School resources, family-school communication and student recognition

A review of school resources, useful family-school communication and student recognition. The studies distinguish spending from unmet need, information from partnership, and reward outcomes from lasting interest. Runstr applicability is considered separately.

Research by Education Angel Group.
Education Angel Group is developing Runstr and has an interest in the proposed product. This review does not establish its effectiveness.

Current edition reviewed: 2026-10-12. Revision: public-v2.

Earlier editions

- Runstr: the case for participation, supportive relationships and school resources

  Research edition reviewed: 2026-09-19. Revision: public-v1.

Prepared by Education Angel Group (EAG). Evidence review updated October 12, 2026. EAG is developing Runstr and has an interest in its success.

Schools, families and students can face related but different questions: which resources are missing, what information makes school life understandable, and what forms of recognition encourage participation without creating pressure? A large education budget does not answer the first question for a particular classroom. Sending an update does not establish understanding or a trusting relationship. Giving an award does not necessarily strengthen interest in the activity being recognized.

This review examines those distinctions through official spending and access data, family-school partnership literature, communication and recognition studies, and adjacent research on community support. The evidence offers useful explanations and cautions, but no single intervention covers all three topics. The closing applicability section considers Runstr's proposed response separately from the independent literature.

1. School resources: spending is not the same measure as unmet need

Personal teacher spending can reveal one way classroom provision is sustained. NCES's corrected report uses the 2015-16 National Teacher and Principal Survey to describe unreimbursed supply spending in 2014-15. Among U.S. public-school teachers who spent personal money, the mean was $478 and the median $297. The March 2021 revision corrected sample weights. These are historical self-reports, subject to sampling and nonresponse limitations, including noted city nonresponse bias. The denominator is teachers who spent, not all teachers or all classrooms. Spiegelman, NCES, S1

These figures document personal expenditure in a measured year. They do not establish how much remains unfunded now, why teachers purchased each item, or whether purchases were essential, discretionary or substitutes for another route. Treating the mean as a present annual shortage would erase both the historical period and the unanswered local questions.

Census's school-finance data describe a different unit: nominal current expenditure per pupil in U.S. public elementary-secondary systems. The May 2026 release reports $16,526 in FY2023 and $17,619 in FY2024. Current expenditure differs from capital outlay; the values are not adjusted for inflation or geographic costs. A rising national average neither proves that every school has adequate materials nor identifies an individual school's missing resources. U.S. Census Bureau, S2

Arkansas's March 2026 resource-allocation study brings the question closer to institutions. Across districts and open-enrollment charters, recorded instructional-material spending was $165.8 million from all funds in FY2023 and $156.9 million in FY2025, including $70.7 million from foundation funds in FY2025. Superintendent responses describe additional needs across matrix resource categories, but they are not an independently verified inventory of unfilled requests. The analysis maps accounting codes to matrix categories, cannot fully separate commingled funds, and cannot analyze two salary/insurance lines. These limits constrain school-level interpretation. Arkansas Bureau of Legislative Research, S3

Measure	Period and denominator	Useful interpretation
Unreimbursed teacher supply spending	2014-15; public-school teachers who spent	Historical personal expenditure, not current unmet demand
National current spending per pupil	FY2023/FY2024; pupils in public elementary-secondary systems	Nominal system expenditure, not classroom adequacy
Arkansas instructional-material spending	FY2023/FY2025; districts and open-enrollment charters	Recorded category expenditure, not unfilled requests

Figure 1

Three measures, three different questions

Teacher spending | 2014-15

$478 mean; $297 median

Unreimbursed supply spending among U.S. public-school teachers who spent personal money. Historical self-report, revised weights in March 2021. Source: S1.

National current spending | FY2024

$17,619 per pupil

U.S. public elementary-secondary systems. Nominal dollars; excludes capital outlay. This is expenditure, not school-level adequacy. Source: S2.

Arkansas instructional materials | FY2025

$156.9 million, all funds

Recorded expenditure across Arkansas districts and open-enrollment charters. Accounting and commingled-fund limits apply. Not an unmet-needs inventory. Source: S3.

Resource context uses separate units and denominators. Historical teacher spending, national per-pupil expenditure and Arkansas materials spending do not estimate a Runstr-addressable shortfall.

Three measures, three different questions

Resource context uses separate units and denominators. Historical teacher spending, national per-pupil expenditure and Arkansas materials spending do not estimate a Runstr-addressable shortfall.

