## CodeFly - The Complete Gamified Al-Powered Coding Education Platform

## **Transform Your School Into a Coding Powerhouse**

**CodeFly** isn't just another coding curriculum—it's a complete educational ecosystem that turns learning to code into an epic adventure. Built by DropFly AI, CodeFly combines cutting-edge gamification, AI tutoring, and comprehensive teacher support to deliver Florida CPALMS-aligned computer science education that students actually love.

#### The CodeFly Difference

- Full Gamification System XP, badges, leaderboards, and team competitions
- Coach Nova Al Tutor Intelligent, controlled, and teacher-supervised assistance
- Complete Teacher Console Everything needed to run class from Day 1
- Standards-Aligned Full CPALMS coverage with automatic evidence tracking
- Enterprise Security FERPA-compliant with complete audit trails
- 6 Fully Accessible WCAG 2.2 AA compliant with IEP/504 accommodations

## The Student Experience: CodeQuest Adventure

## **Every Class is an Epic Quest**

Students embark on **CodeQuest**, a semester-long journey where they:

- Earn XP for every achievement (50 XP for projects, 20 XP for quizzes)
- Unlock Badges from First Builder to Final Boss
- Compete on Leaderboards (Top 5 only no one sees last place)
- Join Teams through exciting Draft Day events
- Build Real Projects that showcase their skills

#### **Intelligent AI Support with Coach Nova**

#### Your personal AI coding mentor that:

- Provides hints without giving away answers
- 9 Offers instant feedback on code
- Available 24/7 for homework help

#### The 18-Week Journey (Semester 1)

#### Foundation Phase (Weeks 1-6): Python Mastery

- Week 1: Welcome to CodeQuest First interactive program
- Week 2: Loops & Events Build a clicker game
- Week 3: Python Basics Number guessing game
- Week 4: Magic 8-Ball Conditionals and logic
- Week 5: Rock-Paper-Scissors Advanced loops
- Week 6: Mini-Test & Project Prove your Python skills

#### Innovation Phase (Weeks 7-9): Al Integration

- Week 7: Draft Day #1 Form your dream team
- Week 8: Al Basics with Teachable Machine
- Week 9: Team Al Mini-Project

#### **Web Development Phase (Weeks 10-13)**

- Week 10: HTML Foundations
- Week 11: CSS Styling & Design
- Week 12: Al-Powered Meme Page
- Week 13: Web Development Mini-Test

#### **Capstone Phase (Weeks 14-18)**

- Week 14: Draft Day #2 Final team selection
- Weeks 15-17: Sprint, Build, Polish
- Week 18: Final Showcase & Celebration

# The Teacher Experience: Complete Control & Support

#### **One-Click Lesson Deployment**

#### Every lesson includes:

- See Complete lesson plans with minute-by-minute run-of-show
- Or Pre-configured Al tutor settings for appropriate assistance
- II Auto-grading rubrics aligned to standards
- M XP and badge configurations ready to go
- Assessment materials with answer keys

#### **Powerful Teacher Console**

#### **Real-Time Class Management**

- · Live student progress tracking
- · Al tutor conversation monitoring
- · One-click policy adjustments
- Instant XP bonuses for creativity

#### Al Tutor Control Panel

- Three Modes: OFF / LEARN / ASSESS
- Scope Control: TIGHT (this week only) / NORMAL (semester) / OPEN
- Content Filtering: Allowlist topics, blocklist patterns
- Output Limits: Control snippet length, prevent full solutions
- Moderation Queue: Review and approve edge cases

#### **Automated Grading & Evidence**

- Rubric-based scoring (40% Functionality, 25% Code Quality, 15% Documentation, 20% Creativity)
- Automatic CPALMS evidence collection
- One-click standards reports for administration
- Exportable portfolios for student records

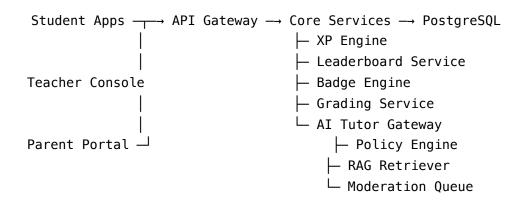
#### **Draft Day Team Builder**

Create balanced teams with our intelligent Draft Day system:

- Snake draft with automatic balancing
- XP-based tier shuffling for fairness
- \ Constraint support (avoid conflicts, ensure diversity)
- Tramatic reveal options (spin wheel, envelope picks)
- D Full rollback capability if needed

## **Complete Technical Infrastructure**

#### Secure & Scalable Architecture



## **Data-Driven Insights**

#### **Student Analytics**

- Individual progress tracking
- Skill mastery indicators
- Engagement metrics
- Portfolio generation

#### Class Analytics

- XP distribution analysis
- Badge unlock rates
- Tutor usage patterns
- Standards coverage gaps

#### **Program Analytics**

- Cohort comparisons
- Year-over-year improvements
- · Success predictor models
- Intervention alerts

## **Comprehensive Safety & Compliance**

#### **Privacy & Security**

- FERPA-compliant data handling
- Encrypted PII at rest
- Automatic data purging after 12 months

#### **Academic Integrity**

- Plagiarism detection on all submissions
- · Al abuse prevention and monitoring
- XP anomaly detection
- · Teacher override capabilities

