

校本支援服務名稱 (2024/25) :

優質教育基金主題網絡計劃 — 大專院校 :

以全方位自主學習推展校本 STEAM 課程 (到校支援)

／ (網絡支援)

網上申請編號

到校支援 - B7

網絡支援 - B8

1. 目標

本支援服務旨在：

- 為教師及課程領導提供支援，以提高他們把自主學習融入 STEAM 教育的能力
- 為教師提供支援，以提高他們把人工智能融入 STEAM 教育的能力
- 發展及推行學校 STEAM 課程及有效評估學生預期學習成果的能力，從而促進學生整合和應用不同 STEAM 相關學科知識與技能
- 透過科學探究及創意工程設計培養學生的自主學習能力、開拓與創新精神及 21 世紀能力
- 促進學校發展在高小 (小四至小六) 及初中 (中一至小三) 的校本 STEAM 課程
- 支援學校發展與 STEAM 相關的多層領導網絡，以促進 STEAM 教育在參與學校內持續發展

2. 支援重點

- 提高教師對 STEAM 教育、人工智能和自主學習的理解，並通過課堂實踐發展學生的 21 世紀能力和 STEAM 相關學科知識與技能
- 提高教師對 STEAM 教育相關的學習設計、評估和課程設計策略的掌握，通過自主學習實踐 STEAM 教育
- 通過 STEAM 教育，促進價值觀教育
- 支援教師利用電子學習科技設計和推行 STEAM 教育，如學習設計工作室 (Learning Design Studio) 和學習管理平台 iLAP 的應用
- 通過專門設計和驗證的數碼素養評估工具，為學生進行數碼素養評估，並為教師及學校領導提供學生相關表現的回饋
- 促進學校之間的協作，並通過學校多層領導網絡，擴大教育創新的實踐

3. 支援模式及活動

- 「到校支援」模式
 - 參與「到校支援」模式的學校除獲得至少 7 次到校支援外，還參與至少 5 次計劃的專業發展及網路活動，包括主題工作坊、技術培訓及獎勵計劃，以促進 STEAM 教育和校本課程發展，以及多層領導培訓
 - 參與學校參與全年兩次行政會議及一次年度分享研討會，以分享成功經驗及面對挑戰的有效處理方法
- 「網絡支援」模式
 - 參與「網路支援」模式的學校參與五場有關學習設計的主題工作坊，以提升教師將自主學習和人工智能融入 STEAM 教育的能力。他們亦可自由參與計劃的其他專業發展和網路活動，包括技術培

訓和獎勵計劃

- 參與學校參與全年兩次行政會議及一次年度分享研討會，以促進學校之間的專業交流

4. 注意事項

- 參與學校支持把自主學習融入高小（小四至小六）或初中（中一至小三）學校課程內推行 STEAM 教育
- 計劃核心團隊教師樂意互相協作，進行課程設計和實踐規劃，以及同儕觀課和實踐反思
- 參與學校鼓勵利用電子學習，支援以自主學習推展 STEAM 教育
- 詳情請參閱優質教育基金網頁
(<https://qcrc.qef.org.hk/tc/fund/activity.php?cate=7>)

5. 查詢

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Title of School-based Support Service (2024/25)

Quality Education Fund Thematic Networks – Tertiary Institutes:
Integrated Self-Directed Learning Approach to School-Based
STEAM Development (In-STEAM) (Onsite Support) / (Network
Support)

<p>Online Application Code Onsite support – B7 Network support – B8</p>

1. Objectives

The support service aims:

- to provide support to teachers and curriculum leaders to enhance their capacity to integrate self-directed learning (SDL) into STEAM education
- to provide support to teachers to enhance their capacity to integrate technologies, such as, artificial intelligence (AI) into STEAM education
- to develop and implement school-based STEAM curriculum, and assess effectively students' expected learning outcomes so that students are facilitated to integrate and apply the knowledge and skills across different STEAM disciplines
- to develop students' SDL, entrepreneurial spirit and 21st century skills through scientific investigation and creative engineering design
- to facilitate school-based STEAM curriculum development at the upper primary (P.4–6) and lower secondary (S.1–3) levels
- to support schools to develop STEAM related multilevel leadership networks so as to foster sustainable development of STEAM education in participating schools

2. Foci of Support

- To enhance teachers' understanding of STEAM education, AI and SDL through classroom implementation so as to develop students' 21st century skills as well as STEAM-related disciplinary knowledge and skills
- To enhance teachers' mastery of related learning design, assessment and curriculum development strategies to implement STEAM education through SDL
- To promote values education through STEAM education
- To support teachers to design and implement STEAM education using e-learning technologies, e.g. Learning Design Studio and iLAP
- To assess students' digital literacy achievement and provide feedback to teachers and school leaders on their achievement levels by using specifically designed and validated digital literacy assessment instruments
- To facilitate collaboration among schools and scale up innovative practices through multilevel school leadership networks

3. Modes of Support and Activities

- **“Onsite support” mode**
 - Apart from receiving at least 7 on-site support, participating schools of the “on-site support” mode attend at least 5 professional development and network activities of the project, including theme-based workshops, technical training and award schemes, to facilitate learning design of STEAM education, school-based curriculum development and multilevel leadership capacity building
 - Participating schools attend two Executive Committee (EC) meetings and an annual dissemination seminar to share the good practices generated and effective ways to cope with challenges encountered
- **“Network support” mode**

- Participating schools of the “network support” mode attend five theme-based workshops on learning design to enhance their capacity to integrate SDL and AI into STEAM education. They are free to join other professional development and network activities of the project, including technical training and award schemes
- Participating schools attend two Executive Committee (EC) meetings and an annual dissemination seminar to foster cross-school professional exchanges

4. Points to note

- Participating schools support the integration of SDL into school-based STEAM curriculum at upper primary (P.4–6) and lower secondary (S.1–3) levels
- Teachers in the core project team are willing to collaborate with each other for curriculum design and implementation, peer lesson observation and reflection on practice
- Participating schools encourage the use of e-learning to support SDL in STEAM education
- Participating schools arrange regular timeslots for teachers concerned to attend meetings and participate in various professional development activities, e.g. collaborative lesson planning
- Participating schools attend two Executive Committee (EC) meetings and an annual dissemination seminar to share the good practices generated and effective ways to cope with challenges encountered
- Please visit the QEF website (<https://qcrc.qef.org.hk/en/fund/activity.php?cate=7>) for details

5. Enquiries

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