

Ambient Insight

2015 International Learning Technology Investment Patterns

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Published: January, 2016



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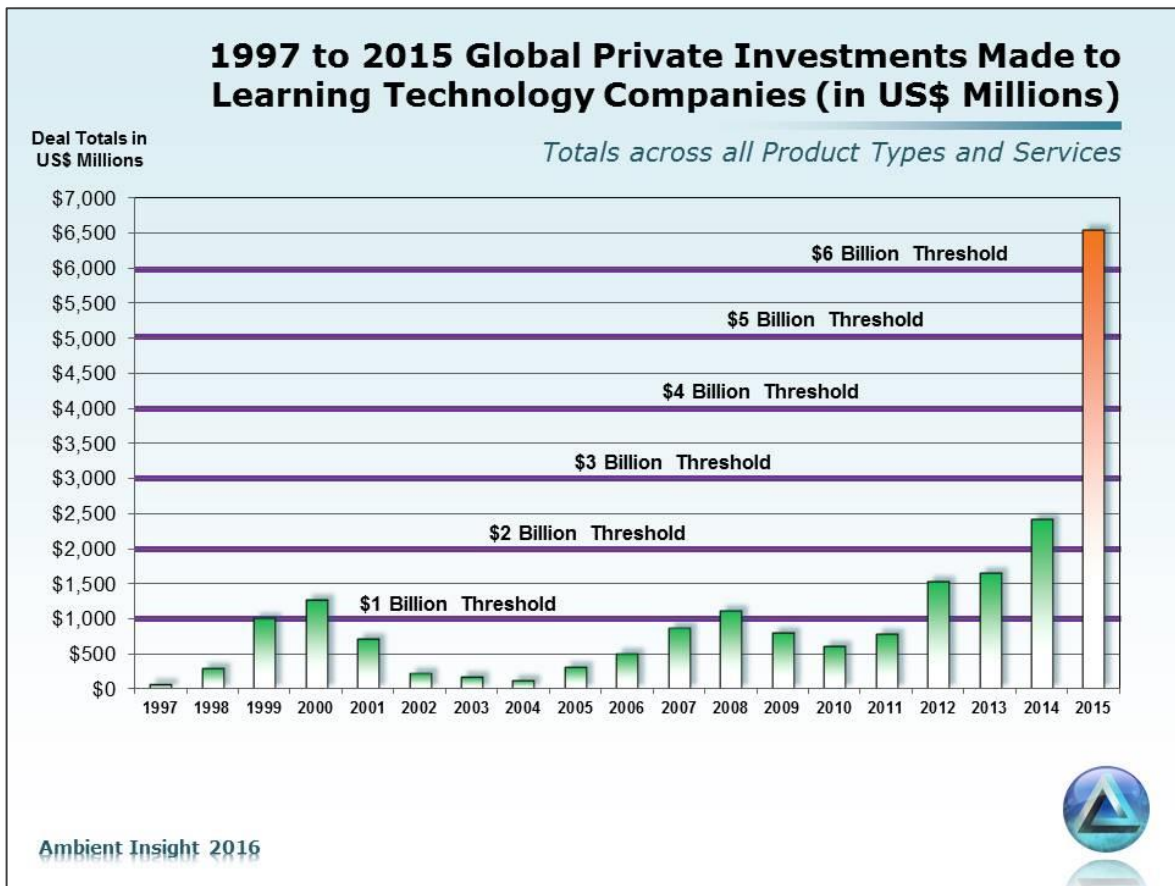
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The 2015 Global Learning Technology Investment Patterns

The investments made to learning technology companies in 2015 were the highest in the history of the learning technology industry by an extraordinary margin. In 2015, global investments made to learning technology companies reached over \$6.54 billion, up dramatically from the previous records of \$2.42 billion in 2014 and \$1.64 billion in 2013.

Just under 39% of the learning technology investments made in 2015 went to just twenty five companies. The other 61% went to 703 companies combined; 582 of these companies garnered less than \$10 million.

Figure 1 – 1997-2015 Private Investment in Learning Technology Suppliers (in US\$ Millions)



Ambient Insight considers learning technology investment patterns to be leading indicators. Those patterns can show a shift away from legacy product types toward different or even new product types. This is clearly the case in 2015, with investors shifting their interest to next-generation Cognitive Learning companies. The patterns can also expose "customer-facing" trends if funding shifts to companies that serve specific buying segments.

For example, there has been a major investment shift to consumer-facing companies in the last four years. This is essentially a reflection of a learning technology distribution channel entirely outside traditional and legacy education systems; Ambient Insight calls

this Retail Education. **In 2015, 48% of all learning technology suppliers funded across the globe were consumer-facing companies.**

The most significant investment patterns in the learning technology industry in 2015 were the massive increase in the number of deals (728 in 2015, more than double the 316 deals made in 2014), the spike in the funding of companies operating in China, a dramatic increase in investments made to Cognitive Learning companies, and an increase in the investments made to consumer-facing suppliers. Three other interesting trends in 2015 were the complete absence of investments made to learning technology companies in Brazil in the fourth quarter, the continued uptick in investments in India, and the burst of investment activity in the UK in the second half.

Scope of this Whitepaper

The investment totals in this whitepaper include seed, angel, venture capital, and private equity. The totals do not include government grants or corporate foundation grants. This whitepaper does not include investments made by non-profit educational institutions unless the investments are made to commercial spinoffs. This analysis does not include leveraged buyouts or acquisitions made by investment firms. Once an investment firm takes a majority stake in a company, Ambient Insight defines that as an acquisition, not an investment.

The whitepaper only covers learning technology companies and does not deal with investments made to print-based, brick-and-mortar, or classroom equipment companies. It also does not include non-instructional technology such as hardware, student information systems, back-office IT systems, front-office systems, student services platforms (retention, course finders, student loans, etc.), education supplies portals, facilities management software, online degree program management systems, mobile alert systems, or administrative systems.

This whitepaper focusses on seven learning technology product types as defined by Ambient Insight's Research Taxonomy: Self-paced eLearning (courseware), Collaboration-based Learning (live online tutoring), Digital Reference-ware, Simulation-based Learning, Game-based Learning, Mobile Learning, and Cognitive Learning. Ambient Insight tracks the investments made to four types of companies that sell these products. These companies sell retail packaged digital content, custom content development services, value added services, and authoring tools & learning management systems.

Sources of Investment Activity Information

Ambient Insight tracks private investments made to learning technology suppliers across the planet via a wide range of secondary sources including press releases, financial reports, investment firm sites, and targeted searches. We constantly monitor public-domain investment tracking sites including CrunchBase, peHUB, The PE Hub Network, Xconomy, DealStreetAsia (Singapore), VCCircle India, VatorNews, EducationInverstor (UK), China Money Network, Tech in Asia, AltAssets, VC4Africa, FinanceAsia, VentureVillage (Germany), the Latin American Private Equity & Venture Capital Association (LAVCA), The Wall Street Journal's Venture Capital Dispatch, the Asian Venture Capital Journal (AVCJ), DealCurry (India), and VentureBeat.

We also track public domain investment sources that focus on particular countries. For example, the top information source for learning technology investment in China is a educational portal called Jiemo Media (JMDedu). The majority of investment activity posted on JMDedu never gets mentioned in the Western media.

2015 Investment Reaches Historic High (Again)

Investments made to learning technology companies reached a new historic high in 2015. This marks the seventh time in the last 18 years that investment totals exceeded the billion dollar threshold and the first time in the history of the industry that investment breached a breathtaking \$6 billion threshold; an increase of 268.08% over 2014.

