

## Fact Sheet

Pragmatic Solutions, Inc. | [www.pr-sol.com](http://www.pr-sol.com)

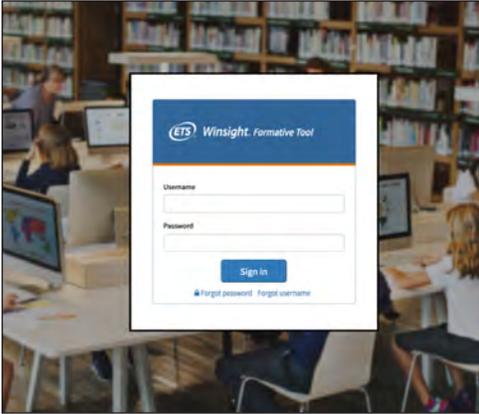
- Pragmatic Solutions was incorporated in 2002 to serve a single purpose: design and deploy innovative computer-based systems that maximize the collection, aggregation, and analysis of real-time data to individualize and enhance a user's experience and performance.
- To achieve this vision, Pragmatic has worked to build expertise in a broad range of domains, including K20 education, teacher training, workforce development, military training, assessment, educational research, and game-based learning, among others. Capabilities amassed include systems design, database architecture, scalable distributed networks, big data, user engagement, models for user on-boarding and support, rapid prototyping, and innovative assessment.
- Our corporate headquarters are in Westlake Village, CA.

### Pragmatic Technology Expertise & Solutions

	Data Management – Scale, Reliability, Security	America's Army simSchool Teacher Simulator Curtin University Mission Skills Assessment	12 million users 11,000 users 1 million users 30,000 users
	Pushing the boundaries of innovative assessment	English Language Learning Initiative Citytown Army Research Institute 3C	multiple U.S. States multiple U.S. States Path to Government
	Reliable service delivery	Mission Skills Assessment ARI 3C Curtin Challenge	30,000 users military sector 1 million users
	General technology solutions	Collaborative Frame Project ARI 3C Corporation for Public Broadcasting	Path to Distribution Path to Government 120,000 users, 25 states
	Experience and knowledge in user engagement	Age of Learning (ABC Mouse) PISA	1 million users 70 countries
	Understanding of cross cultural and organizational intelligence	Partners in North and Central America, South America, Europe, Africa, Asia, and Australia	online customers in over 140 countries worldwide

Over **14 million users** around the world impacted by Pragmatic systems

# Pragmatic's K12 Education Case Studies



## Formative Assessment Systems

- Developing a Formative Platform for one of the world's preeminent Assessment companies for use in the classroom. Pragmatic was engaged to build an innovative technology ecosystem of tools enabling formative and interim assessment informed by real-time instructional improvement and historical assessment data.
- Pragmatic's solution is grounded in practices that ensure accessibility, reliability, transparency, security, adaptability, and sustainability, thus ensuring maximum success across all use cases. Multi-platform, multi-browser, and multi-standard compliant, the system seamlessly blends historic and real-time performance data to inform formative skill building, on-demand formative classroom content, interim assessments, and meaningful reporting to all possible constituencies.

**Availability:** Custom on Demand



## Performance-based Assessment and Game-based Learning

- Partnered with ETS K12 Assessment, Research and NPD
- Game based scenarios using creative stories to present innovative new item types and performance assessment experiences
- Device comparability (PC, tablet), affordances and accommodations
- Expanded our rapid development tools to support and accelerate process from script to storyboard to production
- New types of assessment items include dynamic, adaptive, interactive, multi-item, layered construct, narrative-driven "scenario-based assessment" items

**Availability:** Custom on Demand



# Pragmatic's K12 Education Case Studies



## Collaborative Problem-Solving Frame

- Solve problem of existing tools being embedded in GLASS Lab game developed through GLASS Lab collaboration
- Create tool that is multi-platform, game agnostic, with content integration from multiple games
- Platform for live streaming multi-player text, audio and video communication
- Capture raw event for each keystroke

**Availability:** Licensed and Custom on Demand



## Non-cognitive and Cognitive Assessment

- Support for over 50 traditional and technology-enhanced item types across multiple platforms
- No cap on number of simultaneous test-takers
- 100% data collection in 2013 - 2017
- full web & phone support
- On-boarding, training videos, administrative portal supported
- Live data reporting for teachers & administrators
- Automated score reporting to increase efficiency and address client need