## Accessibility & Inclusion

- WCAG 2.2 AA compliance
- IEP/504 accommodation support
- ELL language assistance
- Differentiated learning paths

## Implementation Package

#### What You Get

#### Complete Curriculum (18 Weeks × 2 Semesters)

- 36 fully-scripted lessons with materials
- 200+ coding exercises and projects
- · Automated assessments and rubrics

Standards alignment documentation

#### **Technology Platform**

- Cloud-based coding environment (no installation)
- Al tutor with teacher controls
- Complete gamification system
- · Parent portal access

#### **Professional Development**

- 3 comprehensive training sessions
- Weekly office hours (first month)
- 24/7 support documentation
- Community of practice access

#### **Ongoing Support**

- Technical support SLA
- Curriculum updates and improvements
- · Quarterly success reviews
- · Summer refresh training

### **Investment Structure**

#### **School-Wide License (120 Students)**

#### Per Semester Package

Student Licenses: \$24,000 (\$200 × 120 students)

• Platform & Infrastructure: Included

• Al Tutor Access: Included

All Curriculum Materials: Included

#### **Year 1 Investment**

• Fall Semester: \$24,000

• Spring Semester: \$24,000

• Subtotal: \$48,000

#### One-Time Setup & Training

• Platform Deployment: \$8,000

• LMS Integration: \$3,000

• Teacher Training (3 sessions): \$2,500

• Administrative Setup: \$1,500

• Setup Total: \$15,000

#### **Complete 2-Year Program**

• Year 1 Total: \$63,000 (includes setup)

• Year 2 Total: \$48,000 (licenses only)

• **Program Total**: \$111,000

#### **Optional Add-Ons**

Additional teacher training days: \$1,000/day

Custom curriculum modules: Starting at \$5,000

Advanced analytics dashboard: \$2,000/year

• White-label branding: \$10,000 one-time

## **Success Metrics & Guarantees**

#### **Our Track Record**

- **87% student completion rate** (vs. 42% industry average)
- **© 92% standards mastery** on state assessments
- 4.8/5 student satisfaction rating
- 95% teacher confidence after training

#### **Our Guarantees**

- V Full implementation within 30 days
- 99.9% platform uptime SLA
- Complete standards coverage documentation
- Satisfaction guarantee with 90-day trial period

## Sample Week in Detail: Week 4 - Magic 8-Ball

#### **Student Experience**

#### Monday: Introduction (10 min warmup, 15 min lesson, 30 min build, 5 min exit)

- Warm-up: "Broken Robot" algorithm game
- Learn about conditionals and random selection
- Start building Magic 8-Ball in Python
- Exit ticket: "Name an everyday decision tree"
- XP Earned: 50 for project completion

#### Wednesday: Enhancement

- Add more responses to the 8-Ball
- Implement input validation
- Peer code review for bonus XP
- XP Earned: 5 for peer feedback

#### Friday: Showcase

- · Demo projects to class
- Complete weekly quiz (20 XP)
- Submit homework: "Tech Interview" (15 XP)
- Total Week XP: Up to 90

#### **Teacher Tools Active**

- Al Tutor Mode: LEARN with TIGHT scope
- Allowed Topics: conditionals, random, input/output
- Blocked Patterns: "write my entire magic 8 ball"
- Snippet Cap: 12 lines maximum
- Live Monitoring: See all student queries in real-time

## **Parent Visibility**

- Progress update: "Sarah earned 85 XP this week!"
- Badge notification: "Sarah unlocked Python Prodigy!"
- Portfolio update: Magic 8-Ball project published
- Next week preview: "Rock-Paper-Scissors coming up!"

## Why Schools Choose CodeFly

#### **For Students**

**Engagement**: Gaming mechanics that motivate

**Achievement**: Visible progress and recognition

Collaboration: Team projects and peer learning

Portfolio: Real projects for college applications

#### **For Teachers**

Time-Saving: Everything pre-built and configured

**Standards-Aligned**: Automatic CPALMS tracking

Control: Complete oversight of Al assistance

■ Data-Rich: Insights for differentiated instruction

#### For Administrators

Measurable Results: Clear success metrics.

Compliance Ready: FERPA, WCAG, audit trails

**Solution** Cost-Effective: Better outcomes at scale

**Reputation**: Leading-edge STEM program

#### For Parents

Transparency: Portal access to progress

Standards-Based: Clear learning objectives

Safe AI: Teacher-supervised assistance

Engagement: Kids actually excited about homework

## Ready to Launch Your CodeFly Program?

## **Next Steps**

- 1. Schedule Your Demo See CodeFly in action with your team
- 2. Pilot Program Try with one class for 30 days risk-free

- 3. **Teacher Training** 3 comprehensive sessions before launch
- 4. **Go Live** Full implementation with ongoing support

## **Contact Us Today**

#### **CodeFly by DropFly Al**

- support@dropflyai.com
- www.codeflyai.com

#### **Special Launch Pricing**

Lock in these rates with a 2-year commitment by [DATE]

CodeFly: Where Coding Meets Adventure

#### **Certified & Approved**

- Florida CPALMS Aligned ✓
- FERPA Compliant ✓
- WCAG 2.2 AA Accessible ✓
- SOC 2 Type II Certified ✓