

— PORTFOLIO

Jennifer Cefaly

Designing Learning for Growth & Possibility

Ideas, systems, and experiences that help people grow.

Learning & Innovation Executive • Learning Systems Architect • Product Strategist



My Philosophy on Learning Innovation

I believe the most impactful learning is **designed, not simply delivered**. It begins with curiosity, gives people meaningful problems to solve, and creates the conditions for them to take ownership of their growth.

When learning is designed well, **it feels meaningful before it feels required**. Learners are building, testing, questioning, and revising rather than waiting to receive. The work crosses disciplines the way real problems do, and it asks for both imagination and rigor- original thinking held to a real standard. It is designed so that different kinds of learners can find a way in, and it stays connected to real people, problems, and possibilities beyond the room. Success looks like creating, testing, revising, and explaining- not matching a template or example.

Creativity and technology are not decoration. STEAM, making, digital tools, and AI earn their place when they expand what a learner can wonder about, attempt, access, and build. At their best, these tools widen who gets to participate and how far an idea can travel. They lose that value the moment they replace the thinking or become the point of the experience. **The tool should make human capability more visible, never stand in for it.**

A great idea is not yet a sustainable learning model. Learning holds up over time only when it rests on clear architecture, is developed alongside the people who will carry it, and is implemented with honest attention to staffing, space, time, and resources. It needs tools people will actually use, feedback loops that inform real revision, and structures that preserve quality as the work grows beyond the person who started it. This is the part I care most about, and it is what I mean when I describe myself as a learning systems architect.

Ultimately, I design learning to help people see themselves as capable thinkers, creators, leaders, and problem-solvers. Whether I am building a curriculum platform, developing educators and leaders, advising an organization, or exploring an emerging technology, the goal does not change: to create learning experiences that expand possibility and leave people more willing to try the next hard thing.

“ *Building things durable enough to outlast the builder.* ”

How I Design Learning Systems

From an idea to something people can actually use, sustain, and grow.



1 Understand the People + Context

Start with the learner, the organization, and the environment. What do people need? What is already working? Where are the constraints? I look at goals, culture, staffing, space, technology, time, and the people who will ultimately carry the work.

2 Define the Learning Problem

Before designing a solution, clarify what needs to change. What should learners understand, do, create, or become more capable of doing? What would meaningful success look like? This keeps innovation from becoming “something new” for its own sake. This is Understanding by Design.

3 Architect the Experience

Build the structure underneath the learning: outcomes, sequence, learner pathways, interdisciplinary connections, assessment, tools, and moments for choice, reflection, iteration, and authentic application.

4 Prototype + Test

Make the idea tangible early. Pilot lessons, tools, workflows, or resources; observe what happens; listen to the people using them; and revise before trying to scale. The first version should be good enough to learn from- not precious enough to protect. Aha! moments = early wins.

5 Build Capacity + Implementation Systems

Design for the people who will carry the work forward: facilitator guides, professional learning, coaching, digital resources, assessment tools, workflows, and clear expectations. A learning model is only scalable when others can use it with confidence and integrity. The people teaching it need to believe in it.

6 Measure, Learn + Evolve

Look at what learners are doing, what educators and leaders are experiencing, where implementation is breaking down, and what the evidence is telling us. Use that information to improve the system rather than simply defend the original idea.

The goal is not simply to launch something innovative. It is to build a learning system that becomes stronger through use.

What I Build

Learning systems, products, and experiences designed to turn ambitious ideas into meaningful, sustainable practice.

01	The Ultimate Makerspace	Product + systems architecture
02	ILMI Science Discovery & Innovation Center	Multidisciplinary + international design
03	Briskin Maker Lab	Organizational transformation
04	SmartLab at St. James' Episcopal School	Long-term innovation leadership
05	Modern Class	Personalized learning + systems design



The Ultimate Makerspace

From a room full of tools to a sustainable learning system

Role — Founder & Learning Product Architect

Focus — Learning Systems • Curriculum Architecture • Product Development • Professional Learning • Implementation

THE CHALLENGE

Schools were investing in makerspaces, STEAM labs, tools, and technology, but too often the infrastructure for meaningful learning was missing.

Teachers were being asked to implement interdisciplinary, hands-on learning without consistent curriculum, sufficient training, planning time, or clear implementation systems. The result could be highly dependent on the experience of an individual teacher: strong programs in one classroom or year, fragmented experiences in another.

