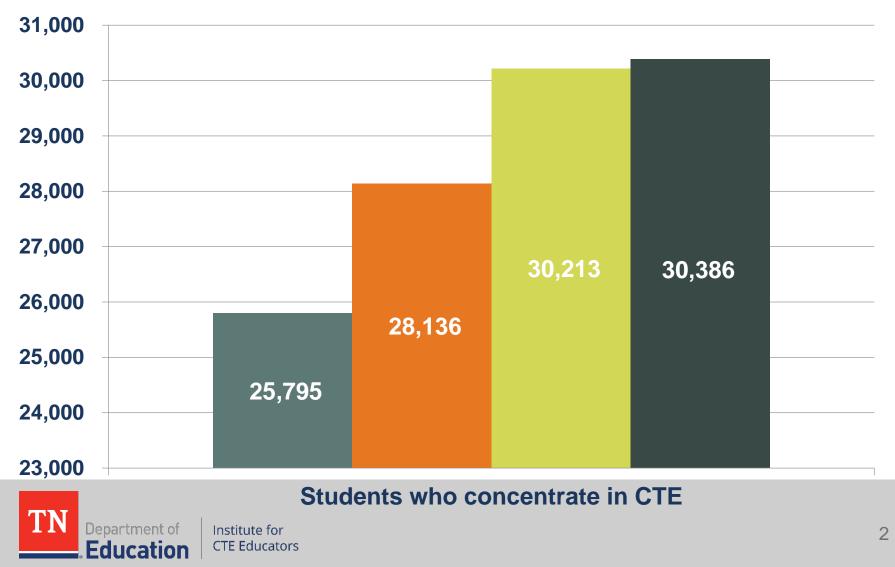


STEM Data Session

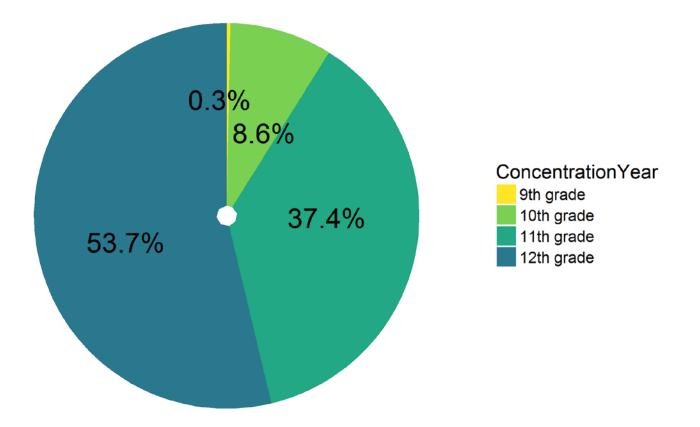
Deborah Knoll, career cluster consultant, division of college, career and technical education

Number of students who concentrate in CTE continues to increase

■2012-13 ■2013-14 ■2014-15 ■2015-16



Grade when students in the 2012 freshman cohort attained concentrator status





Program of Study offerings, 2013-14 through 2015-16

	235		
	114	202	
3000-	175 106	128	188
	296	162	153
	290	131 155	153
		155	128 126
	459	450	
	150		414
	100	160	107
2000-	559	504	506
	13 152	2	1
	110	2 219	135 83
	226	89	
	184	296	331
1000-		172	164
	427	362	247
	536	450	467
0-	62	80	182
0	2013-2014	2014-2015	2015-2016

