2013 International Year of Statistics (Statistics2013)



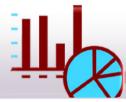
Promoting statistical literacy among students in Hong Kong

K L Chan
Census and Statistics Department
Hong Kong Special Administrative Region

Key topics



Challenges of the knowledge-based era



Defining statistical literacy



Raising the level of statistical literacy in the community



Promoting statistical literacy among students –

The experience of the Census and Statistics Department (C&SD)



Concluding remarks

New paradigm

Meeting socio-economic challenges

- Logical reasoning
- Informed, evidence-based decisions

Statistics users

- Governments
- Investors
- Businessmen
- General public

Official statistical agencies

• Promoting proper use and application of statistics

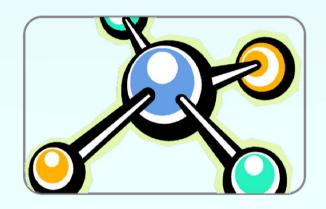




What is statistical literacy?







Understanding things happening around us in a scientific and objective manner

Exploiting facts, trends and relationships behind data

Making sense of a complex world

Ultimate goals of promoting statistical literacy

Identifying correct statistics from the pool of accessible statistical data

Making proper use of relevant statistical data to understand facts and phenomena Analysing issues, making decisions and planning future actions with proper statistics

Possessing a basic understanding of statistical concepts and methods

Raising the level of statistical literacy in the community

Careful consideration of the characteristics and specific needs of different sectors in the community



Organising target-oriented activities



Effective promotion of statistical literacy



Effective promotion of statistical literacy among students



Providing materials for supplementing formal statistical education

Partnership with educational authorities / institutions

Facilitating easy access of official statistics



Providing assistance for statistically-related extra-curricular activities



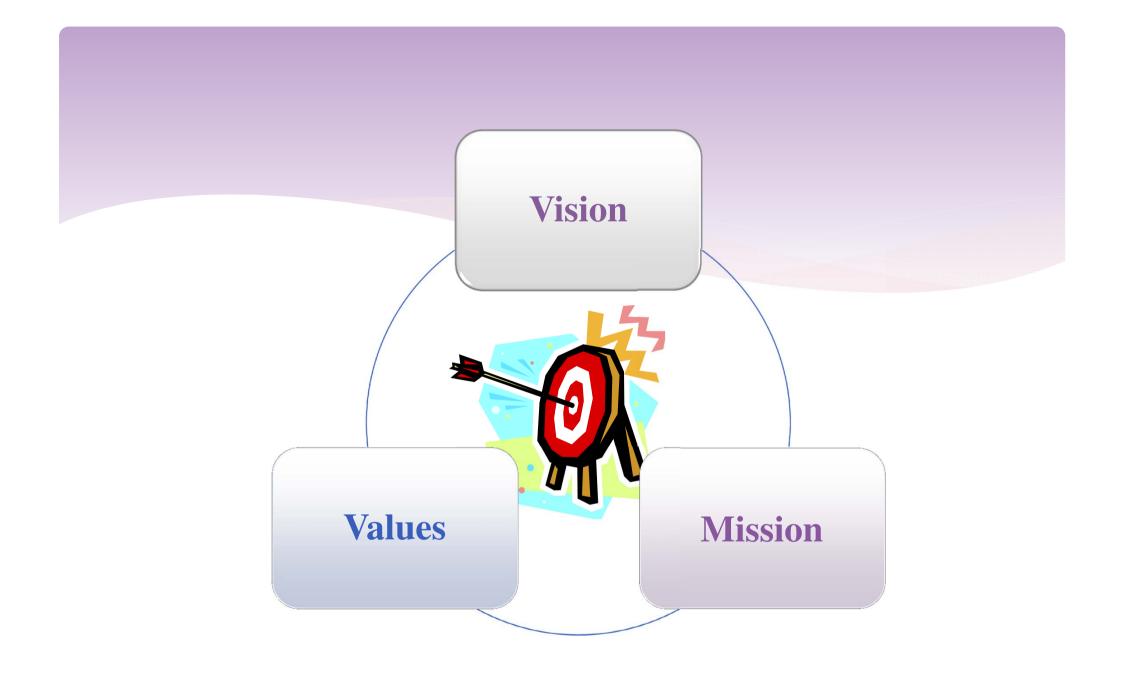
Creating a statistically friendly environment for students

