

Your District is Only as Good as Your Teachers & Staff

A Zoom Presentation to Invited Elected PA School Directors

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*The facts, findings and opinions in this presentation are solely those of Professor Strauss, and not of Carnegie Mellon University or its Board of Trustees

1. Introduction & Structure of Remarks

Thanks to Christina for invitation, thanks for your school service

Purpose of presentation: provide a framework for decision making and some blunt advice that enables your district's children to learn more/better/get into post-secondary education

Remarks Structured as:

2.0 A little about Prof. Bob Strauss as the parent of 3, researcher, changer of current law;

3.0 Pose/answer:

- some questions about what it means to be a school director in PA, discuss constraints on your conduct
- how to think about the learning of the students, nature of teachers and staff, and
- provide some rather concrete suggestions about how to improve the chances you and your district get to the right goal line [and you get re-elected!].

4.0 Answer questions from the audience.

Note: Appendix provides some useful links to PDE detailed data by school building and district. This presentation and links to my education research is also on my web site www.Andrew.cmu.edu/user/rs9f under Item 6 Online etc.

2. About Bob Strauss

- Product of public education in East Side suburb of Cleveland [University Heights]; quarter finalist in Ohio tennis tournament;
- Educated at Michigan/LSE (AB economics) and U of Wisconsin (3 years with focus on public finance and human resources)
- On economics faculty at Chapel Hill for 10 years, CMU for 44 years; significant federal/state/local public service: 2 presidential pens for federal service.
- Celeste & I raised 3 kids, and had bad experiences at St. Edmonds and Franklin Regional which led us to pull our 3 kids

Q1: What are minimum requirements in PA to be an elected school director? Your Duties?

- HS graduate
 - Citizen and Resident for at least 1 year of SD
 - Elected or appointed to fill vacancy
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- On behalf of General Assembly effect the constitutional guarantee of a 'free and efficient public education'
- Responsible for voting budget pursuant to state law: spending and financing (taxes etc.), must vote in public session to hire staff, must vote in public to award contracts & to enact policies
- Responsible for health and safety of k-12 students who are minors
- Not much responsibility if any kid fails to learn

Q2 What limitations are there on conduct of PA elected school directors?

- Direct self-dealing is prohibited, indirect self-dealing is ok as of 1968
- No salary for serving as school director; you are part-time and everybody knows who you are (!) to complain; can lead to rent-seeking;
- Individual school director has no more legal right of access to confidential student & staff information than a citizen or parent;
- Meetings of a majority of school directors (5 or more) must be in public except for personnel meetings which can be closed;
- Local education agencies are under the joint supervision of the PA State Board of Education and the PA Department of Education, so edicts by them constrain LEA and school director conduct
- Note: LEA can voluntarily enact school policy that entails a *higher standard of LEA conduct* than under state rules: examples: hiring criteria can exceed state certification requirements; curricula can be more demanding than that required by state in its Academic Standards;

Q3 What are ways to ensure you have a clue about what is going on within your district?

- Any school director can sign a Non Disclosure Agreement with a LEA to enable him/her to see confidential information about staff, kids;
- A majority of the board can enact policy which obligates statistical [non-identifiable] reporting about students/staff; see Appendix
- A majority of the board can enact policy[s] which obligate the district [itself] to disclose in executive session confidential data; this is a sort of group NDA
- Comment: the managers whom you hire/fire & report to you (Supt, Assistant Supt, School Business Manager etc) will get nervous about the above;
- Best move carefully, and get Board agreement ultimately who is in charge [or not]

Q4: What are some obvious public metrics of district success?

- Student population: in-migration vs. out-migration
 - Hint: examine enrollments by grade, dropouts, school violence which PDE gets from each LEA; compare your district to others in region;
 - Hint: staff turnover reporting, law suit reporting
 - Hint: PSSA and Keystone scale scores by building, grade, subject [more below]
 - SAT and PSAT scores [district pay for each kid to take them]
- Housing starts, Value of Homes sold
 - Hint: multi list; PA State Tax Equalization Reports
- Post-secondary placement
 - Hint: require reporting by post-secondary institution; weight by Petersen Guide; PDE gets post-secondary plans
- Regional and national rankings of your district; Realtors know, just ask them!

Q5: What are the 'legs of the stool' and your leverage/policy levers?

- State rules are a framework. Board votes to make policies about:
 - At will LEA Managers under contracts
 - Teachers & union contract
 - Kids (skills at point in time, home background/socioeconomics, motivation, physical & mental health)
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- School budget, curricula, physical infrastructure/maintenance
- Note: if directors don't vote on matters to establish policy, and/or to monitor, then the managers will just do it.
 - Realty 1: Policy without metrics is mush.
 - Realty 2: Managing the managers is complicated; successful managing requires measurement and positive and negative incentives to change observable behavior.
 - Realty 3: You don't have as much time as they do, change is stressful, and getting agreement among 9 volunteer Board members is not easy.
- Agreeing on common goal of improving student learning and building trust is a way to proceed.

