### Q4: Quarterly Industry Update

AS OF December 31, 2018



### Online Educational Software

**INDUSTRY SUMMARY** 

COGENT VALUATION identified **Online Educational Software** publicly traded companies, IPOs, and recent M&A transactions within the Online Educational Software industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Over the last year since December 31, 2017, the median 52-week share price return of the Online Educational Software industry was 55.9%. Between December 31, 2016 and December 31, 2018, the median EV/EBITDA multiple increased from 14.2 to 18.0. However, the median price-to-earnings multiple decreased from 81.2 to 29.1 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 1.6% and 5.5%, respectively.

Public Company Key Statistics

Median	52-Week
Return	

55.9%

Median EV/EBITDA

18x

Multiple

Median 3-Year CAGR Return

41.2%

Median Price/Earnings
Multiple

29.1x

Median EV/Revenue Multiple

2.3x

Median EV/Gross CF Multiple

17.2x

#### Comparable Public Company Market Price Returns as of December 31, 2018

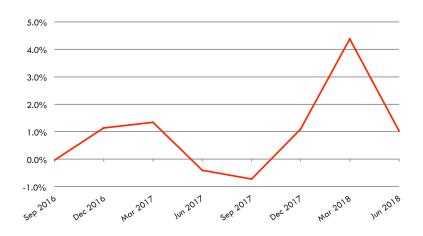
	YTD	3 Month	1 Year	2 Year	2017	2016	2015	2014
eHealth, Inc.	121.2%	54.4%	0.5%	-3.4%	63.1%	-33.6%	20.4%	-17.4%
HealthStream, Inc.	4.3%	10.0%	125.6%	-5.3%	-7.5%	-27.6%	-4.0%	-0.6%
K12 Inc.	55.9%	15.4%	23.4%	-8.3%	-7.3%	10.7%	-45.5%	1.5%
XO Group Inc.	86.8%	54.2%	13.4%	-1.9%	-5.1%	-21.3%	-6.9%	16.0%
Median of Industry Public Companies	55.9%	-1.8%	13.4%	-5.3%	-6.2%	-27.6%	-4.0%	-2.7%

Multiple year periods are calculated as the average annual return.

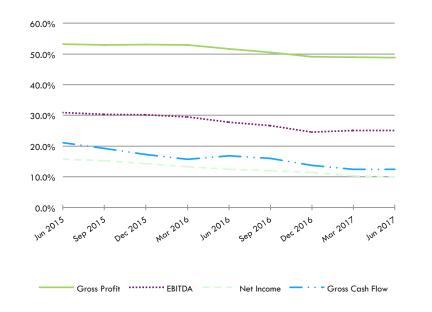


#### Industry Revenue Growth and Profit Margins for the Past Two Years

### Median Quarterly Revenue Growth of All Online Education Software Companies



#### Median Gross Profit, EBITDA, Net Income, and Gross Cash Flow Margins



### Public Company Median Multiples by Quarter

	12/31/18	9/30/18	6/30/18	3/31/18	12/31/17	9/30/17	3/31/17	12/31/16
EV/Revenues Multiple	2.3x	2.6x	1.9x	1.5x	1.6x	1.1x	1.6x	1.1x
EV/EBITDA Multiple	18.0x	24.7x	20.5x	20.9x	19.1x	17.5x	17.0x	14.4x
Price/Earnings Multiple	29.1x	26.9x	47.7x	33.8x	49.6x	77.6x	66.0x	42.0x
EV/Gross Cash Flows Multiple	17.2x	18.1x	15.4x	28.6x	28.3x	39.8x	21.9x	19.9x
Highest Multiple Lowest Multiple	Median	Multiple						

## Industry Initial Public Offerings—Online Educational Software (dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
3/23/18	China Xinhua Education Group Limited	\$0.42	4.0	\$0.7	\$113.4	\$0.0	\$51.9	(\$1.0)	\$0.7	(\$1.0)
3/22/18	Sunlands Online Education Group	\$11.50	4.4	\$70.4	\$64.2	\$0.0	\$149.1	(\$55.5)	(\$58.9)	(\$53.7)
2/18/16	Sylph Education Solutions Limited	\$0.18	10.7	\$106.8	\$3,497.8	\$271.1	\$0.0	\$230.2	\$125.8	\$236.7
11/12/15	Instructure, Inc.	\$16.00	38.8	\$660.1	\$521.7	\$530.0	\$65.1	\$165.1	\$92.1	\$183.0
8/4/10	Ambow Education Holding Ltd.	\$10.00	6.3	\$112.5	\$135.3	\$9.9	\$144.3	\$41.1	\$17.5	\$44.6
7/14/10	Smart Technologies Inc.	\$17.00	4.9	\$46.3	\$169.4	\$0.0	\$708.7	\$19.7	\$14.1	\$20.0
5/31/16	Median IPO	\$0.42	nm	\$88.6	\$152.4	\$5.0	\$104.7	\$30.4	\$15.8	\$32.3

Multiple year periods are calculated as the average annual return.



## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	<sup>n</sup> Target	Acquirer	Transaction Size	% Bought	LTM Revenue	EV Revenue
8/16/18	ATA Online (Beijing) Education Technology Co.,Ltd.	CDH Investments; Zhuhai Lihonghuaying Equity Investment Partnership (LP)	\$200.2	100%	N/A	0.3x
8/1/18	Capella Education Company	Strayer Education, Inc. (nka:Strategic Education, Inc.)	\$964.4	52%	\$2,328.0	0.7x
6/29/18	Learning Tree International, Inc.	N/A	\$10.1	100%	\$331.8	2.4x
4/16/18	No More Practice Education Pty	OneVue Holdings Limited	\$3.9	100%	\$13.3	0.2x
1/31/18	Tecademics LLC	IQUP Sales Group, LLC	\$3.0	100%	\$222.9	2.6x
2/1/17	Apollo Education Group, Inc.	Apollo Global Management	\$1,212.5	100%	\$361.9	1.4x
12/19/16	Smart Technologies Inc.	Foxconn Singapore Pte. Ltd.	\$216.4	100%	\$1.2	0.9x
5/4/16	Cricket Media Group Ltd.	ZG Ventures, LLC	\$32.0	100%	\$13.5	2.8x
1/7/16	Career Partner GmbH	Vtech Holdings Limited	\$93.9	100%	\$180.8	0.8x
10/15/15	Promethean World Plc	Endurance International	\$1,682.0	100%	\$161.8	10.4x
3/6/15	Callista Software Services	Tribal Group plc	\$1.8	100%	\$12.1	0.2x

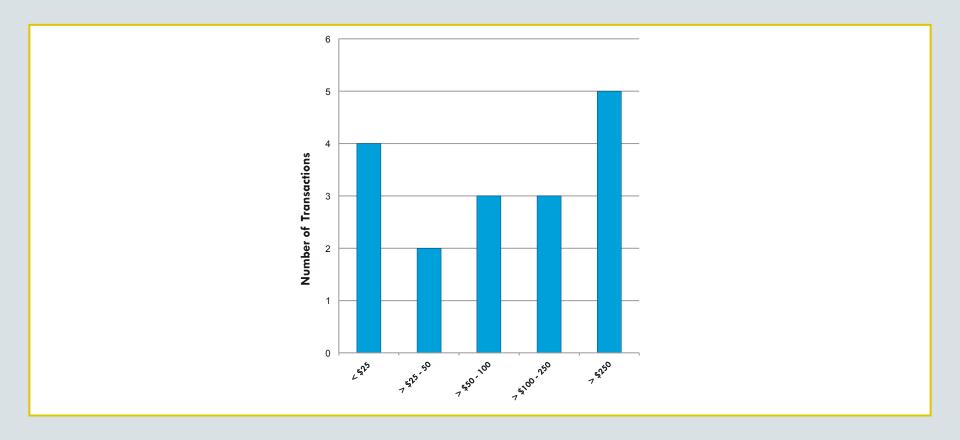
USA International Highest Lowest Median (Continued on next page)

## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

(Continued from previous page)

Transacti on Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenue	EV Revenue
12/4/14	Lollipops Educare Holdings	<b>Evolve Education Group</b>	\$53.0	100%	\$25.5	2.1x
12/4/14	Concur Technologies, Inc.	SAP America, Inc.	\$9,595.5	100%	\$667.9	13.1x
11/20/14	Transformations - Pathways	Academies Australasia	\$1.1	100%	\$3.1	0.3x
5/1/14	Wunderkind Group Pty Ltd.	Massive Interactive, Inc.	\$5.5	100%	N/A	N/A
4/3/14	TESOL Asia Group Inc.	Site Group International	\$2.3	100%	N/A	N/A
3/31/14	Online Courses Australia	Intueri Education Group	\$3.6	50%	\$2.9	1.9x
3/3/14	Health Care Compliance	Healthstream Inc.	\$16.0	100%	\$6.8	2.4x
10/31/13	Xing Wei Institute	ATA, Inc.	\$3.2	100%	N/A	N/A
12/4/14	Lollipops Educare Holdings	Evolve Education Group	\$53.0	100%	\$34.0	1.6x
	Median of the 19 M&A Transa	ction Targets	\$9,595.5	100%	\$25.5	2.1x
<b>■</b> USA	International Highes	st Lowest M	edian			

# Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of December 31, 2018





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**Definitions of Financial Terms Used in this Quarterly Industry Update:** 

Enterprise Value (EV): Market Value of Equity + Market Value of Debt —Cash

**Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA)**: Profitability metric sometimes also referred to as operating profit or operating earnings.

Gross Cash Flows: Net Income + Depreciation and Amortization Expense

Latest Twelve Months (LTM): Financial information is as of the latest twelve months through the date of this Quarterly Industry Update.

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