

政 府 資 訊 科 技 總 監 辦 公 室 Office of the Government Chief Information Officer

IT Innovation Lab in Secondary Schools



Online Briefing





The 2019-20 Budget

"79. To pave the way for nurturing local technology talents, we will also encourage the promotion of popular science education in schools. I will deploy \$500 million to implement the IT Innovation Lab in Secondary Schools Programme in the coming three school years. Each secondary school benefiting will be granted \$1 million to procure the necessary information technology (IT) equipment and professional services, and organise more relevant extra-curricular activities to deepen students' knowledge of cutting-edge IT, such as artificial intelligence, blockchain, cloud computing and big data, with a view to helping young people build a good IT foundation early during their secondary school years. In addition to financial support, the Office of the Government Chief Information Officer (OGCIO) will set up a one-stop professional support centre to provide assistance."

IT Innovation Lab in Secondary Schools

Objectives

- Enhance EITP and extend the programme to all publicly funded secondary schools
- Enhance the interest of young people (including secondary school students) in IT and innovative thinking and foster an IT learning atmosphere to encourage them to choose technology-related tertiary education programmes and pursue an I&T career in the future
- Lay a sound foundation in IT for young people during their secondary schooling, thereby promoting local popular science education and expanding the supply of I&T talent

Funding Scope

IT Innovation Lab in Secondary Schools

IT equipment and facilities

e.g. :

- ✓ Procure or rent server-side and client-side hardware and software
- Optical fibre and broadband network
- Software-as-a-service, cloud-based servers and storage
- ✓ Acquiring relevant professional services



Organisation of IT-related activities

e.g. :

- Coding class, mobile app workshop, VR/AR application experiment
- ✓ Seminars on the application of IT / digital transformation
- ✓ Short course or other learning experience
- Visits to local offices of multinational companies and local start-ups
 - Preparing for and participating in local and non-local competitions
 - Organising IT exhibitions

Others

- Operational expenses of the activities (e.g. maintenance and related professional services including part-time tutors and part-time staff)
- Administrative cost (accounting and auditing services)

Application Procedures



Secondary Schools to submit via online form (URL to be released on 1 December 2020)



Schools to download the completed application form (PDF) and print the hardcopy



Schools to send the application form with school chop and principal's signature to one-stop support centre for processing (6/F, North Point Government Offices)



Notification of approval

Application Timeline



Online Application Form



Part A

Particulars of Applicant School



Part B Annual Plan

Part C

Declaration and Commitment

Can fill in the form in either

English or Chinese.

Save the draft form with password for further

updating before submission.

Part A : Particulars of Applicant School

Basic particulars of the applicant school, including information of :



- School Name
- School Code
- School Address
- School Website, etc.
 (Information will be retrieved after "School Name" or
 "School Code" is entered)



- Name
- Telephone & Fax No.
 (if different from school's)
- Email Address



Part B : Annual Plan

IT-related activities

Cost of IT-related activities – IT Equipment, Infrastructure and Related Service Charges

Cost of IT-related activities – Operating Expenses and Administrative Cost

Budget

IIa

IIb

III

Additional Information

Part B : Annual Plan (I)

I. IT-related activities

- Title
- Description
- Technology
- Objective / Outcome
- Estimated Number of Participating Students
- Estimated Activity Period
- Estimated Activity Hours
- Mode of Delivery
- Activity Type
- Deliverables that can be shared with other schools



Part B : Annual Plan (I)

Intellectual Property (IP) Rights

- All IP Rights derived from the Deliverables developed by the participating school shall be vested in the participating school.
- In case the participating school procures a contractor to create any of the Deliverables, the participating school should require the contractor to vest all IP Rights in such Deliverables in the participating school.
- Participating schools also grant unconditionally the rights to the Government to use and share such Deliverables by any means or in any manner.