- S1. Public School Teacher Spending on Classroom Supplies
- S2. Public School Spending Per Pupil Reaches Historic High in 2024
- S3. 2026 Educational Adequacy Study: Resource Allocation, Part I

These text equivalents accompany the report figures. Source IDs refer to the report references. Publication years are not necessarily intervention years.

Figure 1. Three measures, three different questions

Resource context uses separate units and denominators. Historical teacher spending, national per-pupil expenditure and Arkansas materials spending do not estimate a Runstr-addressable shortfall.

Teacher spending | 2014-15: $478 mean; $297 median. Unreimbursed supply spending among U.S. public-school teachers who spent personal money. Historical self-report, revised weights in March 2021. Source: S1.

National current spending | FY2024: $17,619 per pupil. U.S. public elementary-secondary systems. Nominal dollars; excludes capital outlay. This is expenditure, not school-level adequacy. Source: S2.

Arkansas instructional materials | FY2025: $156.9 million, all funds. Recorded expenditure across Arkansas districts and open-enrollment charters. Accounting and commingled-fund limits apply. Not an unmet-needs inventory. Source: S3.

Sources: S1, S2, S3.

Figure 1. Resource context uses separate units and denominators. Historical teacher spending, national per-pupil expenditure and Arkansas materials spending do not estimate a Runstr-addressable shortfall.
Text and data alternative.

A useful local resource assessment would identify a specific item or experience, intended use, existing provision, authorized recipient and acceptance process. Delivery, maintenance and administrative costs also matter. An available resource may be unsuitable, already funded or unacceptable under institutional rules. These are practical assessment questions, not measured findings from national totals. This review has no local needs inventory, school interviews or resource-delivery data with which to answer them.

2. Sustained community support: return, discovery and distribution

Continuing support can be organized in several ways. DonorsChoose's first-party documentation describes monthly charitable giving, project or teacher/school choices, cancellation and allocation of unused credits. It establishes an existing recurring-support workflow, not evidence that recurrence produces better school outcomes or an effect estimate for a paid membership. School-controlled purchasing and appropriate established support routes remain alternatives for a specific resource request. DonorsChoose, S15

Althoff and Leskovec studied donor return on DonorsChoose. Their dataset spans March 2000-October 2014; the analysis uses donations after January 1, 2009 and first donations through September 2013, allowing at least a year to observe return. Teacher communication was associated with return donations. Teacher-referred donors returned less to the platform overall, while same-teacher return followed a different pattern. The authors explicitly reject a causal interpretation of the Facebook association. A relationship to a particular teacher and a relationship to the whole platform are not interchangeable outcomes.
Althoff and Leskovec, N3

The observational design cannot establish that sending more updates causes continued support. People already inclined to return may choose different projects, communication or relationships. Nor does the association make thanking supporters a student's duty. It suggests examining what information supporters value and whose work supplies it, while keeping the charitable setting and return-donation outcome attached to the finding.

Discovery can also influence which schools receive support. Chakraborty and colleagues analyze DonorsChoose projects from 2003-2015, with 2015 feature comparisons. Funding success varied by location, yet broad school-poverty categories had comparatively similar success rates. Their original linear regression-discontinuity fit was unreliable, so they used before/after inequality comparisons. That methodological change limits causal interpretation of platform-design differences.
Chakraborty and colleagues, N2

The poverty-category finding complicates a simple claim that all high-need groups necessarily lose equally. Location, school poverty category, supporter household wealth and private network size are different measures. The study does not measure all of them or establish how a membership product would distribute resources. A distribution assessment should identify who is discovered, who receives support, who cannot readily recruit, and where effort falls, rather than treating total receipts as proof of broad access.

Commercial subscription research supplies a separate caution about interpreting continuation. Einav, Klopack and Mahoney's *Selling Subscriptions* uses August 2017-December 2021 transactions for ten selected large U.S. commercial monthly services. Cancellation rose around card replacement, when renewal requires active attention. Their models cannot distinguish inattention from switching costs, and counterfactuals hold initial subscribers, prices and offerings fixed. Automatic renewal can provide convenience, but renewed billing alone is insufficient evidence of experienced value. These adult commercial services are not school-supporter relationships. Einav, Klopack and Mahoney, N1

Resource use, voluntary continued support and continued charges require different evidence. Someone may stop support because a project ends or their budget changes, rather than because the relationship failed. Someone may continue paying without following the content. Neither commercial cancellation estimates nor charitable return patterns provide a transferable school-membership forecast.

