Learning from fictional decisions: trade-offs, reflection and transfer

A review of fictional decision practice, trade-offs, guidance and reflection. The evidence distinguishes knowledge, confidence, retention and transfer, without establishing real-life readiness or the effectiveness of Sim After Class.

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

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Earlier editions

- Sim After Class: practicing everyday tradeoffs without predicting a life

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Prepared by Education Angel Group (EAG). Research synthesis date: October 12, 2026. EAG is developing Sim After Class and has an interest in its success. This review examines educational evidence relevant to fictional decision practice, not an independent evaluation of an EAG product.

1. A fictional comparison is not a prediction

Everyday decisions can connect money, time, work and available options. A lower-cost choice can take longer; a change in commitments can make an earlier plan impractical. These are examples of relationships a learning activity might explore, not claims about how often particular students encounter them. A fictional situation can make a relationship easier to inspect without asking a learner to risk real money or disclose private household circumstances.

The educational question is what the learner understands through that comparison. Selecting an option, seeing a consequence and trying again can make a model's rules visible. It can also teach someone how to succeed in that one model without understanding why the result occurred. A favorable fictional outcome does not establish good judgment outside the scenario. Nor does a realistic setting make an authored number, event or probability a reliable forecast.

There is a useful distinction between changing an action and changing a premise. Trying another option with the same circumstances compares actions. Introducing a new time constraint asks whether earlier reasoning still applies. A result may change because the option changed, the circumstances changed or the model's rule changed. Keeping those possibilities intelligible is an analytical requirement for comparing cases, not a measured learning effect of a particular interface.

The evidence reviewed is unevenly distributed. There is school-age evidence about game-based financial learning, broader financial-education research and adjacent higher-education simulation research. None supplies one estimate for learning about work, housing, scheduling and all other life decisions. These settings and outcomes must remain distinct. The appropriate conclusion concerns opportunities and limits of practice, not universal life readiness or a claim that a simulation is necessary whenever a decision is complicated.

2. What school-age digital evidence actually measures

Cannistra and colleagues studied an online Financial Escape Room in Belgium, Estonia, Italy and Slovakia. The analyzed sample comprised 2,220 students aged 11-17 in a school-randomized experiment. They reported improved short post-test financial-literacy scores. The four-item measure included three knowledge questions and a card-handling response, not observed household spending. Only 62.77% of pretested students completed posttesting; non-native language and lower achievement were associated with noncompletion. Sections 4.1 and 4.5 give different field windows and timing descriptions. These findings support a bounded short-test result, not established delayed retention or transfer to a connected life simulation. Cannistra et al., N1

The distinction between a test response and behavior matters. A response about how to handle a card can concern knowledge of an expected practice, while spending or borrowing requires observation in a different setting. Even a valid short knowledge gain does not answer whether someone can explain an unfamiliar trade-off months later. The result should not be weakened into a general claim that nothing was learned, but it also should not be extended beyond the outcome and follow-up actually measured.

Missing follow-up changes whose learning is visible. Students who disappear from observation are not automatically unchanged, unsuccessful or uninterested. When missingness is associated with language or achievement, the completed-test sample cannot simply stand for everyone offered the activity. That is especially important when considering access and inclusion. A learning result among respondents and a claim about suitability for a broad student population require different evidence.

Contrary media findings also deserve attention. Angel's Austrian adolescent randomized comparison, available here through its institutional abstract, reports no significant basic-knowledge or interest improvement from an internet exercise. Budgeting-app users reported checking balances more often. The exact sample and measurement period are not established by the accessible abstract, and balance checking is not itself evidence of better decisions. This is a limited finding about particular media treatments, not a universal conclusion that digital learning fails. Angel, N3

Taken together, these sources make the task and comparison more important than the medium label. A game, exercise or app can involve different information, guidance and demands. Calling an experience interactive cannot identify which of those elements helped. A new activity needs its own account of what learners are asked to understand and what would count as a useful result, rather than borrowing a favorable finding from a different digital treatment.

3. Guidance and reflection are not a universal recipe

Simulation can simplify practice and make consequences available for inspection. It does not follow that exposure alone is enough, or that every learner benefits from the same amount of explanation. Someone unfamiliar with a concept may need an example before comparing alternatives. Someone with relevant understanding may benefit from considering why a choice worked. Asking both to complete the same reflection after every action can impose effort without answering either need.

