




甲骨文學院教育雲 學習零時差

Francine Yang 楊雅致 資深經理
甲骨文學院，臺灣/香港/澳門
Jan 22, 2016

The World is Flat! 世界是平的 ~



Knowledge related work can be done by skilled, connected people from anywhere!

A young man with dark, wavy hair, wearing a white button-down shirt, is looking down at a laptop. He is in a library or study hall with high ceilings and arched windows. Other students are blurred in the background.

As per *The Economist*, An explosion in online learning, much of it free, means that the knowledge once imparted to a lucky few has been released to anyone with a Smartphone or laptop. Over half the 4,500 students at MIT take a MOOC as part of their course.

Source: <https://www.economist.com/news/briefing/2016/05/23/1605899-staid-higher-education-business-schools-earthquake-digital>

21st Century Classroom

Technology is undeniably changing the face of education, and it's easy to see the impact already. Imagine what classrooms will be like in 20 years with the speed of technological innovation. Learn more about some of the key advancements in the 21st century classroom.



of teachers have computers in their classroom...



...but just **1 in 5** feel their classrooms have the right level of technology

INCREASING THE PRESENCE OF THE FOLLOWING TECHNOLOGIES COULD CHANGE THAT RATIO DRASTICALLY

Real World Education

Project-based learning (PBL) teaches concepts, but also organization, articulation, project management and collaboration

Integrating life skills into education can improve student engagement and retention and prepare them for 21st century careers



Online Courses



Almost a third of all college students take at least one online course

Online enrollments saw 21% growth while overall higher education student population only saw 2% growth

Over 65% of education institutions count online learning as critical for long-term educational success



Games and Gamification



of teachers have used online games in the classroom

In one study, games raised average test scores:

91.5%
With the use of digital games
79.1%
Without the use of digital games

Learning Analytics

Help teachers assess top concerns and achievements related to their students



Registration for the Learning Analytics and Knowledge conference doubled between 2011 and 2012



Open Source Textbooks

In the next decade, open source textbooks are expected to grow to 25% of the textbook market



6 in 10

students have used a digital textbook - just 4 in 10 had in 2011 -

By 2013, e-textbooks may comprise



of textbook revenue

81% of teachers believe tablets enrich classroom learning

86% of students believe they study more efficiently with tablets

1 in 5 students have used a mobile app to keep their coursework organized

29% of teachers use social media for coursework, compared to now 80% of college professors

59% of students would like to use their own mobile devices to enhance learning

Top 3 Reasons for Teachers to Use Technology in the Classroom



Adapt to diverse learning styles



Boost student motivation



Enhance the material being taught



Over 51% of colleges cited wireless upgrades as their tech priority in 2011-12 given the **60% increase** in mobile devices on campus in the previous year

Integration of Social Networks

Engaging students with a free tool they already use can help them learn in new ways, gain focus and increase participation



One social media pilot program assisted in a class' 50% rise in grades



4 in 10 students believe integrating social networks into the classroom would benefit their education

Sources: <http://www.pbl.org/about/news/archive/2012/teacher-survey-fact/> • http://www.payscale.com/downloads/PF_Tablet_Survey_Summary_2012.pdf • <http://www.nytimes.com/2011/11/24/world/americas/schoolwork-gets-swept-up-in-rush-to-go-digital.html?pagewanted=all> • <http://techcrunch.com/2012/02/18/open-source-textbooks/> • <http://www.pweds.com/releases/2011/8/pweds8708680.htm> • http://pearsonfoundation.org/downloads/PF_Tablet_Survey_Summary.pdf • <http://edtechdigest.wordpress.com/2011/10/18/trends-survey-says-wireless-networks-expand-for-mobile-growth/> • http://patrickdunn.squarespace.com/storage/blank_center/global-research/Pages/balson-survey-research-group.aspx • http://www.tomorrow.org/speakup/pdfs/SU11_PersonalizedLearning_Students.pdf • <http://www.scholastic.com/browse/article.jsp?id=3751748> • <http://mhealth.sagepub.com/news/article-d0830c0c-4c10-11e1-8269-001871b3e66c.html> • http://www.biele.org/research/study/experimental_study_of_bile_project_based_economic_units • <http://solarresearch.org/OpenLearningAnalytics.pdf> • http://learninganalytics.net/LAK_12_keynote_Siemens.pdf



