K-12 Online Market Overview

We currently estimate that there are ***over 1 million K-12 students*** who have taken a course online, of which ***more than100,000 K-12 students are enrolled in fully online programs*** in the U.S. today. Based upon the available research, this represents over a 300% increase from 2002 and shows similar industry growth characteristics that are being experienced in the online sector of postsecondary education.

With growing acceptance of online education and success experienced in the postsecondary sector, there is growing interest in the application of online education in the K-12 sector. To date there is no one empirical study or database to accurately measure the true market size and student participation. That being said, there are several authoritative sources of information that provide a body of information supporting the growing interest and importance of online education in the K-12 sector.

Postsecondary Online Education

The postsecondary education sector has seen dramatic growth in the online delivery of education over the last several years. It is currently estimated that approximately 20% of all college students have taken at least one course online. The charts below from the Sloan Consortium depict the rapid growth in online learning that the postsecondary sector has experienced.

Total and Online Enrollment in Degree-granting Postsecondary Institutions – Fall 2002 through Fall 2006

	Total Enrollment	Annual Growth Rate Total Enrollment	Students Taking at Least One Online Course	Annual Growth Rate Online Enrollment	Online Enrollment as a Percent of Total Enrollment
Fall 2002	16,611,710	NA	1,602,970	NA	9.7%
Fall 2003	16,900,479	1.7%	1,971,397	23.0%	11.7%
Fall 2004	17,272,043	2.2%	2,329,783	18.2%	13.5%
Fall 2005	17,428,500	0.9%	3,180,050	36.5%	18.2%
Fall 2006	17,647,720	1.3%	3,488,381	9.7%	19.8%

Students Taking at Least One Online Course – Fall 2006

Doctoral/Research	566,725
Master's	686,337
Baccalaureate	170,754
Associate's	1,904,296
Specialized	160,268

Source: Online Nation, Sloan Consortium, October 2007, pages 5 and 7.

With the growth of the online sector there has been substantial interest by all types of colleges to develop and offer online classes and programs. The successful IPO's of Capella Education and American Public Education over the last year have reinforced the interest in the sector, as well.

The K-12 Market

The public K-12 market in the United States is estimated to be approaching 50 million students today and expected to grow to 53 million in 2016. The high school market alone is similar in size to the postsecondary market.

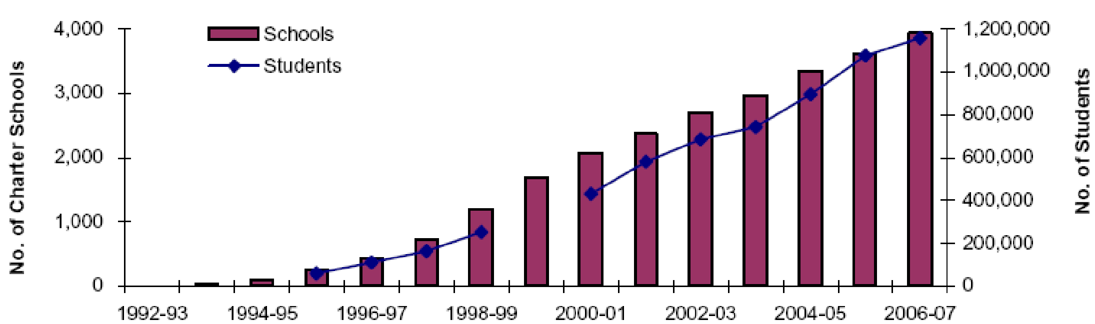
K-12 Enrollments
Public Schools
(thousands)

	2002 Actual	2003 Actual	2004 Actual	2005 Estimate	2007 Estimate	2016 Estimate
Grades:						
PreK - 8	34,116	34,202	34,178	34,174	34,512	37,917
9 - 12	14,067	14,338	14,617	14,853	15,018	15,382
Total	48,183	48,540	48,795	49,027	49,530	53,299

Source: NCES, Condition of Education 2007, page 117

It is currently estimated that there are approximately 1.2 million charter school students in the U.S. Below is a chart from BMO Capital Market's September ***2007 Education and Training*** report that shows the growth rate of the schools and student populations.

