



## 第115回 事例分析: Khan Academyを歩いてみた

- Salman Khan氏が家庭教師的な関わりから動画を作成
  - 2,700を超えたVideo。K-12が対象(大人も楽しく学べる)、ネット
- 動画はYouTube、字幕はvolunteer、学習サイトは構築
- 小さなコンテンツの組み合わせだが、VideoやPracticeには関連が張られ、全体を俯瞰するKnowledge Mapもある
- 数学や科学などの演習は自動採点されるシンプルなもの。コーチ機能もありリアルな学校での導入事例も
- 見て解いて貯まる energy pointとバッジ
- 進み具合や経過を見やすく提供。計画を立てる機能も
- 映像コンテンツは板書主体。外部のコースなどでも利用。



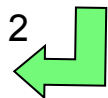
## 機能構成

- FacebookかGoogleアカウントで利用
- WATCH
  - YouTube動画、字幕、コメント
  - 学習量は enagy point。バッジがもらえる。経過の視覚化
- PRACTICE
  - 演習もある。学習制御は強くないが、広大な系列マップは圧巻
- COACH
  - コーチを指定したり、生徒を指導できる
- VOLUNTEER
  - 字幕の翻訳、寄付

<http://www.khanacademy.org/>

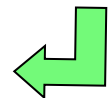
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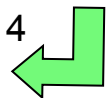
# Salman Khan

<http://www.youtube.com/user/khanacademy>



## WATCH 講義を受講

- YouTubeにアップした数分の動画
  - 基本的に板書。先生は登場しない
  - 字幕付きでVOLUNTEERにより多言語化
- 視聴の度合いで energy pointが貯まる。
- 講義のページにコメント欄がありQAが蓄積されている。
- ソーシャルメディアへの共有機能



# 講義は板書

The screenshot shows a Khan Academy video player interface. At the top, it says "114,468,329 lessons delivered" and "KHANACADEMY". The video title is "Currency Effect on Trade". The video content is a handwritten board with the following text:

**China**  
needs to sell for 10 Yuan  
At current exchange:  
Demand for 100 dolls in U.S.  
China  $\xrightarrow{\times 100}$  U.S.  
 $\xleftarrow{\$100}$   
Try to convert the 100 dollars into Yuan (1,000 Yuan)

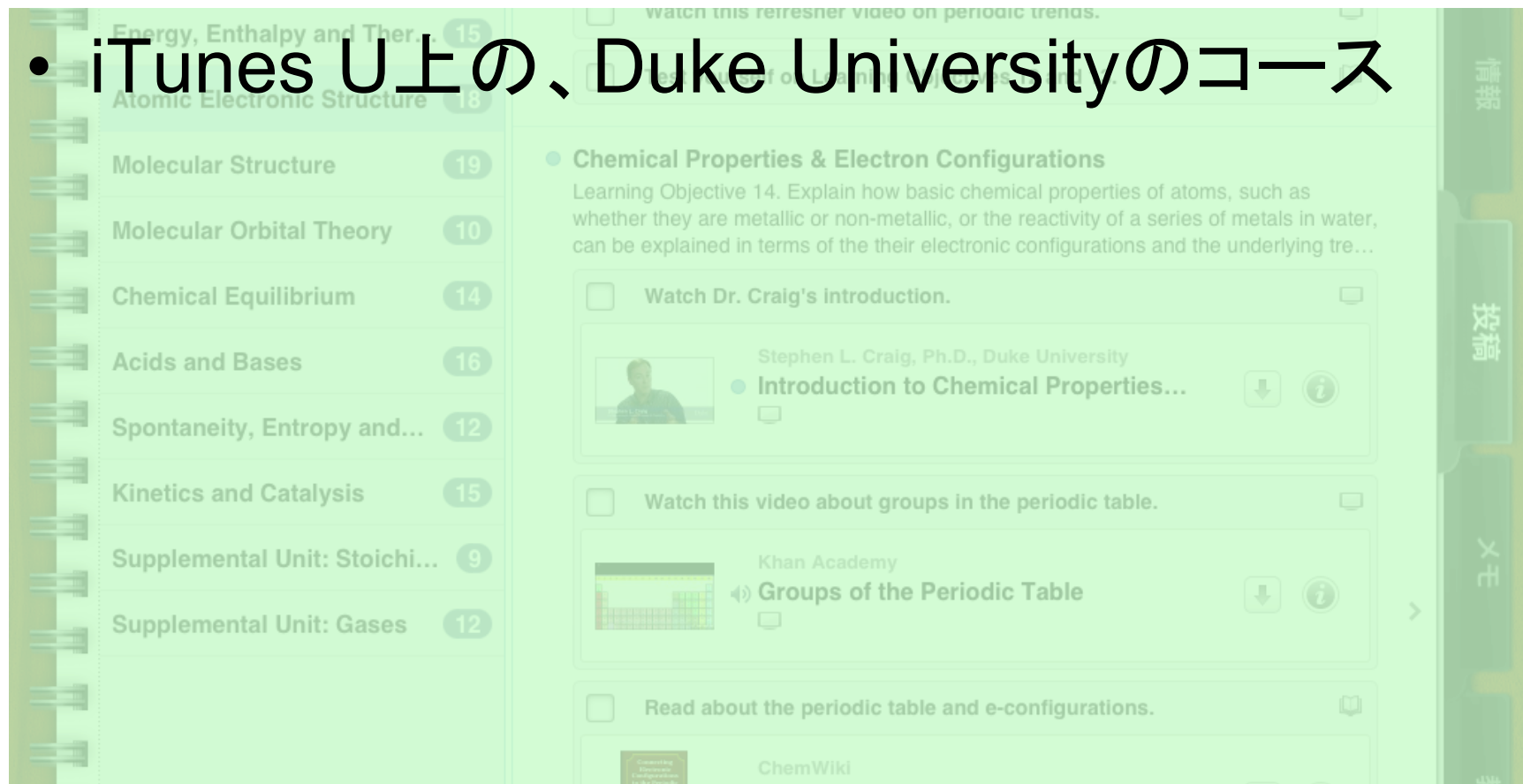
**United States**  
needs to sell for \$1  
At current exchange:  
Demand for 50 cans in China  
China  $\xleftarrow{\times 50}$  U.S.  
 $\xrightarrow{500\text{ Yuan}}$   
Try to convert his 500 Yuan into 50 dollar

