senior Graduate Master, **Physics** Subject Panel, Head of Staff Dev., teaching **Physics**, Maths and Computer in three secondary schools of HK
- 1995- present Lecturer, Assistant Professor, Adjunct Assistant Professor of **Science** and Environmental Studies Dept of Education University of Hong Kong

Research & Teaching areas : creativity education and assessment, creativity in teaching, **science education**, **physics** education, primary General Studies, interdisciplinary concepts, critical thinking, systems thinking, futures thinking, and etc.

## Leadership in curriculum development and education reform in Hong Kong:

- *First* in conducting large-scale school-based project across secondary **science** curriculum, promoting creativity for **ALL**
- *First* in conducting large-scale school-based project across the whole primary school curriculum, promoting creativity for **ALL**
- *First* in conducting large-scale exhibition and teacher competition on creative teaching and learning
- *First* in conducting robotic project for kindergarten students
- *First* in launching a university Minor on Creativity and STEM/STEAM.
- *First* in developing and leading STEM/STEAM courses & program in EDUHK (i.e. the STEM PDP program)

...

**Developed and taught 20+ new courses in EDUHK, including:**

**(GE in B.Ed.)**

1. Creativity Workshop → Exploring Creativity
2. Playing **Science** for Creativity
3. Understanding **science** and human creations through TOYs → Understanding human creation and STEM through toys;

4. Futures thinking and Creativity for Sustainability

**(Creativity and STEM/STEAM Minor)**

5. Creativity in Human Development
6. Nurturing Creativity through **Science and STEM#**
7. Creativity in Teaching
8. Creativity in Action (business element induced)#
9. Creativity Development through Robotics #
10. Creativity and STEM for Environmental Sustainability#

**(PGDE/BEd Secondary method courses)**

11. Teaching and learning a specialist area in **science** education
12. Teaching and learning of Secondary **Physics**;
13. Teaching and learning of Secondary **Science**
14. Teaching and learning in Liberal Studies

**(PGDE/BEd Primary method courses)**

15. Teaching and learning of **General Studies II**
16. Interdisciplinary studies in **GS** → Interdisciplinary Concepts and Inquiry

**(5-week PDC/PDP primary teacher retraining courses)**

17. Creativity, Problem Solving and Collaboration skills in STEM Edu (STEM PDP)#
18. Fostering children' s creativity in **science** learning
19. Creative teaching and learning in **GS**

**(Master courses)**

20. Developing creativity and innovation in **STEM** (STEM MA)
  21. Innovative **science** and technology (MEd.)
- (Note. # still teaching this course this academic year)

**Large-scale funding- Chief leader of projects:**

“Fostering Creativity of Kindergarten Children through Robotics” , (Matching Grant of TKP Donation, **HK\$ 1,300,000**, 2019-present)

“Self-directed learning (SDL) in STEM education – Its assessments and relationships with creativity development” (Individual research scheme, \$250,000, 2020-22)

“Developing and promoting Creative Environmental Practices for/in primary school education” (QEF, **HK\$ 2,208,100**, 2017-20)

“Enhancing Developments in Creativity through Cross-disciplinary STEM+A Learning” , (Teaching Development Grant (university level); \$561,900, 2017-20)

“Understanding and Enhancing Creativity in Making - An Explorative Study in STEM Education Context” (Internal Research Grant of EDdUHK, HK\$100,000, 2016 completed)

“Understanding and enhancing *human creativity and environmental sustainability* through study of toys” , (Deans Research Fund, 2014-2016, \$200,000)

“Understanding prospective teacher view on *Creativity, Sustainability and their Education*” , (Research-related initiative project, 2011-2014, \$162,500)

“Transfer of Creative Learning in HKIED – a preliminary study” (Faculty TDG, 2011-2013, \$72,211)

“Creativity Acceleration through **Science** Education at Secondary School Level” (**HK\$ 794,400**, QEF, 2008 completed)

“Investigating the Development of Student Creative Problem Solving strategies within **Science** Education Context” , HKIED Internal Research Grants HK\$ 126,000, 2006 completed)

“Towards Creativity Education in Primary Schools and Teacher Training institutes” (HK\$ 1,270,000, UGC School Interface Grant, 2002 completed)

“Creative Teaching Campaign for Primary Teachers of Hong Kong” (HK\$ 1,250,000, QEF, 2002 completed)

## Publications

Sole/first/corresponding author of journal papers and book chapters (selected):

Cheng, V.M.Y. (2020). **Multi-Creativities in STEM education – Model and Approaches**. In V.M.Y. Cheng, S.L. Wong, C.H.M. Leung, M.H. Chan, P.M. Chan and Y.Y. Lam (Eds.) *Developing Creativity through Cross-disciplinary STEM+A Learning* (chapter 3.2, Chinese). Hong Kong, China : The Education University of Hong Kong.