I saw the opportunity to solve a larger problem:

What would it take to make high-quality maker learning easier to implement, more consistent, and sustainable beyond the person who originally created it?

THE IDEA

I designed The Ultimate Makerspace as more than a collection of STEAM lessons. The goal was to create a **modular learning and implementation ecosystem** that connects what students experience with what educators need in order to deliver that experience well.

Instead of treating curriculum, professional learning, assessment, and implementation as separate products, I designed them as parts of the same system.



Hands-on building in a makerspace program: construction, iteration, and testing at the center of the learning.

WHAT I DESIGNED

Curriculum Architecture

Hands-on, interdisciplinary experiences built around inquiry, design thinking, creativity, engineering, and real-world problem solving.

Facilitator Resources

Detailed guides that translate learning intent into usable instructional practice without educators recreating the program.

Assessment + Reflection

Structures for documenting process, iteration, problem solving, and student thinking; not matching a final product to a model.

Professional Learning

Training and support that help educators understand both what to teach and why the learning model works.

Implementation Systems

Planning tools, workflows, materials guidance, and frameworks that move schools from enthusiasm to sustainable implementation.

Digital Learning Assets

Reusable resources that make the system easier to access, adapt, and grow across different learning environments.

Incorporating NGSS, Common Core, ISTE, UDL, and the UN Sustainable Development Goals.

HOW THE SYSTEM WORKS



The product is not the lesson. The product is the system that allows learning to happen repeatedly.

MY ROLE

I led the work from concept through development, defining the learning model, creating the curriculum architecture, designing educator and implementation resources, developing assessment structures, and refining the system through classroom implementation and feedback. I approached the work as a product, not a static curriculum: identifying what needed to remain consistent and what could be adapted locally.

THE IMPACT

The Ultimate Makerspace turned years of hands-on curriculum development into a repeatable learning system designed for use beyond a single classroom, educator, or school. Its development shifted my own work toward a larger systems question: *how do we preserve the quality of an idea as more people begin to use it?* That question now informs nearly every learning system I design.

WHAT THIS WORK TAUGHT ME

Scalability is a design decision.

A strong learning experience does not become scalable simply because the curriculum is documented. Scale requires intentional decisions about training, usability, materials, assessment, quality, adaptation, and feedback. The Ultimate Makerspace taught me to design those systems at the same time I design the learning.

ILMI Science Discovery & Innovation Center

Designing learning across culture, technology, and industry

Role — Learning Experience Designer & Curriculum Strategist

Focus — International Learning Design • Digital Learning • STEAM • Cross-Functional Collaboration • Industry-Connected Learning

THE CHALLENGE

How do you turn complex science and technology concepts into learning experiences that feel accessible, relevant, and compelling to young people while designing for a cultural context different from your own?

The work required more than translating curriculum into a digital format. The learning had to connect scientific ideas with inquiry, storytelling, engineering, and real-world applications while fitting into a larger visitor and learning experience being developed by an international multidisciplinary team.

How can a learning experience make complex ideas feel discoverable rather than intimidating?



THE IDEA

I approached the work as an **experience** rather than a sequence of information. Scientific concepts became starting points for learners to question, investigate, design, and apply what they were discovering. The learning combined:

Story + Animation

Narrative and visual storytelling that make complex ideas understandable and memorable.

Inquiry-Based Learning

Opportunities for learners to investigate ideas rather than simply receive information.

Engineering + Design Challenges

Moving from understanding a concept to using it to solve a problem.

Industry Connections

Connecting learning to real-world applications so students see where scientific thinking exists beyond the lesson.

Cultural Responsiveness

Designing with awareness that relevance, examples, language, and context matter—and that effective international work begins with listening rather than assuming.

DESIGNING ACROSS DISCIPLINES

SCIENCE

Core concepts + inquiry

STORY

Animation + narrative

DESIGN

Engineering challenges
+ problem solving

WORLD

Culture + industry +
real-world application

LEARNER EXPERIENCE

The strongest learning experiences do not ask learners to choose between understanding and imagination. They require both.

MY ROLE

I collaborated with an international multidisciplinary team to design technology-enabled learning experiences that integrated curriculum, animation, inquiry, engineering design, and industry-connected applications. My role sat at the intersection of learning design and creative production: translating educational goals into experiences that designers, subject-matter experts, and creative teams could collectively bring to life.