Part B : Annual Plan (IIa)

IIa. Cost of IT-related activities - IT Equipment, Infrastructure and Related Service Charges

- Cost information of the following expenditure items : -(Provide description and justification to show how the procured IT equipment and professional services will be utilised to organise suitable IT-related activities)
 - Hardware (e.g. programmable drone, robotic arm, VR headset)
 - Software (e.g. toolkits for drones programming, AR / VR development tools)
 - Infrastructure (e.g. upgrade of the optical fibre network needed for the proposed activity)
 - Cloud Services (e.g. cloud storage, cloud server, cloud DB)
 - Others (e.g. reference books)
- Estimated amount of related professional and maintenance services
- Activity item number

Part B : Annual Plan (IIa)

Reference List of IT Equipment

| Equipment | Purpose |
|--|---|
| Lab equipment such as optical fibre and broadband network, cloud servers, storage services and relevant cloud-based coding and data analytics software services | Supporting IT-related activities |
| Laptop computers, tablet computers, smartphones, coding tools | Organising coding classes, and participating in workshops and competitions for coding and prototyping |
| Artificial intelligence (AI) learning such as pattern and object recognition kits, voice recognition kits, machine learning tools | Developing AI prototype solutions with machine learning tools |
| Data analytics tools, data visualisation tools | Organising activities on data analytics, data visualisation and programming |
| Drones | Organising drone coding activities and workshops and competitions for producing virtual reality (VR) scenes |
| Programmable robotics kits, sensors, programmable controllers | Organising robotics assembling activities and controlling robotics through programming |
| VR/Augmented reality (AR) devices | Organising workshops and competitions for producing VR/AR prototypes |



Part B : Annual Plan (IIa)

Examples of Out-of-Scope Items (IT Equipment, Infrastructure and Related Service Charges)

| Category | Out-of-scope Items |
|--|--|
| Lab hardware, software and cloud tools and services | E-learning equipment (e.g. e-textbook, touch panel, parallel whiteboard, teacher notebooks, tools for assisting teaching in general subjects) for assisting general teaching and learning purposes Notebook computers for regular ICT class Renovation works and furniture unrelated to IT activities School's general facilities (e.g. WiFi, CCTV, digital signage, electronic display panel, mobile stands, etc.) Non-IT related STEM equipment (e.g. solar panel) |

Part B : Annual Plan (IIb)

IIb. Cost of IT-related activities - Operating Expenses and Administrative Cost

Cost information of the following items : -

(Provide description and justification to show how the expenses are related in and necessary for organising suitable IT-related activities)

- Professional services for supporting the organisation of activities
- Transportation fees (local / non-local)
- Accommodation fees (non-local competition)
- Supply Teacher
- Consumables
- Accounting services / Audit services
- Promotion
- Others
- Activity item number

Part B : Annual Plan (IIb)

Examples of Out-of-Scope Items (Operating Expenses and Administrative Cost)

| Category | Out-of-scope Items |
|--------------------------|---|
| IT-related activities | Lab activities of regular subject of Computer Literacy (CL) and Information and Communication Technology (ICT) within traditional syllabus All trips outside Hong Kong (except representing Hong Kong in non-local competition) |
| Operating cost | Teacher training Maintenance cost for schools' pre-existing hardware or software Utility costs (e.g. electricity cost) Pre-existing bandwidth subscription Entertainment expenses such as food and beverages for any activities including non- local competition Travelling expenses between home and school Costs for travel documents (e.g. passport costs/visa fees) Appointment of teachers and laboratory technicians under regular staff establishment Salary costs for staff who are already employed full-time by the applicant school, (e.g. school's staff who spend a portion of their time on organising the activity) Maintenance cost beyond the initiative period |

Part B : Annual Plan (III)

III. Budget

- Estimated budget in 2020/21 school year (auto-calculate)
- Estimated cashflow in 2021/22 and 2022/23 school years

| 2020/21 School Year | 2021/22 School Year | 2022/23 School Year | |
|---------------------|---------------------|---------------------|--|
| (Auto-calculate) | Please input | Please input | |

Part B : Annual Plan (IV)

IV. Additional Information

- Relevant school background, Vision, etc.
- File of not more than 10MB
 - Document file of not more than 4 pages with font size of at least 12pt.
 - Zip format for multiple files



Part C : Declaration and Commitment



After Submission

We may contact applicant schools for clarification(s) or provide suggestion(s) & advice.