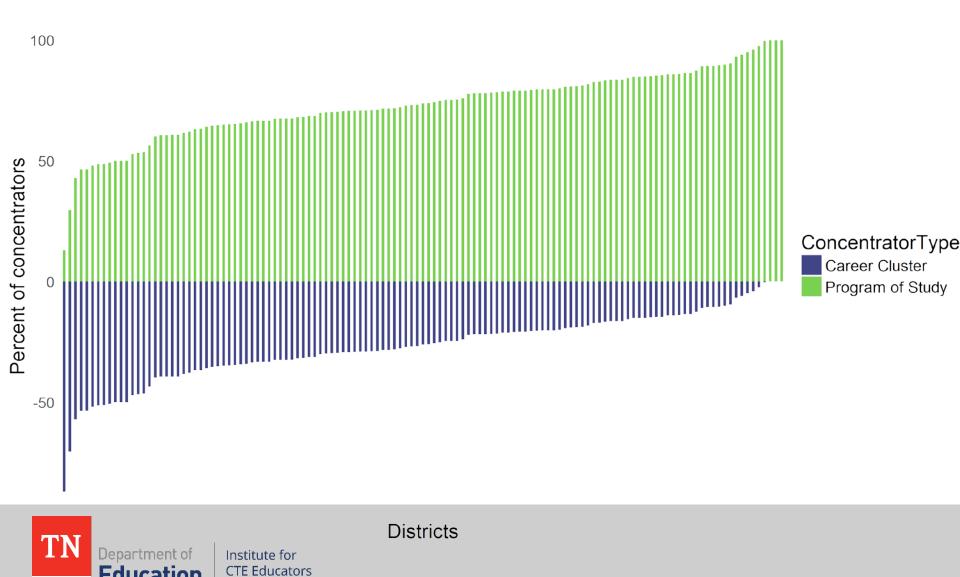
Car	eerCluster
	Transportation, Distribution, & Logistics
	Science, Technology, Engineering, & Mathematics
	Marketing
	Law, Public Safety, Corrections, & Security
	Information Technology
	Human Services
	Hospitality & Tourism
	Health Sciences
	Government & Public Administration
	Finance
	Education & Training
	Business, Management, & Administration
	Arts, Audio-Visual Technology, & Communication
	Architecture & Construction
	Agriculture, Food, & Natural Resources
	Advanced Manufacturing



Students who Concentrate in CTE Programs of Study



District breakdown of concentrator types for 2012 cohort



Education

Concentrator Trends

	14-15 PoS	14-15 CC	% PoS	15-16 PoS	15-16 CC	% PoS	Change
AG	2863	2471	53.7%	3455	1779	66.0%	12.3%
CONS	2309	1335	63.4%	2408	490	83.1%	19.7%
ARTS	1246	932	57.2%	1797	439	80.4%	23.2%
BUS	1234	1745	41.4%	1410	1207	53.9%	12.5%
EDU	204	145	58.5%	295	101	74.5%	16.0%
FIN	555	368	60.1%	372	214	63.5%	3.4%
HS	5389	2699	66.6%	6302	1703	78.7%	12.1%
HOSP	1225	362	77.2%	1442	127	91.9%	14.7%
HUSV	2921	3370	46.4%	3685	1768	67.6%	21.1%
IT	848	622	57.7%	972	246	79.8%	22.1%
LAW	593	1428	29.3%	1235	923	57.2%	27.9%
MANU	314	231	57.6%	1199	343	77.8%	20.1%
MKT	545	1046	34.3%	986	802	55.1%	20.9%
STEM	993	501	66.5%	1314	240	84.6%	18.1%
TRANS	1823	596	75.4%	2172	252	89.6%	14.2%



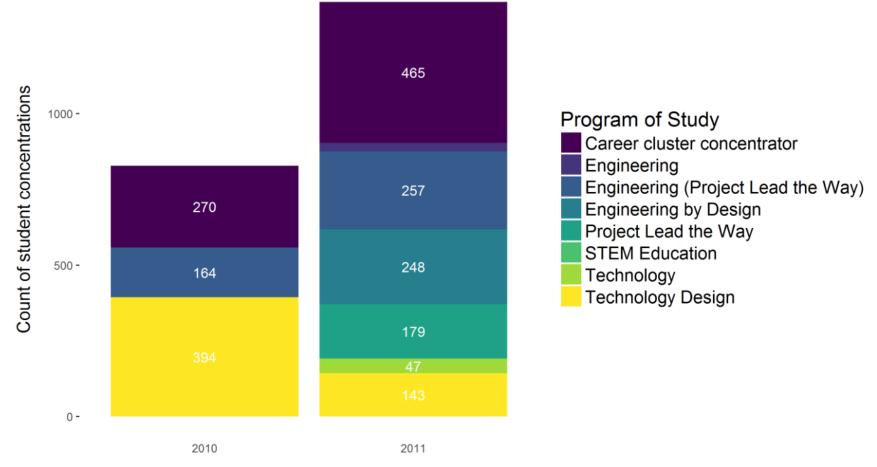
Percentage of CTE Concentrators who concentrated in a Program of Study

