

## Learning from the Living [Class] Room

### Additional thoughts & notes

#### Potential players:

- Amazon – personal assistance via Alexa; enormous investments in AI and the staff to develop an AI-based platform; relaunched Inspire content repository (7/17/17)
- Apple – personal assistance via Siri; deep pockets; huge investments being made in AR; enormous installed base with iOS and MacOS
- Google – personal assistance via Google Assistant; language translation; highly innovative; investing heavily in AI-based applications; quickly moving to where everything they do uses some sort of AI
- Microsoft – personal assistance via Cortana; language translation; LinkedIn (Lynda.com) and big data and AI-based HR/career employment-related systems
- IBM Watson – cognitive computing; language translation
- Polycom – videoconferencing
- Blackboard – videoconferencing, application sharing, chat, interactive whiteboard
- T1V, Prsym, and/or Bluescape – submitting content to a digital canvas/workspace
- Samsung, Sharp, LCD, and others – for large displays with integrated microphones, speakers, webcams, etc.
- Socratic – to take pictures of equations in order to get instant feedback and/or links to other resources
- USC Institute for Creative Technologies (ICT), USC Shoah Foundation, Conscience Display – for holographic storytelling
- Feedly – RSS aggregator

- \_\_\_\_\_ – for creating AR, MR, and/or VR-based content
- \_\_\_\_\_ – for providing backchannels
- \_\_\_\_\_ – for tools to create videocasts and interactive videos
- \_\_\_\_\_ – for blogs, wikis, podcasts, journals
- \_\_\_\_\_ – for quizzes/assessments
- \_\_\_\_\_ – for discussion boards/forums

**Further random thoughts:**

**Might Amazon’s Alexa be a tool to periodically schedule & provide practice tests & distributed practice on content? In the future, will there be "learning bots" that a learner can employ to do such self-testing and/or distributed practice? (3/3/18)**

I pondered this question after seeing the article entitled, "[Scientists Are Turning Alexa into an Automated Lab Helper.](#)"

From page 45 of [the PDF available here](#):



**Psychological Science in the Public Interest**

**Improving Students’ Learning With Effective Learning Techniques**  
*Promising Directions From Cognitive and Educational Psychology*  
 John Dunlosky, Katherine A. Rawson, Elizabeth J. Marsh, Mitchell J. Nathan, Daniel T. Willingham  
 First Published January 8, 2013 | Research Article | [Check for updates](#)

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*Improving Student Achievement* 45

**Table 4. Utility Assessment and Ratings of Generalizability for Each of the Learning Techniques**

Technique	Utility	Learners	Materials	Criterion tasks	Issues for implementation	Educational contexts
Elaborative interrogation	Moderate	P-I	P	I	P	I
Self-explanation	Moderate	P-I	P	P-I	Q	I
Summarization	Low	Q	P-I	Q	Q	I
Highlighting	Low	Q	Q	N	P	N
The keyword mnemonic	Low	Q	Q	Q-I	Q	Q-I
Imagery use for text learning	Low	Q	Q	Q-I	P	I
Rereading	Low	I	P	Q-I	P	I
Practice testing	High	P-I	P	P	P	P
Distributed practice	High	P-I	P	P-I	P	P-I
Interleaved practice	Moderate	I	Q	P-I	P	P-I

Note: A positive (P) rating indicates that available evidence demonstrates efficacy of a learning technique with respect to a given variable or issue. A negative (N) rating indicates that a technique is largely ineffective for a given variable. A qualified (Q) rating indicates that the technique yielded positive effects under some conditions (or in some groups) but not others. An insufficient (I) rating indicates that there is insufficient evidence to support a definitive assessment for one or more factors for a given variable or issue.

As of 7/31/17, according to [this Alexa Skills Kit page](#), there are now more than 15,000+ skills on Amazon's new platform — Alexa. As such, *I continue to wonder...what will this new platform mean/deliver to societies throughout the globe?*

### What Is an Alexa Skill?

Alexa is Amazon's voice service and the brain behind millions of devices including Amazon Echo. Alexa provides capabilities, or skills, that enable customers to create a more personalized experience. There are now more than 12,000 skills from companies like Starbucks, Uber, and Capital One as well as innovative designers and developers.

### What Is the Alexa Skills Kit?

With the Alexa Skills Kit (ASK), designers, developers, and brands can build engaging skills and reach millions of customers. ASK is a collection of self-service APIs, tools, documentation, and code samples that makes it fast and easy for you to add skills to Alexa. With ASK, you can leverage Amazon's knowledge and pioneering work in the field of voice design.

You can build and host most skills for free using Amazon Web Services (AWS).