That meant thinking beyond “What should the learner know?” I also had to ask: *What should they see? What should they wonder? What should they do? And what should happen next?*

THE IMPACT

The work demonstrated how learning design can operate inside a complex creative-production environment; connecting pedagogy with storytelling, technology, design, and real-world application. It expanded the way I thought about learning products as well: curriculum did not need to sit beside the digital experience; the learning itself could shape the experience.

WHAT THIS WORK TAUGHT ME

Learning design is a translation discipline.

A learning designer often sits between worlds: educators and developers, subject-matter experts and storytellers, learning goals and user experiences, local context and global teams.

The work is not simply to contribute another perspective. It is to create enough shared language that all of those perspectives can become one coherent experience. That lesson has stayed with me in every multidisciplinary project since.

Briskin Maker Lab

Turning a makerspace into a sustainable schoolwide learning program

Role — Learning Strategist & Program Lead

Focus — Organizational Transformation • Curriculum Strategy • Professional Learning • Implementation • Continuous Improvement

THE CHALLENGE

A well-equipped makerspace does not automatically become a strong learning program.

Tools, technology, furniture, and materials may create opportunity, but the long-term success of a maker program depends on what surrounds them: curriculum, instructional practice, educator confidence, routines, expectations, leadership support, and a shared understanding of what the space is actually for.

The challenge at Briskin became larger than designing individual projects:

How do you help a makerspace evolve from a collection of experiences into a coherent program that becomes part of a school's learning culture?

THE APPROACH

Rather than treating the Maker Lab as a finished program, I approached it as a **living learning system**, working simultaneously on several layers.



Curriculum Architecture

Interdisciplinary experiences that build skills and complexity over time rather than functioning as disconnected projects.

Educator Development

Helping teachers understand the instructional thinking behind maker learning so they can connect the Lab to classroom curriculum.

Implementation Systems

Routines, resources, and planning structures that make ambitious hands-on learning manageable within school realities.

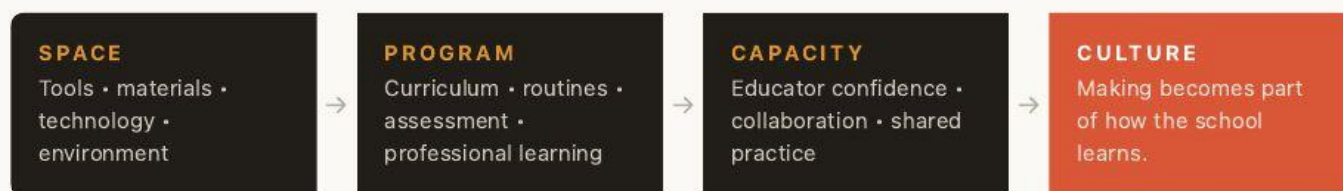
Coaching + Collaboration

Working alongside educators and leadership to identify what is working, where friction exists, and what needs to change.

Continuous Program Evolution

Using classroom experience and feedback to refine curriculum, materials, and program structures from year to year.

FROM SPACE → PROGRAM → CULTURE



A makerspace becomes sustainable when the expertise lives in the organization; not only in the room or the person leading it.

MY ROLE

I lead the long-term strategic evolution of the Maker Lab through curriculum architecture, professional learning, implementation planning, instructional coaching, and ongoing program refinement. The work requires moving constantly between the learner experience and the organizational system around it. That means designing engaging experiences for students while making sure educators have the resources, knowledge, structures, and confidence needed to sustain the model.

My role is not simply to create what happens inside the Lab. It is to help build the organizational capacity that allows the work to thrive without depending on one person.

THE IMPACT

Over multiple years, the work has evolved from individual maker experiences into a more intentional schoolwide program supported by curriculum systems, educator development, implementation structures, and continuous refinement.

WHAT THIS WORK TAUGHT ME

Innovation becomes sustainable when ownership expands.

The strongest programs cannot remain dependent on the person who originally imagined them. They need shared language, useful systems, confident educators, leadership support, and enough flexibility to evolve as the organization learns.

My role as a learning leader is not to make myself indispensable. It is to build the conditions that allow the work itself to become indispensable.

