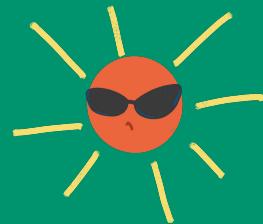




# SOUTH FAYETTE X MHCI

## RESEARCH REPORT 2024

COURSE CATALOG FOR THE FUTURE



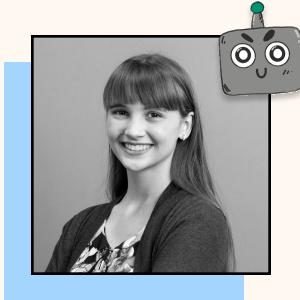
# MEET THE TEAM!

WE ARE A TEAM OF GRADUATE STUDENTS WORKING IN HUMAN-COMPUTER INTERACTION



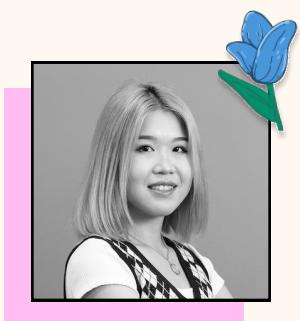
## LORI CHEN

I graduated from NYU with a major in Film & TV and have professional experience working at DreamWorks Animation. I'm passionate about creating engaging stories through interaction design.



## REBEKAH JULICHER

I'm a techie at heart with a degree in Computer Science from the University of Arizona. I've worn many hats, from being a teaching assistant to diving into business applications, firmware engineering, and simulator development.



## VIVIAN LI

I recently graduated from the University of Chicago with degrees in Art History and Media Arts and Design. I designed for the annual student fashion show, worked part-time doing graphic design for local nonprofits, and spent a summer working at an auction house.



## ERIN SAWYER

I'm a curious researcher, quantitative storyteller, and recent graduate of Michigan State University with a B.S. in Data Science, a B.S. in Psychology, and minors in Japanese and Quantitative Data Analytics. I am passionate about games for good.

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OVERVIEW

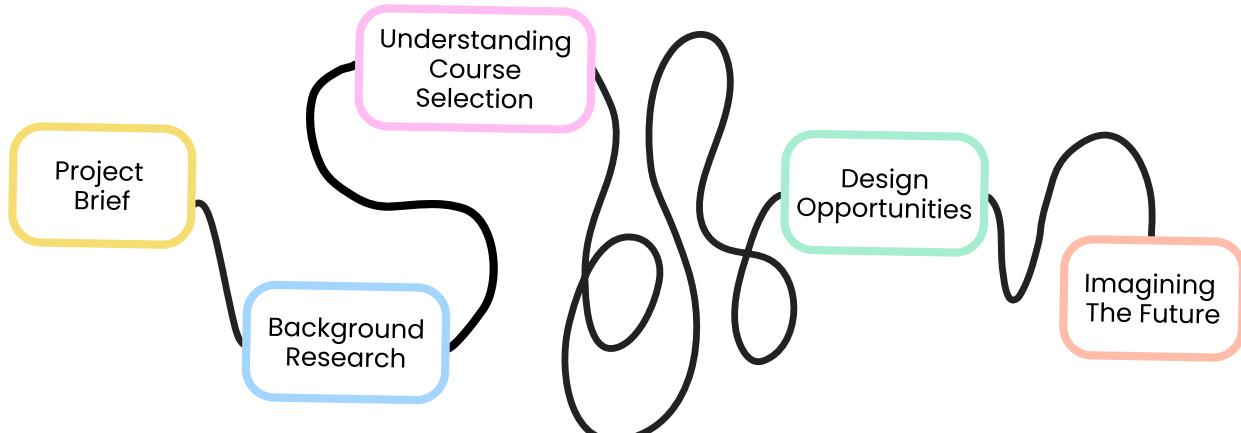
HOW MIGHT WE DESIGN A  
SYSTEM TO INFLUENCE  
BROADER CHANGE?

**We were initially tasked with revolutionizing the course catalog at South Fayette, but we found ourselves asking how we could influence systemic change through new systems.**

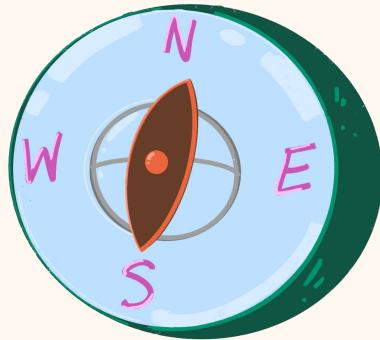
This semester, we embarked on a journey to radically reimagine the South Fayette course catalog to better align it with students' needs and future goals. The team explored the whole process of course selection to ideate a more dynamic, interactive system that facilitates informed decision-making and fosters a deeper engagement with educational and career planning.

Through comprehensive research, including direct interactions with students, teachers, and counselors, our team identified key challenges faced by students that we have translated into opportunity areas for design solutions.

## OUR JOURNEY



# OPPORTUNITY AREAS



IDENTITY & CONFIDENCE



PERCEPTION OF VALUE



COMMUNITY & BELONGING



CAREER THINKING



## How might we help students make better decisions about course planning and their journey beyond high school?

We recommend that design solutions tackle this question by empowering students to...

### BUILD CONFIDENCE + SELF-IDENTITY

We believe that students who are confident in themselves will make better decisions that feel authentic to them given the information they have, and will be better able to adapt to change, even when those decisions do not work out.

### FIND THE RIGHT COURSES FOR THEM

We believe that student's current perception of value may limit them from having a holistic educational journey.

### LEVERAGE THEIR COMMUNITY

We believe that students who can effectively engage with their community, while remaining true to themselves, will adopt a bigger picture view that will aid decision-making.

