

LOGIC MODEL

Robust and Equitable Measures to Identify Quality Schools



Inputs



ENROLLMENT/SCHOOL SIZE



STUDENT BODY COMPOSITION

- Race/ethnicity
- Gender
- Grades
- Language
- Disability/special needs/gifted
- Income/socioeconomic status
- Sexual/gender identity
- Homeless students
- Migrant status
- Parents' highest educational attainment
- Preparedness at entry
- Inherent mobility out of school/district
- Student employment



SCHEDULE AND ORGANIZATION

- Length of school day and year
- Structure of classes and available learning pathways
- Class size/student-teacher ratio



MAGNET PROGRAM



STAFFING

- Number of teachers, administrators, paraprofessionals, and support staff



RESOURCES

- State/district allocation
- Grant funds
- Federal Title I funds
- Per pupil expenditures (district)
- Facilities (e.g., building, computer labs)
- School meals
- Data and tracking systems
- Curriculum (e.g., arts, humanities)



TEACHER CHARACTERISTICS

- Demographics (e.g., race/ethnicity, gender)
- Cultural background
- Credentials/certifications/qualifications
- Experience
- Knowledge and skills (i.e., related to the content)
- Salary
- Tenure status
- Retirement projections

CONTEXTUAL FACTORS

- School neighborhood and economic environment (including local population mobility)
- Reform mandates and reallocation of resources
- Accountability measures
- Funding formulas
- Decisionmaking structure on district and school level
- Teacher pools, credentialing requirements, preparation quality, tenure, and compensation
- Teacher unions
- Pre-K–8th grade education pipeline
- State and district policies (e.g., curriculum, graduation requirements)



Implementation/Process Activities

SCHOOL LEADERSHIP

- Decisionmaking processes (collaborative, hierarchical)
- Hiring (if given authority)
- Fund allocation and budget (if given authority)
- Mission
- Disciplinary policy
- Expectations for staff and students
- Ability to keep order
- Communication style
- Consistency
- Use of data/setting a data culture
- Ability to raise additional resources
- Flexibility and adaptivity

TEACHER ENGAGEMENT

- Absences
- Engagement with professional development
- Opportunities for teacher leadership
- Retention/turnover

TEACHING AND LEARNING PRACTICE

- Instructional practice (including customization/personalization of instruction)
- Intervention models (including strategies for student engagement, formative assessment)
- Progress monitoring (including use of data)
- Time on task
- Expectations and rigor
- Development of student identity as learners

SCHOOL STRUCTURE AND RESOURCES

- General population support services (e.g., guidance counselor, college counselor, employment assistance, emergency funds, disability support)
- ELL or dual-language program(s) offered
- Special education and support for students with disabilities
- Advanced coursework (e.g., AP, IB, dual enrollment/early college)
- Ability tracking
- Career pathway programming for students (e.g., internships, credentials, vocational education, job fairs, job readiness programming)
- College connections (e.g., visits to school by college representatives, college centers)
- Behavior management system (e.g., PBIS systems and fidelity, restorative practices)
- Health and mental health services
- Socioemotional/leadership development interventions
- General population programs/interventions (e.g., reading programs, incentive systems)
- Online learning
- Curriculum/teaching materials (not infrastructural)
- Curriculum development (including for cultural relevance)
- Teacher and staff professional development (including on data usage, collaborative and systemic analysis of student work, formative assessment practices)
- Specials (physical education, electives, extracurricular activities, and enrichment programming)
- Student affiliation or decisionmaking bodies (e.g., GSA, student government)

SCHOOL CULTURE AND CLIMATE

- Teacher-leader relationship and dynamics
- Teacher peer engagement (e.g., peer learning communities, peer observation)
- Teacher investment in school and students
- Mentoring relationships between adults and students
- Consideration of students' social location and how status differences shape student experiences of school
- Student peer relationships (including issues like bullying)
- Student attachment to school/sense of belonging
- Community/family engagement (including formal associations)
- Safety and perceptions of safety



Outputs

HIGH SCHOOL ENGAGEMENT/SCHOOL CLIMATE

- Chronic absenteeism/ average daily attendance
- Suspension and expulsion rates
- Share choosing to reenroll in the same school (in school choice settings)
- Measures of student engagement/enthusiasm/ academic aspirations
- Rates of arrests and law enforcement referrals

HIGH SCHOOL CONTENT KNOWLEDGE

- Student academic proficiency measured by standardized assessments in math and literacy
- Student academic growth measured by standardized assessments in math and literacy
- Average course academic grades
- Share of students enrolling in advanced coursework
- Average science performance
- Average performance on advanced coursework exams
- Average performance on portfolio-alternative assessments
- English language learner redesignation/reclassification

HIGH SCHOOL ON-TRACK/PROMOTION/COMPLETION

- Four-, five-, and six-year high school graduation rates/dropout rates
- Share on track to graduate
- Share overage/undercredited
- Rate of on-time enrollment in prealgebra and algebra

COLLEGE/CAREER READINESS BY GRADUATION

- Rate of completion of a career pathway program while in high school
- Average college admission test scores
- Rate of completion of a college-track curriculum
- Rate of completion of college-level courses/ credits in high school
- Share earning a career readiness certificate by high school completion
- Share earning a military or workforce certification by high school completion
- Share possessing marketable trade skills by high school completion

PHYSICAL HEALTH AND WELLNESS BY GRADUATION

- Rate of teen parenthood
- Rate of drug/substance use/abuse



Outcomes

POSTSECONDARY APPLICATION/ATTENDANCE/SUCCESS OF ALUMNI

- Postsecondary enrollment rate
- College performance/ completion
- Highest degree attained
- Quality of college attended
- College match

MEDIATORS AND MODERATORS

STUDENT MEDIATORS

Mechanisms for effects

- Student learning
- Nature of relationships (including adult and peer effects)
- Student confidence
- Student aspirations
- Norms around learning
- Development of self- and interpersonal respect

SCHOOL MODERATORS

Conditions or characteristics that may enhance or dampen effects

- Share of students who are English language learners
- Share of students of each major racial/ethnic group
- Share of students with an Individualized Educational Plan
- Share of students who qualify for free and reduced-price lunch
- Average student preparedness at entry
- Average student mobility out of school/district
- Share of female students
- Urban/rural area
- School size
- District size
- Student-teacher ratio
- Local economic indicators
- Local safety and law enforcement indicators
- State, county, metropolitan area, city, district, census tract



Outcomes continued

DEEPER LEARNING SKILLS OF ALUMNI

- Knowledge (academic content, career, citizenship content, practical life knowledge)
- Skills/ability (creativity; confidence; self-regulation, responsibility, goal-setting, reflexivity; social interaction/communication; critical thinking/problem solving; information and technology; resourcefulness)

- Behavior
- Mission motivation to learn and be challenged/academic self-concept
- Appreciation of and ability to engage with diversity/equity

PHYSICAL HEALTH AND WELLNESS OF ALUMNI

- Physical health/fitness

JOB QUALITY AND EARNINGS OF ALUMNI

- Labor force participation
- Employment status
- Military enlistment
- Earnings
- Family income/socioeconomic status

- Job-provided benefits
- Job satisfaction
- Adult poverty
- Government-provided benefits

CIVIC ENGAGEMENT OF ALUMNI

- Voter participation
- Incarceration

- Volunteerism
- Community organization participation and leadership