Q6: Metrics 1: Teachers

General Standard is Pool of Competent Teachers

- To get certified as a teacher in PA, teachers must graduate from a PDE recognized training institution with a BA or more, pass 2 kinds of standardized tests (Praxis I and Praxis II), done a bit of student teaching, and pass a FBI/State Police review
- Praxis I is at the 5th grade level, and requires ‘competency in math and reading’; 95% of prospective teachers pass this. Requires only getting around 50 to 60% of questions answered correctly (!)
- PDE uses pool of employed teachers to set passing score each summer in Harrisburg
- Praxis II tests are at the 10th grade level; passing scores in terms of % correct are also quite low.
 - Comment: When hiring look at % correct of prospective hires, and those up for tenure (after 2 years)

Q6: Metrics 1: Teachers II calculating % correct on Praxis I

- Most Praxis tests are stated with a range of 0 to 200 points; however, there is no penalty for guessing, so the actual range is 100 to 200.
- A passing score of, say 160 out of 200, is really 60 out of 100 or 60% correct!
- Source: [Pennsylvania Praxis Test Requirements | 2024 Pennsylvania Test Prep - Teacher Certification](#)
- Franklin Regional voted policy at my wife and my urging 75th percentile passing score through policy, and complaints about new teachers disappeared (!)
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- Praxis I Core Reading (Praxis #5713): 156 [56% correct]
- Praxis I Core Writing (Praxis #5723): 162 [62% correct]
- [Praxis I Core Math](#) (Praxis #5733): 142 [42% correct]
- [Core Combined Praxis](#) (Praxis #5752): Individual scores will be provided for each test, and the passing scores are the same as above.

Q6: Metrics 1: Teachers III Grades 4-12

Grade/Test	Passing Score	% Correct	Praxis Test Code
• 4/8 Math/Science	164	[64%]	5155
• 4/8 Soc Studies	150	[50%]	5157
• 4/8 Math	173	[73%]	5158
• 4/8 Science	156	[56%]	5159
• 5/6 English	152	[52%]	5154
• 5/6 Math/Sci	164	[64%]	5155
• 7/12 Biology	147	[47%]	5235
• 7/12 Chemistry	154	[54%]	5245
• 7/12 Citizenship	148	[48%]	5087
• 7/12 Speech	145	[45%]	5221
• 7/12 Computer Sci	149	[49%]	5652
• 7/12 Earth Sci	157	[57%]	5571
• 7/12 English	167	[67%]	5038

Source: PDE web site, author's calculations

Q7 Metrics 2: PSSA & Keystone tests for Kids/Students I

- PA requires PSSA and Keystone testing for selected grades, starting at Grade 3. Note: starting at grade 3 is rather late in terms of identifying problems.
- Data Recognition Corporation (DRC) of St. Paul, Mn devises the tests under PDE contract; they do about 30+ states;
- PSSA and Keystone multiple choice tests are aligned to PA academic standards which are not particularly demanding/strong.
- Teacher certification standards and approved teacher preparation curricula are supposedly aligned to student academic standards, but PDE oversight is weak