### SUPPORT CAREER THINKING

We believe that by implementing interactive and experiential learning opportunities that bridge the gap between courses, career paths, and real-world contexts, students will be more engaged in exploring these connections.



# THE PROBLEM

**The Program of Study has valuable information, but it's underutilized by students.**

The Program of Study (PS) is created by teachers, counselors, and admin. While it serves as a documented repository of course information such as titles, descriptions, and prerequisites, it is also intended to be a tool to communicate information about courses to students, and secondarily, their parents.

## Counselor, Directed Storytelling

"When I have conversations with parents and students and ask if they've looked at the PS, they usually say no."

In a sample of 17 students intercepted during lunch periods, **65% of the students said they were not aware of the PS when asked**. All grades were represented in this sample, and there did not appear to be significant trends in grade level, future goals, or gender associated with whether they had heard of the PS.

## Counselor, Directed Storytelling

"In my role, I use the PS all of the time when I'm having conversations with students."

Despite being intended as a tool for students, it seems as though the PS is more highly regarded by counselors, used as a reference to help students.



# THE PROBLEM

**Students appreciate the choices available to them, but the current form of the course catalog makes the variety a burden.**

## **Student, Contextual Inquiry**

"There are so many options, and each is an incredible learning opportunity, but it's so hard to choose which one."

Even if students do read the PS, they are overwhelmed by hundreds of pages of dense text. When asked how they plan courses in contextual inquiry around course registration time, students described using strategies like personal documents or notes to sort through and organize the information relevant to them in the PS. For example, a list of what electives they were interested in.

## **Counselor, Directed Storytelling**

"The PS can be hard to navigate if you don't know what you're looking for."

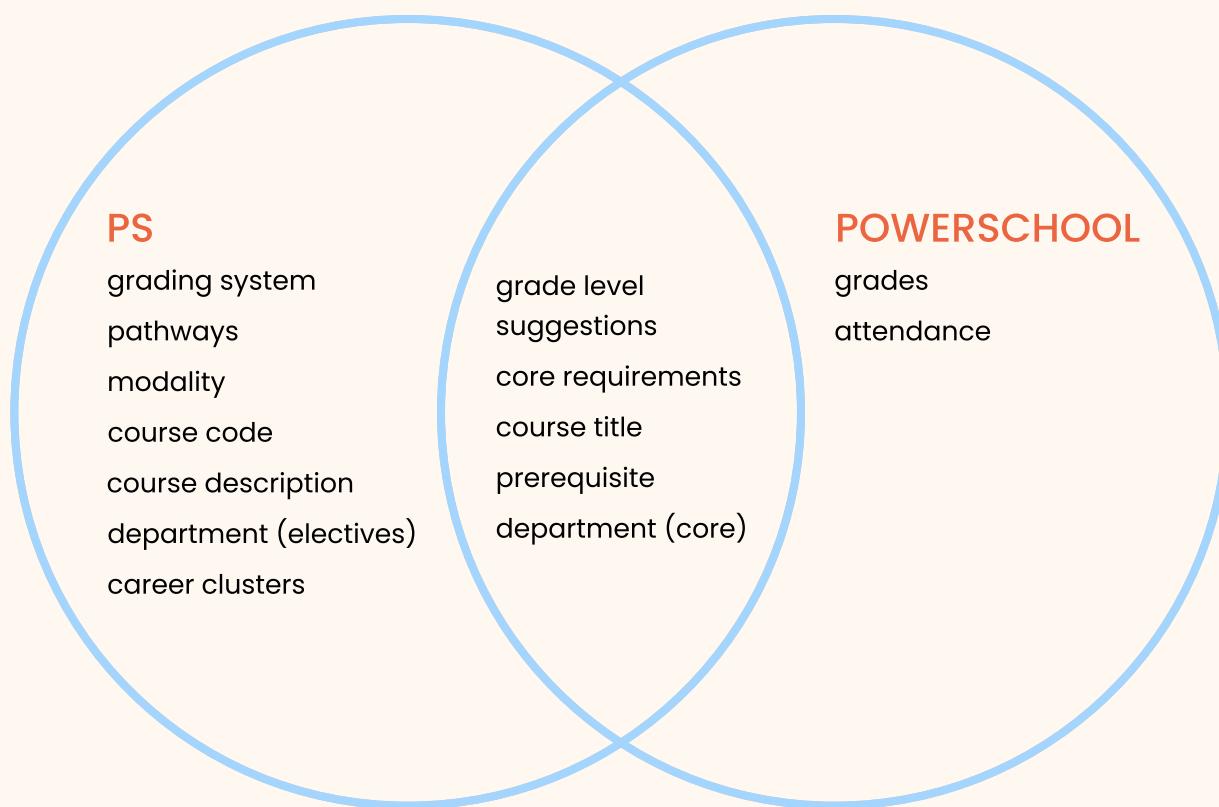
"There's just so much information in the PS."

Even counselors, who would be considered expert users of the PS, recognize the pain points associated with the density of information. The effect on navigation discourages student exploration.

# THE CONTEXT

**Using a separate system for registration creates a gap between where some documented information exists and where it's being used.**

This data model highlights the information is present in each system, and where they have overlap. Importantly, even repeated information is not necessarily presented the same way, as students lamented having to sort through long lists of course titles in alphabetical order on PowerSchool, whereas the Program of Studies organizes courses by department. Further, actual usage of this information varies by student and context.

