

Market Update



Education Technology & Services

Q4 2018

Key Highlights

Education Technology & Services M&A activity was particularly strong in 2018, driven primarily by industry consolidation and increasing private equity interest in the space

The top subsector stock performer in Q4 2018 was For-Profit Educational and Vocational Institutions, up 18.1% year over year

On average, EBITDA multiples for the subsectors decreased 0.4x from the prior quarter and were up 0.3x on a year over year basis

2019 Forecast...More of the Same

A year ago, we predicted that 2018 would be the year of consolidation in the education technology and services market. And while that proved to be true, merger and acquisition activity of all types within the sector was robust, with overall transaction volume surpassing 2017 levels by a wide margin. In addition to continued strategic consolidation, increasing private equity interest in the education sector was a strong driver of transaction levels. A record amount of available capital, or “dry powder,” combined with elevated interest in software-as-a-service (“SaaS”) business models were the underlying factors driving private equity interest levels.

As in prior years, 2018 was marked by several notable and highly publicized deals backed by private equity groups, including:

- Silver Lake's acquisition of Weld North
- Vista's combination and partial sale of PowerSchool and PeopleAdmin
- Francisco Partners' sale of myON to Renaissance Learning and subsequent acquisition of Renaissance
- Insight's consolidation of multiple businesses under the Illuminate banner
- CIP's acquisition and combination of New Mountain Learning and Carnegie Learning
- Veritas' acquisition of Cambium Learning
- Warburg Pincus' acquisition of Procare
- Leeds' acquisition of both Endeavor Schools and LRN
- Providence Equity's acquisition of TES Global
- Apollo and Quad's acquisition of Accelerate Learning

Other notable transactions not backed by private equity groups included the following:

- Adecco's acquisition of General Assembly
- Bertelsmann's acquisition of OnCourse Learning
- Wiley's acquisition of The Learning House
- Grand Canyon's acquisition of Orbis

While long-term education investors remained active (Insight, Leeds, Thoma Bravo, Vista, etc.), the market has changed dramatically with the entrance, or increased presence, of a broad array of both technology and generalist investors desperately seeking higher-growth SaaS and other recurring revenue businesses. With nearly \$2 trillion of dry powder, ever-increasing pressure from limited partners to deploy that capital aggressively and a laser focus on SaaS business models, private equity investors have driven transaction activity in the education market to levels beyond previous peaks.

The increased interest from private equity in education technology assets has driven valuations to never-before-seen levels, in some cases approaching premiums only paid for high-growth B2B enterprise SaaS providers. With education institutions increasingly making the transition toward cloud-based solutions, the market is under a dramatic shift in technology, and savvy private equity investors have taken note. Given the current fundamentals driving buyer interest and the rapid development/implementation of SaaS solutions in the education market today, we anticipate continued, if not accelerated, transaction activity through 2019.