Cheng, V.M.Y. (2020). *Developing Creativity through STEM Learning Assessment*. In V.M.Y. Cheng, S.L. Wong, C.H.M. Leung, M.H. Chan, P.M. Chan and Y.Y. Lam (Eds.) *Developing Creativity through Cross-disciplinary STEM+A Learning* (chapter 3.6, Chinese). Hong Kong, China : The Education University of Hong Kong.

Cheng, V. M. Y., (2019). Developing individual creativity for environmental sustainability: Using an everyday theme in higher education. *Thinking Skills and Creativity*, 33, 100567. (Rank A)

Cheng, V. M. Y., (2018a). Consensual Assessment of Creativity in Teaching Design by Supportive Peers—Its Validity, Practicality, and Benefit. *Journal of Creative Behavior*, 52(1), 5-20. (Rank A\*)

Cheng, V. M. Y., (2018b). Views on Creativity, Environmental Sustainability and Their Integrated Development. *Creative Education*, 9(5).

鄭慕賢 (2017) : 《在 STEM 日常教學中啟發學生的創意》, 在 李揚津(編), STEM 教育 - 從理論到實踐, (34-39), 香港, 香港教育大學。

Cheng V. M. Y., (2016). Understanding and enhancing personal transfer of creative learning. *Thinking Skills and Creativity*, 22, 58-73. (Rank A)

Cheng, V. M. Y., (2015). Assessment for creative teaching and learning in disciplined improvisation. In R. Wegerif, L. Li, & J.C. Kaufman (Eds.), *The Routledge International Handbook of Research on Teaching Thinking* (330-343). United Kingdom & USA: Routledge (Taylor and Francis). (Rank A)

Cheng, V. M. Y., (2011). Infusing creativity into classroom of Eastern context: Evaluations from student perspectives. *Thinking Skills and Creativity*, 6(1), 67-87. (Rank A)

Cheng, V. M. Y., (2010a). Tensions and dilemmas of teachers in creativity reform in a Chinese context. *Thinking Skills and Creativity*, 5(3), 120-137. (Rank A)

Cheng, V. M. Y. (2010b). Teaching creative thinking in regular **science** lessons: Potentials and obstacles of three different approaches in an Asian context. *Asia-Pacific Forum on Science Learning and Teaching*, 11(1), Article 17.

Cheng, V. M. Y. (2008). Consensual assessment in creative learning. In A. Craft, T. Cremin, & P. Burnard (Eds.), *Creative learning 3-11 and how we document it* (pp. 163-170). Stoke on Trent, England: Trentham.

Cheng, M.Y.V., Ng,T.K., Sit,K.W., Ho,C.Y., & Wong,K.A. (2007?). Initial Attempts to Infuse Creative Thinking Training into **Science** Lessons. In Cheng & So (Eds.) *Innovations in Science Education*. Hong Kong.

鄭慕賢 (2006) :融合創造力和物理知識學習的課程設計(A comprehensive curriculum framework for infusing creativity learning into **Physics** knowledge learning)。大學物理, 18 (3)。北京: 中國物理學會, 高等教育出版社。

Cheng, M. Y. V. (2004). Progress from traditional to creativity education in Chinese societies. In Lau, Hui, & Ng (Eds.) *Creativity: When East Meets West*. (pp.137-168). Singapore: World Scientific Publishing Co. Pte. Ltd.

Cheng, M. Y. V. (2004). Developing **Physics** learning activities for fostering creativity in Hong Kong context.



*Asia-Pacific Forum on Science Learning and Teaching*, 2(2) (on-line).

Cheng, M. Y. V. (2001). Enhancing creativity of elementary **science** teachers . *Asia-Pacific Forum on Science Learning and Teaching*, 2(2) (on-line)

Cheng, M. Y. V., (2000), Nurturing creativity through primary **science** teaching (透過科學教學提高小學生創造力), *The Joy of Learning Teaching, Foundations in Education Series 1 (學與教的喜悅- 教育叢書系列一)*, Hong Kong: Longman

### Books published:

A coming book for KG Robotic project ...

