

INFRASTRUCTURE ACADEMY

An Infrastructure Odyssey

PRESS KIT

Project Overview & Media Resources

*From Calories to Consciousness — A 12,000-Year Journey
Through the Infrastructure of Civilisation*

Three Game Modes: Explorer (8-14) | Flight Deck (14-18) | Scholar (18+)
12 Relays | 91+ Inventions | 67 Biomimicry Connections | 33 Vehicles
Four AI Companions | Dearden Field 60-Node Matrix
118 Archive Pages | 30-Chapter Player's Handbook
Four Operational Bridges | Shared Database Architecture

Version 1.0 | 21 March 2026

Block 398 | SAP Verified | D135

Based on the trilogy by Nigel T. Dearden

Systems Thinking, Not Memorisation — The Journey IS the Work

iAAI

PROJECT OVERVIEW

What Is Infrastructure Academy?

Infrastructure Academy is an educational platform that teaches civilisational infrastructure literacy through gamified exploration. Based on the trilogy by Nigel T. Dearden, it traces a 12,000-year journey from the first agricultural settlements to modern digital networks — covering water, energy, transport, communications, and the systems that connect them all.

The platform combines a comprehensive archive of 118 pages covering 12 historical relays with an interactive game engine called The Reality Engine. Players explore infrastructure systems through three age-appropriate modes, guided by AI companions and graded through a unique D20 + FITS assessment framework.

Core Philosophy

"Systems Thinking, Not Memorisation — The Journey IS the Work." Infrastructure Academy does not test recall. It rewards curiosity, lateral thinking, and the ability to see connections between seemingly unrelated infrastructure systems. A student who connects Roman aqueducts to modern water treatment scores higher than one who memorises dates.

Key Numbers

Metric	Value
Archive Pages	118 HTML pages across 12 relays and 5 webs
Game Modes	3 — Explorer (Ages 8-14), Flight Deck (14-18), Scholar (18+)
Historical Relays	12 — from Neolithic agriculture to digital networks
Inventions Catalogued	91+ across all relays
Biomimicry Connections	67 nature-to-engineering links
Vehicles	33 across 5 categories (TB Machines, Pod, FAB, IR, Guest)
AI Companions	4 — DAVID, ARIA, NEXUS, ECHO
Player's Handbook	30 chapters, 291 pages
Dearden Field Matrix	60-node interactive knowledge map
Languages	8 (EN, ZH, HI, ES, AR, FR, PT, RU)

THE FOUR OPERATIONAL BRIDGES

Infrastructure Academy operates across four interconnected web platforms, each serving a distinct function within the Tetrahedral Observer network. All bridges share a common database architecture, enabling seamless data flow for user accounts, XP tracking, iCards, and BitPoints.

Bridge	Name	Domain	DB Access
ACAD SITE	Infrastructure Academy	infra-acad-kuqzaex2.manus.space	MASTER
MEMORIAL	Principia Tectonica	nigelmemorial-ucmtq9dn.manus.space	API
TRE GAME	The Reality Engine	Phase 2: play.iaai.world	SHARED DB
CHART ROOM	The Chartered Chart	xgrowthtrk-2a93yo5z.manus.space	API BRIDGE

Architecture

The ACAD Site serves as the master archive — 118 static HTML pages covering all 12 relays, the 7 scholars, the 8th Scholar materials hub, and the complete document library. It hosts the backend server, database, and authentication system.

The Memorial Site (Principia Tectonica) is a standalone tribute to the intellectual foundations of the project, featuring the HQ formula ($IQ \times EQ \times CQ = HQ$), the ISI (Infrastructure Survival Index), and the civilisational fragility constant.

The Reality Engine (TRE) is the game component, currently embedded at /play on the ACAD site and transitioning to a standalone project at play.iaai.world. It handles all three game modes, the Dearden Field Matrix, DAVID AI co-pilot, and XP/progression systems.

The Chart Room tracks the 60-day follower growth race and provides analytics dashboards for the project's social media presence and engagement metrics.

THREE GAME MODES

Explorer Mode — Ages 8-14

Tap-to-discover gameplay with no login required. Players explore 12 relays covering 91+ inventions through visual cards and interactive timelines. DAVID narrates discoveries. XP is earned through exploration streaks and quiz challenges. Two taps from landing to gameplay.

Flight Deck Mode — Ages 14-18

Cockpit HUD experience with the Dearden Field 60-node matrix — an interactive knowledge map where nodes represent infrastructure concepts connected by golden circuit-board traces. DAVID serves as co-pilot AI guide. Players navigate relay missions, unlock biomimicry connections, and build their understanding of infrastructure interdependencies.

Scholar Mode — Ages 18+

Full character creation following AD&D tradition. Players roll 4d6 (drop lowest) for six ability scores (STR, DEX, CON, INT, WIS, CHA — adapted for infrastructure literacy), take the FITS personality assessment (Feeler/Intuitive/Thinker/Senser), choose a civilisational archetype, and select a perspective (Western/Outrider/Eastern). Scholar mode includes thesis work, peer review, and academic grading through a D20 + modifier system.