The commercial learning technology industry has existed since the early 1970's. The first commercial computer-based training (CBT) system was PLATO (Programmed Logic for Automatic Teaching Operations), which was originally developed by the University of Illinois and commercialized in 1976 by Control Data Corporation (CDC). Aside from a smattering of angel and seed funding, there was virtually no private investment in learning technology companies until 1997, which was the cusp of the dot.com era.

In 1997, a meager \$14.7 million was invested in five learning technology companies. In 1998, \$36.1 million was invested in six companies including \$14.3 million (an unprecedented amount at the time) invested in a company called Centra. In 1999, the dot.com era was in full bloom and an astonishing \$1.0 billion was invested in 49 companies. 48 of the 49 companies funded in 1999 obtained over \$1 million, 16 garnered over \$20 million, and two (Unext and ElementK) obtained \$100 million each.

The dot.com bubble burst in 2001; investments declined dramatically for four years and did not reach the billion dollar threshold again until 2008. The term "eLearning" was first used in 1997 by the author Aldo Morri and became firmly embedded in the lexicon in 1998 due to the widespread propagation of the word by the industry pioneer Jay Cross (who sadly passed away in November 2015).

Table 1 – 2014-2015 Investment Totals by Quarter (In US\$)

Quarter	2014 Value of Deals	2015 Value of Deals	Growth
First	\$685,752,300	\$1,414,184,500	206.22%
Second	\$483,889,700	\$1,534,885,000	317.20%
Third	\$774,527,000	\$1,234,974,100	159.45%
Fourth	\$496,309,700	\$2,358,561,918	475.22%
Total Annual Deals	\$2,440,478,700	\$6,542,605,518	268.09%

Investments in companies operating in China accounted for 33% (\$2.19 billion) of all investments made to learning technology companies in 2015; this is all the more

impressive considering that the number of deals made to companies operating in China comprised only 9.3% of the total 728 deals made in 2015. To put this in perspective, only 6% of all investments made to learning technology companies in 2013 and a meager 1% of funding in 2012 went to companies operating in China. In 2015, a third of all global learning technology investments went to companies operating in China.

There was a sharp spike in investments going to Cognitive Learning companies in 2015. Investments made to Cognitive Learning companies surged to \$483.5 million in 2015, up from a mere \$24 million in 2014 and the and the \$6.9 million in 2013.

There were 52 Cognitive Learning companies funded in 2015, up from just eight companies funded in 2014 and three funded in 2013. Clearly, investors are now interested in this type of learning technology company.

One trend that has remained stable over the last four years is the investor interest in consumer-facing learning technology companies. In 2012, investors sank \$626 million into consumer-facing learning technology companies, more than double from the year before.

In 2013, these companies garnered \$736.8 million, which was 44% of all money invested into learning technology companies on the globe. In 2014, a total of \$983.9 million was invested in consumer-facing companies; this was 40.5% of the total international investments in learning technology in 2014.

The investments made to consumer-facing companies in 2015 more than tripled over the year before to an astonishing \$3.12 billion; this is 48% of all investments made in 2015. There were 312 deals made with consumer-facing learning technology suppliers in 2015 up significantly from the 125 companies funded in 2015.

Unprecedented Deal Flow in 2015

The number of deals made with learning technology companies in 2015 reached a historic high of 728. The majority of the deals were made with US companies.

Table 2 – 2014-2015 Learning Technology Deals by Quarter

Quarter	2014 Number of Deals	2015 Number of Deals	Growth
First	91	135	148.35%
Second	72	178	247.22%
Third	77	199	258.44%
Fourth	76	216	284.21%
Total Annual Deals	316	728	230.38%

Of the 728 global deals made with learning technology companies in 2015, 586 went to US companies for a combined total investment of \$3.6 billion. Despite the high profile funding for US companies like Lynda.com and HotChalk, the majority of investments made to US companies was in relatively small amounts.

There was a spike in deals in every quarter of 2015 compared to 2014. The highest increase was in the fourth quarter of 2015, which surged 284.21% over the year before. For the entire year of 2015, investment deals were up 230.38% compared to 2014.

Of the 728 deals made in 2015, 582 were under \$10 million and "only" 146 were over the \$10 million threshold. The sweet spot for companies seeking investment has consistently remained in the \$1-\$10 million range for the last four years.

Table 3 – 2012-2015 Number of Private Investment Deals to Learning Technology Companies by Investment Amount Ranges

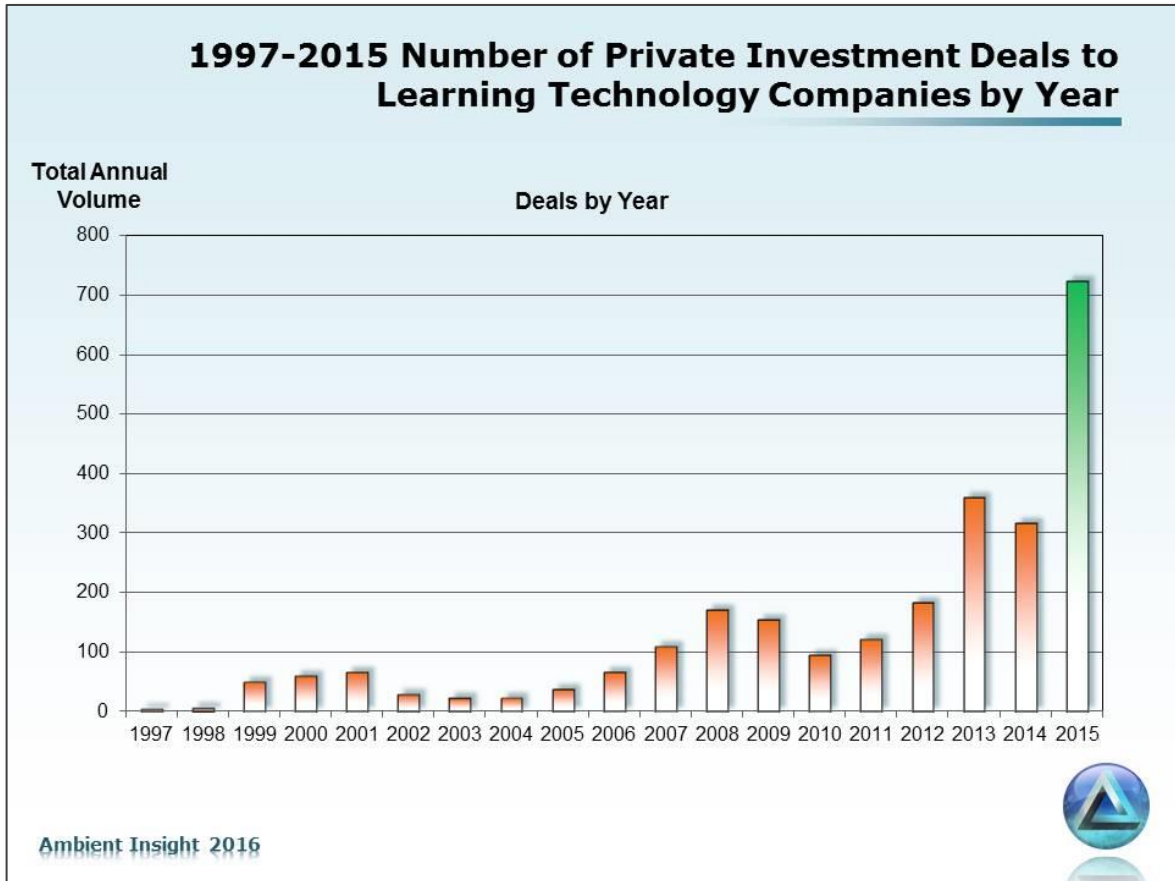
Investment Amount Range	Number of Companies Funded in this Range in 2012	Number of Companies Funded in this Range in 2013	Number of Companies Funded in this Range in 2014	Number of Companies Funded in this Range in 2015
\$50-\$100M+	4	4	13	25
\$40-\$49.9M	4	0	2	12
\$30-\$39.9M	2	4	8	14
\$20-\$29.9M	9	10	12	27
\$10-\$19.9M	26	29	26	68
\$1-\$9.9M	90	176	136	339
\$500K-\$999K	21	49	44	64
Less than \$500K	24	87	75	179
Total Number of Deals Made in That Year	180	359	316	728

Investment in all the funding ranges more than doubled except for the \$30-\$39.9 million range. There were spikes in investment deal made in the \$1-\$9 million range and a sharp increase in funding in the under \$500K range.

