

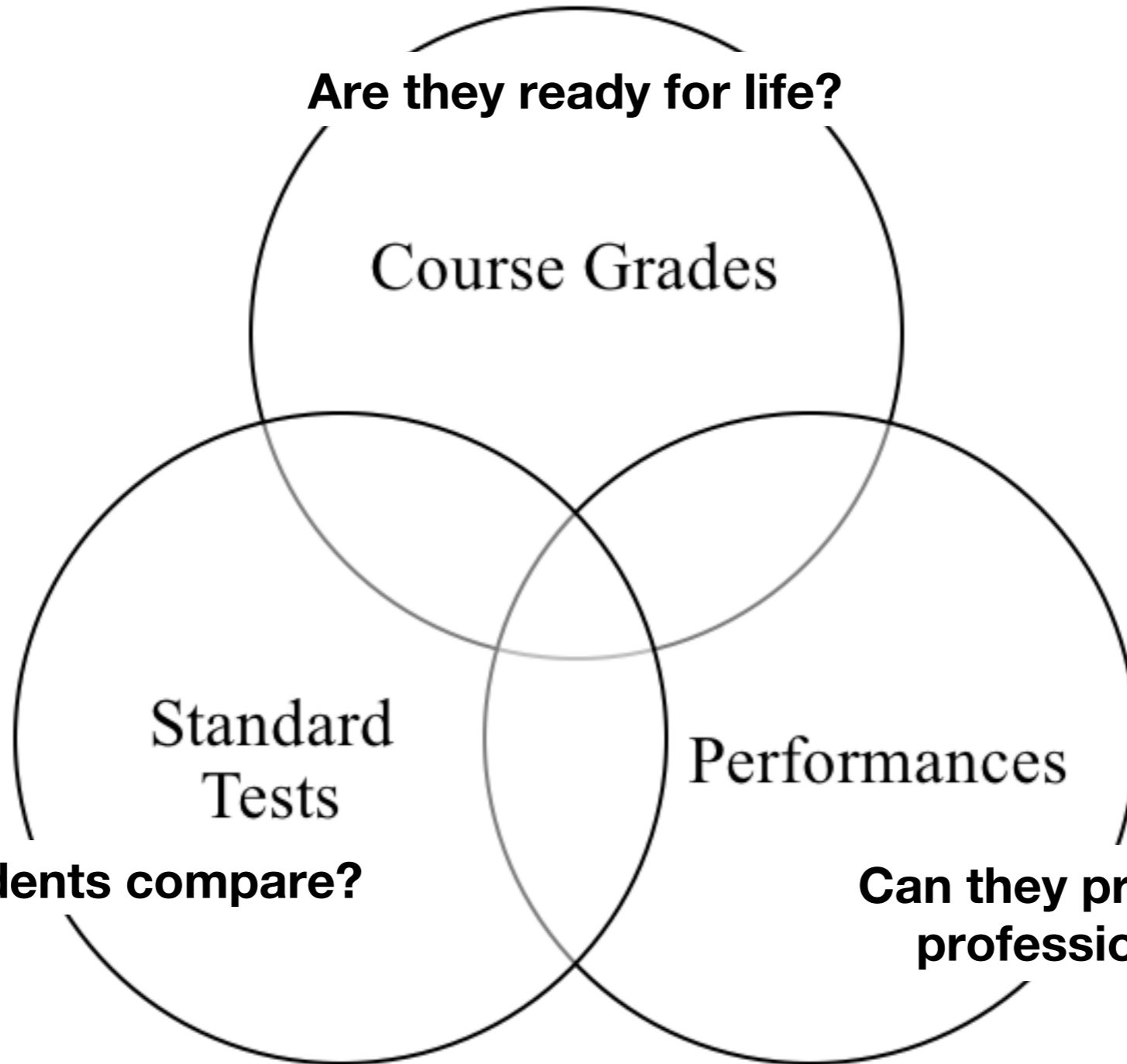
# Technology in Support of Diverse Assessment

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# Overview...

