

# ACADEMY OF MATH & SCIENCE



CHARTER SCHOOL NETWORK, MEMBER OF **A** FOR ARIZONA



# BACKGROUND OF PRESENTERS AND NETWORK

- Tatyana Chayka – CEO and Founder
- Kim Chayka – Chief Operating Officer
- Adriana Rodriguez – Chief Compliance Officer
- Four schools: Academy of Math and Science Prince, Math and Science Success Academy, Academy of Math and Science Flower, and Academy of Math and Science Camelback
- Mission: We will motivate and inspire students for academic, career, and life success through providing an advanced, well-rounded, college preparatory education interlaced with habits of mind, character building, and 21st century skills.

# OUR STORY AND WHY WE HAVE REPLICATED

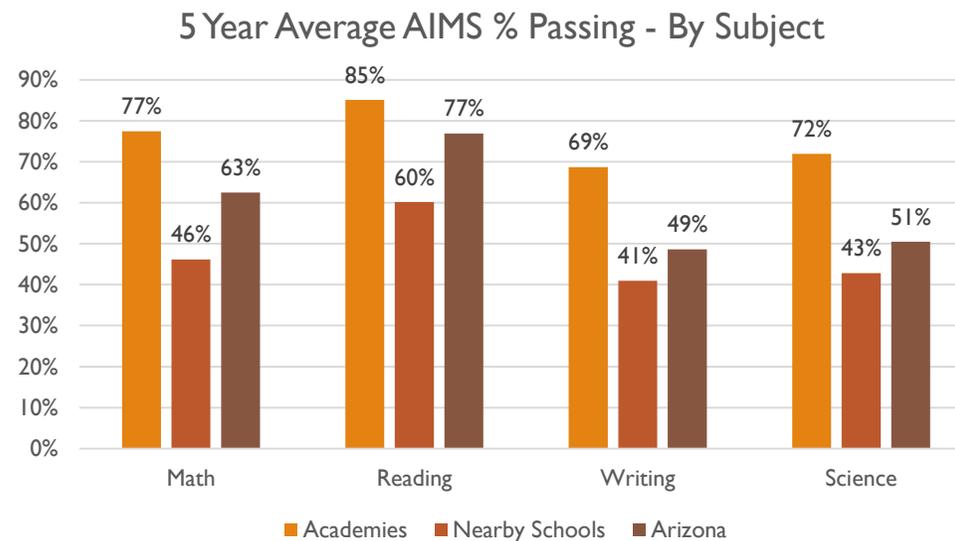
- Beginnings of AMS
- School demographics & demand
  - Network-wide - 91% ethnic minorities, 84% free or reduced lunch
  - AMS Camelback and AMS Flower – 97.5% ethnic minorities, 92.5% free or reduced lunch
  - Camelback – opened with 385 students and with 150+ on waiting list
- Why replicate?
  - 206 C, D, or F rated schools
  - Over 300,000 Arizona students are enrolled in these schools.
  - If not us, then who?
- Statement of impact: 2200 students for 16-17 school year and 5000 students in next 5-10 years

# SMART STUDENTS ARE WELL-ROUNDED

- Often focus on teacher strengths
- Foreign languages: Spanish, Mandarin, and Russian
- Art: history, sculpture, painting, computer-aided graphics design
- Music: piano, guitar, and/or choir
- STEM – robotics, programming, forensics, etc.
- Academic and sport competitions – robotics, Math Olympiad, Science Olympiad, basketball, soccer, etc.

# PERFORMANCE

- This year's highlights:
  - AMS Prince is the highest performing charter school on AzMERIT with > 70% F/R in Arizona (out of 293 charter schools).
  - MASSA also made top 10 on AzMERIT.
  - Algebra I scores of 8<sup>th</sup> grade class is 300% state's average (100% vs 32%)
  - Over a dozen awards and 1<sup>st</sup>-3<sup>rd</sup> place finishes in various academic and sports competitions. Notably, we recently competed in FTC Robotics and took one 1<sup>st</sup> and two 2<sup>nd</sup> places against 23 high schools and 1 middle school.
- A long history of outperformance