The FITS Assessment

Type	Character	Learning Style	Civ. Role
Feeler	Empathetic	Emotional connection to history	Ethical Harmonizer
Intuitive	Pattern-seeker	Sees connections across relays	Visionary Explorer
Thinker	Analytical	Data-driven, systematic	Logical Strategist
Senser	Practical	Hands-on, real-world application	Practical Realist

THE 12 RELAYS

The Infrastructure Odyssey is structured as 12 historical relays, each representing a critical phase in civilisation's infrastructure development. Players progress through these relays chronologically, discovering how each system built upon its predecessors.

#	Relay	Era	Key Theme
1	Neolithic Agriculture	10,000 BCE	From hunter-gatherer to settled farming
2	Hydraulic Civilisations	3,500 BCE	Water management and irrigation empires
3	Classical Engineering	800 BCE	Roman roads, aqueducts, concrete
4	Medieval Infrastructure	500 CE	Castles, cathedrals, trade routes
5	Renaissance Innovation	1400 CE	Printing, navigation, banking systems
6	Industrial Revolution	1760 CE	Steam, rail, factories, urbanisation
7	Electrical Age	1880 CE	Power grids, telegraph, telephone
8	Automotive Era	1900 CE	Roads, highways, mass production
9	Aviation & Space	1903 CE	Flight, airports, space infrastructure
10	Nuclear & Computing	1945 CE	Atomic energy, mainframes, early internet
11	Digital Networks	1990 CE	Internet, mobile, cloud computing
12	Future Infrastructure	2025+	AI, quantum, sustainable systems

THE MPNC FLEET — 33 VEHICLES

The Multi-Purpose Nexus Command (MPNC) fleet comprises 33 vehicles across five categories, each with unique specifications, designated pilots, FITS alignment, and relay mapping. The fleet serves as both a narrative element and a collectible card system within the game.

Category	Count	Example	Type	Role
TB Machines	5	TB-1 Arrow	Hypersonic Recon	Rapid deployment
Pod Vehicles	13	Firefly	Laser Cutter	Specialist ops
FAB Fleet	5	FAB-1	Aqua-Jet Sedan	Field support
IR Support	5	Fire Truck	Emergency Unit	Crisis response
Guest Vehicles	5	Skythrust	Atomic Liner	Transport

Collectible Card Deck

A 66-page PDF card deck is available for download, featuring each vehicle with a full-page artwork render and a specification card showing stats (speed, range, firepower, stealth, versatility), designated pilot, FITS alignment, relay mapping, and operational description. Available from the 8th Scholar materials hub and the Vehicle Hangar page.

AI COMPANIONS & DAVID

DAVID — Your Dungeon Master

DAVID (Digital Adaptive Virtual Infrastructure Docent) is the AI narrator and guide throughout the Infrastructure Odyssey. In Explorer mode, DAVID narrates discoveries. In Flight Deck, DAVID serves as co-pilot. In Scholar mode, DAVID functions as a full Dungeon Master, creating scenarios based on dice rolls and ability scores. DAVID adapts difficulty, provides comeback taunts for struggling players, and celebrates achievements.

The Four Companions

Name	Role	Speciality	Personality
DAVID	Dungeon Master	Scenario creation, grading	Authoritative, adaptive
ARIA	Research Assistant	Data analysis, fact-checking	Precise, methodical
NEXUS	Connection Mapper	Cross-relay links, patterns	Curious, lateral-thinking
ECHO	Historical Voice	Primary sources, quotes	Dramatic, storytelling

The iCard System

iCards are the primary collectible and documentation format within Infrastructure Academy. Each iCard has a unique block reference (e.g., B393K-MODES-001), is SAP Verified, and belongs to a category (FRAMEWORK, SYNTHESIS, VEHICLE, etc.). iCards serve as both game collectibles and formal documentation of project architecture, decisions, and milestones. Every observation becomes a card. Every card becomes a BitPoint. I/O/1/0.

CONTACT & LINKS

Project Links

Resource	URL
Main Site	https://infra-acad-kuqzaex2.manus.space
Memorial Site	https://nigelmemorial-ucmtq9dn.manus.space
Chart Room	https://xgrowthtrk-2a93yo5z.manus.space
Play Page	https://infra-acad-kuqzaex2.manus.space/play
8th Scholar Hub	https://infra-acad-kuqzaex2.manus.space/pages/8th-scholar.html
Vehicle Hangar	https://infra-acad-kuqzaex2.manus.space/vehicle-hangar
Player's Handbook	https://infra-acad-kuqzaex2.manus.space/players-handbook

Author

Nigel T. Dearden — Civil Engineer, author of the Infrastructure Odyssey trilogy, and creator of Infrastructure Academy. Based on decades of professional experience in infrastructure development across multiple continents.

Social Media

Platform	Handle
X (Twitter)	@dearden_ni37258
Project Tag	#InfrastructureAcademy
Series Tag	#InfrastructureOdyssey

Available Downloads

Document	Details
Player's Handbook V2	30 chapters, 291 pages, navy/gold branded PDF
Vehicle Card Deck	66 pages, 33 vehicles with artwork + specs
Doc 9 Vehicle Manual	Original source document (DOCX)
Press Kit	This document

For press enquiries, partnership proposals, or educational licensing, contact via X (Twitter) at @dearden_ni37258 or through the Infrastructure Academy website.

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