http://www.opencolleges.edu.au/infographic/21st_century_classroom.html

甲骨文學院

開始於1993



甲骨文學院教育雲，借助最先進的技術方案，喚醒和深化電腦 / 工程學科學生的學習興趣。

ORACLE ACADEMY



Oracle Academy 學校證言

<https://www.youtube.com/watch?v=9uW7cxVuZFQ>

Oracle's Commitment to CS Education

<https://www.youtube.com/watch?v=pkeH-M8eeuA>

ORACLE GIVING



Charitable giving for CS and STEM education.



RaspberryPi

甲骨文的獨特地位

- Oracle是Java的擁有者
全球超過900萬的開發人員。
- Oracle的技術
在超過44個產品/行業分類中排名第一



- 我們有得天獨厚的優勢以幫助教師們
提供當前、業界相關的一系列CS主題教育（如： Java, database, SQL, PL/SQL, 等）。

Oracle Academy



Delivers a complete portfolio of software, curriculum, educator training, support and certification resources



Present in **106** countries

2.6+ M

Students Reached Annually



Provides access to the same technologies that drive industry

One Program



免費個人或學術機構會員資格為期三年，將提供教育機構和教師對其有益處之獨特的會員權益和資源，同時透過與行業相關的知識和技能，協助學生為進入大學和職業作準備。

- **Oracle Academy** 新課程/新認證
- **Academic** 教學研究使用皆可
- **Individual Memberships**
- **Institutional Memberships**

甲骨文學院教育雲



教育訓練：由各關鍵技術領域之專家所提供的線上、實作講座及「與甲骨文專家對談」網絡廣播和podcast，其內容包括大數據、雲端運算、網路安全、商業智慧以及更多內容

軟體權限：使用甲骨文領先業界用於教學及學術、非營利目的之課程及學位相關之研究的軟體權限

- 使用託管甲骨文學院作業空間之資料庫的權限

甲骨文教育訓練中心培訓折扣：教師和技術人員享有甲骨文教育訓練中心培訓折扣，以透過使用甲骨文的最新產品拓展知識和深化技能

- 為你的教師、技術人員和學生提供優惠的認證資源，其中包括有利於甲骨文學生的甲骨文認證初級工程師（Oracle Certified Junior Associate）認證考試

認證資源：75%折扣優惠



原廠教材： Alice、Greenfoot、資料庫設計、SQL、PL/SQL和使用JAVA的物件導向程式設計之模組化的學術課程，適用於高中職生、主修與非主修資訊工程課程的學院和大學一年級及二年級之學生

社區

電腦科學俱樂部



教師論壇&學生中心



ORACLE OPEN WORLD & JAVA ONE



認證

認證&考試

50%折扣優惠
認證模擬考試75%折扣優惠
認證考試

培訓

教師專業發展



課堂培訓



即時虛擬培訓



依據需求的培訓



自學課程



私人活動

課程

課件



甲骨文出版物

Oracle Press™

客串講座



技術文章



線上學習圖書館

ORACLE® Learning Library

技術

ORACLE軟體



託管實驗室

ORACLE® Application Express

JAVA開發環境



開源軟體



Free Industry Leading Oracle Software For Teaching & Not-for-Profit, Academic Research Use

Oracle Database

Database

- Database Enterprise Edition

Database Options

- Real Application
- Clusters
- Oracle Spatial and Graph
- Advanced Analytics
- Advanced Compression
- OLAP
- Partitioning

Database Enterprise Edition

- Database Lifecycle Management
- Oracle Diagnostics Pack
- Oracle Tuning Pack
- Cloud Management Pack

Big Data

Oracle Middleware

Cloud Application Foundation

- WebLogic Suite (includes TopLink and Application Development Framework)