- “The data we want to gather...”
- Design for improvement
- Two new platforms
  - Dashboard Spreadsheet
  - ePortfolio
- Lessons learned

# The data we want...



**Are they ready for life?**

Course Grades

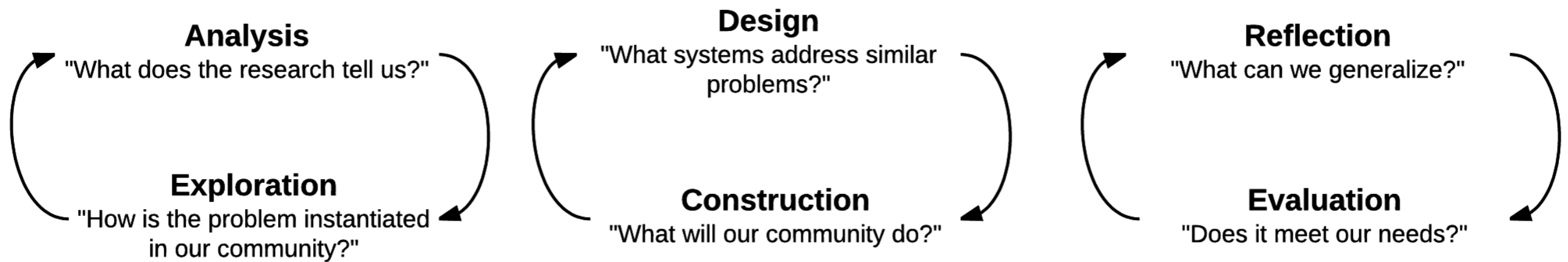
Standard  
Tests

**How do our students compare?**

Performances

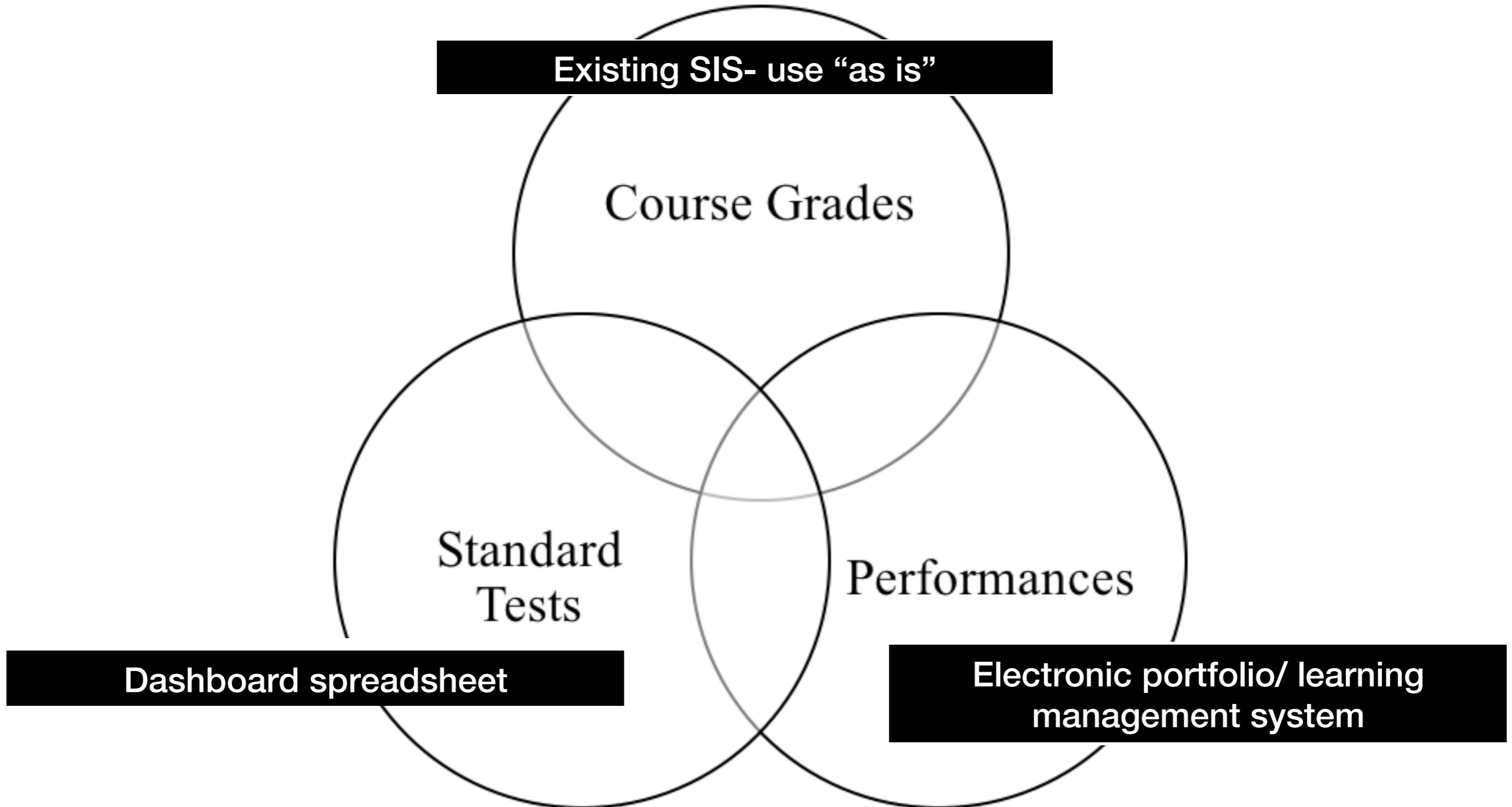
**Can they produce polished,  
professional products?**