#### Top enabled skills

 <p>"Alexa open Sleep Sounds"</p> <p>Sleep and Relaxation Sounds ★★★★☆ 889</p>	 <p>"Alexa Open Find Phone"</p> <p>Find Phone ★★★★☆ 96</p>	 <p>"Alexa, Play Jeopardy!"</p> <p>Jeopardy! ★★★★☆ 596</p>	 <p>"Alexa, what's my Flash Briefing?"</p> <p>Fox News ★★★★☆ 328</p>
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#### New skills

 <p>"Alexa, open Amex"</p> <p>Amex ★★★★☆ 13</p>	 <p>"Alexa, tell Seamless I'm hungry."</p> <p>Reorder with Seamless ★★★★☆ 3</p>	 <p>"Alexa, play Lie Swatter"</p> <p>Lie Swatter ★★★★☆ 4</p>	 <p>"Alexa, ask Newton if I've got mail"</p> <p>Newton Mail ★★★★☆ 4</p>
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#### Customer favorites this week

 <p>"Alexa, Play Jeopardy!"</p> <p>Jeopardy! ★★★★☆ 596</p>	 <p>"Alexa, open Thunderstorm Sounds"</p> <p>Ambient Noise: Thunderstorm Sounds ★★★★☆ 633</p>	 <p>"Alexa, open NASA Mars."</p> <p>NASA Mars ★★★★☆ 50</p>	 <p>"Alexa, Inspire Me."</p> <p>Inspire Me ★★★★☆ 149</p>
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#### Skills trending this week

What happens when you take the capabilities of Amazon's Alexa platform and team those up with some of the capabilities of [Realizeit](#) (ie., an intelligent adaptive platform-as-a-service that can deliver personalized programs)?

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### Addendum on March 27, 2017

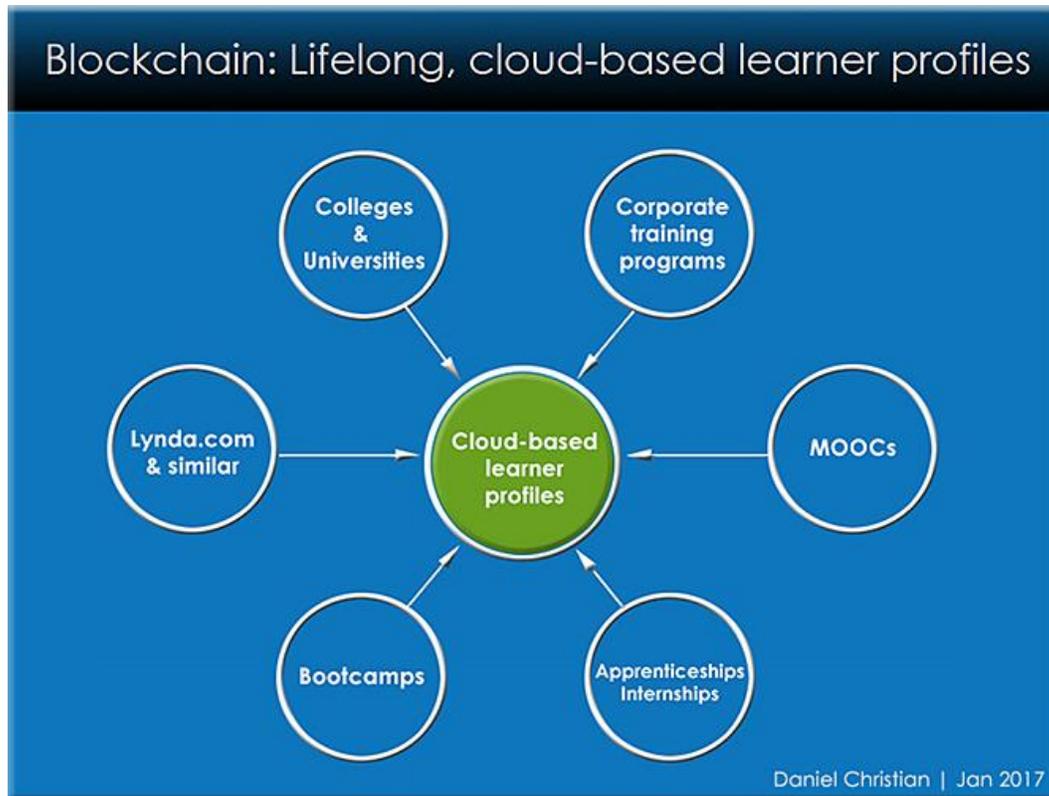
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*This vision entails numerous technologies. Since I posted this vision ~5 years ago, several of the potential pieces of this vision may be coming into view.*

**Lifelong, cloud-based learner profiles** -- owned and controlled by the individual learners. Already we have "Learning Record Stores" -- being offered by GlassBlade, Learning Locker, Saltbox, and Watershed.

Such vendors and their products/services may morph into something much bigger -- especially by using Blockchain.

**Blockchain** and the recording of new credentials that you actually took module/course XYZ and you scored \_\_\_ on it.



**Artificial Intelligence (AI), machine learning, and deep learning** – which includes Natural Language Processing (NLP) – and the use of our voices as a key method of interfacing with our computing devices. Also, such technologies are already providing us with image/object recognition as well as recommendation engines. This is not vaporware! These deliverables and affordances are here today. And so are personal assistants such as Apple's Siri, Google Assistant, Microsoft's Cortana, and the growing-more-powerful by the day, Amazon's Alex platform. Also, [IBM's Intelligent Workplace Solution](#) is worth keeping a pulse-check on in this regard, as well as their push into cognitive computing: "[In 5 years, the classroom will learn you.](#)"

AI and its assorted technologies will provide an incredible amount of **personalized learning** -- keeping things within someone's Zone of Proximal Development (ZPD).

