







荃灣葵涌及青衣區中學校長會 The Association of Heads of Secondary Schools of Tsuen Wan, Kwai Chung & Tsing Yi District

The Association of Hong Kong Chinese Middle Schools

各位校長:

(副本送:STEM/STEAM 負責人、資訊科技科負責人)

# 思科創意解難挑戰賽啟動禮 2017-18

為培育未來社會人材,STEM 教育勢必成為香港課程發展及學與教的重點。在全球科技領域具領導地位的思科系統(香港)有限公司(Cisco)過去二十年來透過參與不同的教育工作,鼓勵學生以 STEM 為發展目標,並推動老師科技在科技發展的角色。

迎向未來教育範式的改變,思科系統公司將舉辦「思科創意解難挑戰賽」(the Cisco Innovation Challenge, CIC),協作伙伴包括香港輔導教師協會、香港中文中學聯會及荃灣葵涌及青衣區中學校長會。比賽對象為 13-16 歲的中學生,旨在「以賽促學」、「以賽促教」、「以賽促用」,為中學生提供應用科技知識能力,解決現實生活場景問題的平台。有關詳情請參閱附件。

「思科創意解難挑戰賽」的特色包括:

- 老師可獲免費及專業發展訓練,參與學生亦可免費使用由思科系統公司所開發的物聯網(IoT)課程 教材 (有中、英文版)。
- 活動以物聯網概念為主軸,著重運用知識和解難能力解決現實生活上的問題,同時提升學生的公 民意識。
- 因應參與學校於 STEM/IoT 的發展步伐,參與隊伍可選擇以不同形式及技術難度的要求遞交參賽作品,包括:文字版方案建議書、影片、IoT 工具等。
- 活動包含生涯規劃教育元素,包括 STEM 與未來出路的聯繫、相關工作體驗等。

現誠邀各位校長、負責 STEM 的學校同工出席計劃開展禮,了解 CIC 理念及詳情。開展禮資料如下:

日期: 二零一七年五月二十四日(星期三)

時間: 下午三時半至五時

地點: 寶血會上智英文書院學校禮堂

九龍石硤尾偉智街三號(石硤尾地鐵站 C 出口;抱歉未能提供車位,請乘公

共交通工具往返)

程序:

3:15 pm - 3:30 pm 登記

3:30 pm - 3:40 pm 歡迎辭

思科系統(香港)有限公司 總經理(香港及澳門)何偉國先生

3:40 pm - 4:10 pm 論 : STEM 在學校教育的多樣可能 講者:

- 思科大中華區公共事務部企業社會責任總監練沛强先生
- 香港中文中學聯會主席 譚日旭校長
- 荃灣葵涌及青衣區中學校長會主席 張欽龍校長
- 香港輔導教師協會主席 曾志滔先生
- 香港創客教育協會主席 賴健昌先生

#### 主持:

香港輔導教師協會副主席 何玉芬博士

4:10 pm - 4:35 pm 「思科創意解難挑戰賽」(the Cisco Innovation Challenge, CIC)計劃介紹 思科創意解難挑戰賽籌委會成員 馬凱雄老師

4:35 pm -- 5:00 pm 答問時間

挑戰賽及相關諮商

歡迎以上三個協會的會員學校參與挑戰賽,為學生開拓更多啟發潛能、開拓視野的機會。報名可於五月十九日前填妥網上表格(https://goo.gl/LynQss 或掃描本頁QR code)。如對開展禮有任何疑問,可致電26711722與香港輔導教師協會梁小姐聯絡。敬祝

教安!

PK

思科創意解難挑戰賽籌委會聯絡人 練沛强 謹上 二零一七年五月十日



附錄: 思科創新挑戰賽(CIC)簡介

## 目標:

挑戰賽的關鍵目標是培養學生成為創新者,並幫助他們建立所需的關鍵技能,讓他們可以:

- 像技術專家一樣創新
- 像企業家一樣思考
- 充當社會變革促進者

#### 重點:

我們必須將有關技能賦予教師,才能讓學校可持續發展。 因此,挑戰賽的重點之一是教師培訓,讓參與學校的教師直接參與由思科及其合作夥伴開發的物聯網(IoT)最先進方案,使教師的專業能力得以提升,將所學應用到教室或挑戰賽中指導學生。我們亦會讓校長/副校長透過工作坊體驗未來世界萬物聯網(IoE)的潛力。有關專業培訓由思科獨家贊助。