Selected Education & Technology Services Transactions

Project Touchdown

Provider of higher education student experience management solutions

Sell-Side

DREAM CENTER EDUCATION HOLDINGS, LLC

has acquired selected assets of

EDMC
Education Management Corporation

South ARGOSY UNIVERSITY
UNIVERSITY

The Art Institutes

Buy-Side

academicworks

has been sold to

blackbaud™

Sell-Side

PRAGMATIC MARKETING

has been acquired by

RENOVUS CAPITAL

and

petra
CAPITAL PARTNERS

Sell-Side

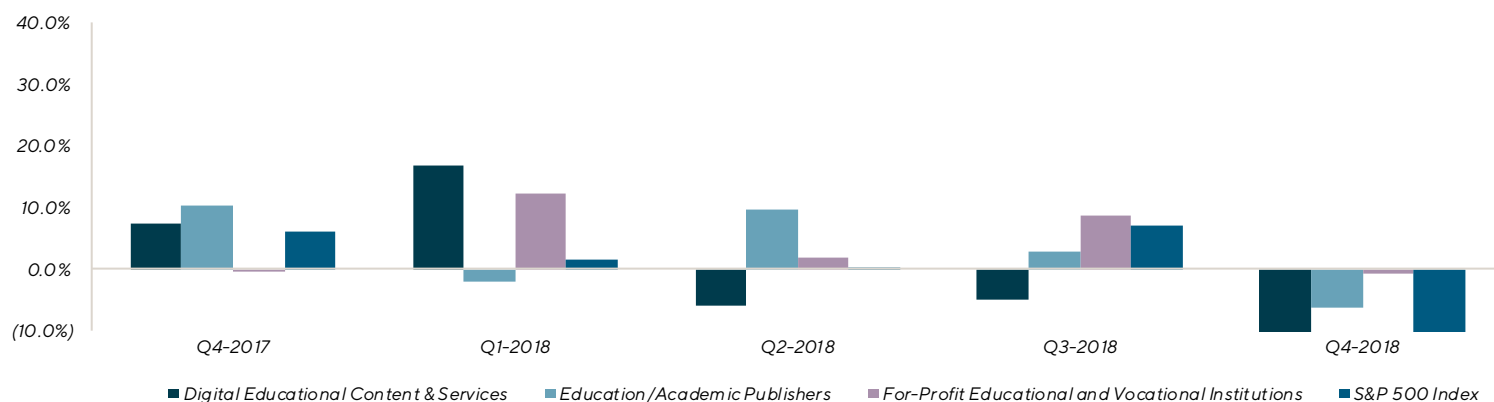
** deal completed by Lincoln team members prior to joining the firm*

Quarter over Quarter Price Performance

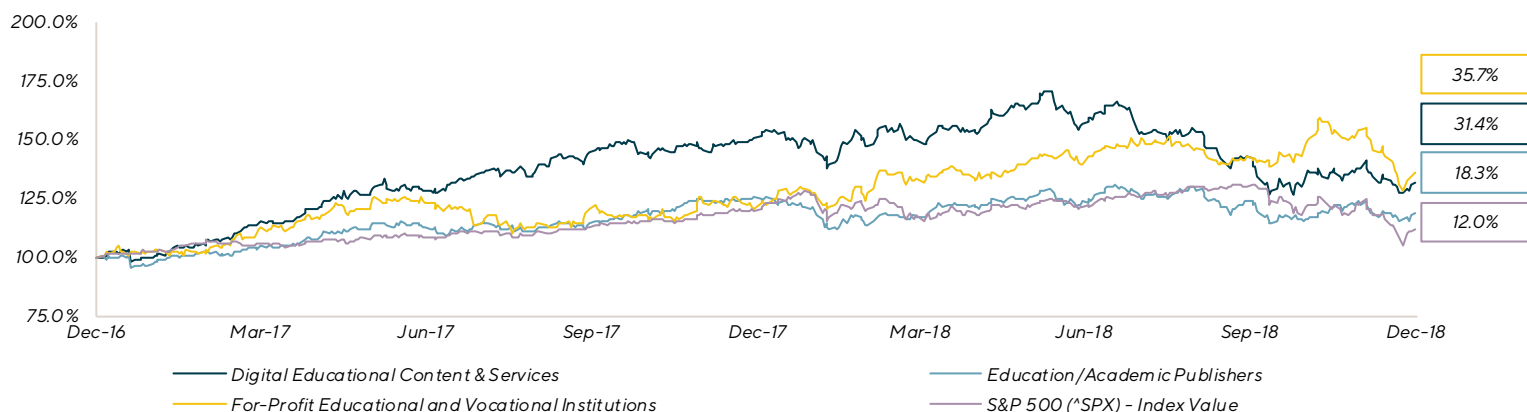
Outperformers	Change
K12 Inc.	40.1%
Lincoln Educational Services Corporation	36.7%
Houghton Mifflin Harcourt Company	27.5%
Graham Holdings Company	12.1%

Underperformers	Change
Blackbaud, Inc.	(37.2%)
2U, Inc.	(34.1%)
RISE Education Cayman Ltd	(32.3%)
Bridgepoint Education, Inc.	(31.0%)