Transportation, Distribution & Logistics Hospitality & Tourism Education & Training Manufacturing Science, Technology, Engineering, & Mathematics Architecture & Construction Health/Science/Tech Arts, Audio/Visual Technology, & Communications Information Technology Finance Agriculture, Food, & Natural Resources Human Services Marketing Law, Public Safety, Corrections & Security **Business Management & Administration**

92.1%
90%
88.8%
85.1%
83.6%
81.4%
79.3%
76.5%
73.9%
72.6%
67.8%
67.3%
55.4%
54.9%
49.5%



CTE Concentrators in STEM



Freshman cohort year



Definition of a Student Who Concentrates in CTE

- Beginning with the 2017-18 School Year:
 - A student who concentrates in CTE will complete three or more courses within a program of study

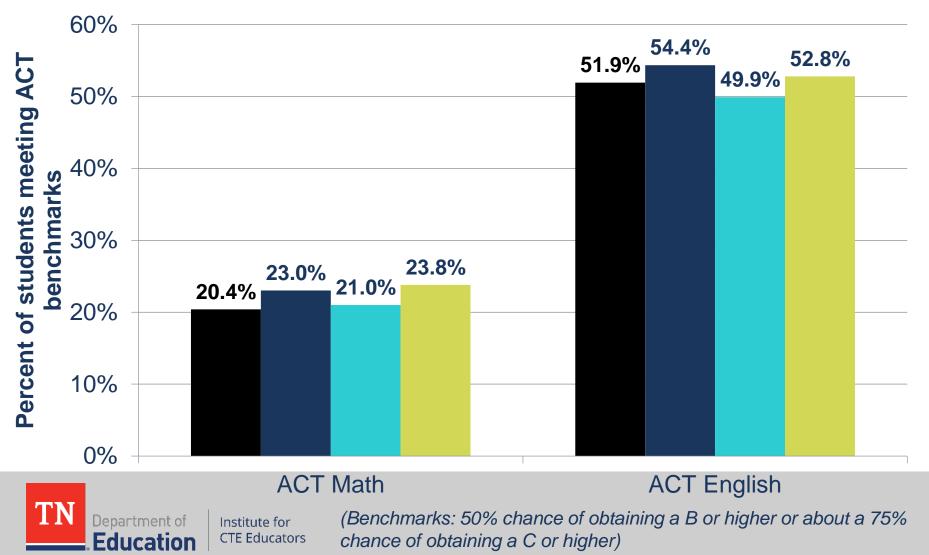






Students who concentrated in CTE and who met ACT benchmarks

■ 2012-13 ■ 2013-14 ■ 2014-15 ■ 2015-16

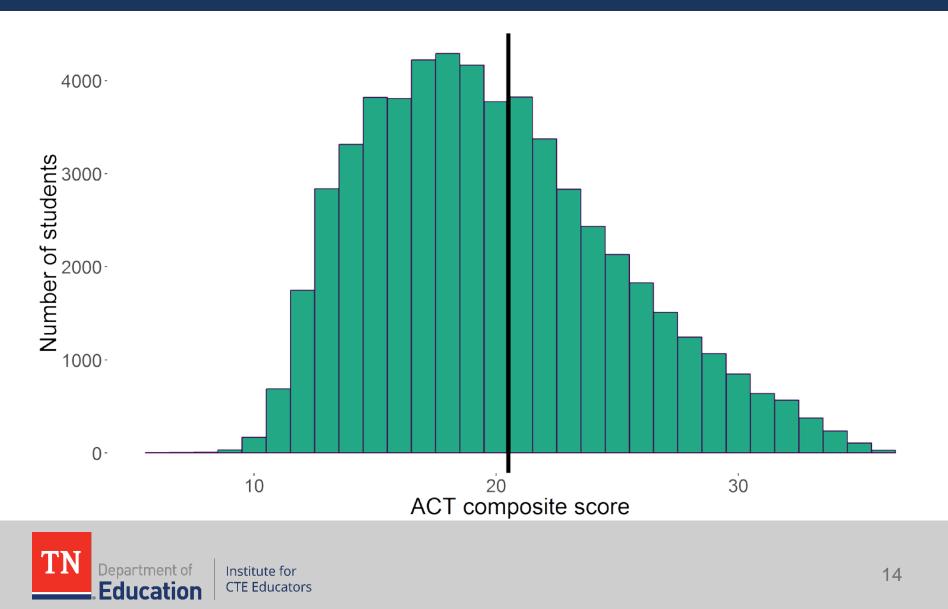


ACT overview for graduates in the 2012 cohort

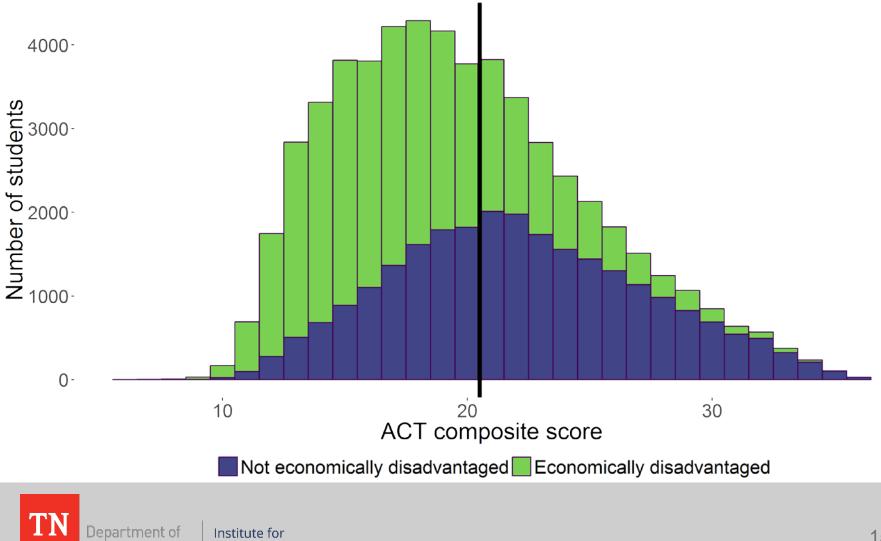
	All Students	CTE Concentrators
Average ACT	19.8	19.0
Percent 21 or above	36.5%	32.0%
Percent below 19	39.5%	45.4%