# Design for improvement



(adapted from McKenny & Reeves, 2012).

# The systems we built



# Dashboard Spreadsheet

Dashboard Draft 2.2

Home Insert Page Layout Formulas Data Review View

Calibri (Body) 12 A A- A+ Wrap Text Merge & Center General Conditional Formatting Format as Table Normal Bad Good Neutral Insert Delete Format AutoSum Fill Clear Sort & Filter

U26 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
		SBAC M 7	SBAC ELA 7	SBAC M 8	SBAC ELA 8	NECAP S 8	GPA 7	GPA 8	GPA 9	GPA 10	GPA 11	GPA 12	PSAT M	PSAT R & W	SAT M	SAT W & L	SAT R	Math Course	FL 1	FL 2	FL 3	FL 4	Arts 9	Arts 10	Arts 11
1																									
2	Browne, Jackson	1	1	1	2	830	2.2	2.9	1.9	2	2.4	3	380	410	350	350	390	Algebra 2	x	x	x		x	x	x
3	Edwards, Kathleen	2	2	2	3	835	2.3	2	2.3	2.1	2.4	2.9	375	490	650	400	425	Algebra 2	x				x	x	
4	Ely, Joe	3	2	3	3	840	2.5	1.8	2.1	2.7	3.1	2.9	325	400	620	325	290	Geometry	x	x	x	x	x	x	x
5	Gauthier, Mary	2	3	1	2	836	2.4	2.9	3.1	2.9	2.6	3.4	400	325	470	400	325	Algebra 2	x	x	x			x	x
6	Foster, Ruthie	1	1	2	3	837	3	3.2	3	3.1	3.2	3.6	390	335	290	380	325	Geometry	x	x	x	x			
7	Keen, Robet Earl	3	2	3	2	840	3.1	3.3	3.2	3.4	3.1	3.6	380	280	410	350	290	Algebra 2	x	x			x	x	x
8	Lovett, Lyle	1	3	3	2	841	3.3	3.4	3.2	3.2	2.9	3.1	410	390	350	410	335	PreCalculus	x	x	x	x		x	x
9	Lynne, Shelby	2	2	2	2	843	3.6	3.1	3.4	3.2	3.1	3.3	280	325	410	530	335	Algebra 1	x				x	x	x
10	Merritt, Tift	2	2	2	3	844	2.9	3.1	3.1	3.2	3.5	3.1	305	295	440	425	375	Geometry	x	x	x	x	x	x	
11	Moorer, Allison	2	3	3	2	846	3	2.9	2.7	2.9	2.7	3.1	365	424	470	580	400	Algebra 2	x	x			x		x
12	Rait, Bonnie	3	2	3	2	847	2.3	2.5	2.7	3	3.2	3	355	280	500	500	400	Algebra 2	x	x	x	x	x	x	x
13	van Zandt, Townes	2	1	2	1	849	3	2.6	2.6	2.8	3	2.8	425	375	530	540	410	Algebra 1	x					x	x
14	Willimas, Lucinda	3	1	2	1	850	3.8	3.5	3.2	3.1	3.4	3.2	295	325	560	360	325	Geometry	x	x	x		x	x	x
15	Zevon, Warren	3	2	2	2	852	3.9	3.3	3.2	2.5	2.7	3.1	310	335	490	290	490	Geometry	x				x		
16																									
17																									

