

# Business Model Canvas – EdGame v2.0

**Snapshot of the company at full operational scale (Year 5)** EdGame is an EdTech platform that replaces traditional assessment and homework with immersive, game-based learning environments focused on **Math and Science**. We capture behavioral data that traditional assessments miss — how students think, collaborate, and behave under pressure — providing educators a complete picture of student capabilities.

**Core insight:** Traditional assessments capture only correctness. EdGame captures why students get answers wrong — guessing patterns, frustration points, and which concepts need reteaching. This is the insight that Classcraft's June 2024 shutdown left a massive gap for.

**Strategic approach:** Beachhead → Expand → Dominate. Start narrow (Math + Science, GCC + US Charter schools), prove value, then expand.

## 1. Customer Segments (Phased)

### Phase 1 Beachhead (Year 1–2): GCC Private/International + US Charter Schools

Segment	Description	Target
GCC Private Schools (primary)	International and private K-12 schools in UAE, KSA, Qatar with innovation budgets and English-medium instruction	50 school pilots → 20 paid by Year 1 end
US Charter/Progressive Schools	Innovation-oriented charter schools and progressive private schools seeking differentiation	30 school pilots → 15 paid by Year 1 end
Individual Math/Science Teachers	Teachers who pay for classroom tools; discovered through PLG and word-of-mouth	5,000 free → 500 paid by Year 1 end

### Phase 2 Expansion (Year 2–3)

Segment	Description	Target
US/UK Public Schools	Larger deals, longer sales cycles; requires efficacy data from Phase 1	200 schools by Year 3
Parents (B2C upsell)	Premium behavioral insights for parents of students already using EdGame at school	3,000 paid by Year 3
After-School Programs	STEM enrichment, tutoring centers, coding academies	150 programs by Year 3

### Phase 3 Scale (Year 3–5)

Segment	Description	Target
Districts	US, UK, GCC district-level deals with cross-school benchmarking	50 districts by Year 5

<b>OEM/API Partners</b>	LMS vendors embedding EdGame's analytics engine	3-5 partners by Year 5
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**Why GCC First:** Saudi Arabia's Vision 2030 is driving massive EdTech investment. Private schools in UAE/KSA have discretionary budgets, English-medium instruction, fast procurement cycles (weeks, not months), and hunger for innovation. Our team (based at KAUST) has natural access to this market.

**Why Math + Science Only:** Prodigy proved that focusing on a single subject (math) can reach 1 in 4 American children. These subjects gamify naturally (virtual labs, physics simulations, math challenges) and have the clearest measurable outcomes. Own "behavioral analytics for math and science" before expanding.

## 2. Value Propositions (Sharpened for Math/Science)

For	Value
<b>Math/Science Teachers</b>	"See why students get answers wrong — not just that they did. EdGame reveals guessing patterns, frustration points, and which concepts need reteaching. Assign a 15-minute game instead of a worksheet; get 10x the insight."
<b>Students</b>	"Math and science homework that feels like a game. Solve real problems in virtual labs and challenge arenas. Your strategy matters more than memorization."
<b>School Administrators</b>	"School-wide learning analytics that go beyond test scores. Identify students with STEM potential for competitions, spot at-risk learners early, and benchmark across classrooms with behavioral data no other tool provides."
<b>Parents (Phase 2+)</b>	"See how your child handles frustration, collaborates with peers, and engages with math and science — insights you'd never get from a report card."