Distribution of ACT scores for 2012 cohort



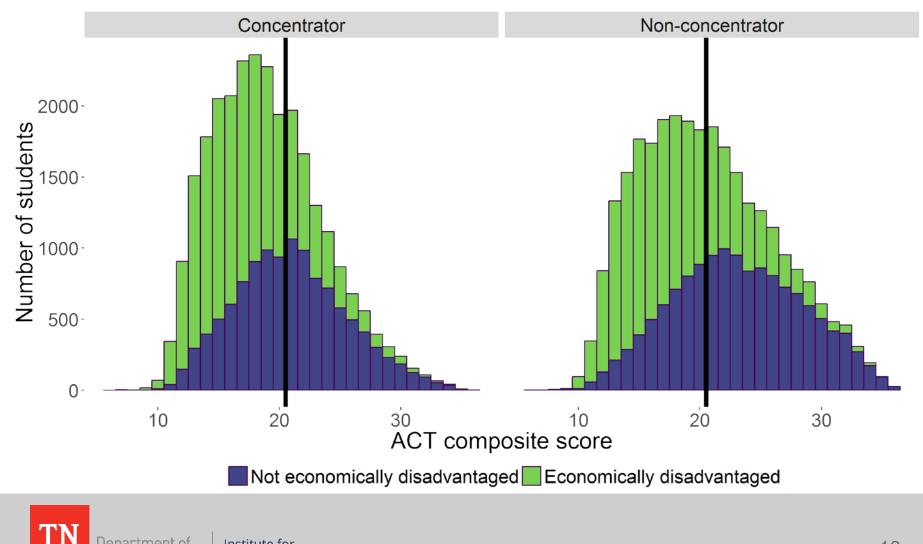
Distribution of ACT scores for 2012 cohort by economic disadvantage



Education

CTE Educators

Distribution of ACT scores for 2012 cohort by economic disadvantage and concentrator status





ACT by Career Cluster for 2012 cohort

Career Cluster	Average ACT	Percent 21 or above	Percent below 19	Students tested
Agriculture, Food, & Natural Resources	18.3	28.6%	64%	4505
Architecture & Construction	17.7	25%	68.8%	2621
Arts, Audio/Visual Technology, & Communications	19.4	38.3%	54.1%	1845
Business Management & Administration	19.7	41.3%	51.9%	2418
Education & Training	18.8	33.7%	59.9%	359
Finance	20.8	50.5%	42.5%	664
Health/Science/Tech	20.4	46.2%	45.1%	7494
Hospitality & Tourism	17.8	22.6%	70.3%	1318



ACT by Career Cluster for 2012 cohort

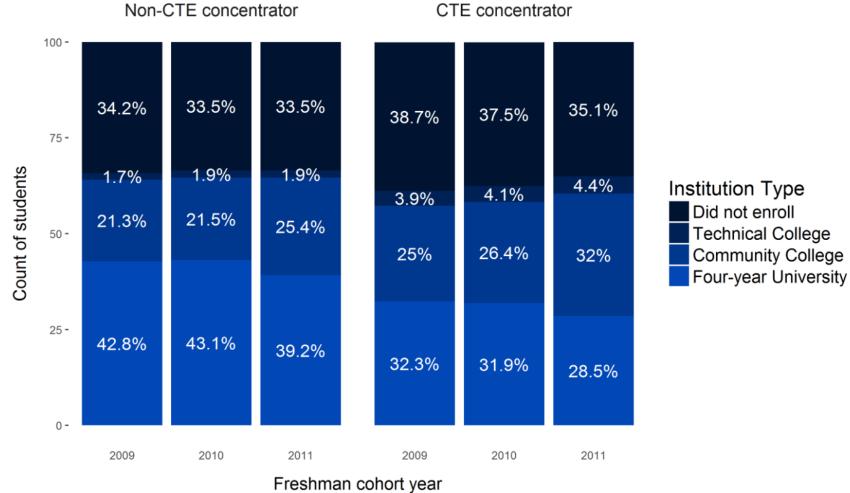
Career Cluster	Average ACT	Percent 21 or above	Percent below 19	Students tested
Human Services	17.6	22.1%	71.5%	4947
Information Technology	20	43.8%	48.8%	1332
Law, Public Safety, Corrections & Security	19	33.7%	56.8%	1800
Manufacturing	17.4	22.6%	72.7%	954
Marketing	20.1	43.7%	47.9%	1635
Science, Technology, Engineering, & Mathematics	21.2	51.2%	41.9%	1528
Transportation, Distribution & Logistics	16.3	13.5%	81.8%	1820