**Availability:** Licensed and Custom on Demand

Teacher	Students Registered	Student Assessments Started	Teacher Ratings Completed
Nickerson, Debbie	7	6	7
Pinto, Erol	7	6	7
Pinto, Mays	8	5	6
Chamquist, Thomas		100%	Complete
Edwards, Madison		100%	Complete
May, Allen		100%	Complete
McGil, Charles		100%	Complete
Palmerin, Antonio		100%	Complete
Pintodemo, Mays		0%	Complete
Powell, Annie		0%	Not Started
Tobor, Mackenzie		0%	Not Started
Post last teacher, Post first teacher	1	1	0
Sweeney, Jam	37	37	37

# Pragmatic's Higher Education Case Studies



## simSchool Educator Preparation Platform

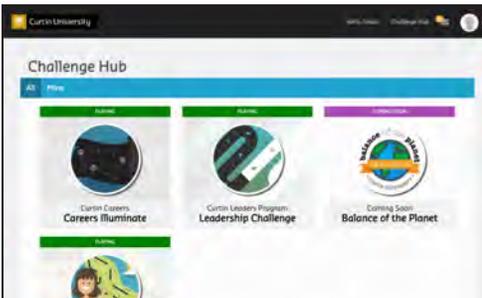
- Incorporated Pragmatic expertise in big data, game-based learning and distributed populations
- Improved rendering times, live content authoring, massive scale
- 10 trillion learner profiles on demand
- Generating and capturing hundreds of data points per "tick" applying the system's psychological model to virtual students (delivered in live reports)
- Reports reflect student's emotional state for every "tick" as a response to teacher (user) actions

**Availability:** Licensed and White-labeled



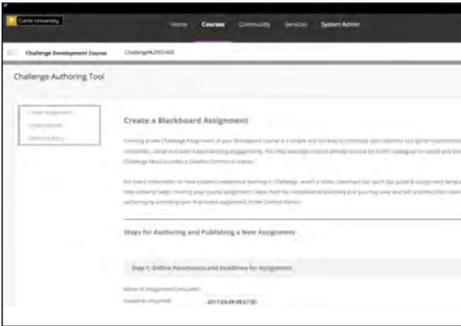
## Challenge and Team-based Global Platform

- Available to 10's of thousands of potential university students
- Designed to fill a demand in needed social learning experiences unmet by Blackboard, MOOCs and other university systems
- Designed to integrate and aggregate data across all e-learning applications
- EdX integration to provide learning analytics
- Data-rich with a sample of 500 students generating over 600,000 raw data events in 6-wk period



**Availability:** Licensed, Custom on Demand, and White-labeled

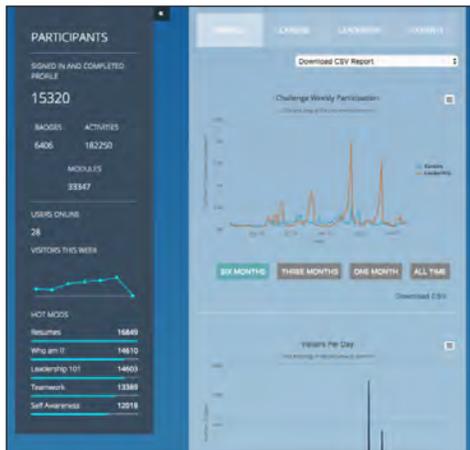
# Pragmatic's Higher Education Case Studies



## Custom Blackboard Building Block Development

- Ability to create custom tools to author dynamic content in Bb
- Integrated pipeline enables content to be deployed live to web-based environment
- Extends utility of static content by enables instructors to deploy as a team-based experience
- Ability to integrate through simple authoring tool to co-publish content to EdX, Blackboard, and Challenge environments

**Availability:** Licensed, Custom on Demand, and White-labeled



## Integrated System Data Dashboards

- Through Leverage Systems Broker, ability to aggregate and analyze live data through infinite number of external systems
- Customizable, exportable data reports
- Live leaderboards to track usage and popularity of content and systems

**Availability:** Licensed, Custom on Demand, and White-labeled

# Pragmatic's Workforce Case Studies



## Next Generation Games & Simulations

- Over 12 million users, 40 countries
- No limit to the number of trackable individual data points, aggregate sets for groups of users, content categories, achievements, and character progressions
- Able to process in excess of 1tb of raw data per day
- History of 99.9% uptime year over year
- Advanced security model using a variety of encryption methods
- Backbone is Pragmatic's Leverage Platform
- Full adaptability managed server-side as a core game element