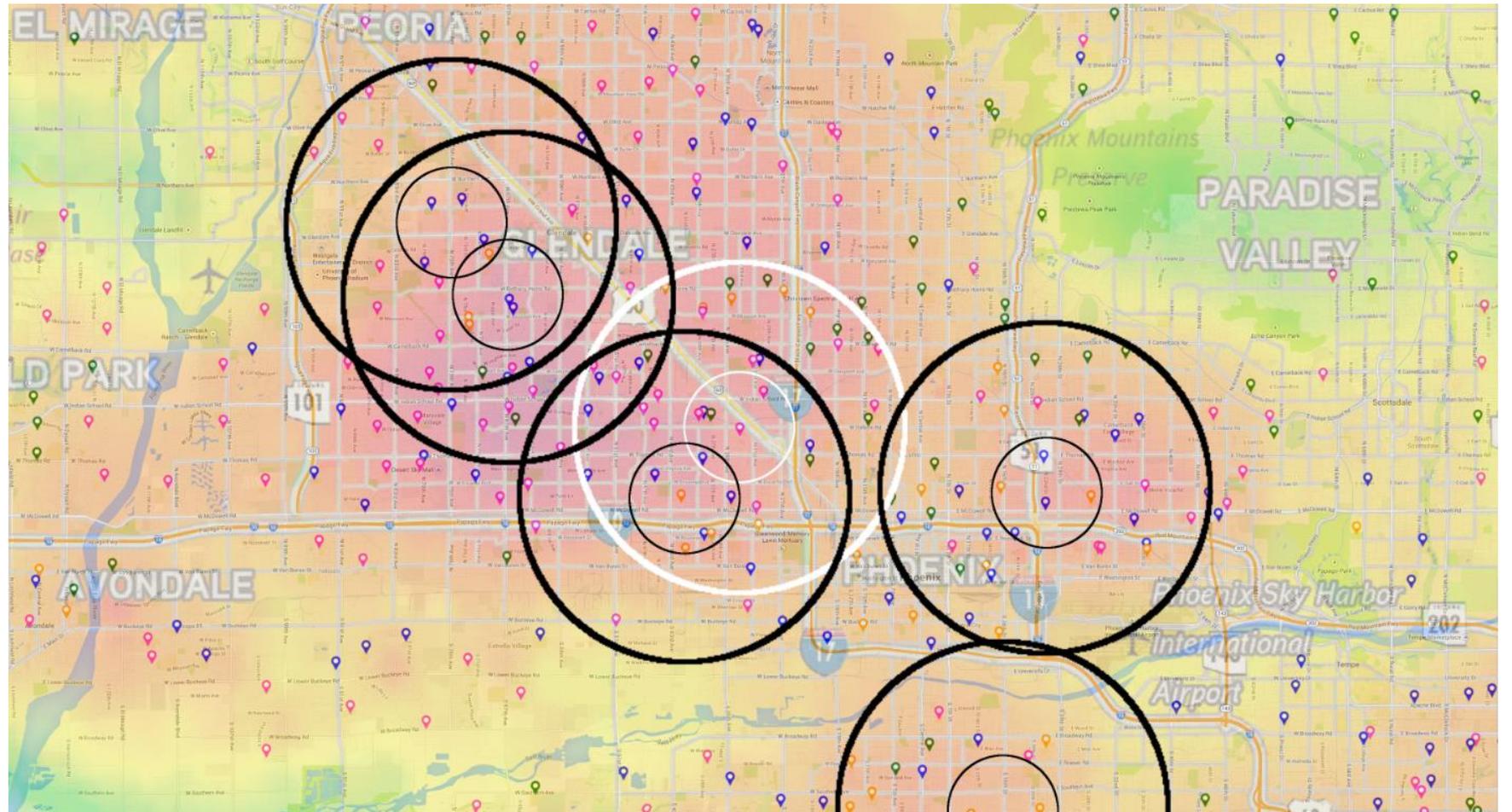


# HOW WE DO IT

- Hire the most motivated, intelligent, and mission aligned people: over 5000 applications for 35 teachers hired
- Organizational principles and beliefs: culture > strategy but also... systems, manuals, and everything else
- Tools, such as...
  - Monthly reports– off mind & what's on / not on schedule
  - Business plan
  - Manuals for executing key functions
  - Surveys
- Practices, such as...
  - Frequent communication, informal and formal
  - Cross pollination, cross training
  - Non-negotiables across some academic areas

# MARKET SELECTION

- We only serve underperforming areas
- Analysis goes from less to more granularity



# MARKET SELECTION

- Quantitative methodology not perfect, but beats solely gut decisions
- Final selection involves a “finger-in-the-air” all-in cost to renovate property

Property	Factor Weight	Street Visibility	Positive Surroundings	Size	Park Proximity	Traffic Count	K-8 C+D Pop	Score	Rank
		1	1	1	.5	1	1		
2250 W Peoria		1	0	1	0	0	7917	2	2
2401 W Colter		0.5	0	0	0	0	10089	0.5	10
4837 E McDowell Rd		1	-0.25	0	0	164754	5381	0.75	8
11640 N 19th Ave		1	0	1	0	77838	6603	2	2
3622 E Washington St		1	-0.5	1	0	0	8906	1.5	5
44th St @ McDowell Rd		1	0	1	0.5	0	7509	2.5	1
SW 75th & Glendale Ave		1	-0.75	1	0	73100	11295	1.25	7
6633 W Camelback Rd		1	0		0.5	90069	19756	1.5	5
N of NEC of 51st Ave & Northern Ave		0.5	0	1	0.25	99300	11652	1.75	4
6362 W Orangewood Ave		0.5	-0.25	0.5	0	63201	12299	0.75	8

# WHAT WE NEED FOR CONTINUED EXPANSION

- Continued easy process for replication
- Your support
- Support of organizations like A for Arizona that put high performing schools in the spotlight (resources)
- Facilities
- State credit enhancement of bonds
- More money (surprise surprise)
- Not more money (flexibly have adapted to today's budget realities by augmenting class sizes). We're going to grow anyways. Just a matter of speed.

# THANK YOU

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