Seamless Postsecondary Enrollment

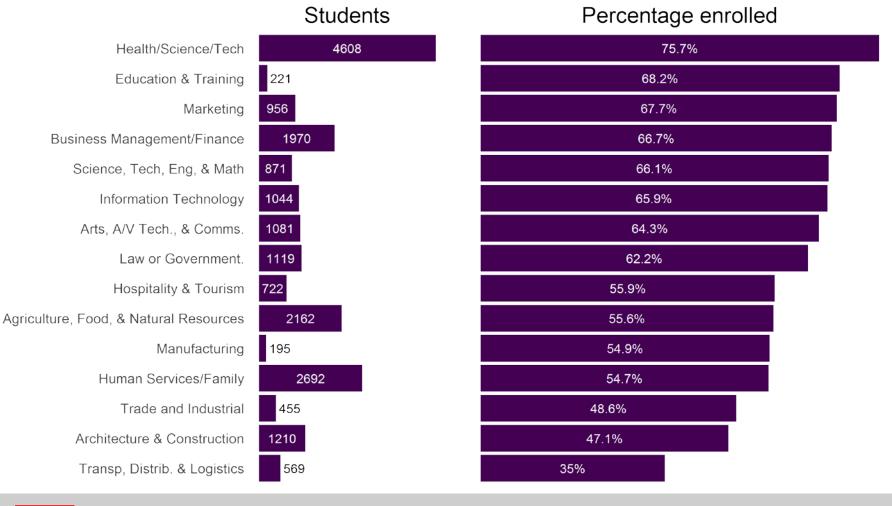
Postsecondary enrollment by CTE concentrator status (seamless enrollment within 16 months of graduation)



CTE concentrator

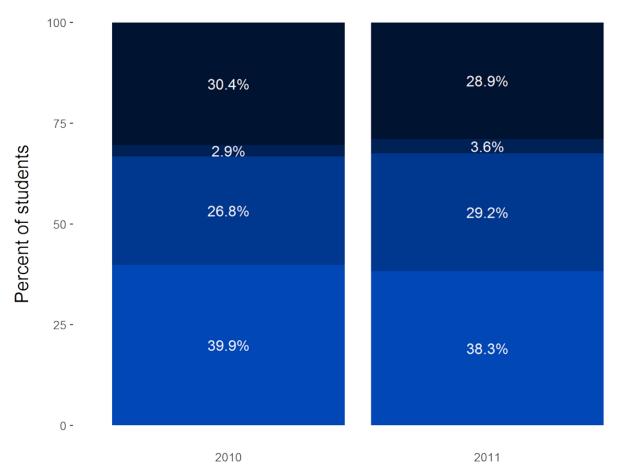


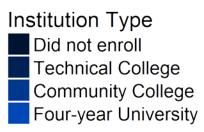
Postsecondary enrollment for 2011 cohort by Career Cluster





