Material rewards, voluntary participation and meaningful choice

Research on rewards, interest, choice and practical access has mixed findings. It does not establish that a particular rewards store improves motivation, learning or fairness.

Research by Education Angel Group.
Education Angel Group is developing Prizes After Class 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

- Prizes After Class: choice, motivation and a truthful rewards journey

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

A reward program can be judged by several different outcomes: participation while an incentive is available, the quality of the activity, interest after incentives end, and whether people understand and can decline the offer. More completed actions do not establish all four. This review examines material rewards alongside choice, expectations and practical access, keeping those outcomes distinct.

The central question is when rewards support a worthwhile, voluntary experience and when they create pressure, disappointment or unequal burdens. Experiments, research syntheses, accessibility guidance and school-store documentation contribute different kinds of evidence. None alone establishes the effectiveness of a particular rewards store.

1. Interest after incentives end

Deci, Koestner and Ryan's 1999 meta-analysis included 128 experiments from preschool through college. For initially interesting tasks, expected tangible rewards and several contingent reward conditions reduced post-reward free-choice motivation on average; feedback showed different patterns. Many experiments were brief. A period spent choosing an activity after the reward is withdrawn is not the same outcome as

completing it to obtain a prize, and neither directly measures durable learning. The findings make reward expectation, contingency and timing important, rather than establishing that every material reward is harmful. S10

Cameron, Banko and Pierce's 2001 review disputes a pervasive-harm interpretation. It reports 145 independent studies and describes 21 dissertation experiments, with 115 studies contributing free-choice measures and 100 contributing task-interest measures. Its inclusion and analytic choices produce different patterns for low-interest tasks and explicit performance contingencies. This is a methodological counterposition to Deci and colleagues, not an independent replication: the reviews draw on overlapping research. Counting them as two separate votes for or against prizes would conceal that disagreement. N1, methods and reward-contingency results

A useful evaluation therefore specifies the activity's initial appeal, what the participant expects, what earns a reward and what happens after it stops. It distinguishes voluntary return from compliance, and reported interest from observed free choice. Neither review establishes how membership-linked points, a particular item or a cosmetic surprise will be understood by current school communities.

2. More activity, better work and unintended messages

Cerasoli, Nicklin and Ford's 2014 synthesis covered 183 independent samples and 212,468 respondents across school, work and physical settings. Intrinsic motivation explained more unique variance in performance quality, while incentives mattered more for quantity. This predictive comparison includes mixed populations and correlational relationships. It does not establish that adding prizes causes better work, and it does not overturn findings about interest after rewards end. A submission count is a different measure from the quality or personal value of the work submitted. S11

Robinson and colleagues provide direct counterevidence to assuming that recognition must improve its target behavior. Their accepted 2019 author paper reports a preregistered symbolic attendance-award experiment in grades 6-12, across 14 districts in one California county: 15,629 students were randomized and 15,329 analyzed. Awards were mailed in January 2016; February attendance was the primary outcome. Prospective awards did not improve average attendance, while retrospective awards increased subsequent absence. The March post-award analysis also found adverse prospective-award patterns, but it was exploratory and must not replace the primary null finding. S12, methods and results

Prior perfect-attendance eligibility and address/household restrictions limit the attendance study's reach. Its intervention was a symbolic certificate, not a chosen physical good. It nevertheless shows why the message carried by an award deserves attention alongside the immediate behavior. It does not estimate the effect of a points catalog or establish that cosmetic variation has the same consequences.

Li, Hew and Du's 2024 synthesis supplies favorable adjacent evidence: a small positive pooled effect on intrinsic motivation, with substantial heterogeneity. The review covers studies published in 2011-2022, including 21 higher-education and 10 K-12 studies; the intrinsic-motivation analysis includes 35 interventions

and 2,500 participants. Measures were mainly self-report, and no included study measured free-choice behavior. Bundled gamification cannot isolate the contribution of redeemable objects. These findings cannot be pooled with attendance, performance or post-reward free choice into a forecast for a store. S13

3. Choice requires more than selectable objects

Patall, Cooper and Robinson's 2008 meta-analysis included 41 studies of choice. Table 4 reports a random-effects intrinsic-motivation estimate of d=0.36, with a 95% confidence interval of 0.27 to 0.46 across 46 samples. Subsequent learning was d=0.10, interval -0.02 to 0.21 across 14 samples; that interval does not establish a learning benefit. The sample counts are not counts of independent studies. Comparison conditions, reward context and sparse or confounded moderator groups matter. P1, Table 4 and discussion

The synthesis was restricted to United States and Canadian samples and excluded samples involving disability or behavior disorders and studies outside North America. Its historical evidence cannot be treated as a representative study of today's adolescents or as proof of universally accessible choice. It supplies no optimal number of catalog families.

A participant may select a color while lacking a comfortable option to decline the surrounding program. That is a different question from choosing between activities or deciding whether to accept a reward. The evidence does not show that cosmetic choice compensates for an unwanted earning condition. Meaningful comparisons include a known-item offer, a non-prize route and an equally usable decline path, rather than a deliberately restrictive control that makes any choice appear favorable.