around, if you think about it in yuan, it would be a trade



## 外部でさまざまに利用

- iTunes U上の、Duke Universityのコース



# PRACTICE 演習

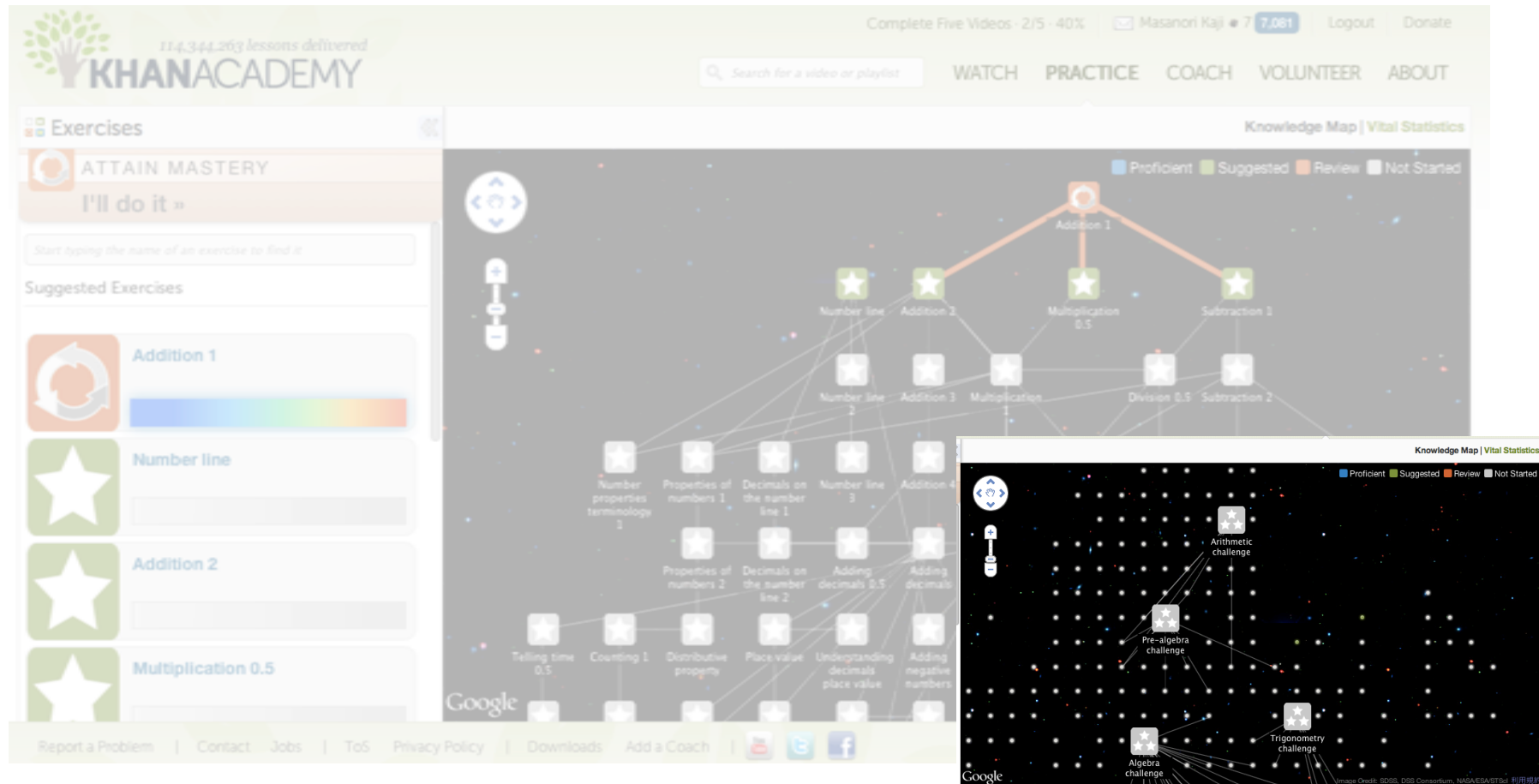
- 簡単な演習と関連するVIDEOの提示

The screenshot shows a Khan Academy practice page titled "Alternate exterior angles". The page includes the Khan Academy logo, a search bar, and navigation links for WATCH, PRACTICE, COACH, VOLUNTEER, and ABOUT. The main content area contains a problem statement: "The two horizontal lines are parallel, and there is a third line that intersects them as shown below. If we know that the blue angle is 82 degrees, what is the measure of the orange angle?". Below the text is a diagram of two parallel horizontal lines intersected by a transversal line. A blue arc is drawn at the bottom-left intersection, labeled "82°", and an orange arc is drawn at the top-right intersection. To the right of the problem is an "Answer" section with an input field, a "Check Answer" button, and a "Need help? Get a hint." section with an "I'd like a hint" button. At the bottom right, there is a "Stuck? Watch a video." section with a video thumbnail.

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# Knowledge Map

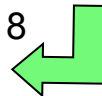


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教授システム学専攻

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Kumamoto University





# Vital Statistics



# Achievements

## Achievements

The screenshot displays a user's achievement profile. At the top, there are six badge categories: Challenge Patches (three stars), Black Hole Badges (a black circle), Sun Badges (a glowing sun), Earth Badges (a globe), Moon Badges (a moon), and Meteorite Badges x 3 (a meteorite). Below this, a text box states: "Meteorite badges are common and easy to earn when just getting started." The "Badges Earned" section lists three items: "Great Listener" (x3, last achieved 1 hour ago), "Nice Listener" (x4, last achieved 2 weeks ago), and "Act I Scene I" (last achieved 3 weeks ago). The "Possible Badges" section shows three items: "Just Getting Started" (100 points, achieve proficiency in any 3 exercises), "Picking Up Steam" (100 points, quickly & correctly answer 5 exercise problems in a row), and "Making Progress" (1000 points, achieve proficiency in any 7 exercises).

