# NEPC Review: Pathways to Success: Exploring the Long-Term Outcomes of Alumni from Summit Public Schools (Summit Public Schools, September 2021)


Reviewed by:

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May 2022


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# Acknowledgements


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## Summary

Summit Public Schools, a charter school organization operating schools in California and Oregon, published *Pathways to Success: Exploring the Long-Term Outcomes of Alumni from Summit Public Schools* in September 2021. The report claims that Summit alumni graduated from college at nearly double the national average and self-reported high levels of well-being, fulfillment, and workplace satisfaction. It also reports that alumni from socioeconomically disadvantaged backgrounds now make more than $60,000 per year on average working full time. While the report claims to be conducted for internal purposes, Summit distributed an accompanying press release that announced its findings to a broader audience, making the report's claims of potential interest to policymakers, practitioners, and the public. However, although the study may provide some information useful to Summit's internal decision-making, its serious methodological issues (e.g., survey research methods, response rates, sample bias, sample representativeness, and uses of comparative data) prevent it from having any implications for practice or policymaking in general.

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## I. Introduction

Since the first charter school opened its doors in 1992 in Minnesota, charter schools have been controversial. Charter schools operate under "charter"-granted entities that vary from state to state. They are publicly funded and tuition-free and as such are considered public schools. They are also free from many of the bureaucratic regulations and requirements under which traditional public schools operate. According to proponents, freedom from regulation allows charter schools to be innovative and flexible in ways that traditional public schools cannot.[1] In turn, it is argued they are likely to be more successful than traditional public schools at promoting student achievement[2] and responding to parental and community expectations.[3] It is also claimed that they promote educational choice by offering parents alternatives to traditional public schools. Charter schools may, for example, offer distinct educational goals and objectives[4] that serve students who want to focus their education on science, technology, engineering, and mathematics (STEM), or students who want to learn subjects in languages other than English (i.e., immersion programs) or, of particular interest in this review, students who are college bound and seek augmented educational opportunities that may increase the likelihood that they will be admitted and succeed in college.

The controversies surrounding charter schools include whether such schools unfairly drain funds from public school districts, unfairly exclude certain students (e.g., lower achievers or students with more behavioral issues or needs), or perform any better than districts schools serving comparable students.[5]

Summit Public Schools,[6] a charter school network operating in California and Washington, describes its mission as preparing "a diverse student population for success in a four-year college and to be thoughtful, contributing members of society."[7] This review examines the claims made about the performance and life satisfaction of Summit graduates in *Pathways*

*to Success: Exploring the Long-Term Outcomes of Alumni from Summit Public School*[8], a report authored by Anum Ali Mohammed (Summit's Social Impact Program Manager) and Adam Black (Summit's Chief Information Officer) and funded by The Bill and Melinda Gates Foundation.

## II. Findings and Conclusions of the Report

The report's four key findings, as summarized and highlighted in the report's executive summary and accompanying press release are:[9]

1. 71.7% of survey respondents reported high levels of overall well-being, as indicated by scores on the Satisfaction with Life Scale.

2. 77.2% of survey respondents reported feeling fulfilled in at least four of five dimensions of well-being as outlined in Summit's vision statement: having strong relationships;[10] holding a sense of purpose;[11] feeling healthy,[12] and feeling supported in their communities.[13]

3. 54.8% of Summit alumni[14] completed a bachelor's degree, "a rate almost 2x the national average for adults over age 18 in the United States" (not emphasized in the executive summary and press release is a 6-year graduation rate of 49.9%).

4. 92.2% of survey respondents are currently working or enrolled in school. Of respondents from socioeconomically disadvantaged backgrounds who reported working full-time, 46.5% reported making more than $60,000 a year.

## III. The Report's Rationale for Its Findings and Conclusions

The report notes that it represents Summit's "first attempt to directly measure [its] ultimate intended outcomes of well-being and fulfillment" of its alumni.[15] In the press release, Diane Tavenner (Summit's Chief Executive Officer and Founder) pivots from a primary focus on Summit graduates' admission[16] to four-year colleges to a primary focus on fulfillment: ". . . we need to play the long game. Defining student success needs to be about more than just college admission – students need to be prepared to build and live a life that will fulfill them."[17] The press release points out that, "Every element of the Summit school design builds on another to equip students with the skills, knowledge, and habits they need to live a fulfilled life."[18]

## IV. The Report's Use of Research Literature

The full report included 41 total endnotes. Twelve endnotes included notes for further explanation or clarification. The other 29 endnotes directed readers to 19 non-peer-reviewed

sources including, for example, comparisons to national averages to situate study findings and 11 peer-reviewed sources including, for example, citations in support of Summit's research methods and Summit's use of the Satisfaction with Life Scale.