3. Family-school communication: information, reciprocity and capacity

Useful transparency means being able to understand relevant school activity and ask an appropriate question. It is not unrestricted observation of a student. An academic alert, a project explanation, a parent-teacher conversation and a chosen school-life update have different purposes. The question is what a recipient can understand or do with the information, not only whether a message reaches a device.

Mapp and Kuttner's *Partners in Education* treats partnership as capacity building for both educators and families. The framework emphasizes trust, shared learning, practical interaction and sustained organizational support, tailored to local circumstances. It distinguishes skills and knowledge, relationships and networks, confidence, and beliefs about partnership. These are proposed capacities and conditions, not estimated effects of a messaging service. The report also distinguishes near-term capacity outcomes from longer-term student outcomes influenced by many other factors. Mapp and Kuttner, S4

Its three historical cases show why context matters. Stanton Elementary's 2009-10 difficulties and 2010-12 turnaround involved home visits and academic parent-teacher teams alongside instructional and school-culture reforms. Boston's account covers the 2008 leadership change, 2009-12 initiatives and 2012-13 reporting; it retains uneven implementation and developing evaluation. First 5 Santa Clara concerns prenatal/age 0-5 families, community organizations and educators, tracing 1998 funding, 2006 district leadership and a 2010 kindergarten-transition pilot. These descriptive cases have no unified analytic population or controlled comparison that isolates partnership effects. They are not current institutional endorsements or evidence about paid followership. Mapp and Kuttner, S4, printed pp.13-23

The framework's practical contribution is to question a one-way dissemination model. Families may need understandable information and a way to use it; educators may need time, knowledge of family circumstances and support to respond. The Boston case is useful because writing engagement into a plan did not ensure implementation. A communication channel can exist while reciprocal work remains unsupported.

Randomized evidence addresses a narrower intervention. Bergman and Chan's January 2019 working paper examines automated academic SMS alerts in 22 West Virginia middle and high schools during 2015-16, with a 2016-17 continuation. Among 1,137 consented families, course failures and class attendance improved, while state-test scores did not and middle-school results were not significantly positive. Only about one tenth of sampled households accepted the study. The one-district setting and selected consented sample constrain generalization. Bergman and Chan, S5

The alerts used existing academic information. Their low marginal SMS expense excludes the full infrastructure and staff cost of maintaining that information. It cannot estimate the work of deciding what to share, composing a story, checking an audience, correcting a transcript, moderating responses or answering questions. One author disclosed prior compensation for advising a vendor. This review uses the January 2019 working paper consistently, rather than importing the later journal version's estimates.
Bergman and Chan, S5

The selected benefits and null outcomes are both important. Timely academic information can change some behaviors in a defined setting without improving every measured outcome. That result does not establish that more personal updates produce stronger relationships or learning gains. A tailored existing message, a conversation or an agreed nonpaid update routine may address the actual information gap with less work.

ParentSquare's first-party FAQ describes SMS, email, app and voice delivery, two-way messaging/translation and school information-system integration. These are described capabilities, not independently verified comparative effectiveness, reach or accessibility. Their existence nevertheless rules out presenting digital school-family communication or channel choice as an absent category. ParentSquare, S14

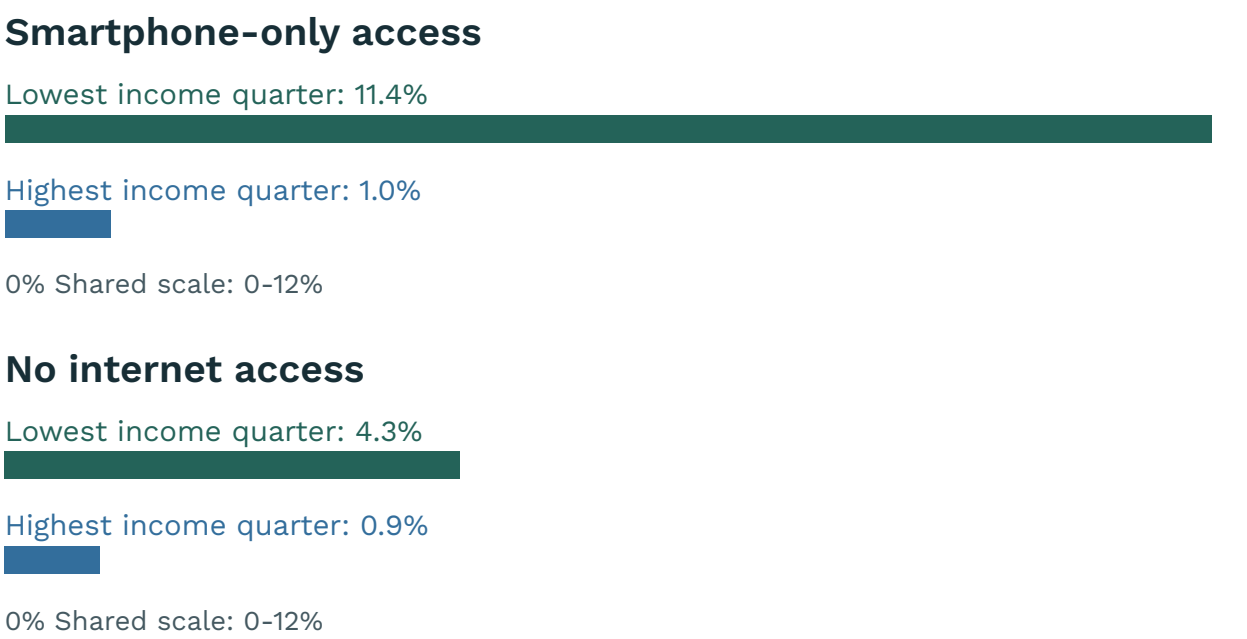
4. Practical access, expression and privacy