Deal flow actually decreased in 2014 compared to 2013, but the investment totals were significantly higher due in large part to the number of companies that garnered over \$30 million. The number of deals made in 2015 was more than four times the number of deals made in 2012 and double the number in 2013.

As noted earlier, investment activity is unpredictable and the recent patterns are not indicative of future patterns. While the investments made to specific learning technology types are leading indicators, the deal general deal flow patterns are not.

Figure 2 – 1997-2015 Total Number of Private Investment Deals Made with Learning Technology Companies by Year



In the context of the overall technology investment ecosystem, learning technology investment is still a tiny fraction of total investment and learning technology is still a very small component of the education and training market.

Skyrocketing Past the \$6 Billion Threshold

"There are many ways to see this, but the big one is obvious: it's never a bubble when everyone talks about it being a bubble."

Tucker Max, Tech in Asia, August 20, 2015

In the twelve-month period between January and December 2015, **\$6.54 billion** was invested in learning technology companies across the globe. What is interesting is that 49% of this funding was concentrated in just twenty-five companies.

Until 2014, funding amounts over \$50 million in single rounds were rare in the learning technology industry. There were no investments over \$50 million in 2008 and 2009. Echo360 was the only learning technology company to obtain over \$50 million in 2010.

K12, Inc. was the only company in 2011 to garner more than \$50 million and only one company (Desire2Learn) obtained more than \$50 million in 2012. In 2013 and 2014, the patterns changed; three companies obtained over \$50 million (Lynda.com, Open English, and Knewton) in 2013 and thirteen companies exceeded the \$50 million threshold in 2014. This accumulation pattern appears to be holding. In 2015, twenty five companies obtained funding of \$50 million or over.

Companies That Garnered over \$50 million in 2015

Twenty-five learning technology companies across the planet garnered investments amounts at or above \$50 million in 2015: Genshuixue, Xuebajun, NetDragon, Mapbox, Affero Lab, Yuan Tiku, Gaosi Education, Udemy, TAL Education, Virgin Pulse, HuJiang.com (which garnered a breathtaking \$257 million in two rounds), Zhan.com (Xiaozhan Jiaoyu), Lamabang, Xuexin, Afanti, Changingedu (Qingqing Tutoring), 17zuoye, Udacity, Edmentum, Peloton, Zhihu, lynda.com, Varsity Tutors, TutorGroup, and HotChalk, (which obtained the highest single round investment in the history of the industry at \$230 million).

Fifteen of these companies are based in China, nine in the USA, and one in Brazil. ***These twenty-five companies combined obtained \$2.523 billion in 2015, more than the total investments made to all 316 companies funded in the entire year of 2014.***

Table 4 - Learning Technology Companies that Obtained \$50 Million or More in Funding in the 2015 (in US\$)

Company Name	Funding Amount	Date of Funding	Product Type	Base Operating Country
Genshuixue	\$50,000,000	March 2015	Collaboration-based Learning	China
Xuebajun	\$50,000,000	March 2015	Digital Reference-ware	China
Zhihu	\$50,000,000	November 2015	Collaboration-based Learning	China
Varsity Tutors	\$50,000,000	November 2015	Collaboration-based Learning	USA
NetDragon's Best Assistant Education	\$52,500,000	January 2015	Mobile Learning	China
Mapbox	\$52,550,000	June 2015	Digital Reference-ware	USA
Affero Labs	\$55,000,000	June 2015	Self-paced eLearning	Brazil

Yuan Tiku	\$60,000,000	March 2015	Mobile eLearning	China
Afanti	\$60,000,000	December 2015	Mobile eLearning	China
Gaosi Education	\$63,000,000	August 2015	Collaboration-based Learning	China
Udemy	\$65,000,000	June 2015	Self-paced eLearning	USA
TAL Education	\$70,000,000	June 2015	Collaboration-based Learning	China
Virgin Pulse	\$92,000,000	May 2015	Cognitive Learning	USA
Xuexin	\$97,000,000	September 2015	Mobile Learning	China
Lamabang	\$100,000,000	March	Digital Reference-ware	China
Changingedu (Qingqing Tutoring)	\$100,000,000	June 2015	Mobile Learning	China
Zhan.com (Xiaozhan Jiaoyu)	\$113,000,000	Two Rounds: April 2015 and November 2015	Collaboration-based Learning	China
17zuoye	\$120,000,000	February 2015	Self-paced eLearning	China
Udacity	\$105,000,000	November 2015	Self-paced eLearning	USA
Peloton	\$105,000,000	Two Rounds: April 2015 and December 2015	Collaboration-based Learning	USA
Edmentum	\$140,000,000	April 2015	Self-paced eLearning	USA
lynda.com	\$186,000,000	January 2015	Self-paced eLearning	USA
TutorGroup	200,000,000	November 2015	Collaboration-based Learning	China
HotChalk	\$230,000,000	November 2015	Self-paced eLearning	USA
HuJiang.com	\$257,000,000	Two Rounds: February 2015 and October 2015	Self-paced eLearning	China
Total	\$2,523,050,000			

To date, the single highest investment amount was the \$230 million Bertelsmann invested in US-based HotChalk in November 2015. HotChalk is a managed services supplier serving the higher education segment. Managed services is one of the few bright spots in the US eLearning market, which now has a negative growth rate of -2.7%. In contrast, the growth rate for managed services is 4.7%. Clearly, Bertelsmann sees the sustainability of the managed services business model.

The company that garnered the most investment in 2015 was the popular language learning site HuJiang.com in China in two rounds of funding. Hujiang reported in 2015 that they had 3 million active paying members and 70 million registered members "made up primarily of young, white-collar workers, many who work for foreign-owned enterprises".

Several companies came close to the \$50 million threshold in 2015. For example, a Chinese company called Tsingda eEdu Corporation garnered \$49 million in February 2015 and US-based Coursera obtained \$49.5 million in funding in August 2015. A Cognitive Learning company called Omada Health obtained \$48 million in September 2015 and China-based Uniquedu obtained \$47 million in November 2015. The online language learning company Duolingo obtained \$45 million in June 2015 and the Cognitive Learning company Welltok garnered \$45 million in December 2015.

Country Analysis

Despite the concentration of investments in US-based companies, the investment patterns in China are extraordinary. Activity in India is trending upward but the investments in Brazil dried up in the fourth quarter of 2015. There appears to be a new interest in UK-based learning technology companies, but it is too soon to discern if this is a long term trend. Investment activity is by definition unpredictable and it takes several years of activity to identify sustainable trends.

The US Still Dominates Learning Technology Investment

Prior to 2012, essentially all of the learning technology investments went to US-based companies. This is now a very different landscape and learning technology investment is a global phenomenon, but the US still dominates the investment ecosystem.