Preference and comprehension also differ. Someone can understand an offer and not want it, or want an item while misunderstanding what is included. Teach-back can examine the explanation; it cannot demonstrate demand, safe products or successful handover. Small formative samples may reveal serious misunderstandings without proving that all groups are served well.

4. Fairness includes practical opportunity

Blake and colleagues studied food-allocation decisions among 866 actor-peer pairs, ages 4-15, at seven sites. Rejection of receiving less appeared across all studied populations; rejection of receiving more appeared in three. The 2015 paper does not establish nationally representative preferences, and recruitment dates were not established in the retained appraisal. Its allocation task is not a rewards-store or earning-access experiment. P2

Equal item value, equal counting rules and equal practical opportunity are separate issues. This review distinguishes the opportunity to take part and earn, the effort needed to understand an offer, and the ability to obtain an item or correct a mistake. Two people may receive equal-value objects after very different burdens. This is an analytical distinction, not an observed fairness result from a particular program.

Language, sensory access, device availability, household permissions, waiting and adult assistance can affect the route to a reward. Assistance chosen by a participant should be distinguished from a dependency unnecessarily imposed by a service. Evaluating only successful redeemers excludes people who stopped, could not proceed or required repeated help. A usable catalog page does not by itself establish equitable earning or redemption.

5. Understandable expectations and credible alternatives

W3C's supplemental cognitive-accessibility guidance recommends recognizable feedback after an action and programmatically determinable status. It informs a hypothesis about clearer expectations; it is additional to WCAG conformance requirements, not a child-redemption trial or a guarantee of understanding. P3

W3C's explanation of Success Criterion 3.3.4 describes reversal, checking and correction, or review and confirmation for covered consequential submissions. These are alternative safeguards. The guidance does not make noncash points money, settle a store's legal applicability or require a confirmation step for every action. A mistaken selection, changed balance, pending request and confirmed handover need distinct, accurate explanations. P4

Existing school stores are real capability comparators. PBIS Rewards documents staff school/class store workflows with balance review, cart adjustment, confirmation and immediate or later redemption. Its store-hours instructions also document configurable student purchasing through the Student App or Portal. The previously unresolved capability question is therefore narrower than a claim that students cannot purchase. These first-party descriptions do not establish reliable operation at a particular school, procurement suitability, physical delivery or motivation effects. P5; P5b

LiveSchool's inspected direct-student-shopping guide is dated August 28, 2026. It describes viewing points, cart and purchase requirements, while the school takes the order onward. Its setup guide describes inventory and per-store student-shopping configuration; browsing can remain available when shopping is disabled. These are documented capabilities, not observed usability or vendor-managed fulfillment. P6a; P6b

Alternative	Basis for comparison	What remains to examine
A configurable school store	First-party points, catalog and redemption descriptions	Actual permissions, usability, exceptions and downstream handover
A school-managed manual process	A legitimate local comparator, not evaluated here	Whether software is needed at the real volume and complexity
Recognition or meaningful activity without goods	A proposed comparison condition	Voluntary value, pressure and interest after incentives end
A known-item-only offer	A proposed alternative to cosmetic uncertainty	Preference matching, understanding and practical access

Comparison should include training, questions, correction work, obtaining goods and actual handover, not only checkout clicks. A shorter interface can hide work transferred to a teacher or operator. Counting declined and failed attempts alongside completed requests gives a more useful account of the service. No measured comparative advantage or numeric success threshold follows from this review.

6. Relevance to Prizes After Class

Prizes After Class is EAG's planned Runstr rewards store. Public catalog browsing is intended to precede account-required eligible balance and redemption; viewing an item grants no entitlement. Runstr owns identity, point earning and authoritative balances, rather than the store creating a second ledger. A selected family, recorded reservation, pending fulfillment and confirmed handover remain distinct. Their proposed continuity is not evidence of working operations or reduced confusion. A0; A1; A3

The digital concept catalog documents twenty families, thirteen known-item and seven allowing only a disclosed equivalent cosmetic variation, with 37 variants and 238 gallery files. Family, function, inclusions and possible variants are known; only the permitted cosmetic choice may be unknown. There are no rare-value odds or paid retries. A meaningful known-item or applicable nonrandom alternative remains legitimate. These counts establish concept provenance, not stock, product safety, age suitability, supplier readiness or rights for public image reuse. A recovered documented economic target and concept cost model exist, but they are not verified current point prices or all-in delivery costs. No model inputs are offered here as operational terms or a cash-out value. A2; A3

Personal rewards, institutional school/team resources, group Challenge scores and separately funded additional winner bonuses remain distinct. Requested Teacher and Coach catalog sections do not establish personal staff entitlement; eligibility, earning, funding, ownership and applicable approvals remain unresolved. The research above informs questions about wanted rewards, voluntary participation, post-incentive interest, comprehension, access and total labor. It does not establish Prizes demand, safe assortment, approved economics, dependable fulfillment or educational effects. A1; A3

7. Methods, access and edition history

This is a focused narrative review, not a systematic review, meta-analysis or independent product evaluation. EAG publishes it, is developing Prizes After Class and has an interest in that work. The September 19, 2026 edition examined a product-led reward journey. This October 12 edition centers the independent educational topics while retaining unfavorable, null and favorable findings, useful alternatives and material product boundaries.

