STUDENT CASE STUDY

“That’s cool, but I have no idea if I’d like that.”

A rising senior at a Pennsylvania public high school, remembering a college visit: a pamphlet full of majors, and no sense of the work behind any of them.

Nine hours. Thirty activities. A field reconsidered.

ONE STUDENT’S EXPERIENCE

01 THE SITUATION

He didn’t need another list of majors.

He was strong in math and science, and college visits were already underway. Forensics sounded interesting. Engineering did not, because in his mind engineering meant dimensions, angles and bridges.

Over nine one-hour simulations he worked through thirty professional activities. After each one he said which parts pulled him in and which wore him down, and talked through the reasons with his guide.

THE CASE AT A GLANCE

9	30	3
guided hours	work activities	career directions

He came in thinking forensics. He left with computer engineering as his leading fit, in a field he had ruled out.

IN HIS OWN WORDS

Verbatim, from recorded sessions

He raised the pamphlet himself, unprompted, in the third session:

> “I’d kind of want to know more about what’s in that major, than if I just hear the word finance, or if I just hear the word like whatever, something else. Like I don’t totally know what that entails, you know what I mean?”

HOW HE HAD BEEN CHOOSING

> “To be honest, I took forensics as a class starting in junior year. I kind of just liked the idea. My sister did it as well, and she went to STEM. And I kind of just liked the idea of blood, and a bunch of different kinds of evidence…”

The student, recorded after the program, looking back at how he had been choosing.

He picked a direction because he liked the sound of it. Nothing available to him would have told him more.

02 THE EXPERIENCE

Experience before opinion.

A career is too big for a student to test-drive. The work inside one breaks into activities small enough to attempt in an hour. He completed thirty of them across nine guided simulations, one per workstyle. There was no questionnaire at any point.

THE NINE WORKSTYLES — One guided simulation each

01 **Perform** — Operate a complex system, then troubleshoot when it fails	02 **Underwrite** — Decide whether an investment is worth backing, and at what price	03 **Create** — Design a solution for real users with real constraints
04 **Lead** — Steer a team through a crisis and keep it together	05 **Care** — Assess a person’s situation and deliver a plan	06 **Sell** — Choose the right buyer, then make the case live
07 **Research** — Design a test, run it, work out what the data says	08 **Teach** — Teach someone a skill until they can do it alone	09 **Engage AI** — Direct an AI, check its work, make the final call

After every activity he stopped and talked it through with his guide: which part of the work pulled him in, which part wore him down, and why. Two activities inside the same field often produced opposite reactions.

WHAT HE SAID WHILE DOING IT — Verbatim, from recorded sessions

Ten minutes into the systems case, offered an easier route and a harder one:

> “I’ll try the expert field, why not?”

Reflecting on it afterwards, correcting himself mid-sentence:

> “I like troubleshooting. Honestly, I’ll say I loved it.”

On the teaching case, one he expected to be neutral about:

> “I actually enjoyed building the actual storyboard, thinking about what icons to help them remember.”

On the same case, ninety seconds later:

> “I don’t really love my success being based off of other people. That’s very open to their willingness to learn.”

On the care case, after delivering a plan:

> “I would want to help someone, but I wouldn’t want to be the person with that role.”

Asked which moment in the AI case felt most like him:

> “It definitely happened within the auditing the AI — being able to see all of those differences, and then being like, okay, cool, now I can start finding all the flaws.”

Every one of those came minutes after he finished the work it describes.

03 THE TURNING POINT

The word said no. The work said maybe.

By the last session a pattern had formed. Systems, precision, troubleshooting and finding flaws engaged him again and again. His picture of engineering had not caught up.

THE STUDENT — BEFORE THE DISCUSSION

“I lean away from — I don’t know if this is ironic or contradictory to what I’ve done. But I lean away from engineer. Engineering doesn’t stick out to me, honestly.”

> He volunteered that. Nobody asked, and he flagged the contradiction himself before anyone else could. Asked to say more, he narrowed it: the only engineering he could picture was structural engineering, and bridges.
>
> His guide then connected several branches of engineering to work he had already tried and already said he enjoyed: operating a complex system, using numbers to decide an outcome, and building and debugging software.

THE STUDENT — MINUTES LATER

“I do want to recant what I said. I actually am really interested in aspects of engineering. I just honestly had no idea what kinds of engineering there are.”

01 · EXPERIENCE

He did the work

Tried nine unfamiliar kinds of work firsthand.

02 · EVIDENCE

A pattern appeared

Systems and troubleshooting stood out across cases.

03 · RECONSIDERATION

He reopened a path

Matched his own reactions to a field he had dismissed.

The explanation worked because he had already done the work. Nine hours earlier it would have been one more description of a job.

04 THE EVIDENCE

Thirty activities. Thirty reactions.

A student can love one part of a workstyle and dislike another. These are his activity-level reactions, grouped by simulation.

10 Loved 16 Tolerated 4 Disliked

Perform
ENERGIZER

- Understand how a system works
- Follow a precise process
- Troubleshoot problems

Underwrite
ENERGIZER

- Model the key drivers and optimize
- Manage risks & trade-offs
- Negotiate deal terms

Create
ENERGIZER

- Gather user needs
- Prioritize features and design a solution
- Get feedback and adjust
- Create a message that sparks interest

Lead
ENERGIZER

- Select candidates for roles
- Coordinate planning
- Inspire people
- Resolve conflicts and align people

Engage AI
SUPPORTING

- Direct AI
- Check AI outputs
- Make the final call

Care
NEUTRAL

- Diagnose or assess human needs
- Create and justify a care plan
- Share with empathy

Sell
DRAINER

- Learn product details
- Find the right customers to target
- Make a persuasive case to an audience

Research
DRAINER

- Read technical or scientific content
- Design a research approach
- Analyze complex data
- Share recommendation with evidence

Teach
DRAINER

- Learn a concept
- Create teaching aids
- Adapt explanation and teach

How the workstyle labels work. Each coloured row is one activity he rated. The label above each card summarises the workstyle overall: **Energizer**, it engaged him; **Drainer**, it wore him down; **Neutral**, neither. **Supporting** marks Engage AI, which is scored alongside other occupations rather than standing as a direction of its own. These are observations from guided work samples, not a personality type and not a psychometric score.