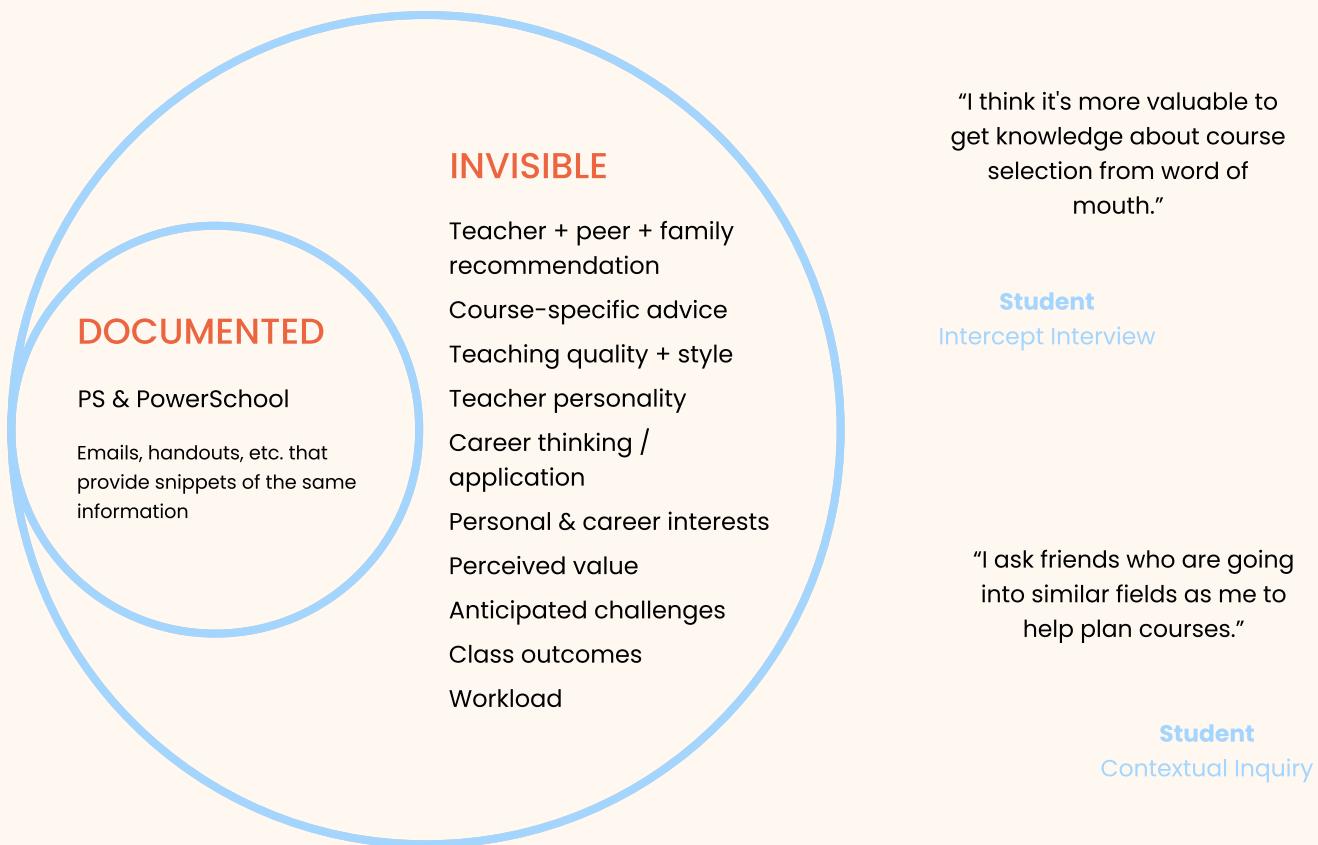




# THE CONTEXT

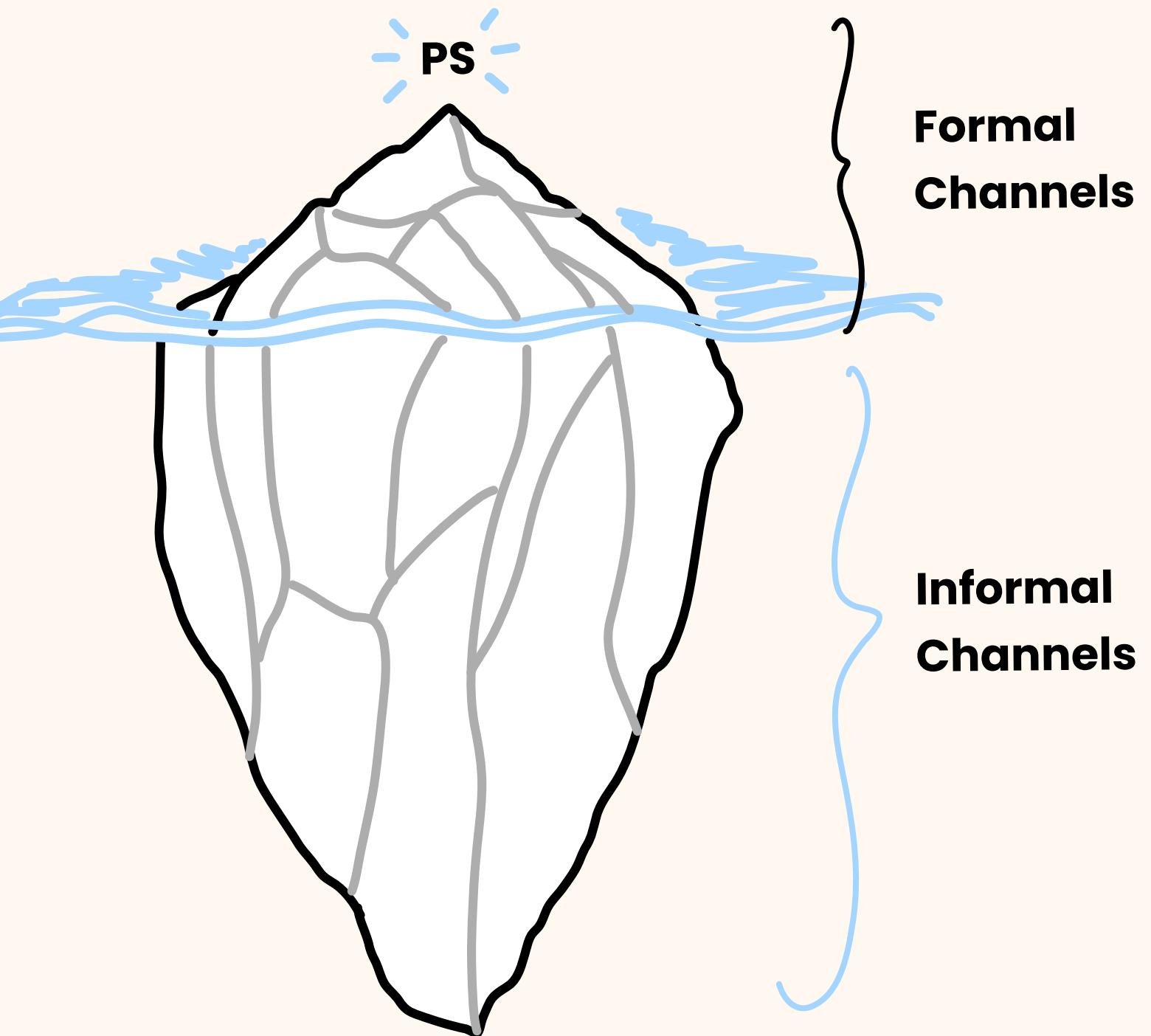
**Informal channels significantly enhance the range of information guiding students' decisions.**