The majority of investment made to learning technology companies in 2015, in terms of both deal flow and dollar amount, went to US-based companies. Of the 728 global deals made with learning technology companies in 2015, 586 went to US companies for a combined total investment of \$3.6 billion.

The investment patterns in terms of deal flow have remained consistent in the US, but the discrete dollar amounts pale in comparison to China. The declining revenue for Self-paced eLearning in the US is an inhibitor going forward for that type of company. On the other hand, investors are now very interested in US Cognitive Learning suppliers and Mobile Learning edugame developers targeting early childhood learning. Of the 52 Cognitive Learning suppliers funded in 2015, 47 were US companies.

Best-of-breed Game-based Learning suppliers garnered \$126.8 million in 2015 with 31 deals made, also a record in the industry. There was only \$35.9 million invested in eleven Game-based Learning companies in 2014. In 2015, 90% of the Game-based Learning suppliers funded are based in the US.

All Roads Continue to Lead to China

There were only six investments made to online education companies in China in 2012. In 2013, 47 online education companies in China received funding from investors. By the end of 2014, 36 companies operating in China had obtained funding. While 2014 saw a smaller number of deals, the investment total was more than double from 2013. **In 2015, a total of 67 learning technology companies in China were funded.**

A total of \$634.4 million was invested in online education companies in China in 2014; this is just over 26% of all funding that went to all of the learning technology suppliers across the globe in 2014. **In 2015, a breathtaking \$2.19 billion was invested in learning technology companies in China; this is 34% of all global funding.**

China is a fascinating market. On the surface, it appears that the economic conditions are quite similar to Brazil, but investment is booming in China and declining in Brazil. The similarities between the economies are more apparent than real. Very few individuals are invested in the stock market in China (the figure is cited as 9-11%) and stock market activity has little impact on the broader economy.

Unlike Brazil, there is no recession in China, although growth has "slowed" to 6.9% in the third quarter – a growth rate the US would love to have. Likewise, the Chinese government has always manipulated the value of the yuan and the value has always been at the whim of the government. They devalued the yuan to boost exports.

In October 2015, Michael Minhong Yu, Chief Executive Officer of New Oriental Education, stated that, "It is important to note that we have found in other periods of economic downturn that education spending proves to be more resilient than most of the other consumer discretionary categories in China and this is being proven once again in the current environment."

Table 5 - Learning Technology Companies in China that Obtained Funding in 2015 (in US\$)

Company Name	Funding Amount	Date of Funding	Product Type
The ONE (Smart Piano)	\$200,000	October 2015	Collaboration-based Learning
Tongban Education	\$350,000	December 2015	Mobile Learning
Xiaoniu Xuetang	\$600,000	October 2015	Self-paced eLearning
Gowell	\$1,000,000	March 2015	Self-paced eLearning

Hujiao Laoshi	\$1,500,000	September 2015	Collaboration-based Learning
CallCall Jiaoshi	\$1,500,000	September 2015	Self-paced eLearning
UCAI.cn	\$1,500,000	November 2015	Collaboration-based Learning
Xingtianji Network Technology	\$1,500,000	November 2015	Mobile Learning
Talk Fun	\$1,500,000	November 2015	Collaboration-based Learning
Linked F Financial Training	\$1,570,000	March 2015	Self-paced eLearning
Crazy262	\$1,600,000	November 2015	Digital Reference-ware
Snapask	\$1,800,000	August 2015	Mobile Learning
JueSheng.com	\$2,000,000	March 2015	Digital Reference-ware
Limixuexi	\$2,000,000	November 2015	Self-paced eLearning
Youban	\$2,100,000	May 2015	Game-based Learning
Kano	\$2,400,000	May 2015	Self-paced eLearning
Leleketang	\$3,000,000	September 2015	Digital Reference-ware
Zmlearn	\$3,200,000	July 2015	Collaboration-based Learning
UEI Online	\$3,200,000	July 2015	Digital Reference-ware
WuXi Jin Xun Tong (JXT)Technology	\$3,366,000	April 2015	Self-paced eLearning
YiXue Education	\$4,500,000	November 2015	Self-paced eLearning
Wyzc.com	\$4,500,000	December 2015	Self-paced eLearning
O2O	\$4,800,000	March 2015	Self-paced eLearning
BabyBus	\$6,000,000	November 2015	Game-based Learning

Yiguan Enterprise Education Group	\$6,400,000	August 2015	Self-paced eLearning
Guolaiaren Education Technology	\$7,200,000	July 2015	Self-paced eLearning
Satech (Beijing) Network Education Technology Limited	\$10,000,000	January 2015	Mobile Learning
Knowbox	\$10,000,000	July 2015	Mobile Learning
Qingtajiao.com	\$13,760,000	July 2015	Self-paced eLearning
MaiziEdu	\$15,000,000	November 2015	Self-paced eLearning
Scholastic Teaching	\$16,000,000	May 2015	Self-paced eLearning
51CTO	\$16,000,000	November 2015	Self-paced eLearning
Fancy Education	\$19,000,000	December 2015	Digital Reference-ware
NeoBear (Winnie Mourinho)	\$19,200,000	September 2015	Mobile Learning
XuetangX	\$17,600,000	November 2015	Self-paced eLearning
XueXiBao	\$20,000,000	January 2015	Digital Reference-ware
Vipkid	\$20,000,000	October 2015	Collaboration-based Learning
Entstudy	\$24,000,000	August 2015	Self-paced eLearning
LangLang	\$30,000,000	September 2015	Collaboration-based Learning
Xiachfang	\$30,000,000	July 2015	Digital Reference-ware
DaDaABC	\$30,000,000	August 2015	Collaboration-based Learning
Lexue Education	\$30,000,000	September 2015	Self-paced eLearning
Phoenix E-Learning Corporation	\$30,000,000	October 2015	Self-paced eLearning

Juesheng.com	\$31,000,000	December 2015	Digital Reference-ware
Huakang Mobile Health	\$32,000,000	April 2015	Mobile Learning
Zingren Doctor	\$32,000,000	July 2015	Mobile Learning
Best Learning	\$32,000,000	July 2015	Self-paced eLearning
Xuebacklass	\$32,000,000	August 2015	Game-based Learning
Emerald Education	\$32,500,000	Two Rounds: February 2015 and December 2015	Self-paced eLearning
Medlinker	\$40,000,000	September 2015	Collaboration-based Learning
Uniquedu	\$47,000,000	November 2015	Self-paced eLearning
Tsingda eEdu Corporation	\$49,000,000	February 2015	Mobile Learning
Genshuixue	\$50,000,000	March 2015	Collaboration-based Learning
Xuebajun	\$50,000,000	March 2015	Digital Reference-ware
Zhihu	\$50,000,000	November 2015	Collaboration-based Learning
NetDragon's Best Assistant Education	\$52,500,000	January 2015	Mobile Learning
Yuan Tiku	\$60,000,000	March 2015	Mobile eLearning
Afanti	\$60,000,000	December 2015	Mobile eLearning
Gaosi Education	\$63,000,000	August 2015	Collaboration-based Learning
TAL Education	\$70,000,000	June 2015	Collaboration-based Learning
Xuexin	\$97,500,000	September 2015	Mobile Learning
Lamabang	\$100,000,000	March 2015	Digital Reference-ware
Changingedu (Qingqing Tutoring)	\$100,000,000	June 2015	Mobile Learning

Zhan.com (Xiaozhan Jiaoyu)	\$113,000,000	Two Rounds: April 2015 and November 2015	Collaboration-based Learning
17zuoye	\$120,000,000	February 2015	Self-paced eLearning
TutorGroup	\$200,000,000	November 2015	Collaboration-based Learning
HuJiang.com	\$257,000,000	Two Rounds: February 2015 and October 2015	Self-paced eLearning
Total in China for 2015	\$2,190,346,000		

The most active investors in online education in China in 2014 and 2015 were the venture capital firms DCM, Shunwei, Weitoulu, Gobi, ZhenFund, Matrix, and IDG. The largest corporate investors were Qualcomm, Xueresi, Bertalsmann, Baidu, and NetEase.

