

What Metey Suggested (Call Highlights from May 4, 2025)

- The assessment should not just be traditional math (rote probability, standard questions) but more focused on:
 - Reasoning and how kids think
 - o Problem solving in novel situations
 - o Ability to navigate ambiguity and AI-like decision making
- Real-world applications and conceptual understanding are key, because AI in real life is about working with incomplete or imperfect data, making educated decisions, and understanding patterns — not just solving clean math problems.
- Filtering should focus on readiness for AI thinking, not only academic achievement or being "good at math."
- He highlighted that "kids who are not perfect math students" but can demonstrate thinking ability and curiosity should have a path forward → e.g., the Foundation Level concept.
- Assessment should identify tiers of students, not just "yes/no" entry decisions.
 Some students will be "ready for immersion," others "need a foundation track."

How the Plan We Drafted Applies This

13-Section Assessment Mirrors Metey's Vision

- Section A (Core Math) → Still necessary, but only 25-30% weighting → NOT dominant.
- Section B (Applied Reasoning/Real World) → Where reasoning, logic, and ambiguous problem solving come in (aligned with Metey's "not clean math problems").
- Section C (AI Conceptual Thinking) → Forces students to explain, decide, and engage with uncertainty → AI-style thinking.

This matches Metey's view that the assessment should "simulate" the kinds of cognitive skills AI requires as well as input from discussions from the group to arrive at a consensus to this approach.

2 Pathways reflect his inclusivity & developmental focus

- Instead of "pass/fail," students will be:
 - \circ Placed in Foundation \rightarrow if they show potential but aren't ready
 - \circ Immersion \rightarrow if they show readiness now
 - $\circ \quad \text{Mastery} \rightarrow \text{if they are top-tier performers} \\$

This embraces Metey's view that this should not be exclusionary but growth-focused.

3 Real-World AI Scenario Questions

- Section C has scenarios like "self-driving car decision" and "AI product recommendation."
- These were added specifically because Metey emphasized this type of thinking and application.

4 Flexibility + Thoughtful Selection

- Outreach, pre-assessment webinars, and careful targeting all align with Metey's concern that students and parents understand this isn't just another "math test."
- This approach ensures we identify students who want to think and solve, not just "test well."

© Summary: The Plan = Directly Implementing Metey's Vision

Metey's Input	Applied in Plan
Not traditional math only \rightarrow reasoning and thinking	Section B and C
Real world scenarios and conceptual thinking	Section C
Non-exclusionary, with multiple pathways	Foundation / Immersion / Mastery
Identify thinkers and curious students, not only perfect math kids	Tiered assessment and placement logic

Suggested ways of How We Integrate This into the Plan:

✓ 3-Section Assessment Format:

- Section A: Core Math + Logic (25-30% weight)
- Section B: Applied Reasoning and Real-World Problem Solving (35-40%)
- Section C: AI Concepts + Decision Making Scenarios (30-35%)

Real-World AI Scenarios:

- Case studies and decision-making questions are now part of Section C.
- Forces students to explain reasoning and navigate uncertainty.

✓ Pathways for Student Placement:

- Foundation Level (preparation for those needing development)
- Immersion Level (AI Immersion Class)
- Mastery Level (post-program advanced track for exceptional students)

Emphasis on Cognitive Skills and Curiosity:

• Questions and scoring are designed to value reasoning and curiosity, not only memorization or perfect math skills.

Action Items:

- 1. Assessment Development (Metey+Matt + D.S.):
 - Finalize 3-section assessment by end of this week. Collaborate iteratively on the assessment quiz by combining collective inputs.
- 2. Content Review (Team):
 - Review for clarity and readiness by Day 5.
- 3. Audience Targeting (Team; Chris to Lead Efforts with Paulo and Team):
 - Define Top 100 lists per region and begin outreach.
- 4. Outreach Material (IDFS Team):
 - o Prepare landing pages, emails, and parent guides.
- 5. Platform and Technical Integration (Chris/Metey):
 - Finalize assessment tool platform and ensure automation integration.
- 6. Assessment Launch (Team):
 - o Pilot launch, monitor, and shortlist students.
- 7. Post-Assessment Pathways (Chris to lead with Team):
 - Invite Immersion Cohort + Foundation/Mastery pathway offers.