Even then, the Program of Studies and PowerSchools, along with more formal resources like grade level scheduling assemblies, are only the tip of the iceberg. While usage of the documented information seems to vary widely, almost all students we spoke to used word of mouth to inform their course selection.





THE PS IS ONLY THE TIP  
OF AN ICEBERG.





# JOBSTO BE DONE

UNDERLYING NEEDS  
& MOTIVATIONS

## COUNSELOR

Counselors support students in a variety of areas from social-emotional wellness, to course selection. They are key users of the current Program of Studies. Their biggest constraint is the sheer number of students they see, and their ability to give personalized and informed recommendations to each student with the capacity and knowledge they have.

**I want to effectively guide students to make informed decisions that are right for them.**

## ADMINISTRATOR

Administrators influence school policy, and in turn the culture of the school. They want to both create opportunities for meaningful educational experiences, and ensure that the community can take advantage of them. Their biggest constraint is generating buy-in from a diverse group of stakeholders with widely varying needs in an industry that can be slow or resistant to change.

**I want our students to have a holistic learning experience that prepares them for a changing future.**



# STUDENT

Students both influence and are influenced by course selection at South Fayette. They are the primary user group, but within the student population, their needs vary widely based on future goals (or uncertainty about future goals), grade level, culture, and personality. Student-centered policy is a key value at South Fayette. Students' biggest constraint is that they don't know what they don't know (about both themselves and the world around them), so they must make the best decisions they can with the information or resources they do have.

**I want to take advantage of meaningful learning experiences that prepare me for my future.**

# TEACHER

Teachers are one of the most important touch points in the course planning process. They have detailed knowledge about each of their courses and students, which they can combine to give holistic and informed recommendations. This is reinforced in the formal scheduling process by recommendation requirements.

Teachers' biggest constraints are time and focus on content expertise, which may limit their knowledge of competencies and opportunities outside of the classroom.

**I want to connect with my students by giving them holistic and informed course recommendations that reflect my knowledge of the student and my subject.**



# LEARNINGS

01

**Effective educational systems should be dynamic. Not just for a diverse set of users, but for a changing future.**

01-1

There is misalignment between the pace of education changes and the pace at which the future education prepares students for is changing.

Administration at South Fayette described the pace and attitude around educational change as a “systemic” issue. They wondered “how do we stay ahead to know what students will need years into the future and still be nimble enough to adapt?” and shared with us how exhausting and discouraging it can be, to teachers especially, to try to keep up with the pace that the world is changing. This demonstrates a need for systems that make change a more natural and comfortable part of educational design. Education professionals have a real need for support in this area.



# LEARNINGS

## 01-2

In the educational landscape, information and the systems through which it is communicated should be created by and for the different stakeholders.

### **Student, Intercept Interview**

“I think it's more valuable to get knowledge about course selection from word of mouth.”

### **Teacher, Semi-Structured Interview**

“I know which classes have a reputation of being like a lot harder.”

The teacher shared that this knowledge is from what she hears from students, other teachers, and her personal experience / word of mouth from many years of teaching at the school.

Regardless of documented information, students seek out additional information from resources and peers around the school. This implies that there is a valuable information base that exists outside the formal resources which only the people participating in these shared experiences can capture.

Different stakeholders add more to the process than just a large information network, though. Admin at South Fayette also described “barriers from the community” being the number of stakeholder groups and their diverse and varying needs associated with the information.



# LEARNINGS

02

## **Educational interfaces should inspire human connection.**

Even a student who described planning out their schedule prior to consulting teachers said that “my teachers see my strength and weaknesses, including ones I may not have seen before.” Later in the conversation, the student shouted out a particular teacher who has helped them with course selection, stating “I feel like I could talk to her about anything.”

**Teacher (On Course Recommendation), Intercept Interview**

“This kind of stuff is why I became a teacher.”

Our research with students, teachers, and counselors highlights interaction as a meaningful and important part of the course selection process. Students describe trusting their teachers for personalized recommendations, and teachers shared how much they enjoy their role in guiding students, even if it takes extra time. While reimagining this process, the human interaction around these topics should be preserved and enhanced.