# COACH 生徒を指導



114,345,642 lessons delivered  
KHANACADEMY

Complete Five Videos · 2/5 · 40% Masanori Kaji 7,081 Logout Donate

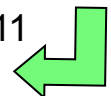
Search for a video or playlist WATCH PRACTICE COACH VOLUNTEER ABOUT

Manage Coaches Manage Students Class Stats For All students

- Manage Coaches
- Manage Students
- Class Status For ...

[http://www.khanacademy.org/class\\_profile](http://www.khanacademy.org/class_profile)

TEDの後半で解説されている...



# VOLUNTEER 字幕の多言語化

- <http://www.universalsubtitles.org/ja/>

China

\$100

Try to convert the 100 dollars into Yuan (1,000 Yuan)

500 Yuan

Try to convert his 500 Yuan into 50 dollar

English

Subtitles Off

English (276 lines) ✓

Spanish (100%)

Portuguese, Brazilian (286 lines)

Vietnamese (100%)

Universal Subtitles

THIS VIDEO

- + Add New Translation
- ✎ Improve These Subtitles
- 📄 Subtitle Homepage
- 🔗 Get Embed Code
- ⬇️ Download Subtitles

MY SETTINGS

- 👤 Login or Create Account
- ⚙️ Language Preferences

750 of 750

Subtitles

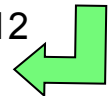
Download

Most votes first

Q. 4

A. 11

No. In the example cited in the lecture, the supply of Yuan is lesser than the dollar. The demand for Yuan is greater than the dollar. The Chinese doll manufacturer has in his hands \$100. The Cola guy wants to convert his 500 Yuans to \$50. Therefore in a way, the Chinese doll manufacturer has found somebody willing to take \$50 in exchange for 500 Yuans. But there are still \$50 left with



# 事例分析の視点 ～eラーニング概論より

1. 対象者・目的・利用環境
2. システム設計(構成要素とその妥当性など)
3. コース設計(構造・系列化と学習制御についてなど)
4. 学習支援設計(学習課題の特徴と学習プロセスの支援状況についてなど)
5. 動機づけ設計(想定される学習者の特徴と動機づけの適切性についてなど)
6. 自己管理学習支援(学習観の変革をサポートしているかどうかについてなど)
7. その他の視点(その他、分析の視点として適切だと思われる観点について:任意)

<http://www.gsis.kumamoto-u.ac.jp/opencourses/iel/index.html>