SmartLab at St. James' Episcopal School

Building an innovation program designed to evolve

Role — Director of Innovation & Technology Integration

Focus — Innovation Leadership • Organizational Transformation • Curriculum Architecture • Technology Strategy • Program Growth

THE CHALLENGE

When I began this work, the traditional computer lab reflected an older model of technology education: students learned specific tools and skills largely in isolation from the rest of their academic experience.

But technology was changing quickly and so was the way students would need to think, create, communicate, and solve problems. The opportunity was not simply to modernize a computer lab. **It was to rethink its purpose.**

What if technology stopped being a subject students visited and became a tool for inquiry, creativity, design, and problem solving across the school?



THE IDEA

I developed SmartLab as an integrated STEAM and innovation program where technology became one part of a much larger learning experience. Instead of beginning with a device or software program, we began with what students could question, design, create, test, and communicate. Over time, the program connected:

Technology + Digital Fluency

Beyond isolated skills toward purposeful use of digital tools for learning, creation, research, and communication.

Engineering + Robotics

Iterative design, systems thinking, programming, robotics, and hands-on problem solving.

Art + Design

Creativity and visual thinking as essential parts of technical and academic work.

Interdisciplinary Curriculum

Connections between technology, science, classroom content, design thinking, and project-based learning.

Student Agency

Opportunities for students to make decisions, test their own ideas, troubleshoot, and develop confidence through productive struggle.

INNOVATION IS NEVER FINISHED



The program grew because the definition of innovation kept growing with it.

MY ROLE

I led both the learning vision and the organizational systems surrounding it: designing and evolving interdisciplinary curriculum, launching new technology and robotics initiatives, coaching educators, guiding technology strategy, and overseeing areas spanning technology, science, library, and IT. I also worked with school leadership on strategic planning, accreditation, technology planning, grants, fundraising, and long-term program development.

I wasn't only asking *what should students experience?* I was also asking: *what does the organization need in order to make that experience possible year after year?*

THE IMPACT

SmartLab evolved from a traditional computer lab into a broader innovation ecosystem embedded in the school's academic identity. The strongest evidence is not that the program launched; it's that it continued to change. Across more than a decade, the work expanded alongside new technologies, new instructional practices, and changing student needs. That longevity matters.

EXTENDING THE LEARNING MODEL

The same design principles that shaped SmartLab also informed new summer and after-school experiences. I developed enrichment programs that expanded opportunities for students while creating a sustainable source of program revenue for the school.

Mission and sustainability do not have to compete. Strong learning products can create both educational and organizational value.

WHAT THIS WORK TAUGHT ME

Innovation is a practice, not a destination.

It is easy to make something feel innovative when it is new. The harder work is creating a culture that keeps questioning, experimenting, learning, and adapting long after the launch. Build the vision. Build the system. Then keep learning.

Modern Class

Designing personalized learning systems around the learner

Role — Creative Operations Director

Focus — Personalized Learning • Learning Systems • Executive Function • Curriculum Strategy • Organizational Design

THE CHALLENGE

Personalized learning sounds simple in theory: meet each learner where they are.

In practice, true personalization requires much more than giving students different assignments or allowing flexible pacing. An organization needs ways to understand each learner, identify strengths and needs, translate assessment into instructional decisions, support educators, communicate clearly with families, and continually adjust as the learner grows.

For a small, highly individualized learning environment, there was another challenge as well:

How do you preserve deep personalization while creating enough structure and consistency for the organization itself to grow?

I approached Modern Class as both a learner-experience challenge and a systems-design challenge. The goal was not to standardize students. **It was to standardize the supports around personalization** so educators could spend more time responding meaningfully to individual learners.



Learner Understanding

Assessments, learner profiles, goals, and family input building a complete picture of the student.

Personalized Learning Pathways

Translating learner needs into individualized curriculum, intervention, enrichment, and flexible experiences.

Executive Function + Learning Skills

Planning, organization, self-regulation, and cognitive flexibility integrated into the academic experience.