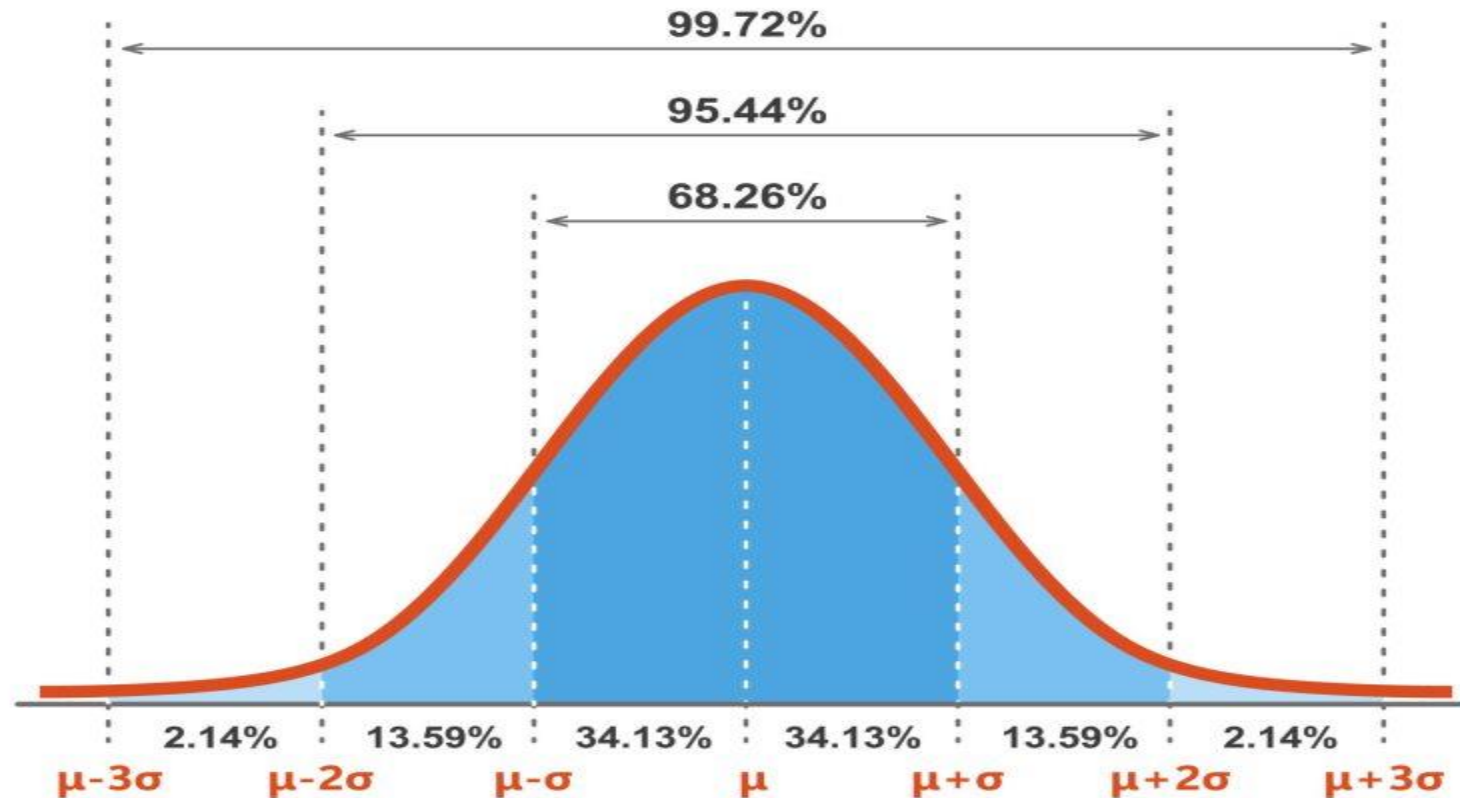
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- Curricula and testing also available from: American College Testing (ACT), International Baccalaureate (IB), Major Book Publishers, National Association of Education Progress (NAEP), Dibbles (U of Oregon for phonics), Advanced Placement (AP) by College Board
 - Comment: can your teachers, administrators, and students realistically move from PA academic standards to more demanding ones? With what carnage?

Q7: Metrics 2: Multiple Choice Test Design for Kids (points or scale scores show bell curve):

2023 SAT range is 400 to 1600 and mean (μ) of 1000 'points' below.

2023 PSSA 3rd grade math range is 840 to 1197 with mean (μ) of 1006; ½ did 1006 or worse, ½ did 1006 or better in bell curve below

Note σ is the measure of variability of test scores. The 2023 PSSA 3rd grade math σ is 65 'points'.



Q6: Metrics 2: Kids test results and No Child Left Behind testing I

- Effective 2003, each state told US Dept of Education what it would test, got it approved, and promised to report annually 4 categories of success for various demographic/ethnic groupings:
 - Below Basic
 - Basic
 - Proficient
 - Advanced

And promised over 12 years that all students would test as Proficient. Result: tests got watered down, waivers provided,, some kids told not to take the tests for fear of pulling down averages.

Q6: Metrics 2: Kids test results and No Child Left Behind test results II

PA Language Arts results by grade (from PDE web site)

Grade	Number Scored	Percent Advanced	Percent Proficient	Percent Basic	Percent Below Basic	Percent Proficient and Above
3	115,762	12.1	41.9	31.6	14.4	54.0
4	116,075	21.4	30.4	31.0	17.2	51.8
5	116,608	13.2	40.4	31.0	15.4	53.7
6	117,377	18.8	36.8	36.3	8.1	55.6
7	117,316	17.7	36.8	41.0	4.5	54.5
8	118,937	14.4	38.4	32.8	14.4	52.7

Q6: Metrics 2: Kids test results and No Child Left Behind test results II

PA Math results by grade (from PDE web site)

	Number Scored	Percent Advanced	Percent Proficient	Percent Basic	Percent Below Basic	Percent Proficient and Above
3	116,303	21.6	30.1	23.4	24.9	51.7
4	116,642	16.5	30.0	28.5	25.1	46.5
5	117,043	15.8	26.9	28.1	29.2	42.8
6	117,725	12.9	23.5	30.1	33.5	36.5
7	117,601	12.3	20.9	27.3	39.5	33.2
8	118,968	8.3	17.7	27.0	46.9	26.1
Total	704,282	14.5	24.8	27.4	33.2	39.4

