

## Appendix D Comparative Leading Edge School Data on Diagnostic Resource Indicators (by School)

Resource strategy 1: Invest to continuously improve teaching quality through hiring, professional development, job structure, and collaborative planning time.

Design principles	Diagnostic indicators	Range	Average	Boston Arts	High Tech High	Life Academy	MetWest	Noble Street	Pacific Rim	Perspectives	Tech-Boston	University Park
	Use of a rigorous, strategic hiring process	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Core academic teachers with three or fewer years' experience	0–57%	23%	13%	N/A	38%	57%	9%	30%	30%	38%	0%
Hiring and organizing staff to fit school needs in terms of expertise, philosophy, and schedule	Core academic teachers proficient in area of expertise	—	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Core academic teachers teaching more than one subject	0–100%	54%	48%	87%	76%	100%	49%	0%	67%	20%	39%
	Leverage outside experts	—	—	Noncore	Noncore	Core, Noncore	Core, Noncore	Noncore	—	Noncore	Noncore	Noncore
Integrating significant resources for well-designed professional development that provides expert support to implement the schools' instructional models	Dollars per teacher spent on PD (not including teacher time)	\$734–\$12,818	\$3,753	\$2,759	\$298	\$786	\$2,386	\$1,884	\$734	\$12,818	\$6,940	\$5,175
	Staff with instructional leadership roles (not full-time equivalent)	3.3–30%	12%	5.6%	1.6%	10%	18.8%	3.3%	30%	13%	15%	7.7%

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Design principles	Diagnostic indicators	Range	Average	Boston Arts	High Tech High	Life Academy	MetWest	Noble Street	Pacific Rim	Perspectives	Tech-Boston	University Park
Designing teacher teams and schedules to include blocks of collaborative planning time effectively used to improve classroom practice	Teacher year in PD (w/collaborative planning time)	10–17%	12%	15%	15%	11%	12%	10%	10%	16%	17%	11%
	Total yearly teacher PD hours (w/collaborative planning time)	133–276	193	225	242	159	167	150	198	276	257	133
	Minutes of collaborative planning time per week	0–210	100	210	150	25	60	75	0	145	180	45
Enacting systems that promote individual teacher growth through induction, leadership opportunities, professional development planning, evaluation, and compensation	PD in content-based activities	0–24%	12%	24%	7%	10%	0%	15%	0%	15%	22%	21%
	Span of review	4–34	16	21.8	30	8	8.8	33.5	12	4	8.3	16.5
	Regular review of teacher performance and growth that informs employment, support, and PD	–	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Teacher compensation for leadership roles	0–12%	1%	0%	0%	0%	1.4%	0%	0%	12%	0%	0%

N/A = data not available, PD = Professional development

Resource strategy 2: Use student time strategically, linking it to student learning needs.

Design principles	Diagnostic indicators	Range	Average	Boston Arts	High Tech High	Life Academy	MetWest	Noble Street	Pacific Rim	Perspectives	Tech-Boston	University Park
Purposefully aligning the schools' schedules with their instructional models and student needs	Total yearly hours in noncore courses	89-440	216	440	240	94	432	268	89	152	90	137
	Student year in noncore courses	6-35%	17.3%	34.4%	19%	7.2%	35.3%	21.5%	5.7%	14%	6.9%	11.6%
	Student year in theme-based activities	7-37%	23%	37%	Integrated	24%	N/A	N/A	N/A	24%	7%	N/A
	Articulated instructional model	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maximizing time on academic subjects, including longer blocks of uninterrupted time	Total average yearly student hours	1,115-1,571	1,276	1,278	1,260	1,306	1,224	1,244	1,571	1,115	1,304	1,185
	Total average yearly core academic hours: all grades 9-12	437-934	733	539	771	837	437	700	934	726	771	886
	Total average yearly core academic hours: ninth grade	437-934	744	606	885	766	437	653	934	789	735	888
	Total average yearly core academic hours: 12th grade	437-934	645	460	621	766	437	693	934	536	N/A	712
	Total core academic hours over four years	2,156-3,737	2,934	2,156	3,084	3,348	1,748	2,800	3,737	2,904	3,084	3,544
Average student year spent in core academic courses	36-75%	58%	42.2%	61.2%	64.1%	35.7%	56.3%	59.5%	65%	59.1%	74.8%	
Use of block schedules, i.e., class periods longer than 70 minutes	—	—	Yes	Yes	Yes	Yes	Yes	No*	Yes	Yes	No	No