**SBAC scores**

**GPA**

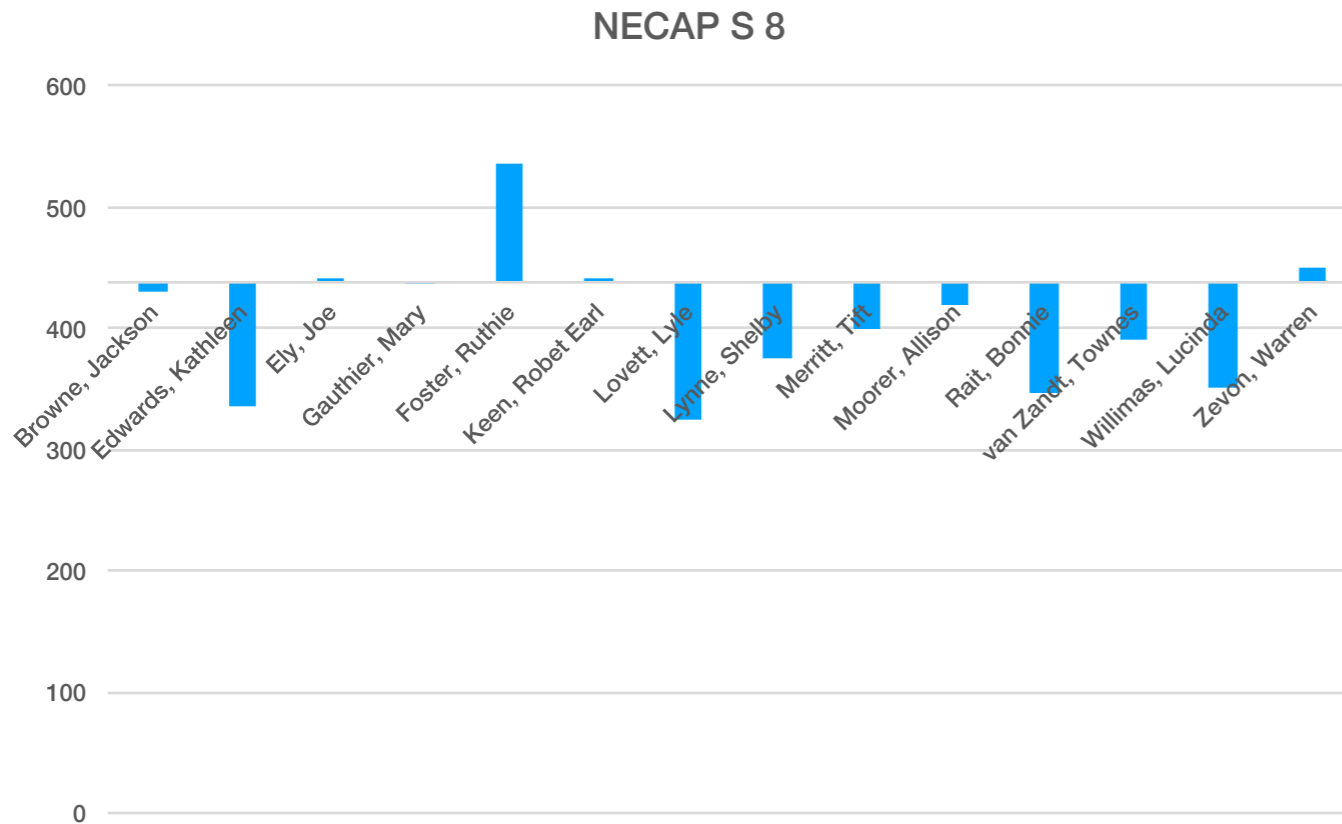
**PSAT/ SAT**

**“Highest” math class passed**

**Participate in arts?**

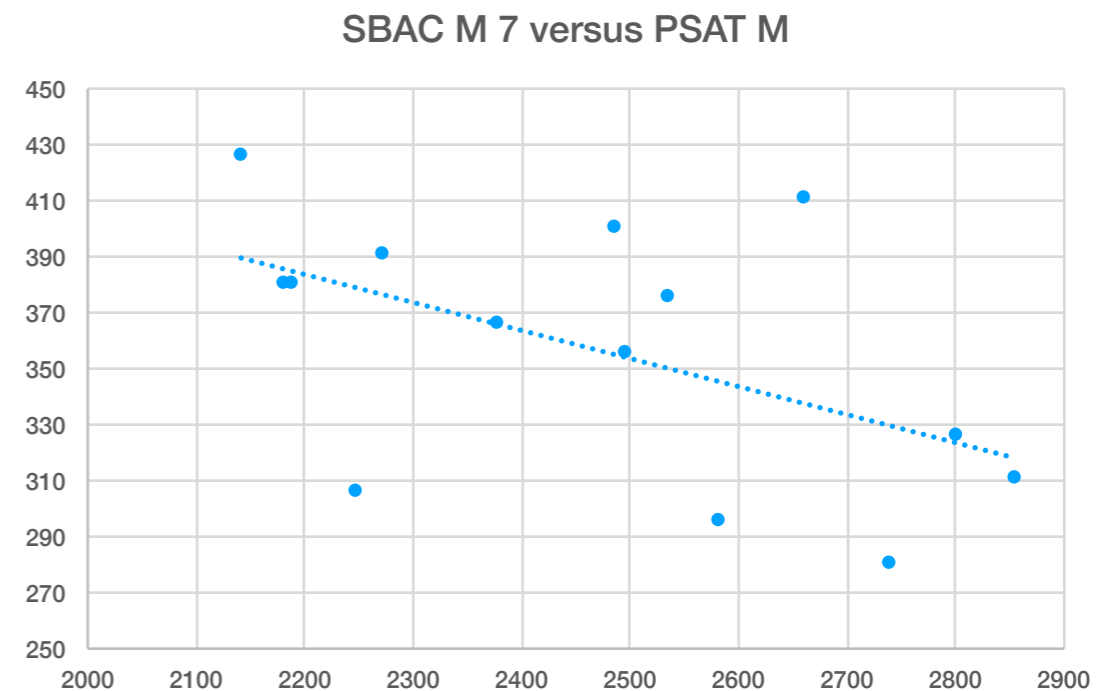
**Data from multiple places “lives” in one place...**

# Dashboard spreadsheet types of displays- cohort



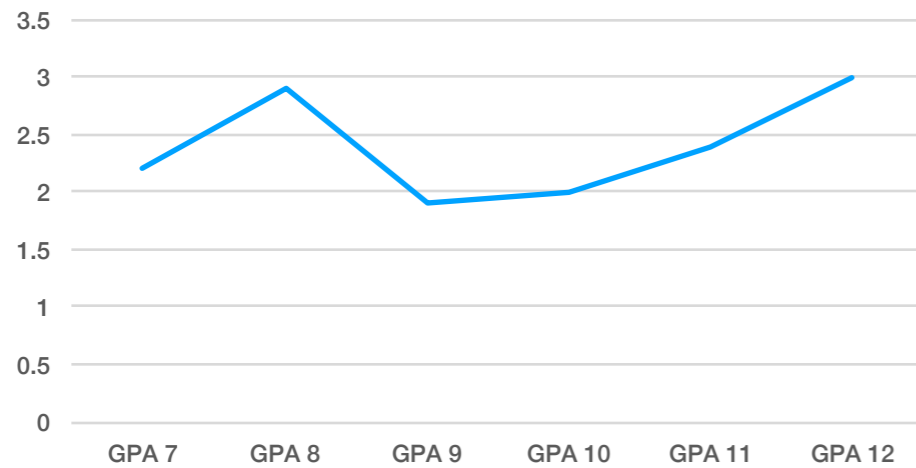