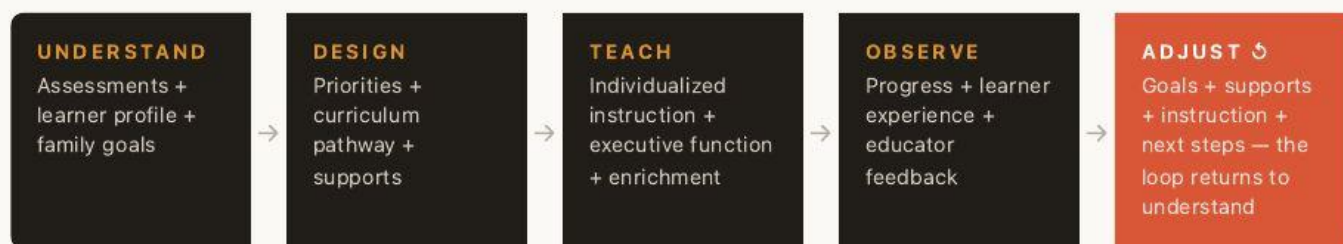
Educator Tools + Family-Facing Systems

Frameworks and resources that help educators plan intentionally—and help families understand the model.

Organizational Infrastructure

Connecting admissions, assessment, curriculum planning, implementation, and communication across the student experience.

PERSONALIZATION IS A SYSTEM



Personalization is not a one-time plan. It is a continuous cycle of understanding, designing, observing, and adjusting.

MY ROLE

I partner with executive leadership on the learning systems and organizational strategy that support Modern Class's personalized model. My work has spanned the learner journey from admissions and assessment through curriculum design, educator resources, executive-function supports, family communication, and instructional implementation. I've also developed resources such as executive-function and reading guidebooks that translate learning research into practical tools for educators and families.

The underlying design question remains consistent: *what structure do the adults need so that the learner can experience greater flexibility?*

THE IMPACT

The work has helped create greater continuity between how learners enter the program, how their needs are understood, how curriculum and supports are designed, and how educators and families participate in the learning process. By designing systems around the learner rather than asking the learner to fit the system, Modern Class can preserve individualized decision-making while building greater consistency in how that experience is delivered.

WHAT THIS WORK TAUGHT ME

Flexibility depends on structure.

Personalized learning does not require fewer systems. It requires better ones. The strongest structures create clarity for educators and organizations while leaving room for different learners to move through the experience in different ways.

That principle extends far beyond schools. Whether designing personalized education, leadership development, professional learning, or AI-enabled experiences, the challenge is the same: build enough structure to support people without designing so much structure that it limits them.

How I Lead

Building the people, clarity, and systems that allow good ideas to take root.

I believe leadership is less about having all the answers and more about creating the conditions for good thinking, good work, and shared ownership. My role is often to bring clarity to complexity, connect people who see different parts of the problem, and build enough structure for others to move forward with confidence.

LEADERSHIP SHOULD EXPAND CAPABILITY, NOT DEPENDENCY — FIVE PRINCIPLES

1 Start with clarity

Before asking people to change, I try to make the purpose clear. What problem are we solving? Why does it matter? What are we trying to make possible? People are far more willing to experiment when they understand the reason behind the work.

2 Build with people, not for them

The people closest to the work often understand the constraints best. I bring expertise and a point of view, but I also listen carefully to the educators, leaders, designers, families, and partners who will ultimately carry the system. The strongest solutions usually emerge through that exchange.

3 Make experimentation safe

Innovation requires people to try things they may not already know how to do. I create environments where testing, questioning, revising, and even getting something wrong are treated as part of the work, not evidence that someone is incapable of doing it.

4 Give people useful structure

Autonomy works best when people understand the boundaries. Clear goals, resources, expectations, tools, and feedback create enough stability for people to exercise judgment and creativity.

5 Build ownership

A program becomes stronger when the people implementing it understand enough to make thoughtful decisions without waiting for permission. The goal is not “follow my system.” It is “understand the system well enough to make it better.”

Leadership should leave people more capable than you found them.

BUILDING CAPACITY IN OTHERS*From professional development to professional confidence*

Professional learning works best when it gives people something they can understand today, try tomorrow, and eventually make their own. Whenever possible, I let people **experience** the kind of learning we are asking them to create. A great workshop is measured by what participants are more capable of doing when they leave, so I build in time for practice, discussion, reflection, and application to real work. And because training alone rarely creates lasting change, I think of professional learning as a system of capacity building, not an event: usable resources, examples, coaching, and follow-up after the room clears.