**Digital playlists** – something akin to Lynda.com's Learning Paths and digital playlists

**Collaboration software**, as found in products like [Bluescape](#), [T1V's ThinkHub](#), [Prism](#), [Microsoft Surface Hub](#), and more.

**Re: software, there will be something akin to today's "tvOS"** – as representative of a new type of a global operating system. Software (in terms of what we think of in terms of today's applications) will be

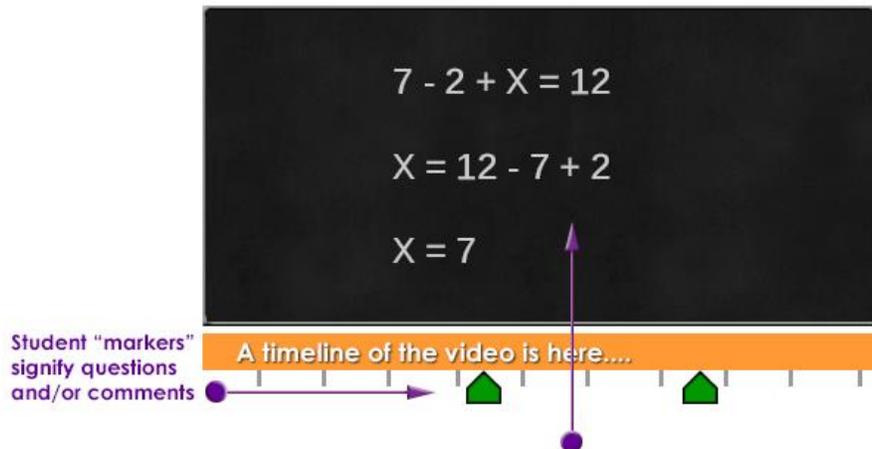
available on demand on either a pay-per-use method or via a subscription model. Open source software will likely be available as well.

**AI-based human resource systems**, checking for people who have passed these particular certifications, have such and such credentials, and who have \_\_ years experience.

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This new learning platform will offer a twist on the flipped classroom approach, whereby students can check out videos of equations, problems, etc. and insert their own "markers" with accompanying comments throughout the videos, alerting the SMEs where they have questions, comments, and/or issues:

## A twist on the flipped classroom approach....



A video of a math problem is playing up here. Students can watch the math problem being executed -- step by step -- and can insert their comments and questions at any time that they don't understand something.

Their comments are shown like markers  within a piece of digital video editing software.

After students record their questions/comments, then the instructor can access the video to see where their learners are having issues. They can double click on the markers to see what the questions/comments were.

It's like a twist on the flipped classroom...but finding out ahead of time where the issues are, so that the time spent in class can hone in on those problematic areas.

Daniel Christian | March 23, 2017

*It was interesting to find out about declara. From [their website](#):*

Declará provides a better way to discover the content that matters to you, your teams, and communities. Our proprietary CognitiveGraph™ engine **uses semantic analysis and predictive analytics to generate your Learning Profile and power your personalized learning feed. The more it learns about what you find valuable, the more valuable it becomes in aiding your discovery of new content and insights.**

Declará helps you collect content in a more meaningful way. **Either you or our smart BOT can go out and access, curate, and store content into the collections you create.** Whether it's out on the web or in your organization's private data stores, no content is out of reach. Our machine learning algorithms understand what you like and feed you the articles, collections, and insights that fit your interests.

Declará provides a highlighting tool to capture what you and others find meaningful. **These "insights" can be stored, commented on, shared, and prioritized to help you better manage important information and engage with your teams and communities.** They're like CliffsNotes for modern content connoisseurs, helping you keep track of the parts that matter, spark discussions, and speed knowledge discovery.

Collaborate and converse right from the content that sparks the ideas. **Share the snippets you find interesting via social media. Invite team members to your collections and have them add their own insights. Engage in real-time conversations via a persistent chat window** that captures the transcript in context so you never lose the thread or miss an idea.

*I could easily see these types of tools/functionalities as a part of the vision that I'm putting forth here. Such functionality could be a powerful piece of this next gen learning platform.*

**Key question: How might learners' expectations be impacted by these trends?**



# Customer Experience in 2020

Seven Technology Trends Defining the Future of Customer Experience



<b>TREND 1</b> <b>Smart Stores</b> Brick and Mortar Strikes Back	<b>TREND 2</b> <b>Hyper-personalization</b> Personalizing for the Segment of One	<b>TREND 3</b> <b>Intelligent Assistants</b> Adding Voice to Customer Interactions	<b>TREND 4</b> <b>Remote Experts</b> Human Interaction Remains Golden
<b>TREND 5</b> <b>Instant Fulfillment</b> Make It a Reality	<b>TREND 6</b> <b>Virtual and Augmented Reality</b> Blend Physical with Digital	<b>TREND 7</b> <b>Application Experience</b> Every Transaction and User Experience Matters	<b>Recommended Content</b> Additional Cisco Resources

[From Cisco in December 2017](#)