Master AI Learning Engine Concept

A master AI learning engine + individual AI workspaces architecture:

- Each student has their own "AI instance" → personalized chat/work environment
 - This instance will be aware of their progress, what problems they are working on, their assessment performance, etc.
 - o Think of this as "IDFS AI Assistant" or "AI Learning Companion."
- Student AI Instances feed into a Master AI Engine
 - This master engine collects/analyzes:
 - Student interaction data
 - Problem solving paths
 - Reasoning approaches
 - Gaps and strengths
 - Uses this data to:
 - Continuously optimize curriculum
 - Recommend interventions
 - Create adaptive learning pathways (eventually)
- All students' data + pathways are visible to instructors/admins (with privacy protections)

AI Engine Concept "Why This Is Powerful" (Strategic Value)

- \bigvee Creates proprietary data set \rightarrow your unique learning + problem-solving dataset.
- Enables adaptive + personalized learning in later phases.
- \checkmark Allows instructors to view cognitive paths \rightarrow not just correctness, but how they think.
- ✓ Helps IDFS build "AI-enhanced pedagogy" IP very valuable for future growth and valuation.

X How Could We Engineer This? (Technical Roadmap)

Phase 1 (Pilot & MVP -6-12 months)

Goal: Build basic architecture using existing tools + APIs

Components:

- 1. Student Instances (AI Assistants)
 - Use OpenAI GPT (or another LLM) hosted per student with unique identifiers.
 - \circ Each student logs into IDFS portal \rightarrow Assigned to their AI instance.

2. Course Integration

- Each "problem" or "assignment" is fed into the AI Assistant.
- Students interact with AI to solve problems → explain thinking → submit work.

- 3. Data Collection & Logging
 - All student-AI conversations, choices, problem-solving steps are logged.
 - o Stored securely in IDFS Master Database.
- 4. Master AI Engine (Phase 1: Analytics Layer)
 - o Aggregate logs.
 - Analyze common struggles, solution pathways, strengths.
 - Simple dashboards + reporting for instructors.
- 5. Instructor Admin Panel
 - See student progress.
 - o Manually intervene or give feedback.

Tools & Tech stack (Recommended MVP):

- OpenAI API (GPT + Assistants API)
- Custom Portal (React + Firebase or Supabase backend)
- Logging & Analytics (Postgres + visualization tool like Metabase)

Phase 2 (Scale + AI-enhanced Master Engine —

Goal: Build adaptive pathways + smart recommendations

 Train ML models on collected reasoning data → predict and recommend learning paths.

- Develop custom "Student AI Profiles" → models of their cognitive patterns.
- Automatically adapt future problems + AI interactions based on past performance.
- Integrate gamification + progress visualization.

Phase 3 (IDFS AI Platform -

Goal: Full ecosystem, licensable + scalable.

- Fully autonomous AI Course delivery → instructors become coaches.
- Custom LLM fine-tuned on IDFS reasoning + education dataset.
- SaaS Platform offered to schools or international partners.

Important Notes

- Yes → Metey's method should be used NOW for rollout. This engine is a strategic build for later phases.
- Data privacy + compliance (FERPA, GDPR) MUST be designed into this from day 1.
- Initial MVP can be very simple → you don't need full adaptive AI right away → focus first on logging, individual AI instances, and analytics.
- This builds REAL IP → most AI education companies today do NOT have reasoning data pipelines or adaptive engines → huge competitive advantage.

© Final Recommendation

Step	Timeline	Focus
Use current rollout method (Metey Method)	Immediate (now - Summer)	Assessment + Selection
Build MVP AI Engine + Student Instances (Pilot)	6-12 months	Individual AI Assistants + Master Analytics Engine
Expand into Adaptive + Recommendation Engine	12-24 months	Smart AI-powered curriculum pathways
Build full IDFS AI Platform	24-36 months	Scalable + Licensable ecosystem

IDFS AI Master Engine Build Plan

Vision Statement

Create a proprietary AI-driven learning ecosystem where every student is paired with their own AI Assistant to solve problems, build reasoning skills, and engage with AI-driven coursework. All interactions feed into a Master AI Engine to enable adaptive learning pathways, analytics, and scalable education delivery.

Phase 1 (Pilot & MVP) -6 to 8 Months

Objectives:

- Launch individual AI Assistants per student.
- Collect data on student-AI interactions.
- Build the foundational Master AI Engine to log and analyze interactions.

Features:

- Student Login + Unique AI instance (GPT via OpenAI Assistants API or Anthropic/Claude API)
- Course problem ingestion and student-AI problem-solving chat.
- Logging engine to store conversations and problem-solving pathways.
- Admin dashboard for instructors to review progress and engagement.

Technology Stack:

- OpenAI GPT API (or Claude API for multi-model approach)
- React.js + Firebase / Supabase for web portal
- Postgres DB + Metabase for analytics
- AWS S3 / Google Cloud Storage for storing large datasets securely

Key Vendors for Phase 1:

- OpenAI (GPT API + Assistants API)
- Vercel or Netlify (frontend hosting)
- Supabase (authentication + database)
- Metabase or Retool (analytics dashboard)

Phase 2 (Adaptive Learning Engine) — 8 to 12 Months

Objectives:

- Analyze accumulated data to create adaptive learning pathways.
- Build recommendation engine to personalize student learning.
- Create dynamic, AI-generated problem sets based on weaknesses.