Household access affects the options available for communication. In NCES's 2023 ACS table, household-resident U.S. children ages 3-18 had 92.4% internet-with-computer access, 5.4% smartphone-only access and 2.3% no access. Independently rounded values total 100.1%. The lowest family-income quarter had 11.4% smartphone-only and 4.3% no access, compared with 1.0% and 0.9% in the highest. Group quarters are excluded. These national estimates do not measure dependable bandwidth, private recording space, individual device ownership or Arkansas-specific conditions. NCES Table 702.12, S7

Figure 2

Household access differs by income

2023 | U.S. children ages 3-18 | NCES S7



Point estimates; no uncertainty intervals.
U.S. household-resident children ages 3-18, 2023 ACS; lowest and highest family-income quarters. Point estimates only, without uncertainty intervals. These figures are not Arkansas-specific and do not measure bandwidth, privacy or individual device ownership.

Household access differs by income

U.S. household-resident children ages 3-18, 2023 ACS; lowest and highest family-income quarters. Point estimates only, without uncertainty intervals. These figures are not Arkansas-specific and do not measure bandwidth, privacy or individual device ownership.

- S7. Digest of Education Statistics, Table 702.12

Figure 2. Household access differs by income

U.S. household-resident children ages 3-18, 2023 ACS; lowest and highest family-income quarters. Point estimates only, without uncertainty intervals. These figures are not Arkansas-specific and do not measure bandwidth, privacy or individual device ownership.

Access category	Lowest income quarter	Highest income quarter
Smartphone-only access	11.4%	1.0%
No internet access	4.3%	0.9%

Values are percent of children within each income quarter. U.S. children ages 3-18 living in households, separately within each family-income quarter; group quarters excluded.

Source reports standard errors; no error bars or inferential comparison shown. Standard errors are not transcribed into this point-estimate graphic.

None; published percentages, unchanged. Zero baseline; shared 0-12 percent scale.

Sources: S7.

Figure 2. U.S. household-resident children ages 3-18, 2023 ACS; lowest and highest family-income quarters. Point estimates only, without uncertainty intervals. These figures are not Arkansas-specific and do not measure bandwidth, privacy or individual device ownership. Text and data alternative.

Access category, 2023	Lowest income quarter	Highest income quarter
Smartphone-only access	11.4%	1.0%
No internet access	4.3%	0.9%

Voice and text can impose different effort, but this review contains no comparative child voice-versus-text trial establishing an easier route. Koenecke and colleagues' 2020 audit used 73 Black and 42 White adult speakers in selected U.S. interview corpora. Average word error rates were 0.35 and 0.19 across five historical

systems. The result documents unequal transcription-error risk; it is not a current provider ranking, multilingual audit or child-speech benchmark. Corrections may consume time unevenly, and a short recording can require substantial review. Koenecke and colleagues, S8

W3C's prerecorded audio guidance calls for an equivalent alternative, with its stated exception when audio is itself an alternative to text. A machine transcript is not proof of equivalent information, and this report is not a conformance audit. A complete text option and a usable correction route are reasonable responses to these access and expression questions. People should not have to reveal household difficulties to use them. W3C, S9