It is important to note that the report claims that the study was conducted for internal purposes and that its analysis "is purely descriptive and does not attempt to make any claims about efficacy of a specific model or program."[19] These claims are in tension both with some statements in the report[20] and with the report's press release, which highlights the report's key findings and implies—while not explicitly stating—that the report's findings should be of interest and importance to an external policy and practitioner audience. It is unusual to issue a press release for a report intended for internal consumption.

## V. Review of the Report's Methods

*Pathways to Success: Exploring the Long-Term Outcomes of Alumni from Summit Public Schools* describes its methodology as "a mixed-methods qualitative research approach" that includes an online survey and one-on-one interviews with members of the 2007-2014 graduating classes of four of Summit's California-based schools.[21] For its assessment of alumni fulfillment; however, this report relies almost entirely on survey data and provides no analyses of qualitative data from the interviews. It describes the interview data providing context to help the research team interpret the survey findings,[22] and quotes from the interviews in non-systematic ways. The report uses the independently validated Satisfaction with Life Scale to assess its alumni's overall life satisfaction. To calculate college completion rates, it supplemented responding alumni's graduation rate data with data from the National Student Clearinghouse and other sources.

The validity of the findings is threatened by a variety of methodological issues. The most significant methodological issue is the relatively low survey response rate of 43.3% (632 respondents of 1,459 surveyed). The report contends that this response rate is "considered high compared to standards for alumni research in higher education, where a survey response rate of 30% or more is generally considered 'high."[23] To support this claim, the report cites three other alumni studies: a non-peer-reviewed Knowledge is Power Program (KIPP) charter network survey with a 35% response rate[24] and two higher education articles. One of these articles described its survey's 43% response rate as "high" without any support as to what "high" means or how "high" is defined in the survey research literature.[25] The authors of the second article, in contrast, noted that although the 20-30% response rates that they achieved are considered "acceptable" for alumni surveys, these rates were far from their goal, which was 50-90%.[26] In general, survey researchers struggle to define how high any response rate is "high enough." While the *Pathways to Success* report's 43.3% rate may be considered on par with response rates now common across online[27] survey research studies,[28] higher response rates are necessary to make valid inferences.[29] Relatively "low" response rates introduce error, or response bias, because those who respond may not adequately represent those who did not.[30]

Related is the issue of whether the responding alumni significantly differ from the overall

alumni population—and if so, why? Self-selection bias[31] could distort findings if respondents differ from non-respondents in important ways (e.g., gender or race/ethnicity). The report notes these concerns[32] without convincingly resolving them. Endnote 12[33] refers to a chi-square test but does not report statistics from that test (including levels of statistical significance, degrees of freedom, etc.). Additional statistics (e.g., derived via chi-square tests) should have been provided to allow for analysis of whether any demographic groups were under- or over-represented in statistically significant magnitudes. Instead, the report details simple statistics to classify sample-to-population differences in methodologically amateurish ways (e.g., all differences were <10%; see also Figure 2[34]). These issues are critical because the study claims that its findings "reflect the general experiences of Summit alumni;"[35] yet, this claim cannot be supported by the descriptive evidence offered.

The report is on firm ground in its use of the independently validated Satisfaction with Life Scale to assess its alumni's overall life satisfaction. However, its self-constructed survey, which measures Summit's five dimensions of well-being, is less convincing. The report provides no statistics to support the reliability, validity, or actual factor structure of the survey.[36] There were also instrument issues with, for example, the use of double-barreled items[37] and intermingling of Likert-scale, opinion-oriented and more factual, demographic-oriented items.[38] Accordingly, it cannot be said with any confidence that the report's findings accurately reflect the extent to which "Summit alumni have achieved high levels of personal well-being and fulfillment in their lives after high school."[39]