Original-source inspections recorded on October 11, 2026 underpin this synthesis. Relevant methods, results and limits were inspected in complete research PDFs or version-of-record HTML and official guidance/vendor pages. This edition uses those appraisals without new external retrieval; it does not claim independent appraisal of every primary study inside a synthesis. Source publication, intervention and access dates remain separate.

The accessible PBIS store-hours page supports the student-purchasing correction. A linked PBIS stores-guide PDF yielded only a help-site string in text extraction and was not used for that finding. Cameron's original journal PDF was accessible through behavior.org; a separate PMC attempt returned a browser challenge. These access limits do not justify substituting snippets. The LiveSchool August 28, 2026 page version replaces the date attributed to it in the earlier source record.

A targeted Patall correction/erratum query did not identify a correction. That is not an exhaustive search, and no comprehensive correction/retraction registry review was conducted. The earlier reward-paper appraisal recorded bounded checks; absence of a visible notice is not proof that no correction exists. No current participant, comprehension, pressure, equity or fulfillment study was conducted. Physical samples, suppliers, safety and economic operations were not evaluated. Corrections should identify the source version, affected statement and dependent explanation, rather than silently updating a date.

References

- **S10. Deci, Koestner and Ryan (1999).** Extrinsic rewards and intrinsic motivation. Historical experimental synthesis; abstract, inclusion criteria, reward-contingency results and discussion inspected October 11, 2026.
- **N1. Cameron, Banko and Pierce (2001).** Pervasive Negative Effects of Rewards on Intrinsic Motivation: The Myth Continues. Original journal PDF methods pp.10-12 and reward-contingency results pp.20-23 inspected October 11, 2026; overlapping literature, not an independent replication. Exact search cutoff was not established.
- **S11. Cerasoli, Nicklin and Ford (2014).** Intrinsic motivation and extrinsic incentives jointly predict performance. Original PDF method/results, Table 4 and limitations inspected October 11, 2026. Predictive synthesis across school, work and physical settings, not a causal store estimate.
- **S12. Robinson, Gallus, Lee and Rogers (2019 accepted author copy).** The Demotivating Effect (and Unintended Message) of Awards. Accepted March 18, 2019; January-February 2016 field intervention, March exploratory follow-up. Methods/results and post-award analysis inspected October 11, 2026.
- **S13. Li, Hew and Du (2024).** Gamification and intrinsic motivation. Version-of-record HTML characteristics, RQ1-RQ2 and limitations inspected October 11, 2026; studies published 2011-2022, not current product data.
- **P1. Patall, Cooper and Robinson (2008).** The Effects of Choice on Intrinsic Motivation and Related Outcomes. Methods pp.276-277, Tables 3-4 p.287 and discussion pp.292-296 inspected October 11, 2026. Sample exclusions and outcome differences limit transfer.
- **P2. Blake and colleagues (2015).** The ontogeny of fairness in seven societies. Published online November 18, 2015. Results, Table 1, Figures 2-3 and Methods inspected October 11, 2026; recruitment dates not established.

- **P3. W3C WAI.** Provide Feedback. Supplemental cognitive-accessibility guidance, What to Do, How it Helps and More Details inspected October 11, 2026; not a trial or conformance finding.
- **P4. W3C WAI.** Understanding SC 3.3.4: Error Prevention. Criterion and Intent inspected October 11, 2026; applicability to noncash points is not established here.
- **P5. PBIS Rewards.** Store. Staff/web balance, cart, confirmation and redemption workflows inspected October 11, 2026; first-party capability, not independent operation or effect evidence.
- **P5b. PBIS Rewards.** Store hours and student purchasing. Opening instructions and teacher-store settings inspected October 11, 2026; configurable Student App/Portal purchasing.
- **P6a. LiveSchool.** How to Shop in LiveSchool, Direct Student Login. Displayed guide version August 28, 2026; steps 2-4 inspected October 11, 2026. The school takes the order onward.
- **P6b. LiveSchool.** Setting Up Your School Store. Reward, inventory and student-shopping settings inspected October 11, 2026; no procurement or fulfillment audit.
- **A0. Education Angel Group.** Prizes After Class public context. EAG's intended Runstr-linked ownership and rewards-store boundaries are product authority, not empirical evidence. The linked entity page provides public context, not the underlying product record.
- **A1. Education Angel Group.** Prizes After Class public context. EAG's approved product wording and research direction, October 12, 2026, concern intended scope, not observed availability or outcomes. The linked entity page provides public context, not the underlying master record.
- **A2. Education Angel Group.** Prizes After Class public context. EAG's September 12, 2026 twenty-family concept record concerns concepts and modeled costs, not operational offers or public image rights. The linked page provides public Prizes context, not access to that catalog record.
- **A3. Education Angel Group.** Runstr public context. EAG's September 23 consolidated direction separates personal, institutional and Challenge benefits and records a recovered economic target, not a verified live price or staff entitlement. The linked page provides Runstr public context, not the underlying reward-authority record.