Practical access also has a permission boundary. Receiving a message, paying, being familiar with a family and having institutional approval are not interchangeable authorizations. The FTC's April 22, 2025 COPPA final rule became effective June 23, 2025, with general compliance due April 22, 2026. It distinguishes consent for collection/use from separate verifiable consent for non-integral third-party disclosure. Its narrow audio exception covers a specific request, no other use or disclosure, and immediate deletion; it does not describe stored supporter-visible school-life recordings. Whether a particular use is covered or a disclosure is integral requires qualified fact-specific review. FTC amended final rule, N4

The FTC FAQ's school-consent discussion is educational-context guidance, not a basis for assuming that a commercial supporter relationship qualifies. The Department of Education source retained here is a privacy-resource index; its linked guidance was not fully appraised. These sources establish relevant review boundaries, not a legal opinion or a complete FERPA assessment. FTC FAQ, S16
Education Department index, S17

5. Student recognition: interest, performance and unintended messages

Recognition can acknowledge effort, provide useful feedback or attach a material reward to behavior. These arrangements should not be judged as a single intervention. What is rewarded, whether it is expected, when it arrives, who is eligible and what is measured afterward can change the answer. Attendance, performance quantity, performance quality and freely chosen interest are distinct outcomes.

Deci, Koestner and Ryan's 1999 synthesis of 128 experiments included children and college students. Expected tangible and several contingent reward arrangements reduced post-reward free-choice motivation on average, while positive feedback differed. Many experimental tasks were brief. The result concerns reward contingencies and interest after the reward condition, not school-resource delivery or a universal rejection of recognition. Deci and colleagues, S10

Cerasoli, Nicklin and Ford's 2014 synthesis covered 183 independent samples and 212,468 respondents across school, work and physical domains over four decades. Intrinsic motivation explained more unique variance in performance quality, while incentives explained more in quantity. Mixed populations and

correlational predictors limit causal interpretation. This does not negate the earlier review: producing more while incentives exist and choosing an activity after rewards end are different questions. Cerasoli and colleagues, S11

Robinson and colleagues' 2019 accepted author paper provides school-specific adverse and null evidence. Among 15,329 analyzed grade 6-12 students across 14 California districts, January 2016 symbolic attendance awards had no average prospective benefit on February attendance; retrospective awards increased absence. An exploratory March follow-up also found an adverse post-award result for prospective awards. Eligibility required a prior perfect-attendance month, with unreliable-address and school-age-sibling household exclusions. Certificates differ from chosen prizes, but recognition can send an unintended message rather than simply reinforce a valued behavior. Robinson and colleagues, S12

Li, Hew and Du's 2024 review searched January 2011-October 2022. It included 31 qualitative-review studies, with 24 articles supplying meta-analysis data, predominantly from higher education. It found a small positive average intrinsic-motivation result with heterogeneity and no free-choice measures. Bundled gamification does not isolate redeemable prizes or establish how younger students respond to a particular earning rule. A favorable average in this review and adverse findings in the attendance experiment can coexist because the designs, populations and outcomes differ. Li, Hew and Du, S13

Figure 3

Reward studies measure different outcomes

Deci et al. (1999) | S10

Post-reward free-choice interest

128 experiments, children and college students. Expected tangible and several contingent rewards reduced this outcome on average; positive feedback differed. Brief task rewards are not subscription-linked points.

Cerasoli et al. (2014) | S11

Performance quality and quantity

183 samples; 212,468 respondents across school, work and physical domains. Motivation and incentives relate differently to quality and quantity. Mixed populations/correlational predictors limit causal transfer.

Robinson et al. (2019) | S12

Attendance after symbolic awards

15,329 analyzed students, grades 6-12, 14 California districts; January 2016 mailings. February prospective null/retrospective harm; exploratory March prospective harm. Eligibility exclusions apply; certificates are not membership-linked prizes.

Li et al. (2024) | S13

Motivation in bundled gamification

Search January 2011-October 2022; 31 qualitative-review studies, 24 meta-analysis articles, mainly higher education. Small heterogeneous result, no free-choice measures. Bundled elements do not isolate points or physical prizes.

Qualitative comparison of different populations, contingencies and outcomes, not evidence for subscription-linked points or a quantitative Runstr forecast.

Reward studies measure different outcomes

Qualitative comparison of different populations, contingencies and outcomes, not evidence for subscription-linked points or a quantitative Runstr forecast.

- S10. A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation
- S11. Intrinsic Motivation and Extrinsic Incentives Jointly Predict Performance: A 40-Year Meta-Analysis
- S12. The Demotivating Effect (and Unintended Message) of Awards
- S13. Gamification enhances student intrinsic motivation, perceptions of autonomy and relatedness, but minimal impact on competency: a meta-analysis and systematic review

Figure 3. Reward studies measure different outcomes

Qualitative comparison of different populations, contingencies and outcomes, not evidence for subscription-linked points or a quantitative Runstr forecast.