Chernikova and colleagues' 2020 meta-analysis included 145 studies in higher-education and professional contexts, searched through April 2018. It used objective outcomes and excluded studies relying only on self-rated competence. Designs included experimental, quasi-experimental and within-person baseline comparisons. Findings were broadly positive, but guidance results varied: prompts-only and prompts-plus-reflection subsets were nonsignificant, and reflection did not have one overall added-value pattern. Sparse descriptions, combined supports, indirect prior-knowledge measures and substantial unexplained heterogeneity limit conclusions about particular scaffolds. These results do not provide a school-age recipe or a pooled effect for everyday-life games. Chernikova et al., N2

A useful interpretation is to examine what help enables a learner to do. An example may clarify the difference between a cost and a duration. A brief explanation may reveal which condition produced an outcome. A question may expose an omitted consideration. These are possible educational functions, not evidence that a specific prompt has achieved them. The right amount and timing of support remain questions for the actual task and participants.

Reflection should also be separated from extra text. Asking someone to repeat a displayed conclusion is different from asking what would change if a premise were different. A lengthy written response can introduce reading and writing demands unrelated to the intended comparison. Help can be useful while changing the meaning of unaided performance. The comparison should acknowledge whether a learner used an example, consulted information or received an adult's explanation.

Visual realism is similarly separate from the relevance of the model. A detailed room can provide context, but the source research does not establish that photorealistic or elaborate presentation is necessary for learning. A simple table or role-play can make an important relation inspectable. Conversely, simplicity does not guarantee that the learner understands the rule. The educational purpose should determine which details are needed, rather than treating realism or minimalism as evidence of effectiveness.

4. Knowledge, confidence and real behavior can diverge

Financial education offers a concrete example of why several outcomes should not be treated as one. The final institutional abstract of Kaiser, Lusardi, Menkhoff and Urban's synthesis reports positive average knowledge and behavioral findings across 76 randomized experiments involving over 160,000 people. That is broad background, not an estimate for a particular game. The abstract does not permit a fresh verification of the earlier working paper's inclusion cutoff or long-run tables. Kaiser et al., S1

Kaiser and Menkhoff's Uganda experiment compared two-hour facilitated active learning, lectures and a control among adult retailers in 83 rural markets. Baseline was in November/December 2015, midline in 2016 and endline in September 2019. Aggregate literacy effects were not significant although confidence rose. Selected savings/investment benefits coexisted with adverse late-payment findings, long-term attrition and uncertainty. The introduction's 1,291 analyzed retailers and baseline passage's 1,292 surveyed are distinct descriptions, not a reconciled denominator. This adult bundled intervention does not isolate software or a school-age revision mechanism. Kaiser and Menkhoff, S2

The confidence-literacy divergence is important without becoming a claim that confidence is always harmful. Someone can feel more capable while remaining unable to explain a premise. Increased certainty and improved understanding are separate possible outcomes. A learner who recognizes uncertainty may also express less confidence while giving a better account of a model's limits. Appropriate assessment concerns the relation between certainty and demonstrated understanding, not confidence alone.

The final Brazil article abstract reports financial proficiency, saving and budgeting improvements alongside increased expensive consumer credit in approximately 25,000 students across 892 schools in six states. Its earlier World Bank version describes 868 schools, about 20,000 students, three semesters over 17 months and 2010-2011 surveys. Teacher training, lessons, home exercises and web tools were bundled. The versions cannot supply one combined sample or effect table, and neither isolates a brief digital activity.
Bruhn et al., final S3, earlier S3a

A provisional Fernandes, Lynch and Kim manuscript also contests publication-selection assumptions used in broader financial-education estimates. Its title page is dated November 8, 2025, while the author upload is January 19, 2026; the listing title differs from the manuscript title. The appraised argument distinguishes symmetric from direction-sensitive selection. It is methodological counterevidence, not a retraction, a replicated numerical conclusion or proof that education has no benefit. Fernandes et al., S8

These findings argue against importing a headline average into a new setting. They also argue against using a single unfavorable result to dismiss all instruction. Populations, time, content and support arrangements differ. Sustained curricula, facilitated adult workshops and short games answer different questions. Real behavior can be affected by circumstances absent from a simplified scenario, so learning within it should not be presented as an outcome already achieved outside it.

5. Connected choices, model limits and structural constraints

A trade-off can be understandable without having one objectively best option. Two alternatives may differ in cost and time while leaving an important constraint unspecified. A learner can explain what additional information would matter instead of guessing the author's preferred answer. That is a possible reasoning task, not a claim that every decision is subjective or that factual correctness is unimportant.