There are also unresolved questions about the reported college completion rates. The report calculated college completion rates (54.8% overall, 49.9% within six years, and 28.2% for students it labels as socioeconomically disadvantaged) using data collected through the survey combined with data obtained from the National Student Clearinghouse and "web sleuthing" (i.e., searching for missing data on non-respondents on LinkedIn, Facebook, and Google).[40] The report went beyond reporting its alumni's college completion rates to make claims based on comparing these observed rates with national averages.[41] It claims Summit's 54.8% overall college completion rate to be "nearly double the national average for educational attainment for adults over 18, which was 33% in 2019,"[42] and it claims its six-year college completion rate for socioeconomically disadvantaged students (28.2%) to be almost three times the national average (11%) for low-income students.[43]

To support the claim that Summit's alumni graduate college at nearly double the national average, the report notes that Summit's "to date" graduation rate of 54.8% is higher than the reported U.S. Census Bureau national average graduation rate of 33% for all adults over 18.[44] However, the census table the report cites (in Endnote 32) provides the education attainment of all adults 18 years and older. It does not provide the 33% average graduation rate the Summit report claims. A more relevant citation would have been the U.S. Department of Education's National Center for Education Statistics (NCES) data on graduation rates for cohorts of high school graduates from the same years as Summit's alumni. The NCES data indicate that the six-year completion rates for students completing a bachelor's degree at the same four-year institution where they started range from 59.4% for the class entering college in 2007 to 64% for the class entering college in 2014.[45] These are higher college completion rates than those reported for Summit graduates.

A similar concern about the appropriateness of the chosen comparison standard arises with respect to the report's claim that Summit's six-year college completion rate for low-income students (28.2%) is "almost 3 times the national average."[46] For this "national average" it cites[47] an article posted on *The 74* website[48] citing a Pell Institute report. Because the article from *The 74* website does not provide a direct link to the report it cites, the only way to try to assess the validity of this comparison was to independently search for statistics reported by the Pell Institute. A 2018 Pell report reported 11% as the estimated bachelor's degree attainment rates by age 24 for the lowest income quartile.[49] A 2021 Pell report (with data through 2019) reported that percentage as 13%.[50] However, since *Pathways to Success* does not define what it means by "socioeconomically disadvantaged" (SED), it is not clear that the Summit alumni defined as being in this group can appropriately be compared to the lowest income quartiles reported in the Pell reports. The second income quartile, according to the 2021 Pell report, had a 21% college completion rate by age 24. Finally, *Pathways to Success* offers no analysis to indicate that Summit alumni were representative of the communities (e.g., districts) from which they came. On that point, it is important to recall that a general criticism of charter schools is that they sometimes use recruiting/admissions (and dismissal) practices—often referred to as "creaming"—that target and seek to retain high-achieving and less-challenging students.[51]

Finally, the report fails to provide important information that would allow for accurate interpretation of its finding that 46% of responding alumni who came from SED backgrounds and working full-time report making $60,000 or more a year.[52] The report does not say how many of these people there were, making it impossible to interpret the significance of the reported percentage. It is also impossible to know if the responding alumni who came from SED backgrounds are representative of alumni who did not respond—although it seems quite likely that they were not. As the report itself notes in an earlier section, alumni "experiencing disease symptoms or COVID-related mental health issues, job loss, or other adverse effects" would have been less likely to respond to the survey.[53] Consistently, alumni from SED backgrounds were among the most underrepresented in the sample.[54] In sum, the data provided do not sufficiently support the claim that "many alumni from low-income families have experienced economic mobility in their post-high school lives."[55]

## VI. Review of the Validity of the Findings and Conclusions

If, as it claims, Summit's *Pathways to Success* report is purely descriptive analysis for internal use,[56] it provides some useful information that the organization can use to understand its alumni. However, although the report claims to refrain from making claims about the success of its model,[57] it does make such claims[58] based on unjustified inferences that the responding alumni accurately represent the full population of alumni and on inappropriate comparisons to national statistics.

Ultimately, the methodological concerns described above cast doubt on validity of the claims made about alumni success. The press release went too far, in other words, in suggesting that the study's results proved Summit's efficacy in terms of all key graduated alumni out-

comes, with emphasis placed on the finding that Summit alumni "graduate college at nearly double the national average."[59]

## VII. Usefulness of the Report for Guidance of Policy and Practice

Summit Public Schools' report, *Pathways to Success: Exploring the Long-Term Outcomes of Alumni from Summit Public Schools*, seems confused about what it wants to be. Is it intended for internal self-improvement, or to solicit funders, or to promote and market Summit's program to other schools? Depending on where you look you might answer yes to any of those questions. What is clear, however, is that the research done is not well organized and the findings reported are of little, if any, value in understanding the actual performance of Summit Public Schools or in supporting the claims made in the report's press release. There is little, if anything, in this report to make it of value to policymakers or non-Summit practitioners.