Exhibit 60. K-12 Charter Schools and Enrollment (1992-1993 to 2006-2007)



Note: Number of students in 1999-2000 school year and prior to 1995-96 school year was not available.
Source: BMO Capital Markets, Charter School Leadership Council and Center for Education Reform.

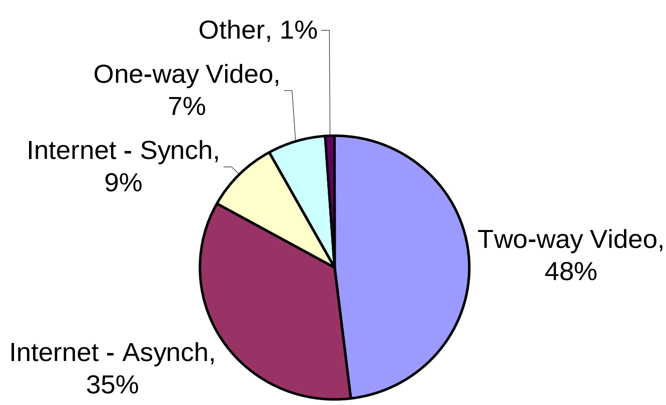
<u>The Online K-12 Market</u>
In March 2005 the Nation Center for Educational Statistics ("NCES") published a report, **Distance Education Courses for Public Elementary and Secondary School Students 2002 – 2003.**

The study made the following observations:

- Estimated that 328,000 students or 0.07% of total public school enrollments are enrolled in distance education courses
- 223,000 or 68% of the students were in high school, representing 1.6% of current high school enrollments
- 5,500 or 36% of the total 15,040 public school districts had students enrolled in distance education courses
- 8,200 or 9% of all public schools (93,869) had students enrolled in distance education courses

The delivery methods utilized for distance education varied with two-way interactive video being the most prevalent in the 2002/2003 school year.

Distance Education Delivery Methods



Source: Distance Education Courses for Public Elementary and Secondary School Students 2002 – 2003, page 10

The Sloan Foundation recently estimated that for the ***2005 school year*** there were approximately ***700,000 K-12 public school*** students taking distance education courses, representing 1.4% of total public school enrollments and a 213% increase from the 2002 school year NCES estimate. If the percentage of high school students remained unchanged from the 2002 data at 68%, then 476,000 high school students or 3.2% would be involved in distance education.

We believe that a good part of the growth that has occurred from 2002 to 2005 is represented by virtual schools that primarily delivery their programs via the internet in an asynchronous delivery mode over the internet, ***resulting in the internet becoming the preferred delivery mode***.

Today we estimate that the number of K-12 students who have taken an online course exceeds one million.

State Sponsored Virtual Schools

Certain states have opted to create their own virtual online schools to meet the needs of students and to offer an alternative to the growing competition for students desiring either a *blended or fully online* education program, from virtual charter schools being developed by Education Management Companies ("EMO's"), such as K12, Inc. and Connections Academy. The list below which identifies 139,622 students enrolled in state sponsored programs in 24 states was included in the report "***Laboratories of Reform***".

Appendix. State Virtual School Student Enrollment 2005–06

School	Enrollment	School	Enrollment
Utah: The Electronic High School	49,391	Illinois Virtual High School	1,964
Florida Virtual School	31,011	West Virginia Virtual School	1,385
Virtual High School (Massachusetts)	7,724	Colorado Online Learning	1,150
Nevada: Clark County School District Virtual High School	7,116	Wisconsin Virtual School*	1,200
Michigan Virtual High School	7,073	Arkansas Virtual High School	1,200
North Dakota Division of Independent Study	5,662	Mississippi Online Learning Institute (now Mississippi Virtual Public School)	1,082
Kentucky Virtual High School	4,092	Hawaii E-School*	700
North Carolina Virtual Public School	3,627	Iowa Learning Online	519
Louisiana Virtual School	2,800	Alabama Online High School (now called Alabama ACCESS)	406
Idaho Digital Learning Academy	2,636	Maryland Virtual Learning Opportunities Program	332
University of California College Prep Online	2,283	Missouri Virtual Public School	N/A
Georgia Virtual School	2,143	Tennessee (E4TN)	N/A
University of Oklahoma, Independent Learning High School	2,126	South Dakota Virtual High School	N/A
Virginia Virtual AP School*	2,000	South Carolina Virtual School	N/A
		Total	**139,622**

Note: * = approximation; N/A = not yet operational or data not available.