One very unique aspect of the learning technology market in China is the active participation of the major technology companies that are increasingly diversifying into the market. They are now major competitors (and investors) in China.

The Big Internet Brands Shake Up the Market in China

Baidu, Alibaba, and Tencent are the largest Internet companies in China and they all entered the commercial eLearning and Mobile Learning markets in 2013 and 2014. Several other leading Internet companies entered the commercial learning technology market in the last two years including NetEase, Sohu, Renren, Kaixin, Jiayuan, Sina Weibo, YY, NetDragon Websoft, Youku Tudou, and Kingsoft. All of their online learning businesses at launch were web-based; all of them are now adding mobile features.

What is interesting is the diversity of the Internet companies. Baidu is the largest search engine in China. Alibaba and Tencent are eRetailers. Jiayuan is a dating site, RenRen and Kaixin are social networks, NetDragon is a game developer, Sohu is an online media and gaming company, NetEase is an IT giant, YY is a Skype-like platform, Sina Weibo is a media company with a Twitter-like product, Youku Tudou is an online video provider, and Kingsoft is a software company.

To put this unusual ecosystem in perspective, imagine if Google, Google's YouTube, Yahoo, eBay, Facebook, Microsoft, Microsoft's Skype, Gameloft, Twitter, IBM, Amazon, and eHarmony all entered the commercial learning technology market **at the same time**.

Tencent, the largest online mass media company in China, started offering online courses in late 2013. In April 2014, they launched Tencent Classroom "an e-learning center that offers exam-oriented courses in language study, skill training and certification, as well as a few lessons for primary and high school students." By August 2014, they had attracted over 34 million users.

New Oriental and Tencent announced a joint venture called Weixue Mingri (Beijing WeLearn Future Network Technology) in August 2014 to develop mobile English language learning products. Their first product launched in December 2014. New Oriental CEO stated in the press that, "Thanks to our joint efforts with Tencent over the past four months, we have successfully launched the first mobile learning product that will transform how students in China learn English. Working together, we believe we can create more best-in-class mobile learning solutions for students in China."

YY, the video-based social network, launched their online learning platform called 100.com in February 2014. The new learning platform is focused on digital English language learning. YY released the iOS and Android mobile versions of the learning platform in September 2014. "Like the website, the mobile app is able to stream live classes during which students can interact with teachers."

It is interesting that the Internet giants continue to invest in online education companies despite the fact that they now have branded products on the market. For example, Alibaba led the breathtaking \$100 million investment in TutorGroup in early 2014. Baidu invested \$4 million in an online test prep company called Wanxue in July 2014 and \$10.6 million in another test prep company called Innobuddy in September 2014.

In February 2015, Baidu invested \$100 million the online language learning provider HuJiang. In October 2015, TAL Education invested \$35 million in Phoenix E-Learning Corporation, "which operates zxxk.com, the largest online educational platform serving the public school system in China."

Learning Technology Investment Activity in India Heating Up

"I don't think that funding for Indian start-ups will dry up. Given the interest in India and the ecosystem, given the lack of commensurate opportunities in other parts of the world, I think funding for Indian entrepreneurs, both from commercial venture capital and philanthropic organizations, is on the upswing."

Roopa Kudva, Omidyar Managing Director, DealStreetAsia, September 1, 2015

Of the educational companies in India that disclosed their funding amounts, a total of **\$297.49 million** in investment went to 63 learning technology in 2015. (There were an additional eleven companies that were funded but did not disclose the amount.) There is now clear evidence of a renewed interest in Indian companies.

In 2012, only 10 learning technology companies in India were funded: a mere \$36.4 million went to these companies for the entire year of 2012. Investor interest picked up considerably in 2013 with a total of \$141.7 million going to 17 companies operating in India.

A modest \$83.0 million went to just 13 Indian companies in 2014, which indicated a diminishing interest among investors. If the investment activity in the 2015 is any indication, investors are turning their attention to India again.

Table 6 - Learning Technology Companies in India that Obtained Funding in the 2015 (in US\$)

Company Name	Funding Amount	Date of Funding	Product Type
BetterButter	\$50,000	August 2015	Digital Reference-ware
Skillveri Training Solutions	\$75,000	December 2015	Simulation-based Learning
LabInApp	\$94,000	June 2015	Simulation-based Learning
CampusKnot	\$100,000	July 2015	Digital Reference-ware
Vlurn	\$100,000	December 2015	Self-paced eLearning
Bodhi Health	\$120,000	April 2015	Self-paced eLearning
Guiddoo	\$200,000	June 2015	Mobile Learning
Smartivity	\$200,000	October 2015	Simulation-based Learning
Prozo	\$205,000	September 2015	Digital Reference-ware
Jay Robotix	\$250,000	May 2015	Mobile Learning
Shirsa Labs	\$250,000	November 2015	Cognitive Learning
Venturesity	\$270,000	May 2015	Self-paced eLearning
ConveGenius	\$302,940	November 2015	Self-paced eLearning
Nayi Dishi Studios	\$320,000	April 2015	Game-based Learning
Capabiliti (Qustn Technologies)	\$393,000	September 2015	Self-paced eLearning

Logic Roots	\$400,000	April 2015	Game-based Learning
MockBank Learning	\$400,000	September 2015	Digital Reference-ware
AlmaMapper	\$400,000	October 2015	Digital Reference-ware
YourDOST	\$400,000	November 2015	Collaboration-based Learning
Daily Rounds	\$500,000	February 2015	Mobile Learning
Zenparent	\$500,000	May 2015	Mobile Learning
Edsix Brain Lab	\$500,000	June 2015	Cognitive Learning
BabyChakra.com	\$600,000	June 2015	Digital Reference-ware
OnlineTyari	\$750,000	September 2015	Mobile Learning
MeetUniv	\$920,000	May 2015	Collaboration-based Learning
WAGmob	\$955,000	August 2015	Mobile Learning
Impartus Innovations	\$1,000,000	January 2015	Collaboration-based Learning
Englishleap.com	\$1,000,000	January 2015	Self-paced eLearning
Harness Handitouch	\$1,000,000	March 2015	Mobile Learning
EduKart	\$1,000,000	June 2015	Self-paced eLearning
Sigrid Education	\$1,000,000	June 2015	Self-paced eLearning
Zoojoo.be	\$1,000,000	August 2015	Cognitive Learning

CureJoy	\$1,150,000	September 2015	Digital Reference-ware
Springboard (formerly SlideRule)	\$1,700,000	December 2015	Collaboration-based Learning
UrbanPro	\$2,000,000	May 2015	Collaboration-based Learning
HealthyWorld.in	\$2,000,000	January 2015	Digital Reference-ware
Purple Squirrel Eduventures	\$2,000,000	April 2015	Self-paced eLearning
Planceess Edu Solutions	\$2,000,000	May 2015	Self-paced eLearning
CAKART.in (Suphalaam)	\$2,000,000	June 2015	Self-paced eLearning
SuperProfs.com	\$3,000,000	February 2015	Self-paced eLearning
Schoolguru	\$3,000,000	October 2015	Self-paced eLearning
Jigsaw Academy	\$3,000,000	December 2015	Self-paced eLearning
Applect Learning Systems (MeritNation)	\$4,000,000	June 2015	Self-paced eLearning
Reverie Language Technologies	\$4,000,000	August 2015	Digital Reference-ware
Brazen Careerist	\$4,700,000	June 2015	Self-paced eLearning
Notesgen	\$4,960,000	July 2015	Digital Reference-ware
iNurture	\$5,000,000	January 2015	Self-paced eLearning
Vedantu	\$5,000,000	May 2015	Collaboration-based Learning
MapmyIndia	\$6,000,000	December 2015	Digital Reference-ware