Data Integration

- Data Integrator Enterprise Edition GoldenGate

Middleware Management

- SOA Management Pack Enterprise Edition
- WebLogic Server Management Pack Enterprise Edition

Service Oriented Architecture

- SOA Suite for Oracle Middleware

WebCenter

- WebCenter Suite Plus

Business Intelligence

- Business Intelligence Suite Enterprise Edition Plus
- Essbase Plus
- Hyperion Interactive Reporting

Identity Management

- Identity and Access Management Suite Plus

Business Process Management

- Unified Business Process Management Suite

Oracle Applications Software Programs

J.D. Edwards Enterprise One

Financials

- Financials
- System

Customer Relationship Management

- Advanced Customer Relationship Management
- Case Management

Primavera

Primavera

P6

PeopleSoft Enterprise

Enterprise HRMS

- Human Resources
- Benefits Administration

- Time and Labor
- Stock Administration

- Pension Administration
- Candidate Gateway

- Talent Acquisition
- eCompensation

- eCompensation
- eProfile

- eProfile Management
- eDevelopment

- eBenefits
- eRecruitment

- eLearning
- ePerformance

- eCompliance
- eGovernance

Enterprise EPM Supply Chain Analytics

Oracle E-Business Suite

Intelligence

- Supply Chain & Order Management Intelligence
- Service Intelligence
- Projects Intelligence
- Procurement Intelligence
- Marketing & Sales Intelligence
- Oracle HR Intelligence
- Financials Intelligence
- Fusion Transportation Intelligence
- Human Resources
- Balanced Scorecard

Supply Chain Planning

- Advanced Supply Chain Planning
- Global Order Promising

Procurement

- Purchasing

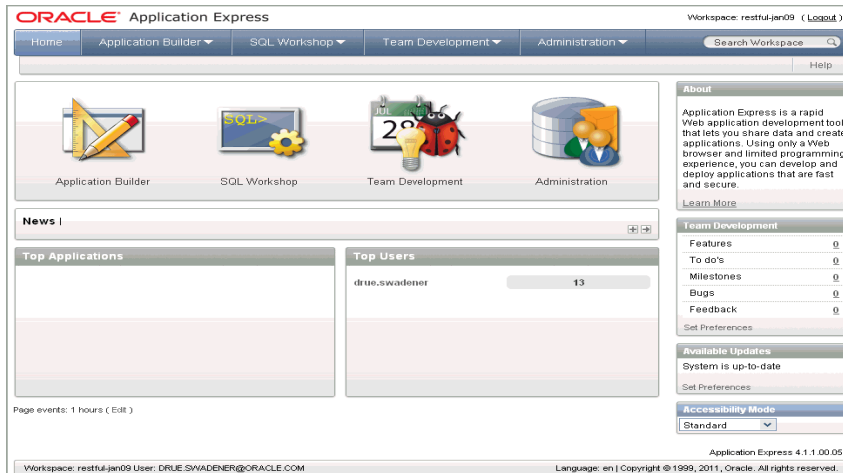
Manufacturing

- Discrete Manufacturing
- Process Manufacturing

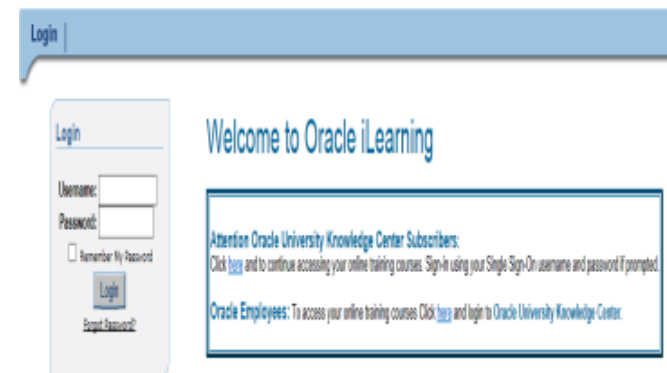
Service

- TeleService

Oracle Academy – Development Environments



ORACLE Academy



甲骨文學院教育雲 教材



- Designed for **high schools, vocational schools, two-year colleges** and **universities**
- Educators receive **training** and **curriculum** to teach programming and database skills.