Features:

- Machine learning layer to analyze student performance and predict readiness.
- AI-generated coursework adjusted per student pathway.
- AI-generated feedback and learning tips.

Technology Stack:

- OpenAI Fine-tuning API or Custom ML models (scikit-learn / PyTorch)
- Kubernetes or managed cloud compute for AI workloads

• PostgreSQL with vector search (pgvector)

Potential Vendors:

- OpenAI + Open Source ML frameworks (Hugging Face transformers)
- AWS SageMaker or Vertex AI (ML platform)
- Pinecone (vector database, optional if scaling up search + recommendations)

Phase 3 (Full IDFS AI Learning Platform) — 12-18 Months

Objectives:

- Build a scalable SaaS platform offering AI-powered education to internal and external partners.
- License and white-label solution for international programs.

Features:

- Full AI-based course delivery
- Real-time adaptive AI instructor
- Global analytics dashboard + parental reporting
- Gamification + credentialing

Technology Stack:

- Custom IDFS LLM fine-tuned on proprietary learning dataset
- Cloud-native Kubernetes multi-tenant SaaS infrastructure
- Enterprise-grade BI (Looker or Tableau)

Potential Vendors:

- Custom AI via OpenAI or Anthropic partnership
- Google Cloud / AWS / Azure for global SaaS scaling
- Twilio Sendgrid (for messaging + notifications)
- Stripe or Chargebee (for billing/licensing)

Governance + Compliance

- Build data protection by design (FERPA, GDPR, CCPA)
- Ensure ethical AI usage aligned with IDFS educational mission
- Transparent audit logs + explainable AI pathways

Recommendation

Use Metey's rollout strategy and basic assessment structure for Summer 2025 cohort.

In parallel, start MVP development in Q3 2025 to pilot Student AI Assistants and Master Engine.

Build adaptive + scalable features in phases through 2025–2026 to position IDFS as a global leader in AI-powered education.

AI Data Import Toolkit - Team Guide

Designed by The Sikat Agency

Author: Christopher Taylor, Co-Founder

Welcome to the official team version of the AI Import and Chunk Toolkit.

WHAT'S INCLUDED:

- 1. export_preparer.py
- Converts OpenAI ChatGPT export (conversations.json) into usable formats (TXT, CSV, JSONL)
- 2. file_chunk_uploader_bulletproof.py
- Splits prepared_data.txt into small uploadable chunks
- Perfect for Gemini, Claude, AI assistants
- 3. This Guide (PDF)
- Simple and branded instructions for team and client use

INSTRUCTIONS:

Step 1: Run export_preparer.py with conversations.json in the same folder.

Step 2: Run file_chunk_uploader_bulletproof.py to create 'chunks_output' folder.

Step 3: Upload chunk files to AI platforms.

All files stay local, no online processing required.

Bulletproof and easy to use.

Optimized for any AI integration workflow.

This document and toolkit were designed by The Sikat Agency to help teams seamlessly transition large AI

datasets for analysis, ingestion, and training.

Al Immersion Assessment - Outreach Master Plan

Objective

Recruit the Top 100 participants for the AI Immersion Assessment using a multi-channel targeting approach that emphasizes selectivity, opportunity, and future career readiness. All assessments and program participation will be conducted fully online to maximize accessibility and scalability.

Unlike most AI courses offered by colleges, universities, and platforms like Coursera, the IDFS AI Immersion Program is uniquely focused on bridging deep mathematical reasoning with real-world AI application. It is not about simply learning how to use AI tools, but about developing cognitive and problem-solving skills that are foundational to AI and data-driven decision making. This program is about building thinkers, not button pushers.

How This Course is Different

Foundational and Advanced Mathematical Focus

 Core to the program is teaching students how AI fundamentally works through linear algebra, probability, calculus, and statistics. Most online AI courses skip these or oversimplify them.

Reasoning and Real-World Application

 Students learn how to apply math to solve real-world problems through AI scenarios, something often missing in traditional university AI programs which are usually theoretical or code-heavy.

Al Thinking, Not Just Al Tools

 Instead of learning how to use black-box AI tools, students are taught to think like AI systems — making predictions, dealing with uncertainty, and applying probabilistic and statistical methods.

Tiered Pathway and Personalization

 Unlike static college courses, IDFS uses assessment-driven placement: Foundation, Immersion, and Mastery. Students advance based on capability and ambition, creating a personalized learning path.