- * Enable students to get accustomed to using official statistics to deal with their daily endeavours
- * Help students build up a good foundation of proper use of statistical methods and data



Census and Statistics Department (C&SD)'s role

- * Central statistical office of Hong Kong
- * Provides adequate, relevant, reliable and timely statistics for meeting the increasingly diversified data needs of the Government and various sectors of the community



Vision

To provide high-quality statistical services, contributing to the social and economic developments of Hong Kong

* To provide adequate, relevant, reliable and timely statistics to facilitate research, discussion, planning and decision making within the government and in the community

- * To ensure that the compilation and dissemination of statistics are in accordance with scientific principles, professional ethics and international standards
- * To promote a user-based culture, ensuring that users can obtain effective and convenient services

Mission

Values

- * Professionalism
- * Objectivity and neutrality
- * Cost-effectiveness
- * Respect for privacy
- * Progressing with the times
- * Commitment to excellence

Cultivating a statistical environment

* C&SD takes an active interest in promoting statistical literacy to cater for the characteristics and needs of different sectors of the community



Students and teachers



Business sector



Media workers



Civil servants



General public

Students and teachers

- * Facilitating teaching of statistics at schools
- * Pursuing e-initiatives in the promotion of statistical literacy among students
- * Arranging talks, visits and exhibitions for students
- * Providing education materials for students
- * Supporting competitions for secondary school students



Business sector

* To give talks on specific subject areas to public and private organisations

* To build the image of the Department and foster our corporate culture



Media workers

- * To organise briefings/talks on specific statistical subjects
- * To help media workers get a better understanding of the coverage, definition, data collection and data computation

methods in respect of specific statistical

subjects

* To facilitate reporting on official statistics

Civil servants

- * To help foster professional development through interactive discussion and exchange of professional knowledge/expertise
- * To keep abreast of latest statistical developments



General public

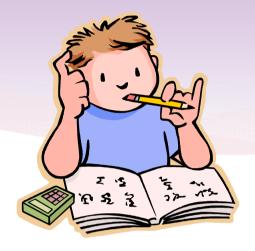
* Free statistical data sheets and reference materials promoting better understanding of the scope, definitions and uses of official statistics are available for free downloading

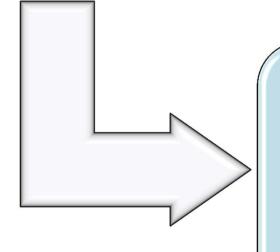
* To organise exhibitions to introduce official statistics in

Hong Kong



Priority





Students who are critical stakeholders of the future

Objectives of promotional activities

- * Instilling an awareness and better understanding of statistics in students
- * Helping students establish a good foundation of proper use of statistical methods and data
- * Enabling students to appreciate the multi-faceted application of statistics in discerning the complexities and cross-disciplinary nature of real life issues
- * Sharpening students' ability to connect, integrate and analyse statistics in everyday life



Efforts made by C&SD in promoting statistical literacy



Facilitating teaching of statistics at schools



Pursuing e-initiatives among students



Talks, visits and exhibitions for students



Educational materials for students

Facilitating teaching of statistics at schools

- * Key statistical indicators are readily accessible on the C&SD website
- * Integrates a curriculum with official statistics
- * Establish a platform with educational institutions in taking forward statistical education

Teaching kit "Living with Statistics"

- * First compiled in 1990 and released online since 2012
- * A convenient means of accessing reference materials on commonly used statistical methods and official statistics in Hong Kong
- * Facilitates teaching of statistics, particularly its practical applications



Living with Statistics

Mobile version of the C&SD website

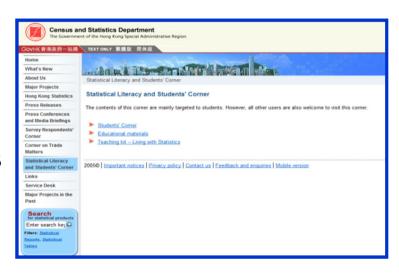
* To facilitate navigation of the latest Hong Kong statistics on handheld devices



"Statistical Literacy and Students' Corner" on the C&SD website

* Short statistical articles, booklets/leaflets → Enable students to understand more about official statistics, proper application

* Statistical hyperlinks between various educational websites and C&SD website → facilitate students' easy access to statistics



Interactive Data Dissemination Service (IDDS)

- * A user-friendly dissemination strategy to present commonly used statistics in the form of "Interactive Statistics" via a dashboard design
- * Users can build their own population census tables through IDDS