Deci et al. (1999) | S10: Post-reward free-choice interest. 128 experiments, children and college students. Expected tangible and several contingent rewards reduced this outcome on average; positive feedback differed. Brief task rewards are not subscription-linked points.

Cerasoli et al. (2014) | S11: Performance quality and quantity. 183 samples; 212,468 respondents across school, work and physical domains. Motivation and incentives relate differently to quality and quantity. Mixed populations/correlational predictors limit causal transfer.

Robinson et al. (2019) | S12: Attendance after symbolic awards. 15,329 analyzed students, grades 6-12, 14 California districts; January 2016 mailings. February prospective null/retrospective harm; exploratory March prospective harm. Eligibility exclusions apply; certificates are not membership-linked prizes.

Li et al. (2024) | S13: Motivation in bundled gamification. Search January 2011-October 2022; 31 qualitative-review studies, 24 meta-analysis articles, mainly higher education. Small heterogeneous result, no free-choice measures. Bundled elements do not isolate points or physical prizes.

Sources: S10, S11, S12, S13.

Figure 3. Qualitative comparison of different populations, contingencies and outcomes, not evidence for subscription-linked points or a quantitative Runstr forecast. Text and data alternative.

The evidence supports asking more precise questions, not choosing a universal reward verdict. Does the arrangement preserve meaningful choice? Does the activity remain worthwhile when rewards stop? Does recognition improve useful work or only its volume? Are eligibility and costs understandable, and does a student feel pressure to recruit or perform for adults? The reviewed studies answer only some of these questions in their own settings. Feedback and meaningful activity without material prizes remain direct alternatives.

6. What the evidence leaves open

Three distinctions govern the synthesis. Recorded spending is not a local unmet-needs inventory. Delivered information is not the same as understanding or reciprocal partnership. A recognized behavior is not the same as enduring interest or useful participation. The sources are most useful when those distinctions remain visible.

Educational question	Evidence retained	Unanswered decision
Which resources are missing?	Historical teacher spending and institutional expenditure records	Specific current requests, acceptance and useful delivery after full costs

Educational question	Evidence retained	Unanswered decision
What makes school life understandable?	A partnership framework, a selected academic-alert trial and existing channels	Useful chosen context, reciprocal response and total family/educator effort
Who can take part?	Historical household access and adult transcription disparities	Local device/language/disability preferences and practical completion
When does recognition help?	Contingency-specific syntheses, attendance null/harm and heterogeneous gamification findings	Effects of the actual arrangement during and after rewards
Can community support persist fairly?	Observational donation-platform research and commercial continuation evidence	Informed voluntary support, distribution and institutional value

There is no evidence here that every school lacks resources, every family lacks information, or every student needs prizes. A direct conversation, an existing communication channel, school-controlled resource provision or recognition without material rewards may be sufficient. Integration could be useful, but only if it adds value after the associated work is counted. A channel that duplicates information, an obligation to generate updates or a resource route that creates more administration than useful provision would weaken that case.

7. Applicability to Runstr

Runstr is EAG's planned membership and participation product for school communities. Its intended response connects ongoing school-resource pathways, intentionally shared school-life context and a separate eligible student-reward program. A Check-in can share chosen context; a permitted Reply can offer encouragement or a useful perspective. These studies inform questions about that response, not evidence that the combined product works.

Student, Teacher, Team and School are the four profiles; a coach manages an authorized Team. The Student, Teacher, Coach, School and Supporter visitor paths explain different ways to participate, not permissions. Private Student Check-ins require an active membership for that exact profile and independent explicit access approval, controlled for a minor by a verified linked guardian. Payment alone is not permission. Routine school-family communication is not replaced by a paid membership; text remains a complete option.

Qualifying memberships, not posting, link to eligible personal points. Institutional resources do not pass through a personal-prize balance; teacher or Team participation creates no personal staff-prize entitlement. Additional group Challenge awards have separate funding and terms. The recovered financial target is not a live ledger or consumer offer. Actual qualifying payment basis, reversals, reserves, complete costs, entitlement and school/district acceptance remain to be reconciled before benefits can be promised. Costs include processing, moderation/support, refund/dispute losses, overhead, packaging, freight, inspection,

distribution, defects/replacements and safety/recall work. Gross receipts are not unrestricted school income, tax-deductible donations or accepted resources, and an institution can reject an instrument. A gift card does not bypass that refusal.