學生需要以隊伍方式參加這活動,參賽隊伍需要參加校本的物聯網(IoE)基礎培訓。計劃的第一階段,參賽隊伍需要提出一個以物聯網解決生活問題的創新解決方案,方案的概念須用書面方式(2頁)附以YouTube 視頻(3分鐘)表達。如第一階段所提的方案通過初步評審,參賽隊伍將會展開第二階段,使用各種硬件製作物聯網設備來實現所提出的方案。

## 創新挑戰主題(2017-18):

團隊可以自由選取以下其中一項主題,並就一具體問題設計創新的解決方案:

- 智能城市(如交通)
- 社會共融 (例如,支援各種障礙的解決方案)
- 保健和食品安全

### 暫定時間表:

日期	活動	備註
2017年	● 啟動禮	
5月24日		
2017年6-7月	● 校長/副校長物聯網體驗工作坊	教師培訓計劃共有3個獨立
	● 教師培訓計劃	課程,每課程6-9小時。
		每所學校可以提名 1-2 名教
		師參加。
2017年9月底	● 提交參賽申請	
2017年9月-	● 學生隊伍學習物聯網	
2018年12月	● 就指定問題制定針對性的解決方	
(第一階段)	案	
	● 以簡短的書面方案及視頻形式提	
	交成果	
2018年1月-	● 入圍團隊將解決方案實現為物聯	進入第二階段後,思科和其
2018年4月	網設備	他公司將會派出友師協助每
(第二階段)	● 在展示會中展示各隊的成果	一隊伍。他們不僅在技術方
	● 頒獎典禮	面為學生提供寶貴的建議,
		亦會幫助學生了解 STEM 與
		不同職業選擇的聯繫的。
2018年7月	● 為挑戰賽優勝者特別提供與工作	
	相關的經歷(CRE)	









10 May 2017

Dear Principal,

(cc. Teacher-in-charge of STEM/STEAM, ICT panel chairperson)

## **Kick-off Seminar on Cisco Innovation Challenge 2017-18**

STEM education will be the focus of school curriculum development and L&T so as to groom talents for the future. Cisco, the leading IT company with global influence, has been taking initiatives to encourage students to pursue STEM, and to help teachers carry technology forward throughout the past two decades.

In light of the potential paradigm change in education, Cisco proudly join hands with three professional organizations, namely, Hong Kong Association of Careers Masters and Guidance Masters, The Association of Hong Kong Chinese Middle Schools, and The Association of Heads of Secondary Schools of Tsuen Wan, Kwai Chung and Tsing Yi District, to organize the first IoT campaign for secondary school students – the Cisco Innovation Challenge (CIC;思科創意解難挑戰賽). It is aimed to motivate students aged 13-16 to apply their knowledge and skills in technology to solve social challenges in Hong Kong. A factsheet spelling out the objectives and tentative schedule of CIC could be found in the Appendix (on last page).

Unique features of CIC that make it stand out for schools include:

- Tailored and free professional training for teachers and IoT course materials for students are developed by Cisco, the leading company in the field.
- CIC focuses on IoT, with authentic problem solving on real-life needs to enhance a sense of citizenship.
- Based on experience or readiness in STEM/IoT, students are expected to come up with solutions in different levels of complexity, including written proposal, video, and IoT devices.
- CIC integrates career education elements connecting STEM to future possibilities and career-related experiences.
- Winning teams will enjoy eye-opening career-related programs through Cisco's global network.

Principals and teachers in-charge of STEM education are invited to attend our Kick-off Seminar, with details as follows:

Date: 24 May 2017 (Wednesday)

Time: 3:30 – 5:00 pm

Venue: School Hall, Holy Trinity College, 3 Wai Chi Street, Shek Kip Mei, Kowloon

(Shek Kip Mei MTR Exit C; no parking arrangement available)

Program rundown:

3:15 pm - 3:30 pm Registration 3:30 pm - 3:40 pm Welcoming

By Mr. Argon Ho, General Manager, Hong Kong and Macau, Cisco

3:40 pm – 4:10 pm Panel Discussion: 'Instill STEM in schools – What and How?'