Program		Offering
Workshops		<ul style="list-style-type: none">• Getting Started with Java Using Alice• Creating Java Programs Using Greenfoot
Academic Course Curriculum		<ul style="list-style-type: none">• Java Fundamentals• Java Foundations• Java Programming• Database Foundations• Database Design and Programming With SQL• Programming with PL/SQL

認證資源



模擬考試：
50%折扣優惠

認證考試：
75%折扣優惠

Oracle Database 12C MySQL Database

Oracle Database PL/SQL Developer

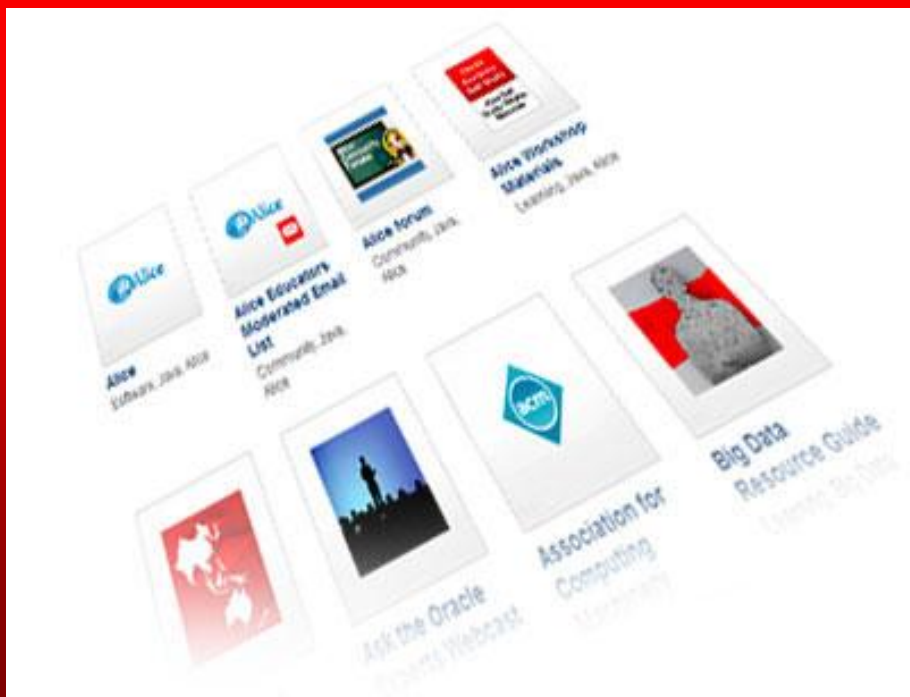
ORACLE®
Certified Professional

ORACLE®
Certified Associate

為什麼需要Oracle的認證?

行業分析師和專家一致認為：Oracle認證是IT市場中最搶手的專業能力證明。擁有Oracle認證的IT專業人員可以從他們的同齡人或競爭中脫穎而出，並獲得寶貴的工作保障。