## 3. Channels (Phased)

### Phase 1 Channels (Low-cost, high-signal)

Channel	Role	Cost
<b>Founder-led school visits (GCC)</b>	Direct relationship building with principals and curriculum heads. In-person demos at 2-3 target schools per week	Travel + time only
<b>Free teacher signup (PLG)</b>	Freemium web app → 1 free game environment with basic analytics → paid upgrade	CAC < \$15/teacher (organic + content)
<b>GESS Dubai + BETT</b>	Live demos at GCC and UK education conferences	~\$30K/year
<b>Teacher communities</b>	Math teacher associations, science teacher groups, Reddit r/teachers, Twitter/X EdTech community	~\$10K/year content
<b>Google Classroom integration</b>	Appear in Google Classroom app marketplace; frictionless assignment flow	Engineering time only

## Phase 2 Channels (Scaled)

Channel	Role	Cost
Clever partnership	Replicate Prodigy's strategy — Clever reached 8,300 districts for Prodigy in one year	Revenue share
School direct sales (3-4 AEs)	Outbound to US/UK curriculum directors with Phase 1 efficacy data	\$420K/year
Parent community marketing	School newsletter partnerships, parenting blogs	\$100K/year
Student viral loop	Multiplayer games (Phase 2+) create organic spread between schools	Near-zero marginal cost

## 4. Customer Relationships

Relationship Type	Description
Self-serve (individual teachers)	Sign up, select math or science, choose a game environment, assign to students — all in under 5 minutes. In-app tutorials and AI-powered customization.
School onboarding	Each school gets founder-led onboarding in Phase 1, transitioning to Implementation Managers in Phase 2. 12-week pilot with assigned school implementation lead.
Analytics-driven retention	Teacher dashboard shows "top 3 insights" per student weekly. Behavioral data becomes essential for intervention planning.
Community & competitions	School-vs-school STEM challenges using EdGame environments. Creates engagement beyond individual classrooms.

## 5. Revenue Streams (Realistic)

### Year 1 Revenue Model

Stream	Pricing	Year 1 Target
Individual Teacher (Basic)	Free (1 environment, basic analytics, 30 students)	5,000 free users (lead gen)
Individual Teacher (Pro)	\$12/month (\$120/year) — 5 environments, full analytics, 100 students	500 paid × \$120 = \$60K
School Pilot	\$0 for 12-week pilot (skin in the game: school assigns implementation lead)	80 pilots (conversion target: 40%)
School License (Standard)	\$6/student/year — all teachers get Pro, admin dashboard	35 schools × 500 students × \$6 = \$105K

<b>School License (Premium)</b>	\$10/student/year — adds talent ID, custom reports, dedicated CSM	15 schools × 600 students × \$10 = \$90K
<b>Year 1 Total</b>		<b>~\$255K</b>

**Why lower pricing than original:** At launch with zero efficacy data and limited content, penetration pricing wins. IXL charges \$12-20/student. EdGame at \$6 undercuts while building switching costs through behavioral data accumulation. Prices increase 20-30% annually as value is proven.

### Year 3 Revenue Model

Stream	Calculation	Subtotal
Individual Teacher Pro	4,000 teachers × \$150 avg	\$600K
School Standard	150 schools × 500 students × \$7	\$525K
School Premium	80 schools × 600 students × \$12	\$576K
District packages	15 districts × 3,000 students × \$5.50	\$247K
Parent premium	3,000 parents × \$72/year	\$216K
After-school programs	150 programs × \$300 × 12	\$540K
<b>Year 3 Total</b>		<b>~\$2.7M</b>

### Year 5 Revenue Model

Stream	Calculation	Subtotal
Individual Teacher Pro	12,000 teachers × \$180 avg	\$2.16M
School Standard	350 schools × 550 students × \$8	\$1.54M
School Premium	200 schools × 650 students × \$14	\$1.82M
District packages	50 districts × 4,000 students × \$6	\$1.20M
Parent premium	8,000 parents × \$80/year	\$0.64M
After-school programs	400 programs × \$400 × 12	\$1.92M
OEM API	4 partners × \$120K avg	\$0.48M
Custom + data licensing		\$0.50M
<b>Year 5 Total</b>		<b>~\$10.3M</b>

This is 58% lower than the original \$24.8M but far more defensible. At \$10.3M ARR with strong unit economics, EdGame is an attractive Series B candidate.