Web-based exhibition

- * Launched a web-based exhibition on the C&SD website in 2012
 - ➤ Major developments of C&SD (1967-2012)
 - > Statistical graphs and charts
 - > Index series of statistical feature articles
 - Photo gallery







Talks for students

- * A programme of statistical talks for secondary school students since the academic year of 1993-1994
- * Objectives
 - > Introduce commonly used statistical methods and data
 - ➤ Help students learn more about statistics and develop interest in the subject at school
 - Promote applications of statistics in a correct way in their work and daily lives later on

Students' visits to C&SD

* Objectives

Acquire a first-hand perspective of the work of the Department, which in turn help foster an interest in statistical work

* Programme includes:

> Briefing session and a guided tour



Career talks and exhibitions

* Participates in the civil service career talks and exhibitions held at various tertiary institutions







Professional Attachment Programme

- * Collaborating with local universities in launching the Programme
 - Providing students with practical experience in official statistical work
 - Providing opportunities to publicise the work of C&SD among students
 - Motivating potential candidates to join C&SD

Statistical feature articles in the *Hong Kong Monthly Digest of Statistics* since 1971

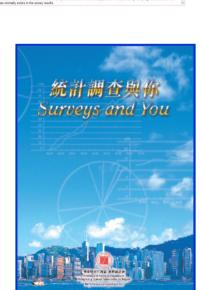
- * Link real-world examples with the relevance of statistical thinking
- * Range from brief overviews of administrative data and survey findings to detailed analyses of social, economic and financial statistics

 useful materials for students in learning statistics
- * Available on the C&SD website to facilitate easy access by students



Electronic versions of educational booklets/leaflets on C&SD Website

- * An Introduction to Sample Surveys
- * Surveys and You
- * Statistics and You
- * Introduction to the Consumer Price Index
- * Retail Sales and Consumer Spending
- * Understanding the concepts, interpretation and uses of Gross Domestic Product, Gross National Income, Balance of Payments





Collaborating with the local academia and statistical community



Hong Kong Statistical Society (HKSS)



Local universities/education institutes



Local statistical community

Hong Kong Statistical Society (HKSS)

Statistical
Project
Competition
(SPC) for
secondary school
students

Statistical
Creative Writing
Competition
(SCC) for
secondary school
students

Professional examinations

Public statistical talks / seminars



HKU SPACE course on "Hong Kong Statistics for Business"

* Background

- ➤ Offered by the School of Professional and Continuing Education of the University of Hong Kong (HKU SPACE) in collaboration with C&SD since 1977
- Two courses are organised every year (March and September)

* Objectives

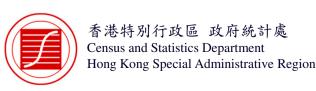
> To put managers, administrators and planners in closer touch with the statistical data available in Hong Kong, show how such data applied in business and forecasting



HKU SPACE course on "Hong Kong Statistics for Business" (cont'd)

* Major topics

- Introduction to official statistics and general discussion on statistical applications in business
- Trade statistics
- Labour, price and wage statistics
- Manufacturing and construction industries, distributive trades and services statistics
- National income statistics
- Population and income statistics
- Monetary and financial statistics





Course on Logistics and I/E Management organised by the Hong Kong Management Association

* Background

C&SD delivers a lecture on official statistics under the "International Marketing" module of the course once every year (March) since 2005

* Objectives

> To equip and update executives in the import-export trade and logistics management sector with the modern concept and professional knowledge on official statistics

* Major topics

- > An Introduction of Official statistics
- > Examples of statistical applications
- Merchandise trade statistics of Hong Kong



59th World Statistics Congress (WSC) of the International Statistical Institute (ISI)

Host city : Hong Kong

Date : 25 August to 30 August 2013

Venue : Hong Kong Convention and Exhibition Centre

Organisers : C&SD and ISI

Objectives: To provide a platform for the international

statistical community to share and present

the latest knowledge and innovation in statistics











The 59th World Statistics Congress

Theme Day on Youth (28 August 2013)

- * A series of sessions will be organised to address, from various statistical perspectives, topics surrounding the "Youth"
- * Encourage participation by students



Concluding remarks

- * Official statistical agencies to partner with statistical organisations and/or schools to enable students to acquire statistical knowledge and applications to:
 - > Prepare for their future careers
 - Strengthen ability of making rational decisions in daily endeavours

~ Thank you ~