Live + Interactive vs. Recorded Lectures

• Unlike many Coursera or EdX courses, IDFS AI Immersion is live, instructor-guided, and interactive, giving students real-time mentorship and problem solving support.

Career-Readiness with AI + Data Science Integration

 Focus is not only academic. Students gain applied skills that can be used immediately in research projects, internships, and future data science and Al roles.

Global and Diverse Student Community

• Students engage globally, building connections with peers worldwide and creating a future-ready global network.

Connected to a Research and Career Pathway

 The AI Immersion Program is a gateway to advanced research opportunities, masterclasses, and real AI career paths — not a one-off certificate

Al Immersion Program Comparison Chart

<u>Feature</u>	IDFS AI Immersion Program	<u>University AI Courses</u>	Coursera / Online Al Courses
Learning Format	Live, Interactive, AI + Instructor guided	Lecture + Lab (In-person or Zoom)	Pre-recorded video + automated quizzes
Target Audience	Students (8-12), Coders, Career Changers, Upskillers	Primarily enrolled university students	General audience, self-paced learners
Mathematical Foundation	Deep focus: Probability, Statistics, Linear Algebra, Optimization	Moderate focus depending on university and course	Very light, if any (most focus on practical tools)
Reasoning and Problem Solving	Central to curriculum (real-world Al scenarios + cognitive reasoning)	Depends on professor and curriculum (often academic/theoretical)	Minimal (tool/application focused)
AI + Data Science Integration	Fully integrated throughout entire course	Typically covered in later or advanced university Al/Data Science courses	Basic level, tool usage and models
Personalization	Tiered pathways (Foundation, Immersion, Mastery), adaptive instruction	Standardized syllabus for all students	Static content, no personalization

Career Focus	Strong, tied to real-world scenarios and upskilling + Masterclass pathway	Academic focus, limited career placement support	No real career path guidance, certification only
Global Peer Community	YES — diverse global cohort + live interaction + projects	No (limited to university cohort)	No (solo learners)
Post Program Opportunities	Research projects, masterclass, career pathways	May offer advanced research but usually restricted to enrolled university students	None beyond certificate
Certification	Certificate + Eligibility for Mastery + Al Pathway credentials	University credit if enrolled	Certificate of completion only
Cost	Mid-tier (value-focused premium offering)	High (tuition, admission required)	Low (but low-touch experience)

Conclusion:

The IDFS AI Immersion Program combines the depth and mathematical rigor of university-level AI education with the accessibility, flexibility, and career relevance of online programs. Unlike other AI courses, IDFS is about preparing real thinkers and innovators — not just software users.

It is the only solution offering a cognitive and real-world focused pathway that can scale globally while maintaining personal mentorship, community, and mastery.

Target Region (All Online)

United States and Global (Online)

Target Audience Profiles

- Students in Grades 8–12
- Top 5-10% math/science students
- Math club, coding club, robotics participants
- Math competition participants (AMC, Math Olympiads)
- Recommended by teachers, counselors, or enrichment instructors
- Existing coders and developers seeking to upskill in AI (college students and graduates)
- Current and former tech employees (Google, Meta, Amazon, etc.) facing layoffs and seeking Al/data science skills
- Adult learners and career changers seeking Al literacy

Outreach Channels

A. Schools and Counselors

- Private and magnet STEM school counselors
- Math and Computer Science teachers
- AP/IB Coordinators

B. Math & STEM Enrichment Centers

- Mathnasium (upper levels)
- AoPS (Art of Problem Solving)
- STEM academies
- Robotics competition coaches (FIRST, VEX)

C. Parent and Career Networks

- Parent Associations (private schools, international schools)
- Facebook, WhatsApp, and WeChat groups focused on college admissions
- Tech industry alumni networks (LinkedIn groups, Slack communities)
- Laid-off tech employee support groups and re-skilling communities

D. Existing IDFS and Partner Networks

- China Partners(Napa, IDFS Asia, Jocelyn, APAC Channels)
- US Based Partners
- Sikat Agency + Asia existing Partnerships (Philippines, Korea, etc.)

• Pasajobs (Joint Venture Partner for AI Upskilling and Workforce Preparation)

E. Online / Social Media Targeting

- Meta (Facebook/Instagram) Ads for STEM + College Prep audiences
- Google Ads targeting keywords in AI, Math, Coding, Career Change, and Upskilling
- LinkedIn Sponsored Posts targeting tech professionals and career changers

F. Agent / Partner Nominations (Global)

Trusted agent and academic centers nominate Top 5-10 students

Marketing Materials Needed

- "Invitation to Top 100 Students + Professionals" Email
- Eligibility landing page (with assessment registration)
- Program overview flyer or PDF
- Follow-up reminder email
- Social Media Ads (Facebook/IG + LinkedIn + Google Display)