Cheng, M.Y. V., Leung, C.H., Wong, S.L., Chan, M.H. & Chan, P.M., (2020), *Developing Creativity through Cross-disciplinary STEM+A learning* (a thick comprehensive ebook). The Education University of Hong Kong, China: Hong Kong

鄭慕賢 (編著) (2020) : 《環保創意 (STEM) 教育—理論與實踐》香港: 香港教育大教育 (附網頁)

鄭慕賢 (編著) (2008) : 《創造力培育: 科學教育改革》, 香港, 激勵創造力的科學教育計劃 (附光碟及網頁)

鄭慕賢 (編著) (2003) : 《開發教學創造力》, 香港: 明報出版有限公司

鄭慕賢、李孝聰 (編著) (2002) : 《創造力培育(上): 基礎理論及教師活動》, 香港: 大學教育資助委員會 (附光碟及網頁)

鄭慕賢 (編著) (2002) : 《創造力培育(下): 教學實踐及校本改革》, 香港: 大學教育資助委員會 (附光碟及網頁)

鄭慕賢、許娜娜 (編著) (2002) : 《創造力培育: 六天小學生創意營》, 香港: 大學教育資助委員會

Cheng, M. Y. V. (2002). *Creativity in Teaching: Conceptualization, Assessment and Resources*. Doctoral Thesis, Hong Kong Baptist University, Hong Kong.

鄭慕賢 (編著) (2001): 《小學教師創意集》, 香港: 香港教育學院

### Others:

Cheng, M.Y. V. (2018): “What is creativity?” (teaching video produced by LTCC of EduHK).

See <https://www.eduhk.hk/lttc2013/view.php?secid=52423>

鄭慕賢 (2018) : 《STEM 教育和創造力培育》, SES Departmental Newsletter, Issue 5, April, 2018. 鄭

慕賢 (編著) (2005-06): **創意科學期刊**, 第 1 卷和第 2 卷

### Chief person-in-charge of Web-pages:

“Creativity and **STEM/STEAM** Minor” <http://www.eduhk.hk/creativity/>  
(our TDG project had created this very rich webpage. It includes our ebook contents and many other teaching materials and student works so as to support student learning in Creativity and STEM/STEAM Minor.)

“綠創未來” <http://greencreativity.eduhk.hk>  
(a very resourceful web-page “綠創未來” published in a QEF project. It includes *more than 100 teaching examples and videos, learning activities and interactive games for primary student and school teacher reference.*)

“Developing and promoting Creative Environmental Practices...” [http://www.eduhk.hk/envir\\_creativity/](http://www.eduhk.hk/envir_creativity/)(Old webpage)

“Creativity Acceleration through secondary **science** learning” <http://www.eduhk.hk/crease>

“Creative Teaching on the Web 創意教學網上行” <http://www.eduhk.hk/creative>

“Creative Teacher Day” <http://www.eduhk.hk/ctd>

### Impacts and recognition

Most publications of Vivian can be found in this link (not yet fully updated)

<https://repository.eduhk.hk/en/persons/mo-yin-vivian-cheng/publications/>

Personal web <http://home.ied.edu.hk/~vcheng>

In google search using “Cheng, M.Y.V.” , 1590 citations/referrals/linking appears

In Google search using “創意&鄭慕賢” , 1660 citations/referrals/linking appears

From April 2015, Vivian had become editorial board member of journal “Thinking skills and creativity” , which is one of the top 3 international creativity journals, and is ranked as A grade by EdUHK.

### Social Services

- Frequently conduct Creativity, **Science** and **STEM** workshops for schools and EDB...
- **Judges of “最佳科技/STEM 學校”** selection in in HK Youth Science and Technology Innovation Competition 香港青少年科技創新大賽香港新一代文化協會科學創意中心 2020-2021, 2019-20, 2018-19, 2017-18, 2016-17, 2015-16, 2014-15 and 2013-14, and many other Invention and Science competitions ...
- Judges of FIRST<sup>®</sup> LEGO<sup>®</sup> League Jr. (WEDO competition for primary schools) 2017-18...
- 擔任顧問- 基層學童 STEM 計劃, 關注學童發展權利聯席
- Chairperson and founder of “Hong Kong Creative **Science** Education Association” in 2006.
- Committee member of Gifted Education Section of Education Department Bureau of Government of Hong Kong , 2004-2006...
- Founder of “Creative Teacher Association” in Hong Kong in 2003.
- Member of the Advisory Council of the Center for Child Development of HKBU (2003-07)
- ...

### University/Dept services

- Founder and Chief program leader of “Creativity and STEM/STEAM” minor
- Chief supervisor of “Creativity Student Association” 2018-19, 2017-18 and 2016-17.
- Program leader of 5-week PDP for in-service primary teachers in STEM Education
- Departmental representative of ECE programme committee
- Member of departmental STEM project, started from June 2018
- Member of dept STEM project, “Developing leadership in STEM education and teachers’ professional development – A multi-pronged approach” Central reserve fund, 2016-17.Organizer of STEM seminars and workshops for dept.
- Sharing of good teaching practices of the Learning and Teaching @HKIEd 2014 Mini Conference and seminar of TDG...