# LEARNINGS

03

## **There is an information gap between students, teachers, and counselors.**

Counselors use the PS in different ways, some referring to specific parts of the document more than others, but their way of understanding a student's academic performance is mostly through grades.

Furthermore, counselors don't interact with a lot of the students. One counselor estimated that they spend 90% of their time with 10% of the students.

### **Counselor, Directed Storytelling**

"I'm here to talk through things and help guide students, but I'd direct them to the teacher for more specific questions. Some of these students I've never even met."

On the other hand, teachers have contextual knowledge of their students and can offer more personalized advice, whereas counselors can answer more logistic inquiry. This in mind, we found that it would be beneficial to facilitate knowledge transfer between teachers and students and counselors.



# SUMMARY OF PROBLEM SPACE

## CURRENT FORM

The current form of documented course information discourages exploration and makes the variety of choice a burden on students. Despite having valuable and useful information, because of this format, documented channels like the Program of Studies are underutilized by their primary audience.

## KEY INFORMATION

The set of information and resources that students use to make decisions related to course planning is actually much greater than what's present in documented channels. This information is accessed and shared through informal channels of communication.

## STAKEHOLDERS

The problem space of course selection has a diverse group of stakeholders with unique, but interconnecting needs. While student-centered systems are a priority, understanding teachers, counselors, parents, administrators, and outside influences, like colleges, is crucial to navigating this problem space.

## A CHANGING FUTURE

The education that students receive should reflect the future they are preparing for, and schools need support in doing so.

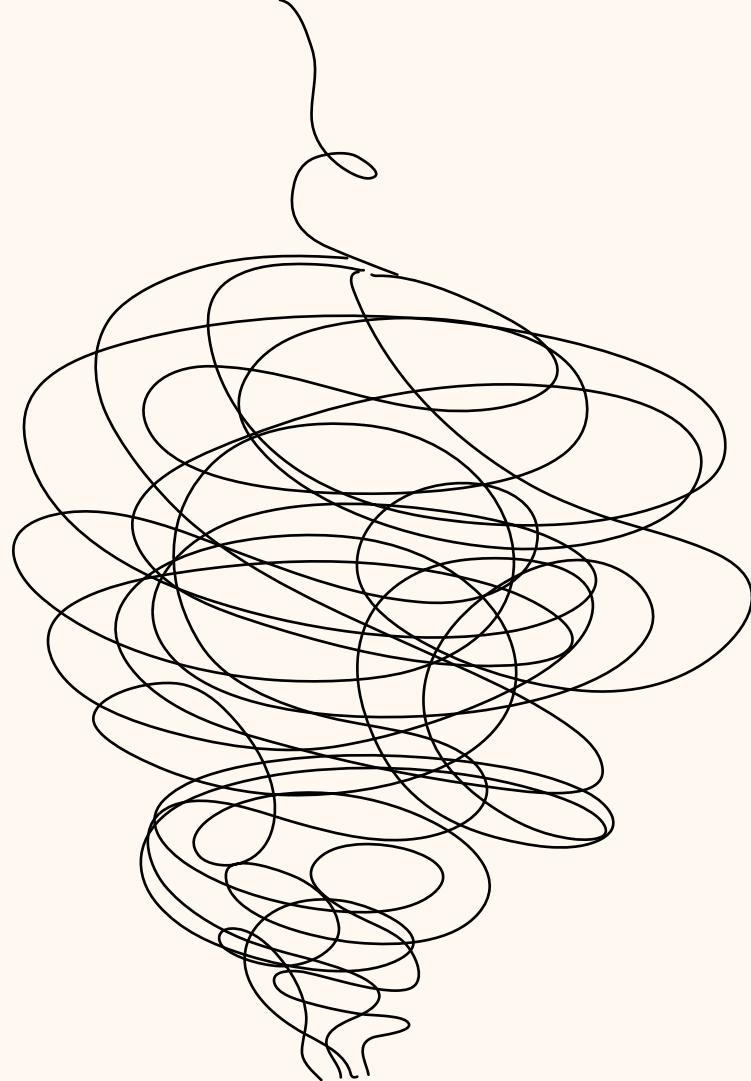


Given what we know about the current state of course selection at South Fayette High School...