How do our NECAP scores compare to the state average?

Is there a correlation between SBAC Math scores as 7<sup>th</sup> graders and PSAT Math scores in 10<sup>th</sup> grade?



# Dashboard spreadsheet types of displays- individual

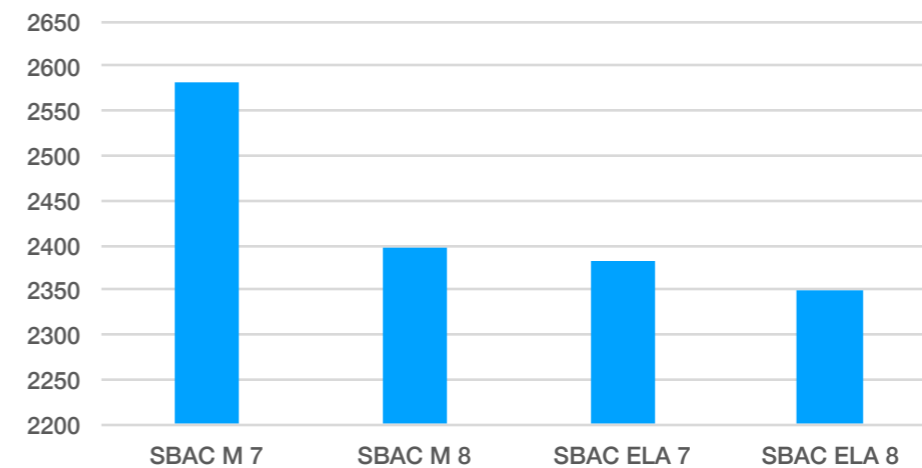
Jackson Browne GPA



How has GPA varied over high school years?