Units and periods make the comparison intelligible. A monthly cost and minutes per trip concern different dimensions; combining them requires additional premises. Without a trip frequency, monthly travel time cannot be calculated. Without an appropriate conversion, time cannot be given a monetary value. An instructional example should not conceal those missing premises behind a total or a success label. This is mathematical and model-transparency reasoning, not financial advice or a new empirical finding.

Models also choose what is available. A fictional housing option can leave out actual eligibility, disability access, location or availability. A schedule can omit caregiving or an unexpected change. Those are examples of possible omissions, not measured circumstances of the participants in the reviewed studies. If a model makes every obstacle solvable through the right individual choice, it can conceal the importance of constrained options. A result inside that model is not a moral assessment of someone facing different circumstances.

The educational aim can include recognizing an omission rather than optimizing an outcome. A useful explanation might identify which constraint changes the comparison, which assumption still holds and where the situation stops resembling reality. This keeps room for uncertainty and different priorities. No source reviewed establishes a universal measure of connected reasoning or shows that one fictional budget prepares a student for adult life.

Private fiction can serve these comparisons without personal financial disclosure. A learner need not provide household income, debt or housing insecurity to examine a modeled relationship. Any later research involving personal data would need its own appropriate authorization and protections. A practice activity is not a household assessment, a readiness record or a basis for high-stakes decisions about a student.

6. Alternatives, transfer and useful evidence

Existing learning resources make it possible to investigate whether a new format adds value. The CFPB's four-page fictional transport-cost worksheet includes three vehicle options, simple-interest calculation and reflection. It addresses one component rather than every everyday decision, and its instructional amounts are not current prices or real-loan advice. Official FDIC descriptions identify youth curricula, caregiver materials and Reality Fairs; direct teaching-page access was restricted in the prior appraisal. The game landing was available but no session was played. These records establish provision, not comparative effectiveness, burden or accessibility. CFPB, S4, FDIC S5, S6, S7

A worksheet, supported discussion or role-play can also connect successive cases. Interaction is not the only way to ask what changed or why an earlier answer no longer fits. Fair comparisons should make the intended reasoning, information and support as comparable as possible. Otherwise a better explanation, a more skilled facilitator or more time can be mistaken for a medium effect.

Question	Relevant evidence	What cannot establish it alone
Was the model applied correctly?	The stated rule, units and consequence agree	An attractive outcome screen
Was the relationship understood?	The learner identifies a constraint, explains its consequence and recognizes a relevant omission	A correct option selected once
Was understanding retained?	An appropriate delayed assessment with missing responses accounted for	An immediate post-test
Did reasoning transfer?	A changed fictional case that requires applying the relevant idea rather than recalling an answer	Repeating the original scenario
Was confidence calibrated?	Certainty considered alongside demonstrated understanding and acknowledged limits	Self-reported confidence or enjoyment

These distinctions are an analytical synthesis, not a validated rubric. An immediate new case can concern transfer without showing retention; a delayed repeat can concern memory without demonstrating transfer. Real behavior requires a separate, context-sensitive study. Completion, enjoyment and voluntary return concern the experience, not automatic financial capability.

The effort involved belongs in the comparison. Reading, adult explanation, navigation and recovering from confusion can matter even when an activity is completed. A supported discussion that produces adequate understanding with less effort can be a sufficient response. If an interactive format helps only in one narrow task, the learning claim should stay narrow. Neither longer use nor wider content coverage proves a greater benefit.

The defensible direction is to investigate understandable comparisons, useful support and recognition of limits. Research can inform the design of practice without validating a whole fictional life model. The possibility of no added advantage, uneven participation or confidence without understanding must remain visible beside favorable short-test results.

7. Relevance to Sim After Class

Sim After Class is planned as a character-led living space with two or three distinct fictional decision activities. A player deliberately enters an activity, considers a modeled consequence, revises or leaves, and returns to the room. Budgeting, scheduling and changed plans are candidates; their exact rules require owner

approval. Equivalent accessible controls and normal website navigation remain part of the selected definition.
EAG product direction, A0

The research is relevant to whether a learner can explain a trade-off, distinguish a changed action from a changed premise and recognize an omitted constraint. It does not establish that room navigation, character selection or a connected fictional setting improves learning. Comparisons with adequate discussion, worksheets or existing instruction remain substantive alternatives.