**OUR SOLUTION SHOULD NOT JUST**

**REINFORCE THE CURRENT SYSTEM**

**MORE EFFICIENTLY.**



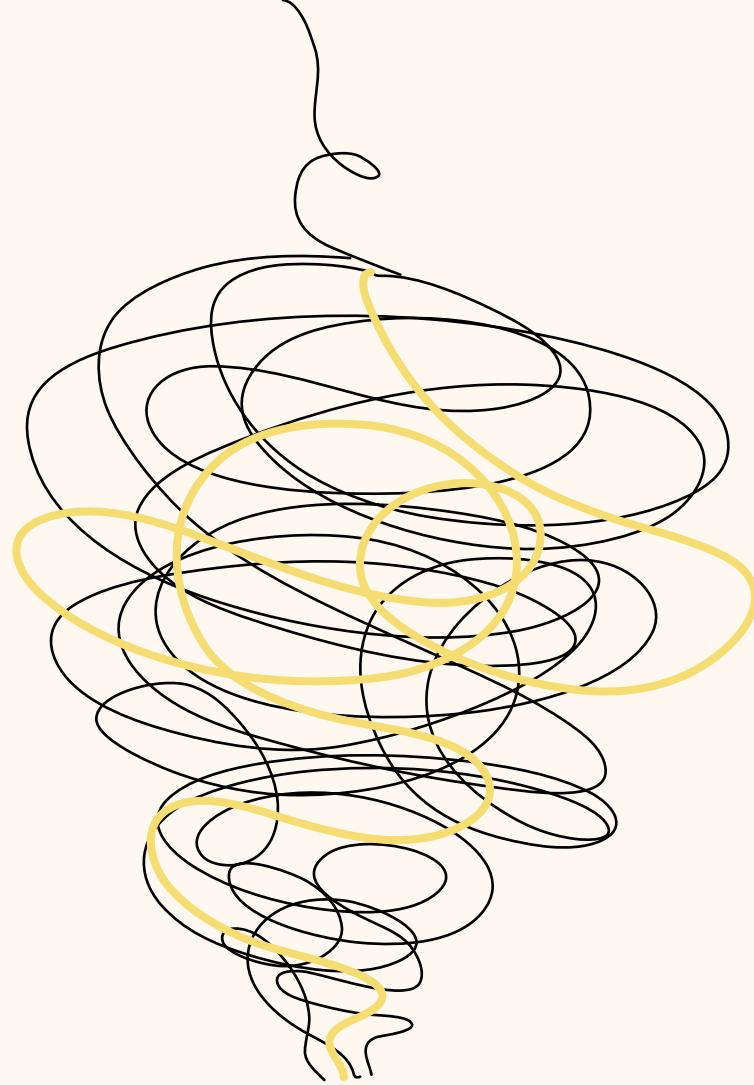
# OPPORTUNITY AREAS

We identified four lenses through which we can understand the problem space and respond to our guiding question:

**How might we help students make better decisions about course planning and their journey beyond high school?**



- O1 IDENTITY + CONFIDENCE**
- O2 PERCEPTION OF VALUE**
- O3 COMMUNITY + BELONGING**
- O4 CAREER THINKING**



## IDENTITY + CONFIDENCE

### QUESTIONS

How might we empower students to trust their inner voice?  
How might we better support students in exploring and forming  
their identity?

### HYPOTHESIS

We believe that students who are confident in themselves will make better decisions that feel authentic to them given the information they have, and will be better able to adapt to change, even when those decisions do not work out.

## Students who are not confident in themselves see opportunities as a threat.

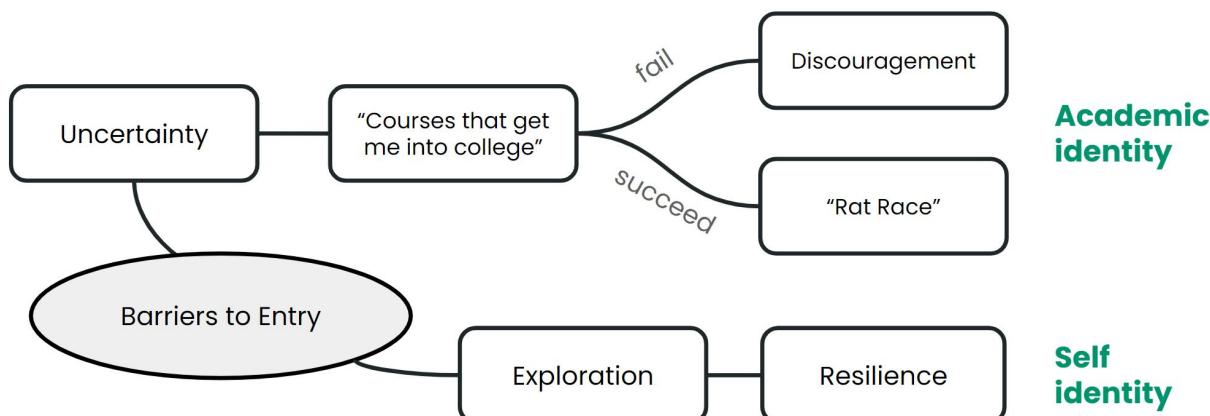
### University Admissions / Advising Staff, Semi-Structured Interview

[In high-achieving students] “Self-identity is wrapped up in academic performance”

When students have not formed a more holistic self-identity that they are confident in, they tend to tie their self-identity to their academic performance. This means that academic exploration, which can help students find their passion, is not just seen as a risk to the educational journey, but as a risk to the self and future aspirations. Failure is a natural and important part of the learning process, but students can't reap the benefits of picking themselves back up, and are not willing to risk falling down in the first place.

## UNDERSTANDING THROUGH MODELING: IDENTITY

This is an early model we made exploring the idea of self-identity vs. academic identity.