# Notes and References


1 Garcia, G.F. & Garcia M. (1996). Charter schools—Another top-down innovation. *Educational Researcher, 25*(8), 34-36. Retrieved April 28, 2022, from https://doi.org/10.3102/0013189X025008034

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Wohlstetter, P., Nayfack, M.B., & Mora-Flores, E. (2008). Charter schools and "customer" satisfaction: Lessons from field testing a parent survey. *Journal of School Choice*, *2*(1), 66-84. Retrieved April 28, 2022, from https://doi.org/10.1080/15582150802007424

O'Reilly, R.R. & Bosetti, L. (2000). Charter schools: The search for community. *Peabody Journal of Education*, *75*(4), 19-36. Retrieved April 28, 2022, from https://doi.org/10.1207/s15327930pje7504_2

4 For more information about charter schools, please see: National Charter School Resource Center (NCSRC). (n.d.). *What is a charter school?* Retrieved April 28, 2022, from https://charterschoolcenter.ed.gov/what-charter-school

5 For more information about charter schools, as well as the controversies surrounding charter schools, please see: Jason, Z. (2017, Summer). The battle over charter schools. *Ed. Harvard Ed. Magazine*. Retrieved April 28, 2022, from https://www.gse.harvard.edu/news/ed/17/05/battle-over-charter-schools

6 Summit defines itself as "a leading network of public schools that prepares a diverse student population for success in a four-year college and to be thoughtful, contributing members of society." Founded in 2003 by a group of local families, today Summit operates 14 schools serving in grades 6-12 in California and the State of Washington and shares its "instructional approach—Summit Learning—with more than 380 schools, 3,800 educators, and 72,000 students across the country for free." Retrieved April 28, 2022, from https://summitps.org/who-we-are/

For more information see: Summit Public Schools. (n.d.). Retrieved April 28, 2022, from https://summitps.org/ and https://summitps.org/who-we-are/

7 Summit Public Schools (n.d.). College. *Career. Life. Equipping every student to lead a fulfilled life*. [webpage]. Retrieved April 28, 2022, from https://summitps.org/

8 Mohammed, A.A. & Black, A. (2021, September 20). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools*. Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

9 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 3). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

See also:

Summit Public Schools. (2021, September 20). *Summit Public Schools reveals first alumni report of its kind, redefining student success*. Retrieved April 28, 2022, from https://summitps.org/wp-content/uploads/2021/09/Pathways-to-Success-Press-Release.pdf

10 "Strong Relationships" are defied as having "relationships with loved ones who care about [Summit alumni] and who offer support in their everyday lives. This may include family members, friends, or significant others."

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 13). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

11 "Purpose' refers to an intrinsic drive that pushes [Summit alumni] to set and reach for specific goals. Alumni who are fulfilled in this area like what they do each day and are motivated to achieve their goals. For many alumni, a strong sense of purpose is often tied to having meaningful work."

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 14). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

12 Summit alumni who are fulfilled in "Health' have good health and energy to complete tasks on a daily basis."

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 14). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

13 "The dimension of 'Community' refers to liking where [Summit alumni] live, feeling safe, and having a deep sense of engagement and connection with [their] local community."

14 Included in the calculation of college completion rates were data from survey respondents and from non-respondents for whom data were found in the National Student Clearinghouse and via "web sleuthing."

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 17). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

15 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 3). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

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16 See, for example:

Summit Public Schools (n.d.). Our results [webpage]. Retrieved April 28, 2022, from https://summitps.org/the-summit-model/our-results/

17 Summit Public Schools. (2021, September 20). *Summit Public Schools reveals first alumni report of its kind, redefining student success* (p. 1). Retrieved April 28, 2022, from https://summitps.org/wp-content/uploads/2021/09/Pathways-to-Success-Press-Release.pdf

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19 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 7). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

See also the study's methods being cited as "descriptive" on page 28.

20 For example, the claim that "...our data demonstrate a clear positive relationship between education attainment and feelings of fulfillment, which validates our mission and reinforces our commitment to preparing all students to succeed in a four-year college or university" (p. 15). Also, "Summit's completion rates signal progress towards closing the college achievement gap" (p. 18).