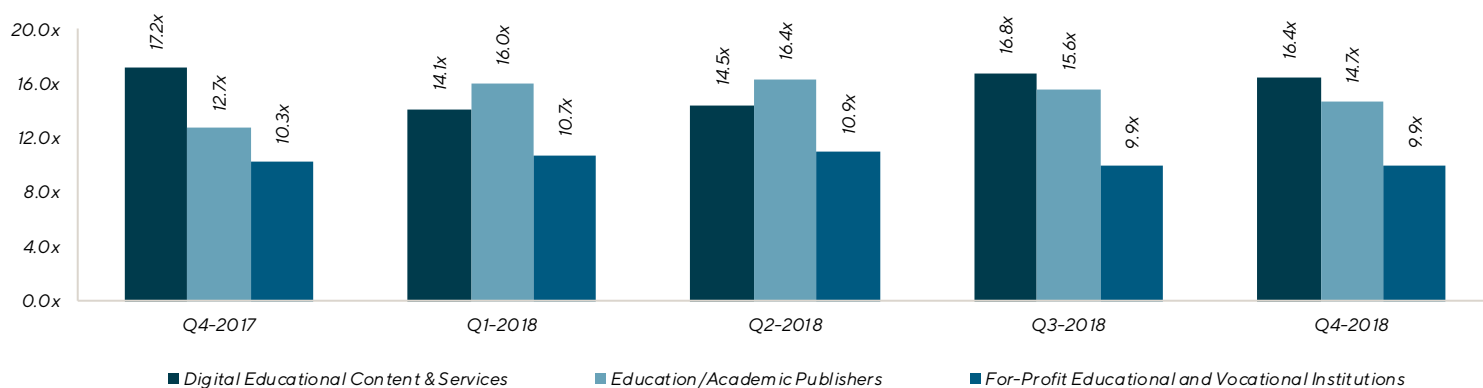
Quarter over Quarter Stock Indices Price Change



Two Year Relative Stock Indices Price Performance



Historical Enterprise Value/EBITDA Valuation Performance



Education Technology & Services Stock Indices Data

Company Name	Stock Price	% of 52 Week High	Market Cap	Enterprise Value	LTM		YoY Revenue Growth	EBITDA Margin	EV / LTM	
					Revenue	EBITDA			Revenue	EBITDA
Digital Educational Content & Services										
2U, Inc.	\$49.72	50.4%	\$2,880	\$2,437	\$383	(\$20)	33.7%	(5.3%)	6.4x	NM
3P Learning Limited	0.85	68.2%	118	102	41	9	(26.5%)	20.8%	2.6x	11.9x
Blackbaud, Inc.	62.90	52.3%	2,977	3,376	845	137	7.1%	16.2%	4.0x	24.6x
Chegg, Inc.	28.42	86.6%	3,265	3,086	299	13	17.2%	4.4%	10.3x	NM
Grand Canyon Education, Inc.	96.14	73.9%	4,628	4,576	939	332	(3.6%)	35.4%	4.9x	13.7x
Instructure, Inc.	37.51	76.3%	1,315	1,144	196	(48)	23.3%	(24.7%)	5.8x	NM
New Oriental Education & Technology Group Inc.	54.81	50.6%	8,698	6,287	2,776	335	35.2%	12.1%	2.4x	18.2x
Pearson plc	11.96	95.6%	9,270	10,361	5,715	749	26.6%	13.1%	1.9x	13.2x
Pluralsight, Inc.	23.55	61.4%	1,467	1,385	212	(85)	27.2%	(40.1%)	6.5x	NM
RELX PLC	20.57	95.2%	40,492	48,511	9,638	2,931	31.0%	30.4%	5.2x	16.9x
RISE Education Cayman Ltd	7.96	42.8%	481	400	173	13	(82.1%)	7.6%	2.3x	NM
TAL Education Group	26.68	56.0%	15,135	13,752	2,341	372	53.3%	15.9%	6.3x	NM
Tarena International, Inc.	6.30	40.8%	337	225	326	(30)	(83.5%)	(9.3%)	0.7x	NM
Mean		65.4%					4.5%	5.9%	4.6x	16.4x
Median		61.4%					23.3%	12.1%	4.9x	15.3x
Education/Academic Publishers										