Postsecondary enrollment for STEM

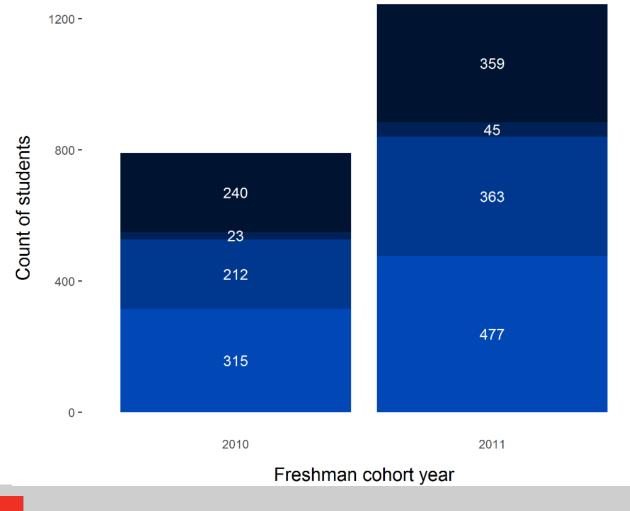




Freshman cohort year



Postsecondary enrollment for STEM



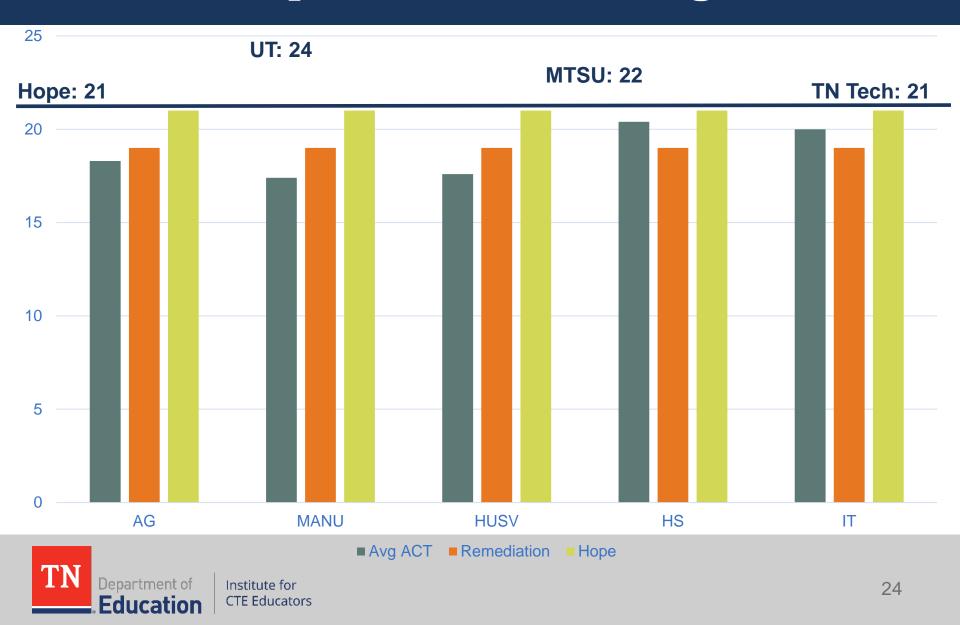


Did not enroll

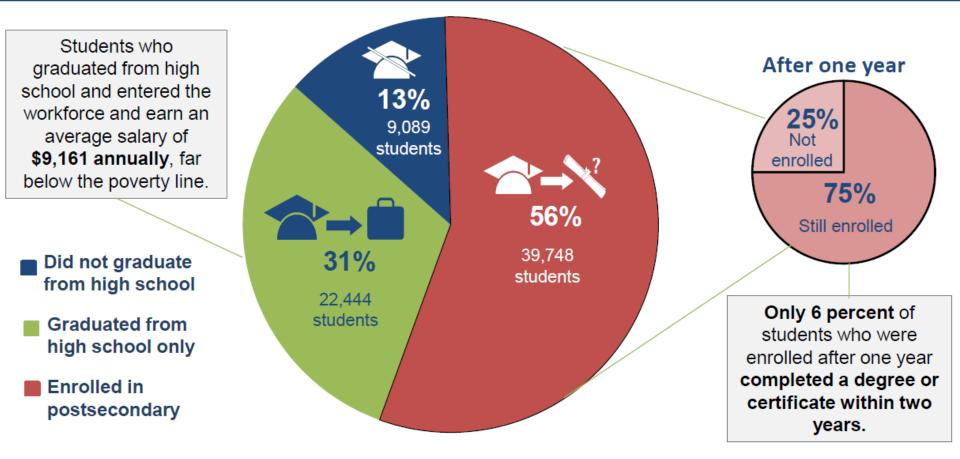
Technical College Community College

Four-year University

Entrance requirements vs. average ACT



71,403 Students 2008 Cohort of High School Freshmen





Questions and Discussion







Districts and schools in Tennessee will exemplify excellence and equity such that all students are equipped with the knowledge and skills to successfully embark on their chosen path in life.

Excellence | Optimism | Judgment | Courage | Teamwork 27