No real household data is required. Progress is not a readiness record, financial or legal advice, a moral score or a Runstr reward balance. Availability and save behavior must follow the actual build. The source evidence supplies neither a current operating demonstration nor an effect of Sim's proposed combination; useful fiction must remain distinguishable from predictions about the player's life.

8. Methods and limits

This is a focused source-led synthesis, not a systematic review, meta-analysis or original student study. It reuses the attributed October 11 source appraisals and October 12 institutional-abstract check. This revision freshly downloaded Cannistra and colleagues' original article and inspected its design, measurements, attrition and results. Chernikova and colleagues' original HTML methods, Table 1, guidance discussion and limitations were reopened. The final Kaiser and colleagues institutional abstract was also reopened; renewed original working-paper access was unavailable.

The Uganda, earlier Brazil and CFPB full-source findings retain their earlier attributed appraisals. The final Brazil record and Angel study remain abstract-limited, not newly verified full text. Renewed Uganda retrieval returned a challenge page, not a PDF; renewed Angel retrieval did not provide usable article text. Angel's journal name was corrected against the official author CV, without expanding study-access claims. Restricted FDIC descriptions and the unplayed game landing remain provision evidence. Fernandes and colleagues' provisional manuscript retains the earlier title-page and introductory appraisal; its analysis was not reproduced.

These access distinctions limit which details can be asserted. Historical working-paper access does not refresh a final article's tables. Article publication, field periods, upload dates and review dates are different. Cannistra's inconsistent timing descriptions and selective posttesting remain unresolved. No comprehensive correction or retraction clearance, statistical replication, current-price analysis, local access inventory or direct Sim trial is claimed.

The reviewed evidence does not demonstrate delayed transfer, calibrated confidence or real financial benefit for Sim. Higher-education/professional simulation findings are adjacent, not school-age life-skills estimates. Conclusions remain open to simpler adequate instruction and to a narrower claim than the product's full ambition.

References

Reference	Version and locator
A0	Education Angel Group, Sim After Class product direction, reviewed October 12, 2026. Defines intended scope and boundaries, not measured efficacy.
N1	Cannistra et al., *The impact of an online game-based financial education course: Multi-country experimental evidence*, Journal of Comparative Economics 52 (2024), 825-847. Sections 4.1-4.5, Tables 2-5 and Appendix D. Original article.
N2	Chernikova et al., *Simulation-Based Learning in Higher Education: A Meta-Analysis*, Review of Educational Research 90(4) (2020), 499-541. Eligibility/search, Table 1, guidance/knowledge comparisons and limitations. Original article.
N3	Angel, *Smart tools?*, Journal of Behavioral and Experimental Economics 74 (2018), 104-111. Institutional abstract; exact sample and measurement period unverified. Study record, author-institute publication record.
S1	Kaiser, Lusardi, Menkhoff and Urban, *Financial Education Affects Financial Knowledge and Downstream Behaviors*, 2022 institutional abstract. Earlier April 2020 working paper unavailable in this revision. Final record.
S2	Kaiser and Menkhoff, *Active Learning Improves Financial Education: Experimental Evidence from Uganda*, CESifo 9661, March 22, 2022. Earlier full appraisal of sections 2-5, Table 3, response-rate passage and Appendix A1. Original manuscript.
S3	Bruhn et al., *The Impact of High School Financial Education: Evidence from a Large-Scale Evaluation in Brazil*, AEJ Applied Economics (2016), final abstract. Final record.
S3a	Bruhn et al., World Bank WPS 6723, December 2013, earlier full version. Abstract, intervention/design and response-rate passages. Working paper.
S4	CFPB, *Deciding which car and car loan you can afford*, Summer 2022 worksheet, pages 1-4. Resource.

Reference	Version and locator
S5	FDIC, *Teach Money Smart* and Reality Fair provision descriptions, prior restricted/indexed access. Teaching, Reality Fairs.
S6	FDIC, *Money Smart for Young People*, prior indexed grade-specific/caregiver descriptions; direct access restricted. Youth resources.
S7	FDIC, *How Money Smart Are You?*, prior landing access; activity unplayed. Game landing.
S8	Fernandes, Lynch and Kim, *Publication Bias in Research on the Effects of Financial Education on Financial Behavior*, November 8, 2025 manuscript, uploaded January 19, 2026. Earlier title/abstract/introduction appraisal; listing uses *Correcting the Record on Financial Education*. Author-uploaded manuscript.