**Availability:** Custom on Demand



## Army Research Institute Cross-Cultural Competency Assessment

- Building on expertise thru working on game-based and conventional assessments in K20 education
- Tasked with investigating, proposing, creating, and deploying new and innovative item types
- Innovated scenario-based assessment as means to engage and immerse while preserving ecological authenticity and cognitive fidelity
- Maintained "light" applications to support the security model
- Rapidly iterated and web-deployed
- Integral to Validation award from military awarded to prime contractor

**Availability:** Custom on Demand

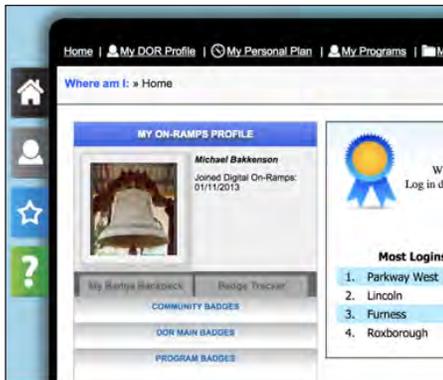
# Pragmatic's Workforce Case Studies



## Badging and Micro-credentials

- Evaluated the feasibility and utility of digital badges for proficiency and project-based assessment in diverse and distributed middle and high school under-resourced schools and learning centers
- Worked with over 100,000 students in 40 states
- Lead discussions and trainings on the meaning of assessment, the integration of tech into ed settings
- Worked closely with top leaders in education to evaluate COPPA, FERPA, social media, and related legal, moral, education and workforce implications of awarding and sharing digital content and student data across otherwise closed systems.

**Availability:** Licensed, Custom on Demand, and White-labeled

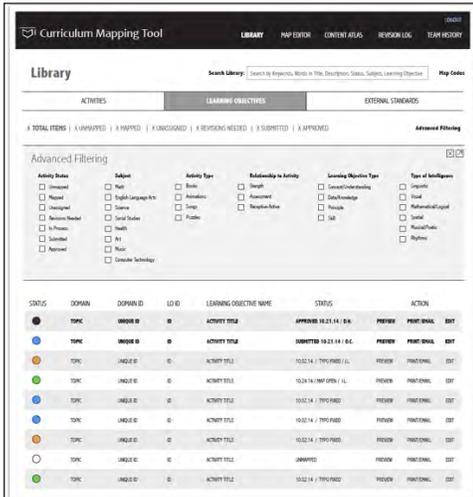


## Highschool to Workforce Portfolio Development

- Worked with 12 service providers in education, workforce development and government
- Developed prototype pilot to evaluate engagement and assessment within disadvantaged, digitally disconnected population aged 14-65
- Created rich administrative tools for multiple classes of stakeholders
- Optimized tools for multi-device and browser compatibility in low bandwidth situations
- Researched and defined best practices for designing online tools for low language and technology literacy populations
- Pioneered methodology for using SMS in live training settings to communicate with and persist evidence and achievements to cloud-based LMS

**Availability:** Licensed, Custom on Demand, and White-labeled

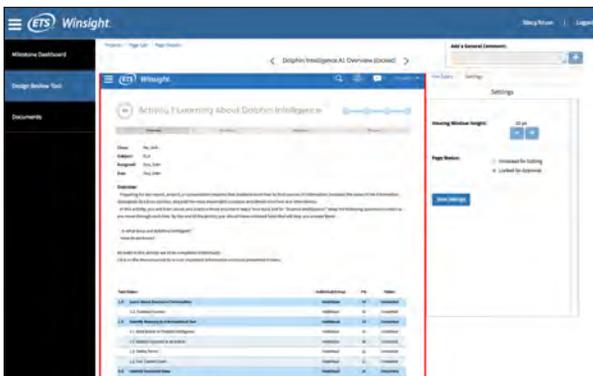
# Pragmatic's Enterprise Solutions Case Studies



## Information Architecture and Systems Analysis

- Internal Content Management System
- Curriculum mapping / tagging system
- Improves workflow and efficiency when internal tools do not allow mapping to or across multiple external standards, learning outcome relationships, and other attributes
- Necessary to improve internal workflows + accommodate business need to enhance external public search options and content recommendations for user constituencies

**Availability:** Custom on Demand



## Content Prototyping and Dynamic Content Review Toolkit

- Tool allows for both wireframes and actively published web-based tools to be reviewed, commented on, assigned by project team, and managed in a web-interface that fully captures all input in the format and medium end-user tools are intended to be experienced
- Improves efficiency by constraining feedback to a single platform that enables reviewers to fully evaluate intended UX/UI/IA and workflows as it is intended to be displayed to users

**Availability:** Licensed, Custom on Demand, and White-labeled