Houghton Mifflin Harcourt Company	\$8.86	88.2%	\$1,095	\$1,725	\$1,388	\$78	(1.4%)	5.7%	1.2x	22.0x
Informa plc	8.03	72.5%	10,049	13,566	2,374	749	35.1%	31.6%	5.9x	18.7x
John Wiley & Sons, Inc.	46.97	65.5%	2,688	3,107	1,792	318	2.3%	17.7%	1.7x	9.8x
Pearson plc	11.96	95.6%	9,270	10,361	5,715	749	26.6%	13.1%	1.9x	13.2x
RELX PLC	20.57	95.2%	40,492	48,511	9,638	2,931	31.0%	30.4%	5.2x	16.9x
Rosetta Stone Inc.	16.40	76.1%	375	345	174	(4)	(5.8%)	(2.2%)	2.0x	NM
Scholastic Corporation	40.26	84.0%	1,418	1,074	1,664	114	2.5%	6.9%	0.6x	9.4x
Wolters Kluwer N.V.	59.15	92.8%	16,035	18,292	4,984	1,402	12.7%	28.1%	3.7x	13.2x
Mean		83.7%					12.9%	16.4%	2.8x	14.7x
Median		86.1%					7.6%	15.4%	1.9x	13.2x
For-Profit Educational and Vocational Institutions										
Adtalem Global Education Inc.	\$47.32	80.5%	\$2,780	\$2,672	\$1,222	\$274	4.0%	22.4%	2.2x	9.8x
American Public Education, Inc.	28.46	61.7%	467	270	299	55	(0.1%)	18.5%	0.9x	5.2x
Bridgepoint Education, Inc.	7.01	51.4%	190	35	459	23	(4.1%)	4.9%	0.1x	NM
Career Education Corporation	11.42	59.9%	797	608	579	98	(2.9%)	16.9%	1.1x	6.2x
Graham Holdings Company	640.58	94.4%	3,396	3,097	2,683	417	3.5%	15.5%	1.2x	7.3x
Grand Canyon Education, Inc.	96.14	73.9%	4,628	4,576	939	332	(3.6%)	35.4%	4.9x	13.7x
K12 Inc.	24.79	99.8%	953	847	978	71	10.6%	7.3%	0.9x	16.5x
Laureate Education, Inc.	15.24	88.9%	3,320	5,546	4,380	729	0.0%	16.6%	1.3x	7.6x
Lincoln Educational Services Corporation	3.20	99.1%	79	93	260	7	(0.5%)	2.7%	0.4x	13.0x
Strategic Education, Inc.	113.42	73.2%	2,395	2,080	511	68	12.3%	13.3%	4.1x	NM
Mean		78.3%					1.9%	15.4%	1.7x	9.9x
Median		77.2%					(0.0%)	16.1%	1.1x	8.7x