CultureAlley	\$6,500,000	July 2015	Self-paced eLearning
CL Educate	\$7,000,000	November 2015	Self-paced eLearning
Speakwell Enterprise	\$10,000,000	March 2015	Self-paced eLearning
Healthifyme	\$10,000,000	Two Rounds: May 2015 and June 2015	Mobile Learning
Lybrate	\$10,200,000	July 2015	Collaboration-based Learning
MindTickle	\$12,500,000	November 2015	Self-paced eLearning
Toppr	\$14,000,000	Two Rounds: May 2015 and October 2015	Self-paced eLearning
UpGrad	\$15,000,000	July 2015	Self-paced eLearning
U Education (UpGrad)	\$16,000,000	January 2015	Self-paced eLearning
PaGaLGuy	\$20,000,000	April 2015	Self-paced eLearning
Amazed Infotainment	\$20,000,000	September 2015	Simulation-based Learning
S Chand and Company	\$27,000,000	November 2015	Digital Reference-ware
Think and Learn (BYJU's Classes)	\$28,800,000	June 2015	Self-paced eLearning
Simplilearn	\$29,734,800	Two Rounds: January 2015 and April 2015	Self-paced eLearning
Total in India for 2015	\$297,499,740		

The majority of investments made in India learning technology companies went to Self-paced eLearning courseware suppliers. In 2015, \$192.4 million went to eLearning companies in India.

Like China, India is an exam culture and test prep startups are attracting investment. Twelve of the 63 companies funded in 2015 are test prep firms. Simplilearn obtained two

rounds of funding totaling \$29.7 million in 2015; they specialize in professional certifications.

Toppr is another test prep startup in India and they garnered \$14.0 million in two rounds in 2015. Toppr specializes in test prep for college entrance exams. MeritNation obtained \$4 million in June 2015; they offer wide range of test prep courses ranging from first grade to college boards.

Interestingly, a new learning technology accelerator call Edugild launched in September 2015 in India. It will provide seed and angel funding to startups beginning in January 2016; each selected startup will obtain up to \$22,500 in exchange for a 10% stake.

Brazil Hits Headwinds

In the first three quarters of 2015, there was evidence of investor interest in Brazilian learning technology companies. This changed dramatically in the fourth quarter with no investment made to any learning technology suppliers in Brazil. Only 13 learning technology companies were funded in Brazil in 2015 for a combined total of \$107.45 million, a relatively small amount for the largest economy in Latin America.

The investment environment is complicated in Brazil. The inflation rate is very high and the dramatic devaluation of the Brazilian Real is economy-driven - a primary factor relating to the recession. Unemployment is at a five-year high. Brazil reported in December 2015 that they are in three quarters of contraction, the longest since 1999.

Investors are keeping their powder dry until they see a bottom in the currency valuation. For example, the German media conglomerate Bertelsmann and a domestic investment firm called Bozano are sitting on an edtech fund of roughly \$100 million since last mid-2014 and have yet to invest in any Brazilian firm.

Bertelsmann did directly buy a 40% stake in Affero Lab for \$55 million in June 2015, which, to date, in terms of an investment amount, is an anomaly in Brazil. The second-highest amount in 2015 went to Movile's Playkids education app division at \$15 million, highlighting the disparity in funding.

The Brazilian currency (the real) has lost 33% of its value since the current economic meltdown began. As recently as September 2015, analysts expected that this would have a positive impact on private investment; this has not proven to be the case. The annual inflation rate in Brazil is 9.5%. Investors now expect a continued drop in the value of the real and are waiting until it hits a bottom.

"Just a few months ago, dealmakers at some of Brazil's largest investment banking firms, like Bradesco BBI and Goldman Sachs believed a gradual slide in the real would boost activity as takeover costs would fall in dollar terms for cash-rich private equity and sovereign wealth funds. Buyout firms are walking on egg-shells and multinational firms are also taking longer than usual to execute due-diligence. In the year through September 2015, companies announced \$24.3 billion worth of M&A transactions in Brazil, ***the lowest in a decade and down 45 percent from a year earlier***, according to Thomson Reuters deal intelligence data."

Investments in learning technology suppliers in Brazil between 2012 and 2014 were tepid at best and peaking at a meager \$5.3 million in 2013. A total of \$107.4 million had been invested in learning technology companies in Brazil by the end of 2015.

The bulk of the investments went to Self-paced eLearning courseware providers. ***There were no investments made to learning technology companies in Brazil in the fourth quarter of 2015.***

Table 7 - Learning Technology Companies in Brazil that Obtained Funding in 2015 (in US\$)

Company Name	Funding Amount	Date of Funding	Product Type
HashLearn	\$7,500	September 2015	Mobile Learning
NutriSoft	\$46,200	January 2015	Mobile Learning
Edools	\$100,000	May 2015	Self-paced eLearning
Profes	\$1,000,000	January 2015	Self-paced eLearning
GoGeo	\$1,300,000	August 2015	Digital Reference-ware
Navitoo	\$2,000,000	February 2015	Mobile Learning
Kuepa	\$2,000,000	September 2015	Self-paced eLearning
Passei Direto	\$7,000,000	February 2015	Social Learning
Geekie	\$7,000,000	May 2015	Self-paced eLearning
Descomplica	\$7,000,000	June 2015	Digital Reference-ware
EduK	\$10,000,000	May 2015	Self-paced eLearning
PlayKids (Movable)	\$15,000,000	June 2015	Mobile Learning
Affero Lab	\$55,000,000	June 2015	Self-paced eLearning
Total in Brazil for 2015	\$107,453,700		

Affero Lab is a corporate-facing learning technology company in Brazil. In June 2015, they obtained the highest investment (\$55 million) ever made to a Brazilian learning

technology company. Bertelsmann led the funding round and took a 40% stake in the company. Affero Lab is using the record-setting investment to expand into Europe; They are opening an R&D facility in Dublin in 2015.

PlayKids is a division of Movile, one of the largest media conglomerates in Brazil. The PlayKids apps consistently rank in the top twenty bestselling apps in the app stores across the planet. They garnered \$15 million in funding in June 2015, which is a relatively high amount in Brazil.

Investors Turning Their Attention to the UK

There has been a spike in investments going to UK education technology companies. In 2015, 21 companies were funded in the UK with a combined total of \$115.76 million. What is interesting is that the funding was almost all concentrated in the second half of the year.

The highest investment in the UK went to a unique company called Macat, which "is a platform that explains the world's greatest ideas and is proven by Cambridge University to make you smarter. We're dedicated to helping you improve your problem-solving and creative and reasoning skills through the greatest thinkers—from Aristotle to Zimbardo—as we believe that improving our collective critical thinking will help create a better society."