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (pp. 15 and 18). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

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23 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 8). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

24 Knowledge is Power Program (KIPP) Public Charter Schools. (2017, January 31). *2016 KIPP alumni survey results*. Retrieved April 28, 2022, from http://www.kipp.org/wp-content/uploads/2016/09/2016-KIPP-Alumni-Survey-Results.pdf

25 The article reads: "We attribute the high response rate to two factors: (1) brevity of the survey and (2) an appeal to the cause."

Silva, E.A., Mejía, A.B., & Watkins, E.S. (2019). Where do our graduates go? A toolkit for retrospective and ongoing career outcomes data collection for biomedical PhD students and postdoctoral scholars. *BioRxiv* (p. 3). Retrieved April 28, 2022, from https://www.biorxiv.org/content/10.1101/539031v2.full.pdf

26 The article reads: "While by most standards, 20-30% response rates are considered acceptable using survey techniques, especially for alumni, we were far from reaching the 50-90% response rates requested by the BOG." "BOG" refers to the Florida Board of Governors.

Jones, F.R., Mardis, M.A., McClure, C.M, & Randeree, E. (2017). Alumni tracking: Promising practices for collecting, analyzing, and reporting employment data (p. 172). *Journal of Higher Education Management, 32*(1), 167-185. Retrieved April 28, 2022, from https://mardis.cci.fsu.edu/01.RefereedJournalArticles/1.9jones-mardisetal.pdf

27 Nulty, D.D. (2008). The adequacy of response rates to online and paper surveys: What can be done? *Assessment & Evaluation in Higher Education, 33*(3), 301-314. Retrieved April 28, 2022, from https://doi.

org/10.1080/02602930701293231

28 Cook, C., Heath, F., & Thompson, R.L. (2000). A meta-analysis of response rates in web- or internet-based surveys. *Educational and Psychological Measurement, 60*(6), 821-836. Retrieved April 28, 2022, from https://doi.org/10.1177/00131640021970934

29 Johnson and Wislar (2012) note that, "There is [still] no scientifically proven minimally acceptable response rate. A response rate of 60% has been used as the threshold of acceptability by some and has face validity as a measure of survey quality; however, similar to $P < .05$ in statistical comparisons, 60% is only a 'rule of thumb' that masks a more complex issue."

Johnson, T.P. & Wislar, J.S. (2012). *Response rates and nonresponse errors in surveys*. JAMA, 307(17), 1805-1806. Retrieved April 28, 2022, from https://doi.org/10.1001/jama.2012.3532

See also Richardson (2005), who notes that a response rate of 70% is ideal, and a response rate of 60% is also reasonable.

Richardson, J.T.E. (2005). Instruments for obtaining student feedback: A review of the literature. *Assessment & Evaluation in Higher Education 3*0(4), 387-415. Retrieved April 28, 2022, from https://doi.org/10.1080/02602930500099193

See also Nulty (2008) who questions whether a 50%, 60%, or 70% response rate is adequate, and notes that a 70% response rate is ideal. See also other information about response rates within this same publication.

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See also Dillman, D.A. (1991). The design and administration of mail surveys. *Annual Review of Sociology, 17*(1), 225–249. Retrieved April 28, 2022, from https://doi.org/10.1146/annurev.so.17.080191.001301

See also Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.

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32 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 8). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

33 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 47). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

34 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 9). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

35 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 8). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

36 Cited in Endnote 18 is: "For example, see Butler University (2020). Graduate Success. Retrieved April 28, 2022, from https://www.butler.edu/graduate-success." However, the link does not yield anything about the

survey items used and only includes very general information about Butler University's graduate outcomes as per student's success stories, Butler University's graduate programs, and the like.

37 Double-barreled items are items that are used to ask two distinct questions within the same item, but the items only permit one response. As such, they not only confuse respondents as to how they are to respond, but they ultimately void or invalidate respondents' answers given analysts cannot determine to which part of the item (i.e., which of the two questions included within the same item) respondents answered how they did. In Summit's survey instrument, for example, see the first sub section of Item 13: "I like what I do each day and am motivated to reach my goals." Respondents can (1) agree that they like what they do each day and agree that they are motivated to reach their goals, (2) agree that they like what they do each day but disagree that they are motivated to reach their goals, (3) disagree that they like what they do each day but agree that they are motivated to reach their goals, or (4) disagree that they like what they do each day and agree that they are motivated to reach their goals.