Note: USD in millions, except for stock price

Source: Bloomberg, Capital IQ and company filings, as of 12/31/2018

Market Intelligence

1/28/19: PSI Services, the provider of professional testing services and talent assessment solutions backed by **Waud Capital**, has halted its sale process due to buyer concerns over aggressive addbacks to EBITDA

1/15/19: BenchPrep, which offers a platform for education providers to build online courses and programs, has raised \$20 million in a Series C funding round led by **Jump Capital** and **Owl Ventures**

10/31/18: Handshake, a provider of career network solutions for college students, has raised \$40 million in a Series C funding round led by **EQT Ventures**

1/23/19: EdTechX Holdings (NASDAQ: EDTX), the first special purpose acquisition company ("SPAC") focused on the education technology sector, is seeking acquisitions in the education and training space

12/5/18: Blackboard, a provider of enterprise technology and learning solutions backed by **Providence Equity**, collected initial bids for the sale of its payments business; the division generates \$55 million in EBITDA and is expected to be evaluated on a low-double digit EBITDA multiple

10/11/18: Pearson (LON:PSON), has resumed its K-12 courseware publishing segment sale process, continuing to shed assets to focus on its core technology and assessment businesses

Selected M&A Transaction Recap

Closed	Target Company	Target Description	Acquiring Company
Announced	Glynlyon	Provides educational and curriculum solutions for K-12 students	Weld North
Announced	Times Higher Education	Publishes educational print and digital content	Inflexion Private Equity
Announced	TES Global	Provides publishing and digital education solutions	Providence Equity Partners
Announced	Squirrel Learning	Provides digital intervention curriculum and services to schools and district councils	BoomWriter Media
Announced	Watershed Systems	Operates a platform that connects learning platforms, content and apps	Learning Technologies Group plc
Announced	Grovo Learning	Provides an online training platform for businesses	Cornerstone OnDemand
Announced	Glint	Develops a real-time employee engagement platform for corporations	LinkedIn
Jan-19	Orbis Education Services	Provides placement solutions for healthcare workforce shortages	Grand Canyon Education
Dec-18	Brassart	Operates graphic arts and digital creation schools	GEDH (Quilvest Private Equity)
Dec-18	Workstar Technologies	Offers digital content and corporate learning services	Anvia
Dec-18	Bournemouth Collegiate School	Educational institution which offers day and boarding education to students	Bright Scholar Education
Dec-18	Knovation	Provides open educational resources	ACT
Dec-18	LRN Corporation	Provides ethics and compliance knowledge solutions to companies worldwide	Leeds Equity Partners
Dec-18	Science-Metrix Inc/1science	Engages in science and technology research / develops research intelligence products	Elsevier
Dec-18	West Academic Publishing	Publishes casebooks, study aids and supplementary products for law schools	Levine Leichtman Capital Partners
Dec-18	Cambium Learning Group	Provides educational technology solutions	Veritas Capital Fund Management
Dec-18	SARS Software Products	Develops software for the higher education market	Valsoft Corp
Dec-18	Next Tier Education	Develops software to simplify the high school and college application process for students	Follett Corporation
Dec-18	Devry University	Offers online undergraduate and graduate degree programs	Cogswell Education
Dec-18	Linguistics Abstracts Online	Provides easy access to over 63,000 linguistics abstracts from over 600 journals	EBSCO Information Services
Dec-18	Education Umbrella	Provides books and digital learning resources	Bertram
Dec-18	School Loop	Provides online communication systems for K-12 schools	Think3
Dec-18	edCetra	Provides a web-based platform for e-learning, online training and XML based development	NexTech AR
Nov-18	Educators Resource	Distributes school supplies to e-retailers and brick-and-mortar stores	Gladstone
Nov-18	Interfolio	Provides institutional accreditation and reporting solutions	Insight Venture Partners
Nov-18	Workbench	Provides a platform used to build, customize and share lessons for classrooms	Google
Nov-18	LernQuadrat	Offers professional tutoring services for all ages	Studienkreis
Nov-18	Vector Solutions	Provides continuing education, training and performance management solutions	Golden Gate Capital
Nov-18	TRA	Provides a cloud-based school activity fund account software for K-12 schools	Kev Group (Serent Capital)
Nov-18	Constructive Media	Provides digital learning solutions	Figjam Group
Nov-18	Capital Education Group	Manages private schools and programs for children with specialized learning needs	Catapult Learning
Nov-18	Lumesse Limited	Provides talent management cloud solutions for organizations	Saba Software (Vector, HarbourVest)
Nov-18	The Learning House	Develops a cloud-based technology platform for online degree programs and courses	John Wiley & Sons
Nov-18	OnCourse Learning	Provides education, pre-licensing and corporate training services online	Bertelsmann
Oct-18	Acadview Software	Develops an online platform for undergraduates that offers live online courses and industry projects	UpGrad Education
Oct-18	Mindflash Technologies	Operates a cloud-based learning platform for employee and customer training	Applied Training Systems
Oct-18	Edlio	Develops and manages K-12 school and district websites	LLR Partners
Oct-18	Iridize	Develops a platform that creates product guides and walkthroughs for employee training	Oracle
Oct-18	NovoEd	Develops an online platform for social, mobile and analytical learners	Devonshire Investors
Oct-18	SmartCatalog	Provides academic content management solutions for higher education	Watermark (TCV)
Oct-18	High Line Corporation	Develops HR management systems for public and higher education markets	NEOGOV (Warburg Pincus)
Oct-18	prIME Oncology	Offers medical education services to physicians focusing on cancer treatment	WebMD (KKR)
Oct-18	Firehose Project/JobTrack	Provides an online training platform to learn coding / operates a platform that helps job seekers manage the application process	Trilogy Education (Exceed Capital)
Oct-18	Rubicon International	Develops curriculum management software for schools	ManageBac
Oct-18	Gradescope	Develops a grading platform for schools and departments	Turnitin
Oct-18	Actively Learn	Provides a digital e-reading platform	Achieve3000 (Insight Venture Partners)