Table 8 - Learning Technology Companies in the UK that Obtained Funding in 2015 (in US\$)

Company Name	Funding Amount	Date of Funding	Product Type
The Training and Recruitment House	\$22,200	December 2015	Self-paced eLearning
GuyKat	\$77,200	October 2015	Self-paced eLearning
Video Enhanced Observation (VEO)	\$202,800	September 2015	Digital Reference-ware
Gojimo	\$925,000	July 2015	Digital Reference-ware
TLC Education Group	\$1,000,000	May 2015	Collaboration-based Learning
Proversity	\$1,500,000	December 2015	Self-paced eLearning
MyTutorWeb	\$1,540,000	August 2015	Collaboration-based Learning
Technology Will Save Us (TWSU)	\$1,810,000	December 2015	Self-paced eLearning
Hopster	\$2,000,000	January 2015	Mobile Learning

PIE Mapping	\$2,270,000	December 2015	Digital Reference-ware
Third Space Learning	\$2,295,000	July 2015	Self-paced eLearning
Digital Assess	\$3,000,000	June 2015	Digital Reference-ware
TAG Assessment	\$3,000,000	June 2015	Digital Reference-ware
Administrate	\$3,359,730	In Two Rounds: February 2015 and December 2015	Self-paced eLearning
RefME	\$5,000,000	April 2015	Digital Reference-ware
Busuu	\$6,000,000	July 2015	Self-paced eLearning
Peak	\$7,000,000	April 2015	Cognitive Learning
Fuse Universal	\$10,000,000	May 2015	Self-paced eLearning
Kano	\$15,000,000	May 2015	Game-based Learning
FutureLearn	\$19,760,000	November 2015	Self-paced eLearning
Macat	\$30,000,000	November 2015	Digital Reference-ware
Total in UK for 2015	\$115,761,930		

A new organization called EdTech UK launched in the UK in October 2015. EdTech UK describes itself as "a new strategic body set up to help accelerate the growth of the UK's education technology sector in Britain and globally. Incubated by The Education Foundation, the new body is a 'front door' for industry, investment and government and a convening voice for all of the education and learning technology sector including educators, startups, scale up and high growth companies, large corporations, investors, regulators and policy makers." EdTech UK claims that "Edtech is one of the fastest growing tech sectors in London; over 200 edtech startups and SMEs are based in the city, with 1000 across the UK."

In September 2015, The City & Guilds Group, "a London-based organization that helps people and organizations to develop their skills for personal and economic growth", launched a \$3.7 million investment fund for edtech startups. "The fund will invest in growing, post-revenue edtech startups from across the globe that have a focus on skills development for people in transition from education to employment in return for equity stake."

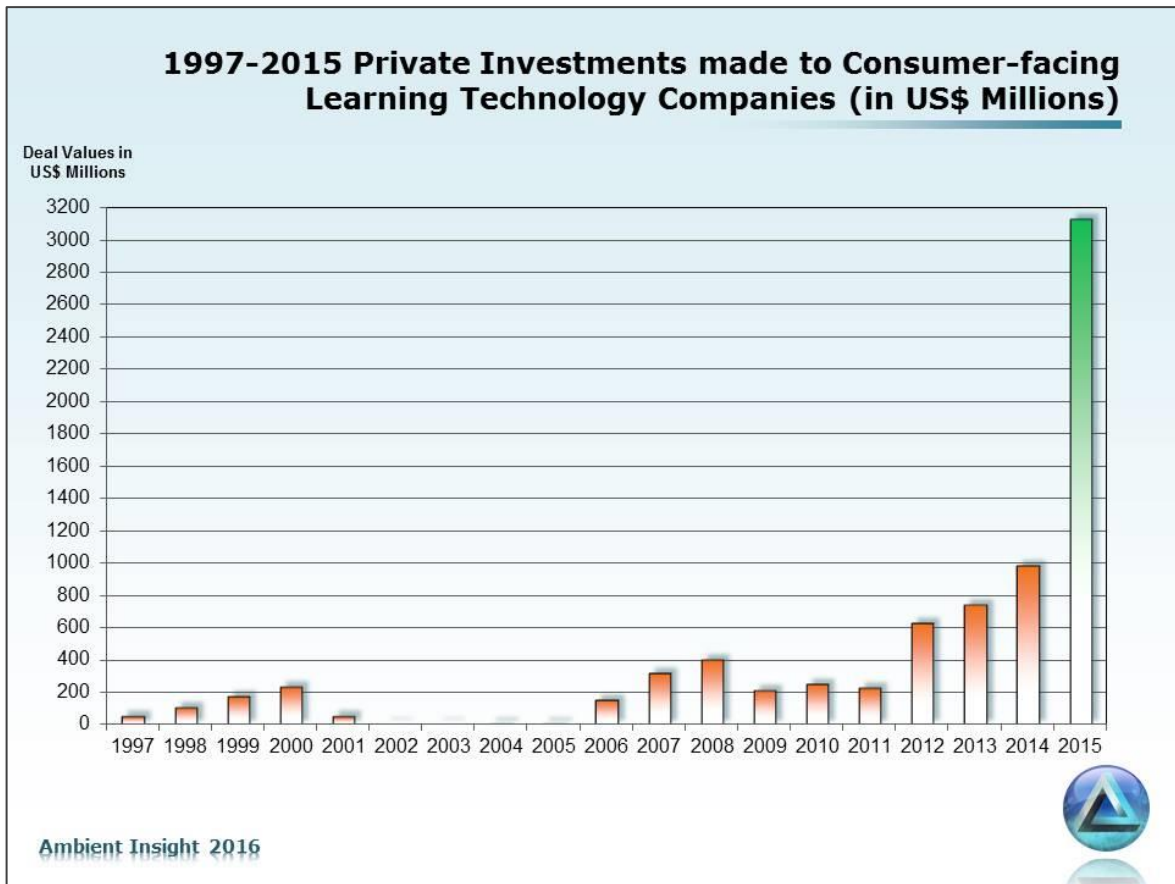
Retail Education: The Focus on Consumer-facing Companies

The investments made to consumer-facing learning technology companies across the planet started to surge in 2006. This spike was unusual considering the near complete lack of investments made between 2002 and 2005. The most significant spike hit in 2012 and continued in 2013 and 2014 and then surged dramatically in 2015.

In 2012, investors sank \$626 million into consumer-facing learning technology companies, more than double from the year before. In 2013, these companies garnered \$736.8 million, which was 44% of all money invested into learning technology companies on the globe. In 2014, a total of \$983.9 million was invested in consumer-facing companies; 40.5% of the total international investments in learning technology in 2014.

The investments made to consumer-facing companies in 2015 more than tripled over the year before to an astonishing \$3.12 billion. This is 47% of all the investments made across the globe in 2015.

Figure 3 – 1997-2015 Private Investments Made to Consumer-facing Learning Technology Companies (in US\$ Millions)



Clearly, investors are now focusing heavily on consumer-facing learning technology suppliers. In essence, these suppliers are engaging in retail education, a fundamental change in the global education ecosystem. There is now a vast global education channel operating outside the traditional academic segments. In 2013, 141 consumer-facing companies were funded; 38% of all companies funded in that year. This trend continued in 2014 with 122 consumer-facing suppliers getting funding. The number of deals made to consumer-facing suppliers was smaller in 2014 in comparison to 2013, but the total investment was \$162.1 million higher than the year before.

In 2015, a total of 312 consumer-facing learning technology suppliers were funded across the globe. This is significantly higher than the 125 investments made to consumer-facing learning technology suppliers in 2013.

In 2013, 27 of the funded consumer-facing companies were commercial language learning companies and almost all of them specialized in English language learning products sold directly to consumers on a global scale.

This trend continued in 2014, with 24 language learning companies obtaining funding; except for one supplier that sells online Mandarin courses, all of the language learning companies funded in 2014 sold online English courses. In 2015, 59 of the 312 consumer-facing suppliers funded were language learning companies.

