

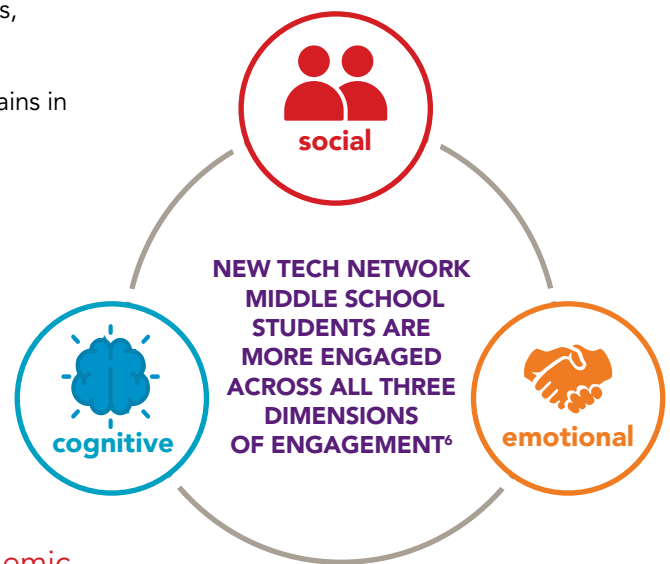
# EVIDENCE OF NEW TECH NETWORK IMPACT: SUMMARY REPORT

**NEW TECH NETWORK STUDENTS HAVE A RIGOROUS ACADEMIC EXPERIENCE AND OUTPERFORM NON-NTN STUDENTS**

## NEW TECH NETWORK (NTN) STUDENTS

NTN students outperform non-NTN students and demonstrate workforce readiness skills.<sup>1</sup> **New Tech Network students:**

- ▲ outperformed on SAT/ACT<sup>2</sup>, and state exams<sup>3</sup> in English, Math, Biology, English Language Arts, and Algebra
- ▲ report stronger instructional methods<sup>5</sup> than non-NTN students
- ▲ made statistically significant gains in critical thinking<sup>4</sup>



Middle school is pivotal in establishing a strong academic pipeline because disengagement from school that leads to dropping out often begins in middle school. Increased student engagement has been demonstrated to increase the likelihood of graduating high school and enrolling in college.<sup>7</sup>

Statistically significant survey **results demonstrate that NTN students are more engaged in**<sup>8</sup>:

- ▶ innovative technology use in their classrooms
- ▶ investigations of real-world problems
- ▶ communicating to external audiences
- ▶ peer feedback and collaboration
- ▶ data analysis



## NEW TECH NETWORK SCHOOLS

NTN schools have **higher 4-year high school graduation rates**,<sup>9</sup> and students **demonstrate college and career readiness success**.

New Tech Network **PBL enables increased access and opportunity** for underrepresented STEM students.<sup>10</sup>



## NEW TECH NETWORK PROFESSIONAL DEVELOPMENT AND COACHING ENABLES NTN EDUCATORS TO BUILD AND REINFORCE KNOWLEDGE<sup>11</sup>

### NTN PROFESSIONAL DEVELOPMENT AND COACHING

**New Tech Network professional development and coaching** enables professional growth that challenges the established “rhythm” of schooling, and **requires reflection on beliefs, values, identity, and mindsets**.<sup>12</sup>

#### **New Tech Network professional development and coaching:**

- ▶ enables authentic elementary **student learning environments**<sup>13</sup>
- ▶ **supports and sustains** adult shifts over time
- ▶ provides consistent **high quality** virtual and in-person adult **learning experiences**<sup>14</sup>
- ▶ provides **specific benefits, including:**



Project creation



Tools and resources



Application to practice

“While learning may represent the acquisition of new knowledge, growth implies the transformation of knowledge into the development of the individual. Growth is qualitative change, movement to a new level of understanding, the realization of a sense of efficacy not previously enjoyed.”<sup>15</sup>



## REFERENCES AND STUDY NOTES

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- NTN elementary case study
- Barnett, E., Kafka, T., and Kim, J. (2020). *Adult Learning in the New Tech Network's SCLN Project*. New York, NY: National Center for Restructuring Education, Schools and Teaching.
- Mixed methods study using an extensive literature review, interviews, surveys, observations of events, and document analysis
- Bergeron, L. (2017, February). *Examining Student Outcomes in New Tech Network Title 1 Eligible Schools*. Paper presentation at the annual conference of the Eastern Educational Research Association, Richmond, VA.
- Quantitative analysis using National Student Clearinghouse data for ten NTN schools
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- Percentage of students who met standard in each of the three performance bands were compared using chi-squared testing.
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- Bergeron, L. and Bogdan, C. (2019b). *Critical thinking and end of course findings: An exploration of practical significance and statistical significance*. Internal Report. New Tech Network, Napa, CA.
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- Explanatory quantitative case study research design using the Insight Assessment Educate Series (formerly the California Critically Thinking Skills Test) for 4th grade with testing for statistical significance in the change scores and the Youth Truth Student Experience Survey for grades 3–5 with comparative analysis using ordinal regression.
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- Hernández, L. E., Darling-Hammond L., Adams, J., and Bradley, K. (with Duncan Grand, D., Roc, M., and Ross, P.). (2019). *Deeper learning networks: Taking student-centered learning and equity to scale*. Palo Alto, CA: Learning Policy Institute.
- Multisite nested case study approach using exemplar cases
- Hinnant-Crawford, B. (2020). *New Tech Network Comparative Analysis: Academic Outcomes in Texas Addendum*. Cullowhee, NC: Western Carolina University.
- Secondary data analysis with OLS Regression and multi-level modeling
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- Multiple instrumental case study with subsequent cross case analysis
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<sup>1</sup> Stocks, Odell, and Culclasure, 2019

<sup>2</sup> Gordon and Bergeron, 2018; Stocks, Odell, and Culclasure, 2019

<sup>3</sup> Bergeron, 2019; Gordon and Bergeron, 2018; Lynch et al., 2018; Bergeron, 2019; Bergeron and Bogdan, 2019a; Stocks, Odell, and Culclasure, 2019; Hinnant-Crawford, 2020

<sup>4</sup> Bergeron and Bogdan, 2019b; Bergeron, et al, 2019

<sup>5</sup> Bergeron, Boesche-Taylor, Gehrke, Dugan-Knight, Kamdar, Vorse Wilka, and Gittens, 2019

<sup>6</sup> Muller and Hiller, 2020

<sup>7</sup> Trobst, et al, 2016; Orthner, Cook, Rose, and Randolph, 2002; Blafanz, Fox, Bridgeland, and McNaught, 2009; Fredricks, Blumenfeld, and Paris, 2004

<sup>8</sup> Hinnant-Crawford and Virtue, 2019

<sup>9</sup> Gordon and Bergeron, 2018; Bergeron, 2017

<sup>10</sup> Bergeron, 2017; Gordon and Bergeron, 2018; Lynch, Peters Burton, Behrend, House, Ford, Spillane, Matray, Han, Means, 2018; Stocks, Odell, and Culclasure, 2019, Bergeron, 2019

<sup>11</sup> Hernández, Darling-Hammond, Adams, and Bradley, 2019

<sup>12</sup> Barnett and Kim, 2020

<sup>13</sup> Ancess and Kafka, 2020

<sup>14</sup> Bergeron, 2019; Bergeron, Boesche-Taylor, and Bogdan, 2021

<sup>15</sup> Duke, 1993