Figure 4

Proposed paths require separate evidence

Conceptual only. Every link is proposed.

Chosen communication and independent permission

1. Choose a Check-in and audience
↓ proposed link
2. Independent audience approval
↓ proposed link
3. Permitted understanding and Reply

Private Student Check-ins also require active membership for that exact profile. A verified linked guardian controls minor approval. Payment alone is not permission; relationship value is untested.

Membership-linked eligible personal benefit

1. Qualifying membership
↓ proposed link
2. Funded eligible personal points
↓ proposed link
3. Separate selection and fulfillment

Posting does not mint points. Actual qualifying payment basis, reversals, beneficiary eligibility, costs and fulfillment require reconciliation. No personal staff entitlement.

Separate accepted institutional obligation

1. Qualifying membership
↓ proposed link
2. Agreed institutional obligation
↓ proposed link
3. School/district acceptance
↓ proposed link
4. Accepted delivery and reconciliation

Institution is recipient. No personal-prize balance or duplicate funding route. Actual instrument, costs, reserves, timing, reversals and acceptance remain unresolved; Challenge awards are separately funded.

EAG conceptual model, not a measured causal chain or live economic rule. Payment does not grant audience access. Membership-linked eligible personal benefits and accepted institutional obligations remain separate, with actual terms and delivery unresolved.

Proposed paths require separate evidence

EAG conceptual model, not a measured causal chain or live economic rule. Payment does not grant audience access. Membership-linked eligible personal benefits and accepted institutional obligations remain separate, with actual terms and delivery unresolved.

- EAG product definition

Figure 4. Proposed paths require separate evidence

EAG conceptual model, not a measured causal chain or live economic rule. Payment does not grant audience access. Membership-linked eligible personal benefits and accepted institutional obligations remain separate, with actual terms and delivery unresolved.

Chosen communication and independent permission. Choose a Check-in and audience → Independent audience approval → Permitted understanding and Reply. Private Student Check-ins also require active membership for that exact profile. A verified linked guardian controls minor approval. Payment alone is not permission; relationship value is untested.

Membership-linked eligible personal benefit. Qualifying membership → Funded eligible personal points → Separate selection and fulfillment. Posting does not mint points. Actual qualifying payment basis, reversals, beneficiary eligibility, costs and fulfillment require reconciliation. No personal staff entitlement.

Separate accepted institutional obligation. Qualifying membership → Agreed institutional obligation → School/district acceptance → Accepted delivery and reconciliation. Institution is recipient. No personal-prize balance or duplicate funding route. Actual instrument, costs, reserves, timing, reversals and acceptance remain unresolved; Challenge awards are separately funded.

Sources: EAG product definition.

Figure 4. EAG conceptual model, not a measured causal chain or live economic rule. Payment does not grant audience access. Membership-linked eligible personal benefits and accepted institutional obligations remain separate, with actual terms and delivery unresolved. Text and data alternative.

The product questions remain whether permitted updates are welcome and useful, continued payment is informed and easy to end, reward eligibility creates pressure, and obligations become useful accepted resources after full delivery and administrative costs. Resource receipt, relationship value, billing, permissions and distribution need separate evidence. No Runstr willingness-to-pay, retention, fulfilled-resource, learning or mental-health outcome was measured here. A usable first Check-in would establish only that interaction, not the whole membership economy. Any later participant research requires its own permission and arrangements, including people who decline or leave and adequate simpler alternatives.

Methods, source limits and corrections

This is a focused question-led review of U.S. school resources, family-school communication and recognition, with Arkansas expenditure context. It is not a systematic review. It distinguishes descriptive surveys, randomized interventions, observational associations, conceptual frameworks, official guidance, first-party capabilities and EAG product authority. No interviews, original participant data, Runstr outcome measurements or independent expert review were conducted for this report.

The September 19, 2026 evidence record is retained as history. The October 11 appraisal revisited the seventeen-source core and added four originals; focused passages in those added originals were checked October 12. The October 12 topic-led revision reorganizes the educational substance and incorporates full S4 access. These source-review dates do not change the measured periods of the studies.

For S4, the publisher full PDF explicitly dates publication to 2013. The publisher catalog labels 2014/27 pages, while the publisher and ERIC PDFs each have 32 physical pages. Their body text matches on physical pages 3-32; front matter differs. The catalog discrepancy remains unexplained and is not treated as evidence of a different body edition. The full report is a conceptual framework with descriptive cases, not a controlled evaluation. S17 remains an index rather than a complete FERPA appraisal. Correction checks were bounded to accessed versions and visible notices, not a comprehensive registry clearance. Different populations and outcomes were not pooled into a product forecast.