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Design principles	Diagnostic indicators	Range	Average	Boston Arts	High Tech High	Life Academy	MetWest	Noble Street	Pacific Rim	Perspectives	Tech-Boston	University Park
	Student time in academic support and enrichment	0–20%	6.6%	8.5%	0%	7.6%	12.9%	0%	7.8%	0%	19.6%	3.5%
	Total yearly hours spend in academic support and enrichment	0–255	87	108	0	99	158	0	122	0	255	41
	Consistent graduation requirements for all students	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Varying individual student time when necessary to ensure all students meet rigorous standards	<ul style="list-style-type: none"> <li>Ratio of time in ninth grade math to average time in math</li> </ul>	0.92–1.08	0.99	1.02	1.00	1.00	1.00	0.93	1.00	1.08	1.00	0.92

N/A = data not available, PD = Professional development, ELA = English language arts  
 \* Pacific Rim uses a block schedule for 12th grade students, with 100-minute or 120-minute blocks.

Resource strategy 3: Create individual attention and personal learning environments.

Design principles	Diagnostic indicators	Range	Average	Boston Arts	High Tech High	Life Academy	MetWest	Noble Street	Pacific Rim	Perspectives	Tech-Boston	University Park		
Assessing student learning on an ongoing basis and adjusting instruction and support accordingly	Systems for tracking and reviewing individual student progress	--	--	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes		
	<ul style="list-style-type: none"> <li>Average overall class size</li> <li>Average core class size</li> <li>Average ninth grade core class size</li> <li>Average math class size</li> <li>Average ELA class size</li> </ul>	17-23 16-24 17-28 7-22 8-27	21 20 22 18 18	19.6 16 17 19 13	Yes	21 22 25 22 23	Yes	23 24 28 19 27	Yes	17 17 17 7* 8*	20 18 21 16 17	22 22 24 22 22	22 21 20 15 15	19 19 18 19 19
Creating smaller group sizes and reduced teacher loads for targeted purposes	Average overall teacher load (point in time)	17-135	82	71	53	104	17	135	65	113	87	90		
	Average core teacher load (point in time)	17-124	76	46	53	101	17	118	65	124	75	82		
	Average teacher load ninth grade core teacher	17-141	83	52	51	100	17	140	73	141	81	91		
	Average teacher load math teacher	37-133	79	37	55	88	N/A	133	66	115	58	79		
Average teacher load ELA	35-140	82	35	51	106	N/A	120	66	140	69	68			

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Design principles	Diagnostic indicators	Range	Average	Boston Arts	High Tech High	Life Academy	MetWest	Noble Street	Pacific Rim	Perspectives	Tech-Boston	University Park
	Average number of students assigned to an adult advocate/advisor, providing academic and/or personal support	10–27	16	10	15	17	17	15	10–12	27	N/A	N/A
	Student to core academic teacher ratio	12–19	16	17	19	16	14	18	12	16	15	19
Organizing structures that foster personal relationships between students and teachers	Total yearly teacher hours spent in support and enrichment (S&E) (other)	0–151	60	36	24	40	151	88	139	63	0	0
	Looping practices around strategically grouped students	–	–	Yes (S&E)	Yes (Core, S&E)	Yes (S&E)	Yes (All)	Yes (S&E)	Yes (S&E)	Yes (Core)	Yes (Core)	Yes (Core)
	<ul style="list-style-type: none"> <li>• Size of school (enrollment)</li> <li>• Size of student group in strategic core academic teacher teams</li> </ul>	128–507	273	395	507	255	128	482	130	186	227*	149
		–	–	–	50	–	–	–	–	54	–	–

N/A = data not available, PD = Professional development, ELA = English language arts  
 \* In SY2004–05, TechBoston only had ninth through 11th grades; it expanded to have ninth through 12th grades in SY2005–06.