EXPERIENCE



PRACTICE



APPLY



REFLECT



REFINE

LEADING ACROSS DISCIPLINES*Creating shared language across different kinds of expertise*

Some of the most interesting work happens when people who think very differently are asked to build something together. I've worked across educators, designers and creatives, engineers and developers, executives and organizational leaders, and community and industry partners. My role is often the connector: translating learning goals into design requirements, turning technical possibilities into meaningful experiences, and creating enough shared language for teams to make decisions together.

Cross-functional leadership is not getting everyone to think the same way. It is helping people understand how their different ways of thinking fit together.

FROM INNOVATION TO ADOPTION*The work is not finished when the idea launches.*

New ideas are exciting. Adoption is harder. Organizations rarely struggle because nobody has a good idea, they struggle because people do not have enough time, clarity, confidence, resources, alignment, or ownership to turn the idea into practice. So when I lead change, I pay attention to both the idea (is it meaningful? is it better? is it worth doing?) and the environment (do people understand it? do they have the capacity to do it? are the systems around them helping or getting in the way?). I think about implementation from the beginning: who needs to understand the work, where friction is likely to occur, what resources will be necessary, and how feedback will travel back into the design.

My job as a leader is not simply to advocate for the future. It is to help people move toward it with vision, empathy, practical systems, honest communication, and a willingness to keep adjusting until the idea works in the real world.

Innovation is not adoption. Adoption happens when people can see themselves inside the change.

The questions shaping the next generation of learning.

AI + Human Capability

What should become easier and what should remain deeply human?

AI is changing what people can produce, access, analyze, and automate. The more interesting question for learning is not simply how we use the technology, but what becomes more important when the technology can do more.

I am interested in learning systems that use AI to expand human capability rather than reduce human participation. AI can help people generate possibilities, access information, receive feedback, personalize practice, and move from idea to prototype faster than ever before. **But speed is not the same as learning.**

As AI becomes more capable, learning environments will need to become even more intentional about developing the things that remain deeply human:

Curiosity

Judgment

Creativity

Communication

Collaboration

Empathy

Discernment

Agency

The design challenge becomes: *what should we allow technology to make easier so people have more capacity for the thinking that matters most?*

The future of learning is not human or artificial intelligence. It is designing thoughtfully for both.

From Subjects to Problems

Designing learning for a world that does not arrive in departments.

Real problems rarely introduce themselves as math problems, science problems, design problems, or business problems. They arrive messy, interconnected, and incomplete. Our learning systems have traditionally separated knowledge because it makes teaching easier to organize. **But the world asks people to recombine it.**

I am increasingly interested in learning experiences built around questions, challenges, and real-world contexts that require learners to pull knowledge from multiple disciplines, collaborate with people who think differently, and make decisions without knowing the answer in advance. That does not mean disciplines disappear. It means learners understand why and when to use them.

The future-ready learner is not simply someone who knows more. It is someone who can ask:

| *What do I know? What don't I know?*

| *Who else do I need?*

| *What can I try?*

| *What is the evidence telling me?*

| *What should I change?*

The goal is not interdisciplinary learning for its own sake. It is preparing people to think across boundaries when the problem requires it.

Learning → Pathways → Possibility

Helping people see where learning can take them.

One of the most important questions in learning is not only “What are you learning?” but “**What can this help you become able to do?**” Learners need opportunities to see how knowledge connects to people, professions, industries, communities, and real problems. That means bringing the outside world into learning earlier and more often:

Industry partnerships

Mentors

Design challenges

Real audiences

Community problems

Internships

Credentials

Portfolio evidence

I am interested in learning systems that help people build both **capability and visibility**—not only developing new skills, but being able to demonstrate what they know and imagine where those skills might lead.

Career-connected learning should not narrow possibility too early. Done well, it does the opposite: it helps learners discover possibilities they did not know existed.

Learning becomes more powerful when people can see a future for themselves inside it.

I have spent my career building learning experiences, products, programs, and systems across schools, museums, organizations, and communities. The environments have changed. The technologies have changed. The problems have grown more complex.

The work that continues to interest me most has remained remarkably consistent:

How do we design learning that helps people become more curious, capable, creative, and willing to take on something they cannot yet do?

I am interested in organizations willing to ask that question seriously—and ambitious enough to build the systems that make the answer possible.

Jennifer Cefaly

Learning & Innovation Executive
Learning Systems Architect • Product Strategist

jennycefaly@gmail.com

818.294.2236

[linkedin.com/in/jencefaly](https://www.linkedin.com/in/jencefaly) — Los Angeles