05 FROM EVIDENCE TO DIRECTION

Where the evidence points.

He found three workstyles draining overall. Inside each one he found something he liked. An answer at the level of a job title loses all three.

Sell	He enjoyed working out which buyer to target. He disliked making the pitch live.
Teach	He enjoyed designing the storyboard and the visual explanation. He disliked having his success depend on another person learning.
Research	He enjoyed analyzing complex data. Technical reading drained him.

THREE DIRECTIONS WORTH TESTING

Ranked on fit, shortlisted on criteria the family set

01

Computer engineering

Among the highest fits · Systems and hardware

Building and improving how physical computing systems work, with the precise, systems-level problem-solving that engaged him most.

RELEVANT MAJORS

Computer engineering
Electrical engineering

OCCUPATION EXAMPLES

Computer hardware engineers
Electronics engineers

His signals: troubleshooting · understanding how a system works · precise execution · checking outputs

02

Computing & software

Second direction · Build and debug systems

Finding flaws and working toward a result that runs, which drew on the activities he rated highest.

RELEVANT MAJORS

Computer science
Software engineering
Data engineering

OCCUPATION EXAMPLES

Software developers
Database architects
Data warehousing specialists

His signals: debugging · building toward a working result · finding the flaw · designing a solution

03

Quantitative & financial

Third direction · Model and optimize decisions

Using data, models and trade-offs to reason toward a decision. Lower on fit than the first two, and still a direction in its own right.

RELEVANT MAJORS

Finance
Applied math / statistics
Actuarial science

OCCUPATION EXAMPLES

Financial managers
Investment fund managers
Actuaries

His signals: modeling the drivers that decide an outcome · analyzing data · optimizing against constraints

How the shortlist was built. His reactions to thirty activities were matched against the work patterns of 400+ occupations in the U.S. Department of Labor's O*NET database. Fit does the ranking, and systems work scored highest for him: Perform was the only workstyle where every activity came back as a love. Computer engineering sat among the highest scorers alongside several other engineering roles. The family's own priorities, employment outlook and compensation, narrowed those into three directions worth exploring. Fit shows where to look, based on firsthand experience. Building the college list stays with his counselor and his academic record.

06 WHAT CHANGED, AND WHAT COMES NEXT

A clearer direction. Still his choice.

He did not leave with a guaranteed answer. He left able to see a field he had dismissed, and with specific evidence to weigh while he decides what to study.

BEFORE	AFTER
Considering forensics. Engineering ruled out, because the only engineering he could picture was bridges.	Looking at engineering schools and programs, with firsthand evidence of the work he enjoys.

Reported by his parent after the program.

His last words in the final session, unprompted:

> "I really enjoyed this. It's like very unique. I've never really done something like this before, so I actually really did enjoy this."

AFTERWARDS · THE STUDENT

"Before the experience, I had a different perception of engineering. When I thought of engineering, I thought of figuring out dimensions, cutting pieces, almost like building a bridge. That is how I would describe my perspective. But now I realize that there are so many aspects to engineering, and aspects that I think I would enjoy, like the math and science. But not only the math and science, also being innovative. So when I look at college majors, I do think engineering would be very helpful... There are a bunch of different paths with engineering. So I think that interests me a little more now."

The student, recorded after the program finished.

AFTERWARDS · HIS PARENT

"I think he was really interested in forensics when we first started. And he wasn't interested as much in engineering, because he had a couple of engineering classes at his school and he said, 'No, it's more about bridge building, and angles, and this and that. That's not really what I want to do, I'm not really interested in that.' So then he went through DecadeAhead and figured out that he likes problem solving, and there's a lot more to engineering than just bridge building. There's a lot of different things that he could do after going through some of these nine simulations. So now he's looking at different schools, engineering schools and engineering programs, and we're really excited for him because he has a much better target now."

Parent of the student, recorded after the program finished.

TURN A DIRECTION INTO A DECISION

From his report

START HERE

01 **Get a real taste of each direction**

Try the actual work in engineering, software and quant this summer through a short course, a small build or a set of real problems, and notice what energizes him and what drains him.

02 **Build one real project this summer**

Something he can build, investigate or ship, tied to his strongest loves. One finished thing he can talk about beats several half-starts.

03 **Build the college list through the major lens**

Strong programs across his directions, with attention to how each one teaches — problem, lab or project based.

04 **Start the application narrative early**

Draft the why-major, why-school and personal essays from his fit story and summer experiences, and line up teachers who have seen this side of him.

His report carries three further steps to layer in — short conversations with people doing the work, a running energy log, and baseline skills to build over the summer.

RAW MATERIAL FOR COLLEGE APPLICATIONS

The report builds application material from his evidence, including essay threads, language for the teachers writing his recommendations, and a why-this-major version of each of the three directions. One sample:

> "What energizes me is making a system work better: understanding something deeply enough to see why it isn't working, and then fixing it. I would rather reach an answer with evidence than argue my way to one. That is the thread I want to keep following, and computer engineering is where it points."

Know what they're building toward.

DecadeAhead is a guided work-sample program, not a quiz. Students try thirty professional activities across nine workstyles, one-to-one, around the academic day. They leave with an activity-level preference map, best-fit majors and careers, and an action plan.

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