Source: All figures are based on phone or e-mail responses from statewide virtual schools in summer/fall 2006. Education Sector researchers also consulted two reports, John Watson and Jennifer Ryan, *Keeping Pace with K–12 Online Learning: A Review of State-Level Policy and Practice*, Evergreen Consulting Associates, 2006 and *Report on State Virtual Schools*, Southern Regional Education Board, August 2006, for definitions and additional cross-checking of enrollment numbers.

Independent Virtual Charter Schools

According to the Center for Education Reform ("CER"), there ***were 173 virtual schools with total enrollment exceeding 92,000 students,*** operating in 18 states compared to just 86 virtual schools in 13 states with total enrollment of approximately 31,000 students in the 2004-05 school year. We believe the actual number is higher, as there is still a lack of standardized reporting in the industry. The following chart lists the 20 largest virtual charter schools from the CER database. Please note the student counts seem to be for the years 2004 – 2007, based upon our knowledge of the schools we are working with.

Top 20 Independent Virtual Charter Schools by Student Population

School	State	Opened	Students
Electronic Classroom of Tomorrow	OH	2000	6,664
Pennsylvania Virtual Charter School	PA	2001	5,000
Primavara Online High School	AZ	2000	4,100
Hope Co-Op Online Learning Academy	CO	2005	3,804
Ohio Virtual Academy	OH	2002	3,800
Pennsylvania Charter School	PA	2000	3,100
OHDELA	OH	2001	3,000
Colorado Virtual Academy	CO	2001	2,500
TRECA Digital Academy	OH	2001	2,500
Idaho Virtual Academy	ID	2001	2,100
River Valley Digital Academy	OH	2004	1,884
Pennsylvania Leadership Charter School	PA	2004	1,842
Vitual Community of Ohio	OH	2002	1,507
Odyssey Charter School of Nevada	NV	1999	1,300
Minnesota Transitions Charter School	MN	1996	1,200
Oregon Connections Academy	OR	2005	1,200
Commonwealth Connections Academy Charter School	PA	2003	1,000
Eagles Peak Charter School	CA	2000	965
Idaho Distance Education Academy	ID	2004	911
iQ Academies	WI	2004	911
Total			49,288

Source: Center for Education Reform Charter School database

Outsourced Virtual Charter Schools

Many new virtual schools opt to outsource the complete operation of their virtual schools to EMO's. BMO, in their recent industry report, identified the following EMO's who manage virtual schools. In these cases they enter states with new charter legislation and help establish new virtual charter schools that they provide full outsourced services to.

Exhibit 65. Virtual Schools Managed by For-Profit EMOs (ranked by students in 2006-2007 school-year)

Company	Location	Public Schools Under Management	That are Virtual Schools	Students in Virtual Schools	States With Virtual Schools
K12, Inc	Herndon, VA	21	21	27,297	14
Connections Academy	Baltimore, MD	12	12	7,335	10
White Hat Management	Akron, OH	38	2	2,762	2
Pinnacle Education. Inc.	Tempe, AZ	10	1	250	1

Source: BMO Capital Markets based on information compiled by Education Policy Studies Research Unit at Arizona State University and K12, Inc.

We also expect to see other for-profit charter school EMO's who do not manage virtual charter schools to have an interest in the virtual market as well. The following are the largest providers in the market today.

Top 20 For-Profit Educational Management Companies (ranked by students in 2006-2007 school-year)