EAG is the parent organization and publisher responsible for this interpretation. Education Needs More is its editorial umbrella; that relationship supplies no independent endorsement. This review does not approve live prices, benefits, data use, legal compliance or a public offer.

Revision history: September 19, 2026, initial evidence review retained in the earlier edition. October 12, 2026, current source review adds community-support evidence and then reorganizes the body around resources, communication and recognition, with Runstr applicability separated and S4 full-report access corrected. Readers identifying an error should give EAG the section, disputed statement and supporting source.

References

Core sources were initially retrieved September 19, 2026 and appraised again October 11, 2026. S4 full-report access was recovered and its relevant full body read October 12. N1-N4 were retrieved October 11 and focused passages checked October 12. Undated first-party pages are access-date snapshots, not proven current service performance.

- **S1.** Maura Spiegelman, NCES. Public School Teacher Spending on Classroom Supplies. March 2021 corrected report; 2014-15 spending, 2015-16 NTPS.
- **S2.** U.S. Census Bureau. Public School Spending Per Pupil Reaches Historic High in 2024. May 7, 2026, revised May 12; FY2023/FY2024.
- **S3.** Arkansas Bureau of Legislative Research. 2026 Educational Adequacy Study: Resource Allocation, Part I. March 10, 2026; FY2023-2025.
- **S4.** Karen L. Mapp and Paul J. Kuttner. Partners in Education: A Dual Capacity-Building Framework for Family-School Partnerships. Publisher full PDF, explicit 2013 date; ERIC full PDF. Conceptual framework and historical cases; version/catalog distinction above.
- **S5.** Peter Bergman and Eric W. Chan. Leveraging Parents through Low-Cost Technology. January 2019 working paper, not mixed with later journal estimates.

- **S7.** NCES; Census ACS. Digest Table 702.12. Prepared November 2024; retained 2023 household estimates.
- **S8.** Allison Koenecke and colleagues. Racial disparities in automated speech recognition. 2020. DOI: 10.1073/pnas.1915768117.
- **S9.** W3C. Understanding SC 1.2.1. Official accessibility guidance.
- **S10.** Edward L. Deci, Richard Koestner and Richard M. Ryan. Effects of Extrinsic Rewards on Intrinsic Motivation. 1999. DOI: 10.1037/0033-2909.125.6.627.
- **S11.** Christopher P. Cerasoli, Jessica M. Nicklin and Michael T. Ford. Intrinsic Motivation and Extrinsic Incentives Jointly Predict Performance. 2014. DOI: 10.1037/a0035661.
- **S12.** Carly D. Robinson, Jana Gallus, Monica G. Lee and Todd Rogers. The Demotivating Effect (and Unintended Message) of Awards. 2019 accepted author copy. DOI: 10.1016/j.obhdp.2019.03.006.
- **S13.** Liuyufeng Li, Khe Foon Hew and Jiahui Du. Gamification and intrinsic motivation: meta-analysis and systematic review. January 16, 2024. DOI: 10.1007/s11423-023-10337-7.
- **S14.** ParentSquare. Frequently Asked Questions. First-party capability description, accessed October 11, 2026.
- **S15.** DonorsChoose. Manage or cancel a monthly donation. First-party workflow, accessed October 11, 2026.
- **S16.** FTC. Complying with COPPA: Frequently Asked Questions. Staff guidance with amended-rule referral.
- **S17.** Education Department. Privacy and Education Technology. Resource index only.
- **N1.** Liran Einav, Ben Klopack and Neale Mahoney. Selling Subscriptions. *American Economic Review* 115(5), 1650-1671, May 2025. DOI: 10.1257/aer.20231612.
- **N2.** Abhijnan Chakraborty and colleagues. On the Impact of Choice Architectures on Inequality in Online Donation Platforms. WWW 2019. DOI: 10.1145/3308558.3313663.
- **N3.** Tim Althoff and Jure Leskovec. Donor Retention in Online Crowdfunding Communities. WWW 2015, 34-44. DOI: 10.1145/2736277.2741120.
- **N4.** FTC. Children's Online Privacy Protection Rule, final amendments. 90 FR 16918, April 22, 2025, final section 312.5 and DATES.

Product-definition source: Education Angel Group, Runstr product definition, reviewed October 12, 2026. This establishes intended scope, not live adoption or empirical outcomes.