The sharp spike in investments made to consumer-facing eLearning companies is a relatively new trend. In the early days of the industry several commercial eLearning providers tried to market online courses to consumers. There was simply no demand and many companies failed; the others that survived repurposed their product lines for corporations. Obviously, investors now believe the consumer market is ready for eLearning.

Modifying Behavior: Cognitive Learning Comes into Focus

A major investment pattern that appeared in 2015 was the investor interest in next-generation Cognitive Learning (behavior modification) companies. Investments made to Cognitive Learning companies spiked dramatically to \$483.5 million in 2015, up from a mere \$24 million in 2014.

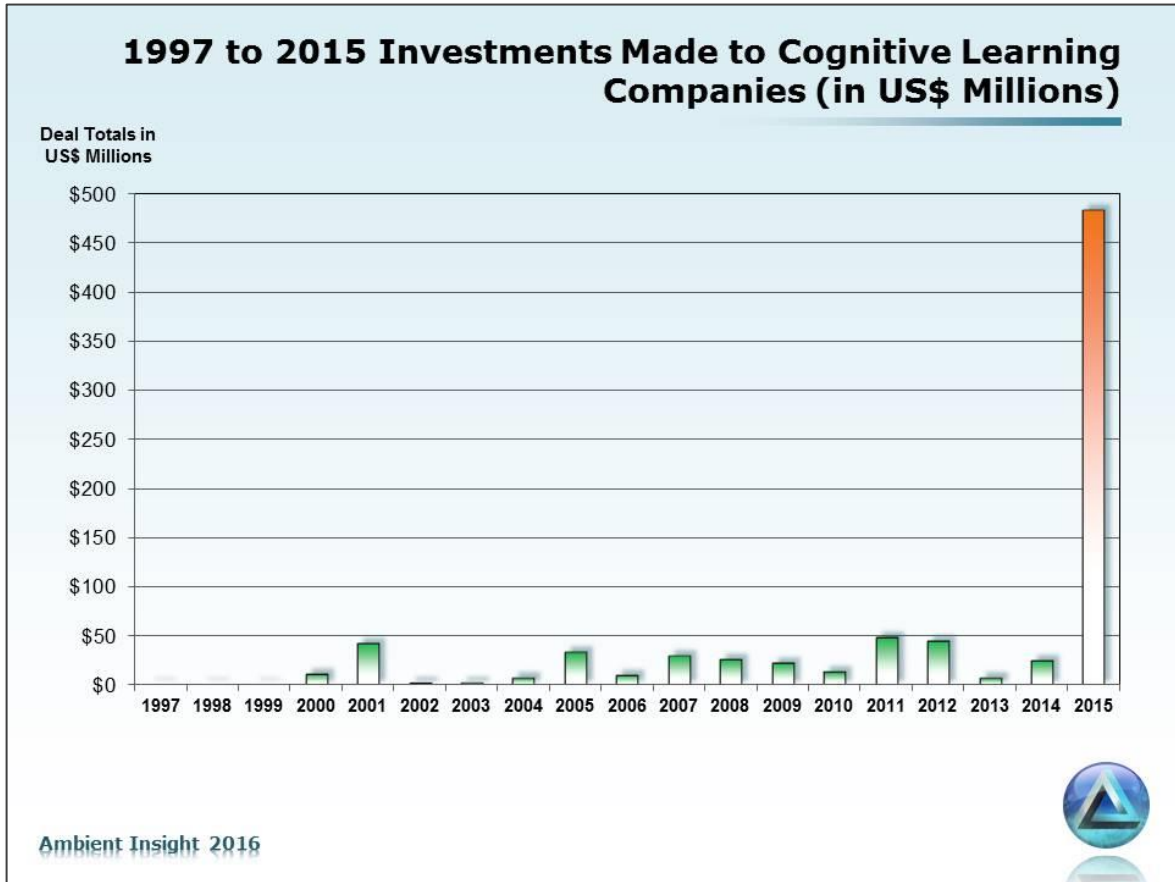
There were 52 Cognitive Learning companies funded in 2015, up from just eight companies funded in 2014 and three funded in 2013. Clearly, investors are now interested in this type of learning technology company.

The synonymous relationship between behavior modification (Cognitive Learning) and knowledge transfer (learning) is widely understood by instructional design experts in the federal government (particularly the military) and corporate segments. Cognitive Learning is a fundamental tenet in both the Bloom and Gagne taxonomies, two of the most prevalent instructional schemas used in systematic approaches to instructional design.

Regardless of the fact that behavior modification is identical with knowledge transfer, with the exception of special education in the PreK-12 segment, the term is rarely

explicitly used outside the government and corporate segments. It is no surprise that commercial Cognitive Learning companies have had a bumpy ride attracting private investment. On the surface, that appears to have changed dramatically in 2015.

Figure 4- 1997 to 2015 Investments Made to Cognitive Learning Companies (in US\$ Millions)



Prior to 2000, there were no recorded investments made to Cognitive Learning companies. Before the first three quarters of 2015, there was never more than \$50 million invested in commercial Cognitive Learning companies in any given year.

To some extent, the \$92 million invested in Virgin Pulse in 2015 exaggerates the spike, but even without that deal, the surge in investments in Cognitive Learning companies was extraordinary. However, considering the erratic investment patterns in this type of company, it is too soon to tell if investors will continue to gravitate to these companies.

It is interesting that, except for one PreK-12 company, the investments made to behavior modification companies in 2015 were evenly divided between corporate-facing and consumer-facing companies.

Lumos Labs garnered \$32.5 million in 2011 and \$31.5 million in 2012, both records for Cognitive Learning companies at the time. This record was shattered with the \$92 million invested in Virgin Pulse in 2015, the highest amount obtained by a Cognitive Learning company in the history of the industry.

Behavior modification is a staple in the training and education industry and used to improve (modify) employee performance. The Virgin Pulse product is a sophisticated Cognitive Learning product, which is one of seven learning technology types defined in Ambient Insight's Research Taxonomy. Behavior modification is a fundamental characteristic of learning theory. The terms "learning" and "behavior modification" are synonymous; **behavior modification is structured learning.**

Webster's Dictionary defines learning as "a modification of a behavioral tendency by experience." Learning is demonstrated by a change in behavior. Technology-based Cognitive Learning products are behavior modification products designed to improve or enhance perception, working memory, comprehension, emotional states, decision making, fluid intelligence (general problem solving), and reasoning. They are meta-cognition products that enable users to modify cognitive behavior (learn) by understanding and manipulating the learning process itself.

A behavior modification company called Omada Health obtained \$48 million in funding in September 2015. They offer a range of methods to help corporate employees reduce the rates of preventable diseases. The program is a sixteen-week experience that includes online courses, online coaching, and game-based learning. "Over 16 weeks, each participant is guided through an online health lesson that tackles the physical, social, and psychological components of their condition. Interactive games reinforce learning and help participants make connections to real-world scenarios."

Another Cognitive Learning company called Headspace garnered \$34 million in investment in September 2015. Headspace is a "digital health platform, providing guided meditation sessions and mindfulness training. With hundreds of hours of content, it is acknowledged as one of the most comprehensive secular programs for meditation and mindfulness. Headspace is your very own personal trainer, here to help you train your mind. Learn online, when you want, wherever you are, in just 10 minutes a day."

About Us

Ambient Insight is an ethics-based market research firm that identifies revenue opportunities for learning technology suppliers. We track the learning technology markets in 120 countries. Ambient Insight publishes quantitative syndicated reports that break out revenues by customer segment (demand-side) and by product category (supply-side) based on our taxonomy and our proprietary Evidence-based Research Methodology (ERM). We specialize exclusively in learning technology used in the process of knowledge transfer.



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