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 38). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

38 It is standard practice in constructing survey instruments to keep, for example, the more objective, personal, demographic-based items (e.g., one's age, race/ethnicity, gender) separate from the more opinion- or self-reported-based items. The former are also typically, deliberately, and collectively placed at the beginning or end of a survey instrument. Constructs that are included to measure respondents' opinions, beliefs, and the like (e.g., using Likert-type scales), are also typically organized near each other, typically by construct, and typically with clear definitions regarding what the constructs being measured are. In Summit's survey instrument, for example, see Item 14: "How would you rate your overall sense of well-being?"—as followed by Item 15: "What range best describes your personal income?"—as followed by Item 16: "Please indicate your level of agreement with the following [and additional opinion-based] items."

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 38-39). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

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40 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 17). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

41 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 18). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

42 The report also claimed its six-year college completion rate of 49.9% to be "on par with figures published for leading charter networks across the country," although it provided no citation in support of this claim.

Mohammed, A.A, & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 18). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

43 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 18-20). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

44 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 48). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

45 National Center for Education Statistics (2021). Table 326.10: Graduation rate from first institution attended for first-time, full-time bachelor's degree-seeking students at 4-year postsecondary institutions [webpage]. Retrieved April 28, 2022, from https://nces.ed.gov/programs/digest/d21/tables/dt21_326.10.asp

46 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (pp. 18-20). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

47 Endnote 36 (p. 48) cites:

Whitmire, R. (2019). New numbers show low-income students at most of America's largest charter school networks graduating college at two to four times the national average. *The 74*. Retrieved April 28, 2022, from https://www.the74million.org/article/new-numbers-show-low-income-students-at-most-of-americas-largest-charter-school-networks-graduating-college-at-two-to-four-times-the-national-average/

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 48, endnote 36). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

48 The site describes itself as "a non-profit, non-partisan news site covering education in America."

See *The 74* (n.d.). About us [webpage]. Retrieved April 28, 2022, from https://www.the74million.org/about/

49 Pell Institute and Penn Ahead (2018). *Indicators of higher education equity in the United States: 2018 historical trend report* (p. 99). Retrieved April 28, 2022, from http://pellinstitute.org/downloads/publications-Indicators_of_Higher_Education_Equity_in_the_US_2018_Historical_Trend_Report.pdf

50 Pell Institute and Penn Ahead (2021). *Indicators of higher education equity in the United States: 2021 historical trend report* (p. 180). Retrieved April 28, 2022, from http://pellinstitute.org/downloads/publications-Indicators_of_Higher_Education_Equity_in_the_US_2021_Historical_Trend_Report.pdf

51 Kho, A., Zimmer, R., & McEachnin, A. (2022). A descriptive analysis of cream skimming and pushout in choice versus traditional public schools. *Education Finance and Policy, 17*(1), 160-187. Retrieved April 28, 2022, from https://doi.org/10.1162/edfp_a_00333

See also West, A., Ingram, D., & Hind, A. (2006). "Skimming the cream": Admissions to charter schools in the United States and to autonomous schools in England. *Educational Policy, 20*(4), 615-639. Retrieved April 28, 2022, from https://doi.org/10.1177/0895904805284054

See also Lacireno-Paquet, N., Holyoke, N.T., Moser, M., & Henig, J.R. (2002). Creaming versus cropping: Charter school enrollment practices in response to market incentives. *Educational Evaluation and Policy Analysis, 24*(2), 145-158. Retrieved April 28, 2022, from https://doi.org/10.3102/01623737024002145

52 Oddly, the report does present "n's" for several other findings reported on the same page.

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 21). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

53 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 8). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

54 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alum-*

*ni from Summit Public Schools* (p. 8). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

55 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 21). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

56 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 7). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

57 Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 7). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

58 For example, "Additionally, our data demonstrate a clear positive relationship between education attainment and feelings of fulfillment, which validates our mission and reinforces our commitment to preparing all students to succeed in a four-year college or university."

Mohammed, A.A. & Black, A. (2021, Fall). *Pathways to success: Exploring the long-term outcomes of alumni from Summit Public Schools* (p. 15). Summit Public Schools. Retrieved April 28, 2022, from https://drive.google.com/file/d/1LU81FTmr4ZkZzkAzCPZrVurjfmpJcgHn/view

59 Summit Public Schools. (2021, September 20). *Summit Public Schools reveals first alumni report of its kind, redefining student success*. Retrieved April 28, 2022, from https://summitps.org/wp-content/uploads/2021/09/Pathways-to-Success-Press-Release.pdf