社群資源



Java用戶群組



Oracle User Groups



對電腦科學
俱樂部的技術支援



Support for CS Clubs



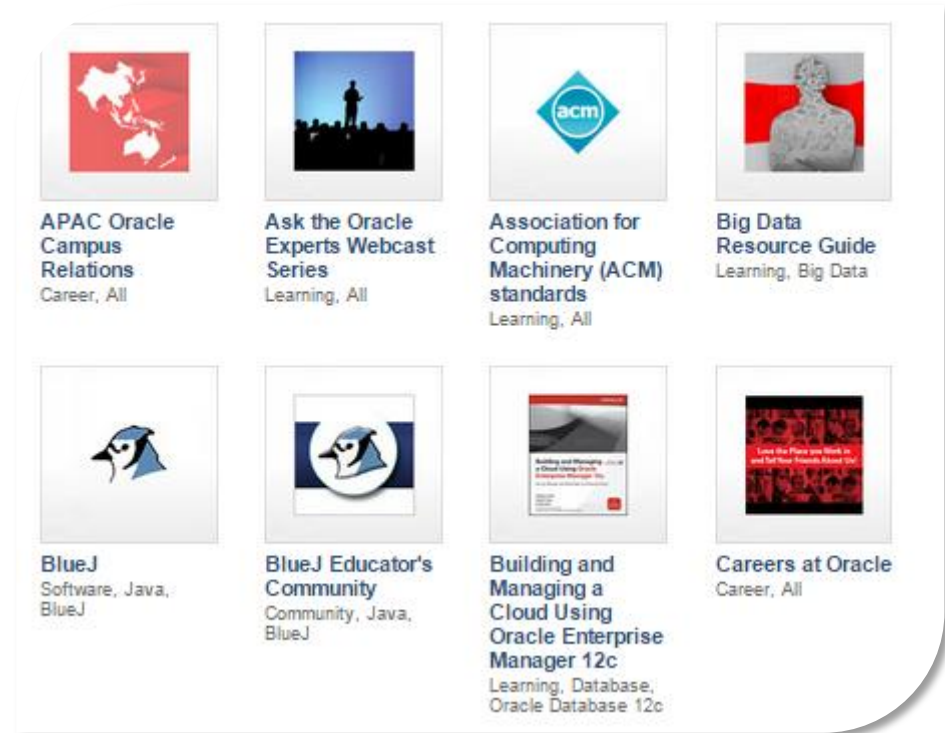
Oracle Open World

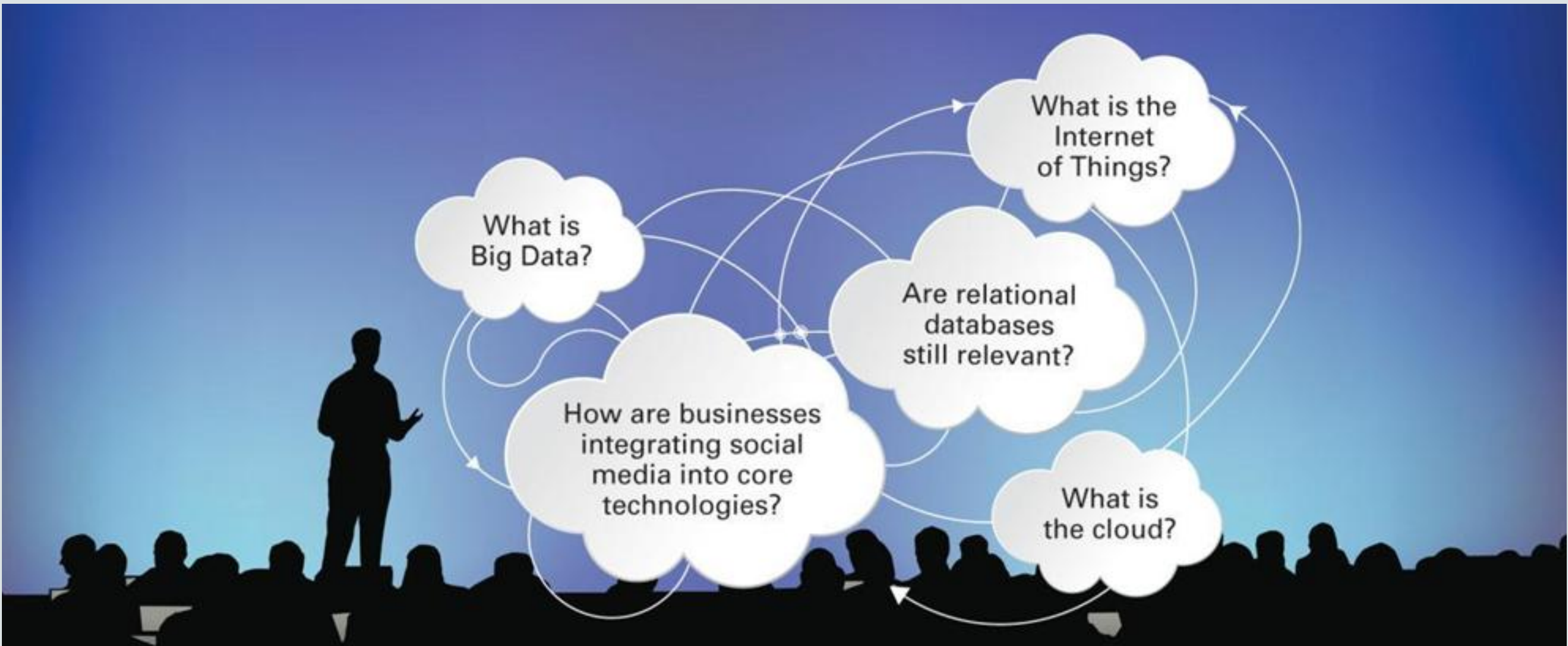
CAREERS &
INTERNSHIPS



Resources for Educators

- Online lectures: Ask The Oracle Experts
- Big Data Bootcamps
- Getting started with Oracle APEX
- Java Learning Library
- Oracle Academy YouTube Channel





Ask the Oracle Experts Series
academy.oracle.com/oa-ask-the-experts.html



主畫面 | 學習進程 | 自訂進度 | 排定的課程 | 聊天室 | 論壇

搜尋目錄

執行

☐ 完全符合的字詞

[進階搜尋...](#)

瀏覽目錄

我的學習

篩選

☐ 包括已完成的課程

執行

開始	課程
	2013-2014 Oracle Academy Java Fundamentals V2 - Student
	2013-2014 Oracle Academy Java Fundamentals V2 - Teacher
	2013-2014 Oracle Academy Java Programming V2 - Student
	2013-2014 Oracle Academy Java Programming V2 - Teacher
	2013-2014 Welcome and Introduction Series

2013-2014 Oracle Academy Java Programming V2 - Teacher

課程目錄

- 2013-2014 Oracle Academy Java
 - Section 0 - Professional Deve
 - Java Programming Virtual
 - Section 0 - Course Resources
 - Java Programming Instru
 - Java Programming Studen
 - Java Programming Course
 - Java Programming Course
 - How to Use the Course Ma
 - Java Programming Forum
 - 2013-2014 iLearning Setu
 - Oracle Academy Curriculu
 - Java Programming Techni
 - Java Programming Softwa
 - US AP College Board Tem
 - Section 1 - Java Application L
 - Section 2 - Working with Pre
 - Java Programming Midterm Exam**
 - Section 3 - Class Design, Gen
 - Section 4 - Creating a Final P
 - Java Programming Final Exam
 - Appendix B: A SQL Primer
 - Appendix C: Prep for US AP C
 - Appendix D: GridWorld Case

測驗：Java Programming Midterm Exam

請回答此頁面中的試題，然後按一下「下一頁」到下一個測驗頁面。您可以按一下「跳覽」，在送出測驗前查看您還需要回答的試題。

Section 1

(請回答此部分的所有試題)

1. Which of the following is not a reason to use a Java package?

- ☐ It is a way to organize files when a project consists of multiple modules.
- ☐ It is a way to help resolve naming conflicts when different packages have classes with the same names.
- ☐ It is a way to protect data from being used by the non-authorized classes.
- ☐ It is a way to allow programmers to receive packets of information from databases.
- ☐ None of the above