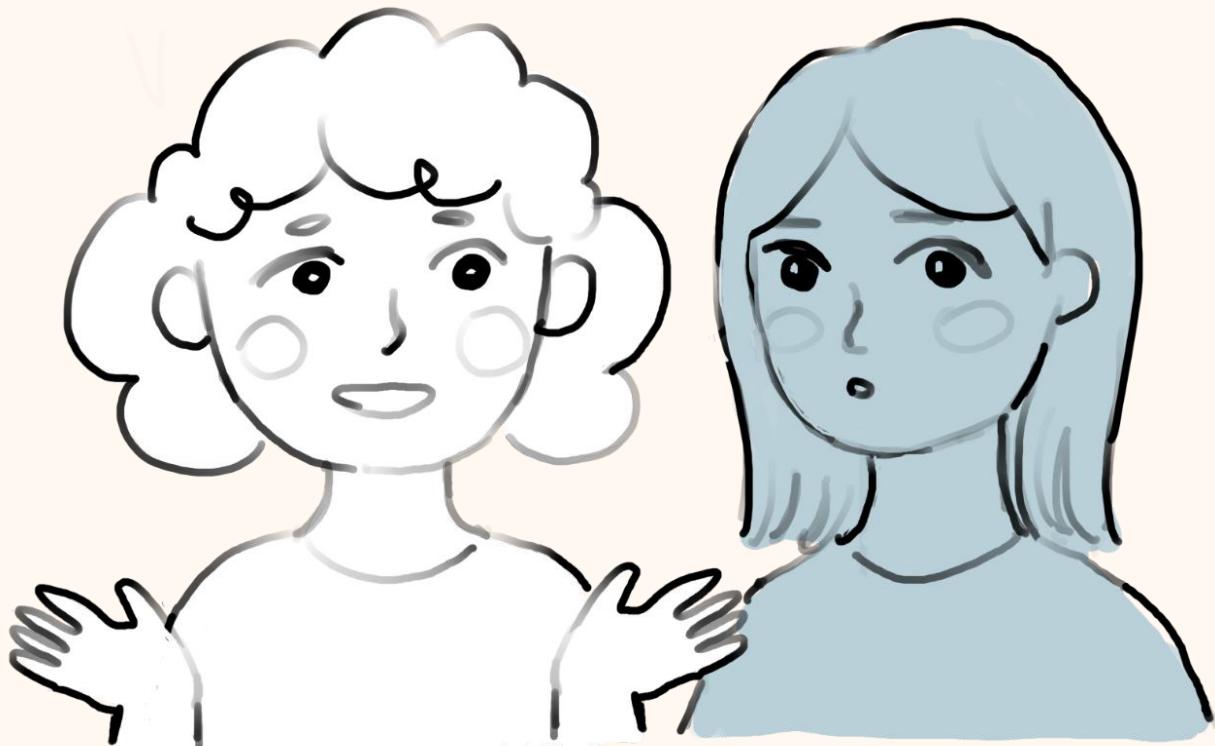




A South Fayette teacher shared a story of a student who was extremely nervous to take on a leadership role that she was well-qualified for and interested in because she was comparing herself to another candidate. Instead of seeing it as an opportunity to follow her passion and grow, she saw it as a risk for failure or rejection. Students have the opportunity to explore, fail, build resilience, and redefine their identity in high school, but they may be too scared to do so.



You can certainly go too far with this, but when one end of the spectrum is cutting yourself off from opportunities early, how might we encourage students to "fake it until they make it" a bit more?





## High school should be reframed as an opportunity for growth, rather than a zero-sum game.

### University Admissions / Advising Staff, Semi-Structured Interview

"the best and happiest students that I see are not getting 4.0s"

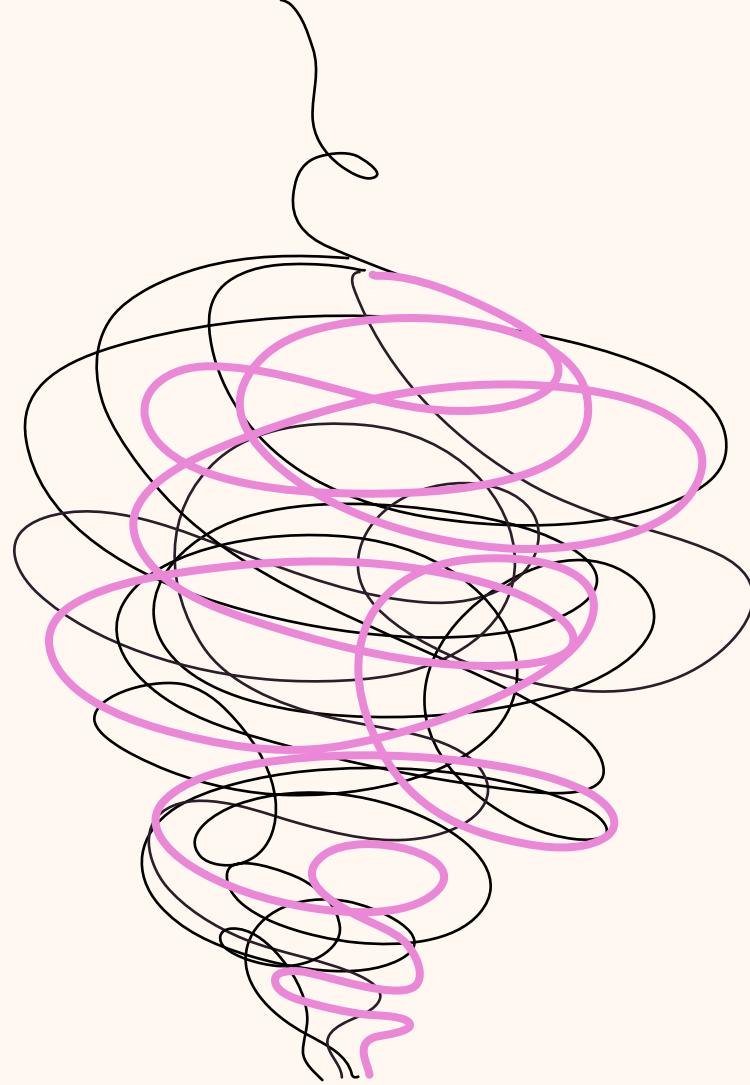
"Students who are happiest and healthiest here have stuff outside their major – not even necessarily related to courses. [Course load] that's not everything"

Helping students find their academic passions and encouraging them to develop their whole selves outside of school will foster a healthy mindset about school that will, in turn, support performance. Further, engaging students to venture outside their comfort zone will help them build resilience in a supportive educational environment. To do this, students need to embrace their unique strengths and weaknesses both in and outside of academics.

### Teacher, Semi-Structured Interview

I think that [Course Planning is] most successful when a student is willing to engage in a conversation and be honest about their strengths and weaknesses."

We've discovered that students benefit most when they're open to discussing their strengths, weaknesses, and future course plans. This includes being mindful of balancing challenging courses with their workload and dedication, but they need to develop a solid understanding of themselves before they can do so. So how can we foster their sense of identity and build confidence?