How consistent are SBAC scores between 7<sup>th</sup> & 8<sup>th</sup> grade?

Williams, Lucinda



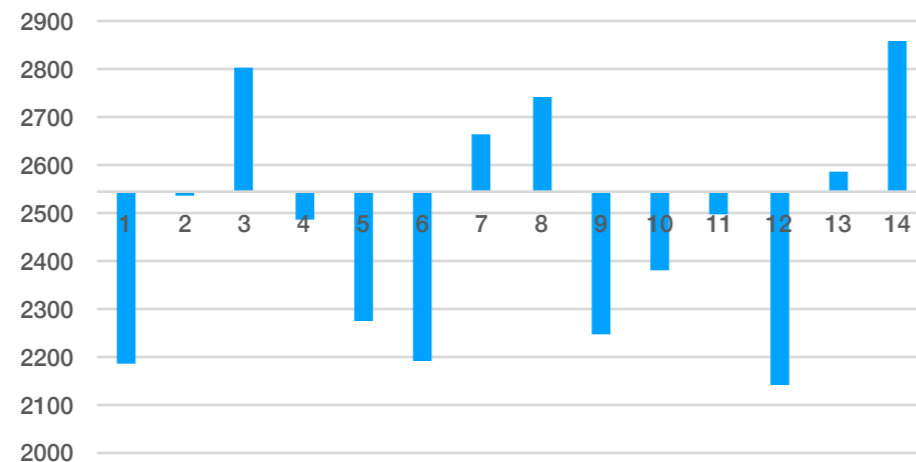


# Dashboard spreadsheet types of displays- groups

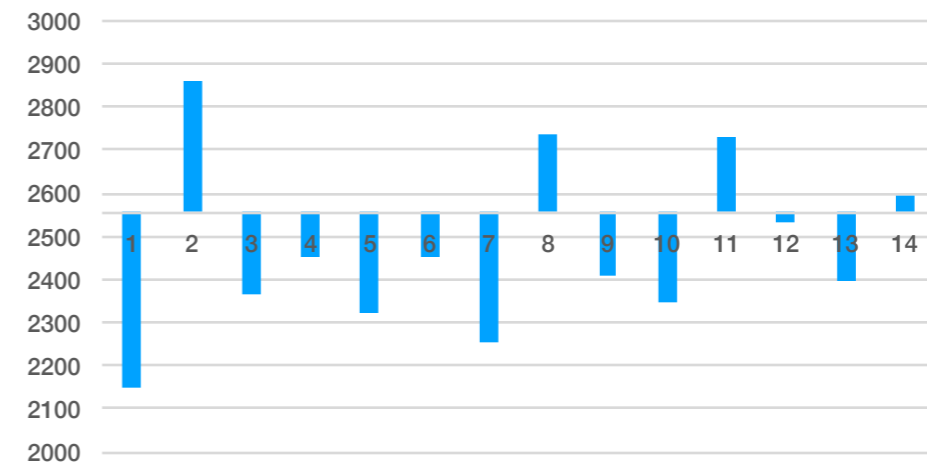
	Geometry	Algebra 2
	620	350
	290	650
	440	470
	560	410
	490	470
		500
<b>Average SAT M</b>	<b>480</b>	<b>475</b>

Are there differences in SAT Math scores between students who passed Geometry versus those who passed Algebra 2?

SBAC M 7



SBAC M 8



How did SBAC Math scores changes compared to state average between 7<sup>th</sup> & 8<sup>th</sup> grade?

# Dashboard spreadsheet challenges and discussions

- How sophisticated do we make the statistics?
  - Are differences significant?
  - Problem of small population
- Graphic displays misleading because of inconsistent scales
- Are we answering questions of convenience?
  - Ask the question... add the data

# Electronic Portfolio



- **Assignments**
- **Grades**
- **Rubrics**
- **Map to expectations**

- **Media-rich pages**
- **Text (for reflections)**
- **Navigation**
- **Set access rules**

# Lessons Learned:

- Efficiency matters
  - Populating the spreadsheet
  - Cognitive load of graphs
- Ease of use
  - Single sign-on and Moodle and Mahara
- Understanding learning
  - Qualitative data matters

# References

McKenney, S., & Reeves, T. (2012). *Conducting educational design research*. New York: Routledge.