Q6: Metrics 2: PSSA and Keystone test results
 Simple Evaluation with publicly available data (Pine Richland)
 Compare Building scale score to state average scale score (1006) :
 3rd Grade math for some selected districts' buildings

School	Test	Grade	Year	test takers	mean scale score	Building/State
HANCE EL SCH	Math	3	2021	74	1109	112.0%
RICHLAND EL SCH	Math	3	2021	105	1067	107.8%
WEXFORD EL SCH	Math	3	2021	132	1107	111.8%
HANCE EL SCH	Math	3	2022	93	1096	109.6%
RICHLAND EL SCH	Math	3	2022	116	1124	112.4%
WEXFORD EL SCH	Math	3	2022	125	1143	114.3%
HANCE EL SCH	Math	3	2023	89	1074	106.7%
RICHLAND EL SCH	Math	3	2023	126	1087	108.0%
WEXFORD EL SCH	Math	3	2023	105	1128	112.1%

School_name	test_subject	grade	year	test takers	mean scale score	Building/State
BENJAMIN FRANKLIN SCH	Math	3	2021	95	854	86.3%
COUGAR ACADEMY	Math	3	2021	17	882	89.1%
DOWNEY SCH	Math	3	2021	42	837	84.5%
FOOSE SCH	Math	3	2021	72	841	84.9%
MELROSE SCH	Math	3	2021	72	883	89.2%
SCOTT SCH	Math	3	2021	71	855	86.4%
BENJAMIN FRANKLIN SCH	Math	3	2022	116	875	87.5%
COUGAR ACADEMY	Math	3	2022	17	865	86.5%
DOWNEY SCH	Math	3	2022	57	858	85.8%
FOOSE SCH	Math	3	2022	88	846	84.6%
MELROSE SCH	Math	3	2022	96	881	88.1%
SCOTT SCH	Math	3	2022	83	867	86.7%
BENJAMIN FRANKLIN SCH	Math	3	2023	114	877	87.2%
COUGAR ACADEMY	Math	3	2023	20	889	88.4%
DOWNEY SCH	Math	3	2023	56	849	84.4%
FOOSE SCH	Math	3	2023	75	883	87.8%
MELROSE SCH	Math	3	2023	88	889	88.4%
SCOTT SCH	Math	3	2023	63	882	87.7%

Q7. What are some policy ideas to improve learning outcomes? I

- Begin to compare mean PSSA scale scores and variation of your various elementary schools for grades 3,4,5; compare also to neighboring districts.
- In executive session, begin to compare the Praxis scores of your individual teachers
- If you are not using Dibels for phonics training of your reading teachers, get started, and begin to use it for grades 1-4. Be sure to send home the Dibels scores to parents. (It's basically free from the University of Oregon).
<https://dibels.uoregon.edu/>
- Pay for your kids to take the PSAT and SAT exams, and send home results; use them for guidance counselor; examine them in Executive Session;
- Obligate your superintendent to report specific college acceptance and placement; start with Executive Session presentations
- Only fund teacher professional development for coursework in their area of teaching

Q7. What are some policy ideas to improve learning outcomes? II

- Subscribe to PAEducator.Net, <https://www.paeducator.net/> and have your HR person and principals begin to troll to look for those interested in working in PA School Districts. Board should look too.
- Adopt policy for new hires about minimum Praxis I and II passing scores in terms of percentiles of test takers; say 75th percentile and above;
- Adopt policy that you will only hire teachers or administrators who earned a college major in an academic discipline, and a Masters of Arts in Teaching (MAT); examine the US News & World Reports rankings of various college majors, and same for schools of education as possible filters

Q7. What are some policy ideas to improve learning outcomes? III

- Consider renegotiating your union contract to allow limited term, part-time instructors in STEM disciplines
- Hire full time substitutes who can transition to full time teaching jobs
- In Executive Session begin to look at the *change* in student test scores by teacher over time to determine who deserves bonuses, who is under-performing; begin to give salary increases to reward superior improvements in learning outcomes (student test scores). Pass policy for PVAS training and implementation

<https://www.education.pa.gov/K-12/Assessment%20and%20Accountability/PVAAS/UsingPVAAS/Pages/default.aspx>

- Allow parents to sit in on classes as a positive matter of school policy

Questions/ Comments?

Appendix: PDE Links

- PA Academic standards for kids:

<https://www.stateboard.education.pa.gov/Regulations/AcademicStandards/Pages/default.aspx>

- PSSA & Keystone Scores:

<https://www.education.pa.gov/DataAndReporting/Assessments/Pages/PSSA-Results.aspx>

- Teacher Salaries by name, school, LEA

<https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfSupPersIndStaff.aspx>

- Enrollment (building level); projections:

<https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.aspx>