## 6. Key Resources (Phased)

### Phase 1 (Year 1)

- **3 polished game environments:** Virtual Chemistry Lab, Math Challenge Arena, Physics Simulation
- **Behavioral analytics engine:** 15-20 core metrics (not 40+ — start focused)
- **Teacher dashboard:** Actionable "top 3 insights" per student
- **Web-first platform:** React + Phaser, mobile-responsive
- **2-3 person founding team** augmented by AI coding tools

## Phase 2 (Year 2)

- 12 game environments (expand within math + science, add 2 language arts)
- Full behavioral analytics (30+ metrics)
- Multiplayer modes (cooperative + competitive)
- Basic parent portal
- Mobile apps (iOS + Android)

## Phase 3 (Year 3-5)

- 25+ environments across 5+ subjects
- Admin/district analytics platform
- ML-powered predictions (at-risk students, talent ID)
- Game development SDK for faster environment creation

## 7. Key Activities

Activity	Description
<b>Game environment development</b>	Building 3 polished Math/Science environments in Phase 1; expanding to 12 in Phase 2. Co-designed with pilot teachers for curriculum alignment.
<b>Behavioral analytics R&amp;D</b>	Shipping 15 core metrics that answer "What do I do Monday morning?" — not a wall of data. Expanding to 30+ in Phase 2.
<b>Platform engineering</b>	Web-first with Supabase + Vercel + Phaser. Adding mobile and multiplayer infrastructure in Phase 2.
<b>Founder-led sales (Phase 1)</b>	In-person demos at GCC schools, conference presence at GEES/BETT. Transitioning to AE team in Phase 2.
<b>Efficacy research</b>	IRB-approved study with 1 university partner by Month 12. Essential for US school sales.

## 8. Key Partnerships (Prioritized)

Priority	Partner	Value
<b>P0 (Immediate)</b>	Google Classroom, Clever	Distribution — appear where teachers already assign work
<b>P0 (Immediate)</b>	KAUST / GCC Education Networks	Credibility and access to pilot schools in Saudi Arabia
<b>P1 (Year 1)</b>	2-3 GCC school groups (GEMS, Taaleem, SABIS)	Pilot deployments, case studies, reference customers

<b>P1 (Year 1)</b>	1 university research partner	IRB-approved efficacy study for credibility
<b>P2 (Year 2)</b>	Canvas/Schoology (LTI integration)	US school distribution
<b>P2 (Year 2)</b>	Phaser/game engine community	Developer ecosystem
<b>P3 (Year 3+)</b>	Curriculum publishers (Pearson, McGraw-Hill)	Co-developed content, credibility

## 9. Cost Structure (Year 5)

Category	Year 5 Cost	% of Revenue
<b>Engineering &amp; R&amp;D</b> (12 engineers)	\$2.1M	20%
<b>Game Design &amp; Content</b> (5 designers, 2 artists, 2 curriculum)	\$1.1M	11%
<b>Cloud Infrastructure</b>	\$1.0M	10%
<b>Sales &amp; Marketing</b>	\$2.2M	21%
<b>Customer Success</b>	\$0.8M	8%
<b>Research &amp; Curriculum</b>	\$0.3M	3%
<b>General &amp; Administrative</b>	\$0.9M	9%
<b>Total Costs</b>	<b>\$8.4M</b>	<b>82%</b>
<b>Operating Margin</b>	<b>\$1.9M</b>	<b>18%</b>

**Note on margin:** 18% operating margin at Year 5 is realistic and healthy for a growth-stage EdTech. The original claimed 36% which was overly optimistic. Margins expand to 25-30% by Year 7 as game library amortizes and viral growth compounds.

At Year 5, EdGame operates as a ~\$10.3M ARR platform with ~12,000 individual teacher subscribers, ~550 school licenses, ~50 district deployments, ~8,000 parent premium subscribers, and partnerships with 4 major EdTech platforms. Students engage with 25+ game environments focused on Math, Science, and expanding subjects. Teachers, parents, and administrators access behavioral analytics that reveal how students think and learn — going far beyond traditional assessment. The platform has established itself as the leader in behavioral learning analytics for STEM education.