Applications will be submitted to Vetting Committee for endorsement.



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Vetting Criteria

The Vetting Committee will consider applications according to the following components :

| Project Scope | The proposed scope is primarily related to IT (including but not exhaustively Artificial Intelligence, Big Data, Blockchain, Cloud Computing, Coding / Algorithm / Computation Thinking, Cyber Security, 3D modeling, Digital Game Design and Development, Drone Coding, Internet of Things, Mobile App Development, Robotics Coding, Virtual Reality / Augmented Reality / Mixed Reality, Web Development) and in line with the policy objectives and funding scope of the programme. |
|------------------------------|--|
| Project Outcome | The proposed activity can enhance students' computational thinking and digital skills in innovation and real-life problem solving outside regular classroom learning, and cultivate students' interest in IT and foster an IT learning atmosphere at school. |
| Design and Implementation | The proposed activity is practical. |
| Financial Considerations | The proposed budget is reasonable and effective. |

Notification of Approval and Funding Disbursement



Change Management

Any proposed changes of the approved annual plan must conform with the vetting criteria.

Minor Changes

Participating schools should reflect the changes in the annual / final report.

- Substituting proposed equipment / services with a newer model / version
- Securing better prices by quotations
- Altering the activity dates within the initiative period
- Increasing the number of participating students

Major Changes

Participating schools should submit a change request form for major changes.

Schools should obtain approval from the OGCIO before implementation of the major changes to ensure proper use of funding.

- Any additional funding support on top of the approved annual plans;
- Change of activities to be held;
- Changes on expenditure items;
- Budget change for the following expenditure category exceeding 30% of the original approved budget :
 1. IT Equipment, Infrastructure and Related Service Charges; and
 2. Operating Expanses and Administrative Cost

2. Operating Expenses and Administrative Cost

Control Measures

Undertaking to be signed by schools

- Dedicated Bank Account (or User Code for Government Schools)
- Guidelines on Procurement and Financial Management by EDB and ICAC
- Online questionnaire after activities
- Random School Visits
- Annual Report
- Final Financial Report and Audited Account



Deliverables to be Shared with Other Schools

All deliverables specified in the annual plans shall be shared with other schools.

- Participating schools are encouraged to submit photos, videos, winning awards results, attendances, questionnaires, source codes, etc., once available, to the OGCIO upon completion of the activities.
- Participating schools should submit shareable source codes produced in the course of the activities to the source code repository for sharing with other schools.
- Participating schools are encouraged to participate in seminars, sharing sessions and other activities such as promotion and publicity activities to be organised or supported by the OGCIO.

Annual Submission (by August annually)

- Annual Report
 - details of the proposed IT activities conducted
 - class levels and number of students participating in the activities, activity venues, etc.
 - annual financial report showing the details of the expenditure of the procured equipment and services
 - Assets register
 - Bank statement
 - Certified true copies of invoices for large expenses (i.e. \$50,000 or above per invoice)
- Annual Plan
 - proposed IT-related activities to be organised, equipment and services to be acquired next year and the revised estimated cashflow required for future years.

At Programme End

- Participating school is required to submit a final report.
- All payment for goods supplied or services provided for the project should be made within three months after the programme end, including the audit fee which has been incurred within the programme period.
- The school should submit a final financial report with audited accounts within three months after completion of the school project.



IT Innovation Lab in Secondary Schools 中學IT創新實驗室計劃

Online Form Demo

One-stop Support Centre



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• 計劃目的

諮詢委員會
 評審委員會

計劃文件

關於計劃

申請程序・申請指引

•

常見問題

有用資料

資訊科技設備及設施参考清單

最新消息

• 課外活動例子

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IT Innovation Lab in Secondary Schools 中學IT創新實驗室計劃

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