- Mr. Joseph Lin, Regional CSR Manager, Cisco
- Principal Tam Yat Yuk, Chairperson, The Association of Hong Kong Chinese Middle Schools
- Principal Cheung Yam Lung, Chairperson, The Association of Heads of Secondary Schools of Tsuen wan, Kwai Chung and Tsing Yi District
- Mr. Tsang Chi To Joseph, Chairperson, Hong Kong Association of Careers Masters and Guidance Masters
- Mr. Casey Lai, Chairman, STEM & Maker Education Initiative

#### Facilitator:

 Dr. Esther Ho, Vice-chairperson, Hong Kong Association of Careers Masters and Guidance Masters

4:10 pm – 4:35 pm Introducing Cisco Innovation Challenge 2017-18

By Mr. Ma Hoi Hung, Core Team Member of CIC Organizing Committee

4:35 pm -- 5:00 pm Q&A

Practical consultation

It is a movement of education development. The competition will be open to secondary students from member schools of the three associations. Do come and explore new opportunities for your students. Enrollment could be done through on-line registration on or before 19 May 2017: <a href="https://goo.gl/LynQss">https://goo.gl/LynQss</a> (or scan the QR code below). Should you have any enquiries, please don't hesitate to contact Ms. Leung of HKACMGM at 26711722.

Yours faithfully,

Mr. Joseph Lin Cisco Innovation Challenge Organizing Committee



### Appendix: Factsheet on Cisco Innovation Challenge (CIC)

### **Objectives:**

The key goal of the challenge is to help students to build the key skills needed to become an innovator who can:

- innovate like a technologist
- think like an entrepreneur
- act as a social change agent

#### **Highlights:**

Sustainable change in schools could not happen without empowerment of teachers. Thus, one of the key focuses of CIC is train-the-trainers, with teachers from participating schools directly be engaged in state-of-the-art programs on IoT developed by Cisco and their partners so that they have their professional capacity enhanced before they teach or coach their students in their own classrooms or in the Challenge. We also offer experiential workshops to school principals concerning the potential of IoE in the future world. The professional training is solely sponsored by Cisco.

To participate, students will be required to form teams, go through the basic training in IoE offered in school-based manner, and go through Phase 1 of the Campaign -- coming up with an innovative solution to a life problem through IoT by submitting a two-page concept note accompanied by a 3-min YouTube video pitch of their idea. Teams with satisfactory performance will be invited to Phase 2 -- actualizing the solution through production/making of IoT devices using various options of hardware.

### Themes of Cisco Innovation Challenge (CIC) 2017-18:

Teams are free to choose one of the following themes to design innovative solutions to specific problems:

- Smart City (e.g. transportation)
- Social Inclusion (e.g., solutions supporting target groups with specific impairment)
- Health care and food safety

# **Tentative Time-line:**

Date/period	Event/Details	Remarks
May 24, 2017	Kick-off Seminar	
Jun-Jul 2017	<ul> <li>Experiential Learning Workshop on loT for Principals</li> <li>Train-the-trainer Program for teachers</li> </ul>	For the Train-the-trainer Program for teachers, each Program lasts for 6-9 hours in 3 separate sessions. Each school can nominate one to two teachers to join.
Late Sept 2017	<ul> <li>Submission of applications</li> </ul>	
Sept 2017 – Dec 2018 (Phase 1)	<ul> <li>Team learning on IoT by students</li> <li>Formulation of solutions towards designated problems</li> <li>Deliverables submitted in form of a brief written proposal + short video</li> </ul>	
Jan 2018 – Apr 2018 (Phase 2)	<ul> <li>Shortlisted teams actualize solutions into IoT devices</li> <li>Showcase ceremony of solutions by teams</li> <li>Prize Presentation Ceremony</li> </ul>	For teams entering Phase 2, each will be connected to a mentor from Cisco and other companies, who not only provides invaluable advice to students on technical aspects, but also connects STEM to authentic career options.
Jul 2018	<ul> <li>Career-related experiences exclusively for winners for CIC</li> </ul>	