2. To deploy java applications you may use Java Web Start. True or false?

- ☐ 是
- ☐ 否

3. The method for connecting a java application to a database is JNLP. True or false?

- ☐ 是
- ☐ 否

4. Which of the following files are not required to be uploaded to a web server to deploy a java application/applet?

- ☐ jar files
- ☐ JNLP files
- ☐ html files
- ☐ java files
- ☐ None of the above

5. An example of two tier architecture would be a client application working with a server application. True or false?

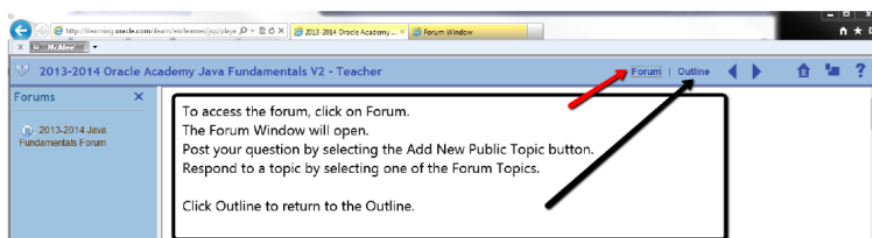
- ☐ 是
- ☐ 否

Java Programming Instructor Course Resources

Section 1	Section 2
Section 3	Section 4
Appendix A	Appendix B
Appendix C	Appendix D
Oracle Academy Website Resources	

This Instructor Course Resources page provides you access to all printable materials for the Java Programming course. Each section contains printable Student Guides (slides), Practice Guides, Instructor Solution Guides, and additional materials needed for a section.

Do you have questions, or would you like to participate in a discussion? Select the Forum link from any Oracle Academy Teacher Course Offering:



2016 Java Fundamentals 新課程

10次華語零時差同步課程

*即日起 ~ 註冊會籍

*2/15~3/7 註冊課程

*3/23~5/25 每周三線上課程

<https://academy.oracle.com/en/membership-join-oracle-academy.html>





Oracle Academy

教育

[動態時報](#)[關於](#)[相片](#)[說讚的粉絲](#)[更多 ▾](#)

4,948 人說這讚

邀請朋友對這個粉絲專頁按讚


關於

[要求 Oracle Academy 分享地址](#)[詢問 Oracle Academy 的電話](#)<http://academy.oracle.com/>

相片





Oracle Academy
8 小時前 · 

JavaOne4Kids: The Next Generation of Programmers

Four hundred fifty students—more than three times as many as last year—convened in San Francisco for JavaOne4Kids, an amazing day of workshops engaging kids who want to learn more about programming, robotics, and engineering.

Read More: <http://bit.ly/JavaOne4Kids>



Join the Oracle Academy Community



www.facebook.com/oracleacademy



[@OracleAcademy](https://twitter.com/OracleAcademy)



[OracleAcademhttps://www.youtube.com/watch?v=pkeH-M8eeuAyChannel](https://www.youtube.com/watch?v=pkeH-M8eeuAyChannel)



academy_ww@oracle.com

Oracle Academy Curriculum – Mapping / Levelling

Standards Mapping

Mapping is performed to meet a National / International standard

Examples

Computer Science Teachers Association (CSTA)
International Society for Technology in Education (ISTE)

Framework Levelling

Levelling is performed to meet a National / International qualification as part of a qualifications framework

Examples

Scottish Qualifications Framework (SCQF)
European Qualifications Framework (EQF)

Unit of Learning Mapping and Levelling

Mapping / Levelling is performed to meet a National / Local unit of Learning to be delivered as part of a qualification

Examples

South Africa Basic Education
Scottish Qualifications Agency
UPR Banyan

全球成功使用學校案例<https://academy.oracle.com/en/about-success.html>

Case Study : UK Diploma

Collaboration with industry and college:

- Oracle Academy, New College Lanarkshire and The Royal Bank of Scotland
- Creation of a customised Diploma which meets industry needs in “soft skills” and embeds Oracle Academy curriculum in Java, SQL and PL/SQL

Computing Diploma

- Higher National Diploma in Computing
- Validated by the Scottish Qualifications Authority
- Credited levelled at European Qualification Framework standards
- Delivered to college enrolled students with work experience / summer school project provided by the Royal Bank of Scotland data centre student mentors

Results

- 16 students started in 2013 and in 2015 all now employed by the Royal Bank of Scotland on successful completion of the Diploma
- 2015 planned for 45 new students to enrol in the course.
- Another 8 Oracle customers now aligned with their local colleges to deliver the Diploma in Academic year 2015/2016

Integrated Cloud

Applications & Platform Services