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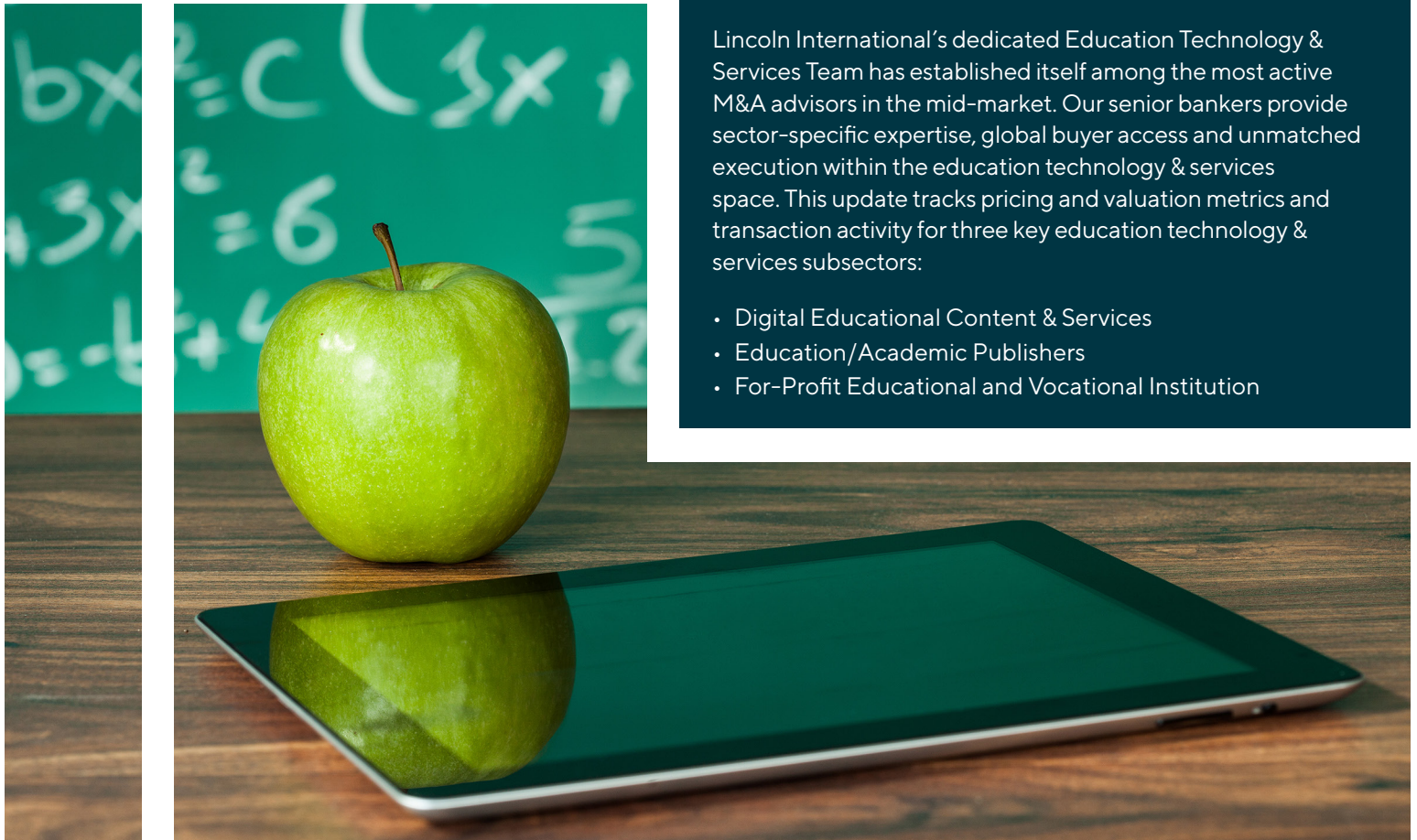
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Lincoln International's Education Technology & Services Team

Lincoln International recognizes the importance of understanding a client's industry, value drivers, growth opportunities and challenges. Our extensive expertise provides in-depth market insights, deep relationships with the most active strategic and financial partners and superior knowledge on how to best position a business and overcome potential issues. These attributes, combined with our globally integrated resources and flawless execution, enable us to consistently deliver outstanding outcomes for our clients.

Lincoln International's dedicated Education Technology & Services Team has established itself among the most active M&A advisors in the mid-market. Our senior bankers provide sector-specific expertise, global buyer access and unmatched execution within the education technology & services space. This update tracks pricing and valuation metrics and transaction activity for three key education technology & services subsectors:

- Digital Educational Content & Services
- Education/Academic Publishers
- For-Profit Educational and Vocational Institution



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About Lincoln International

We are trusted investment banking advisors to business owners and senior executives of leading private equity firms and public and privately held companies around the world. Our advisory services include mergers and acquisitions, debt advisory, growth equity and restructuring for the mid-market. We also provide valuations and fairness opinions and joint ventures advisory services. As one tightly integrated team of more than 500 professionals across 15 countries, we offer an unobstructed perspective, backed by superb execution and a deep commitment to client success. With extensive industry knowledge and relationships, timely market intelligence and strategic insights, we forge deep, productive client relationships that endure for decades. Connect with us to learn more at:

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