Rank Company	Location	Public Schools Under Mgt.	That are Charter Schools	Students in Managed Schools
1 Edison Schools Inc. (1)	New York, NY	97	37	56,383
2 National Heritage Academies Inc. (1)	Grand Rapids, MI	53	53	32,158
3 K12, Inc. (1)	Herndon, VA	21	17	20,865
4 White Hat Management LLC	Akron, OH	38	38	15,613
5 The Leona Group, LLC	Phoenix, AZ	45	45	15,142
6 Charter Schools USA Inc. (1)	Fort Lauderdale, FL	15	15	13,360
7 Mosaica Education Inc. (1)	New York, NY	42	42	12,339
8 Connections Academy (1)	Baltimore, MD	12	8	7,335
9 Charter School Administrative Services	Southfield, MI	15	15	7,295
10 Victory Schools	New York, NY	13	7	5,840
11 Helicon Associates Inc.	Trenton, MI	14	14	5,522
12 SABIS Educational Systems	Eden Prairie, MN	7	7	5,215
13 Richard Milburn High School, Inc.	Virginia Beach, VA	16	13	3,020
14 Nobel Learning Communities (NLCI)	West Chester, PA	4	4	2,870
15 The Romine Group	Utica, MI	5	5	2,624
16 CS Partners, LLC	Howell, MI	9	9	2,443
17 Planagement Group	Lewisville, TX	18	18	2,379
18 Choice Schools Associates	Grand Rapids, MI	8	8	2,090
19 Global Educational Excellence	Ann Arbor, MI	6	6	2,052
20 Benjamin Franklin Charter School	Gilbert, AZ	4	4	1,904
Total				216,449

(1) Member of National Council of Education Providers. Source: BMO Capital Markets based on Information compiled by Education Policy Studies Research Unit at Arizona State University.

Source: BMO Education and Training, September 2007, page 69, exhibit 62

In addition to these for-profit EMO's there is an emerging group of non-profit EMO's emerging such as the Charter Management Organizations ("CMO's") backed by the New Schools Venture Fund, which includes, Aspire Public Schools, KIPP, D.C. and others.

The Case for Online Education in the K-12 Market

While this is a consensus view that online education is working in the postsecondary sector, it is not the case in K-12 today. It is very common for people to assume that online education cannot replace or improve upon our current public and private school K-12 system. Those who initially accept online as a viable, many times fall prey to the fallacy that it only works for "over-achieving" students.

In the March 2005 NCES report the following were the primary reasons cited by school districts for employing distance learning:

- Offering courses not currently available at the school (91%)
- Meeting the needs of specific groups of students (81%)
- Offering advanced placement or college-level courses (69%)
- Reducing scheduling conflicts for students (56%)

The North American Council for Online Learning makes a strong case for the efficacy on online K-12 education in its paper, **Virtual Schools and 21st Century Skills,** citing the following skills that are fostered:

- Global Awareness
- Self-Directed Learning
- Information and Communications information Technology Literacy
- Problem solving Skills
- Time Management and Personal Responsibility

<u>Convergence between High School and College Online Programs</u>

Based upon the growth rate alone it is clear today that online education is a key component of our K-12 education system, particularly in grades 9-12, and should grow in market penetration and importance in the future. In the college sector, 85% of the online undergraduate students identified by the Sloan Consortium are at the associate's level. With the majority of online students in the high school and associates level, we expect in the future to see increasing activity in high school students using online programs to meet their high school as well as college entry requirements. Factors such as this probably entered into the decision of Kaplan, Devry and Apollo to purchase private for-profit online K-12 schools over the last year.

Additional Industry Information

The following page includes links to the sources of information discussed here as well as other relevant industry reports and studies.

Resources:

The Condition of Education 2007
http://nces.ed.gov/pubs2007/2007064.pdf

K-12 Online Learning: A Survey of U.S. School District Administrators
http://www.sloan-c.org/publications/survey/pdf/K-12_Online_Learning.pdf

Making the Grade – Online Education in the U.S. 2006
http://www.sloan-c.org/publications/survey/pdf/making_the_grade.pdf

Virtual Schools and 21st Century Skills
http://www.21stcenturyskills.org/documents/VSand21stCenturySkillsFINALPaper.pdf

A Primer on Virtual Charter Schools: Mapping the Electronic Frontier
http://www.qualitycharters.org/files/public/IssueBriefNo10.pdf

Distance Education Courses for Public Elementary and Secondary School Students 2002 - 2003
http://nces.ed.gov/pubs2005/2005010.pdf

LABORATORIES OF REFORM:
Virtual High Schools and Innovation in Public Education
http://www.educationsector.org/usr_doc/Virtual_Schools.pdf

Students are Streaming to State Virtual Schools
http://www.educationsector.org/analysis/analysis_show.htm?doc_id=420347

Online Nation
www.sloan-c.org/publications/survey/pdf/online_nation.pdf