# PERCEPTION OF VALUE

## QUESTIONS

How might we better inform students' perception of value?  
How might we communicate the value of courses in a trustworthy way?

## HYPOTHESIS

We believe that student's current perception of value may limit them from having a holistic educational journey.

□□□

**Students assign higher value to courses based on perceived, direct benefit to their future, and differentiate that value from seemingly unrelated courses taken for personal enjoyment or interest.**

### Student, Contextual Inquiry

"I wish I had taken more 'smart' classes versus 'fun' classes my freshman year."

This student categorized classes by "smart" – directly related to college or career preparedness or "fun" – just for fun. While some classes could be both "smart" and "fun," it depended on the student and their interests. This revealed an interesting mental model that other students shared, assigning hierarchy to different courses. While we see the value that each course brings to the whole student, the students seemed to have a more narrow viewpoint about what is beneficial to them, and why. Observations from school admin confirmed this culture where students seek to "game the system" by optimizing for advantages for future opportunities, rather than optimizing for learning or passion.





## **This sense of value limits exploration and may incentivize students to take courses that are not a good fit for them.**

### **Teacher, Semi-Structured Interview**

"The other thing we've started to see is like competing over GPAs. So they often take an AP level course, be okay with getting a B or a C over a regular level course that they would have gotten an A in because overall their GPA is going to be higher with the weighting."

At South Fayette, grading policy gives students in AP courses a boost, even if they receive lower grades than in regular classes. This promise of a GPA advantage discourages students from taking regular level exploratory electives whether that's the right choice for them or not.

## **This sense of value is reinforced by truth, but only to a certain extent.**

In speaking with admissions staff from CMU, they did confirm that most successful applicants took 1-3 AP classes, but that it was highly dependent on the students and the school they came from. Further, colleges, especially prestigious ones, do want to see rigor in the high school coursework, but AP may only be one metric to showcase that. Standards may also be different at different universities. These universities want to get to know the whole student and are interested in how they applied their passions into life outside of school. Some perceptions of the value of courses with regards to academics are supported by the truth of the college applications process, but perhaps not to the extent that some students have internalized it.



**Communicating value means recognizing the unique worth of each course for different students, not directing them towards particular choices.**

While South Fayette wants its students to live whole and fulfilling lives, this ultimately means preparing the student for whatever pathway is right for them.



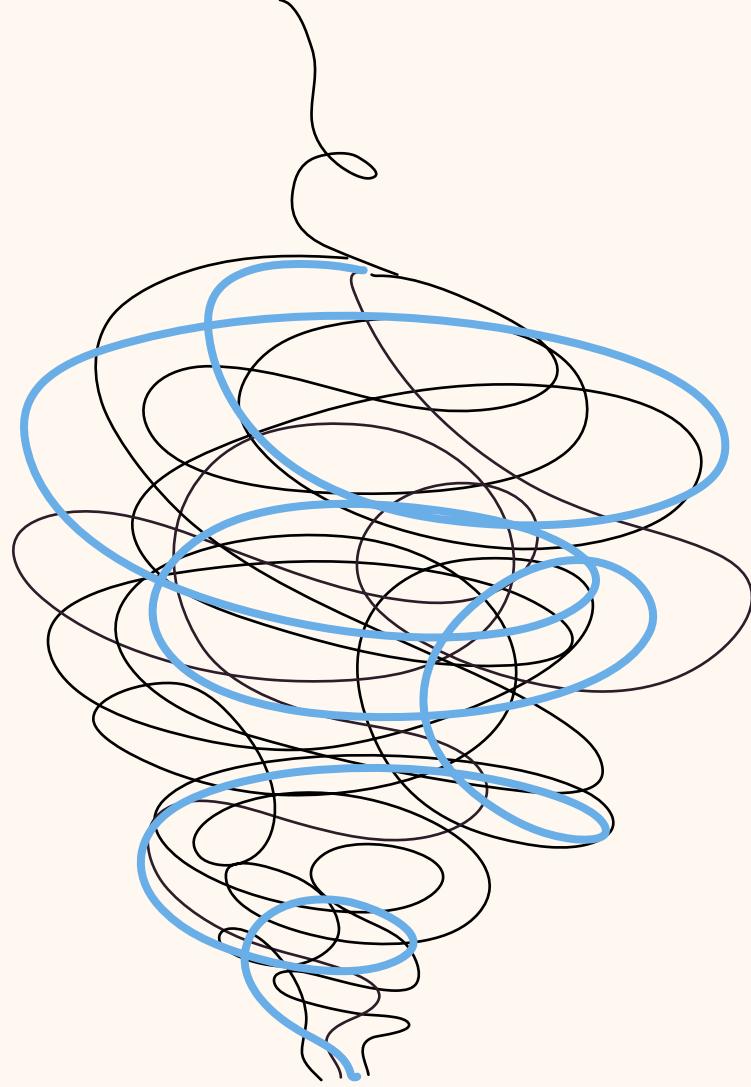
**Students want to understand the true experience of a course to understand its value and be willing to add it to their schedule.**

Students are already using their informal channels to seek out information about the student experience in a course. We want to honor this need, while exploring how to mitigate bias, misinformation, and pressure that may come with the current strategies they are using to meet this need. Solutions should encourage exploration through enhanced sense of value, while making sure to get students the info they need.



**Information architecture that scaffolds information and allows for discovery, encourages exploration, compared to the current system.**

Our review of analogous products like LinkedIn Learning and Coursera revealed that these systems promote a much more positive user experience with some of the same information that South Fayette already has. By displaying more limited information up front which can be expanded, and offering more advanced filtering features, these products make it easier and more exciting to browse through hundreds of courses.



# COMMUNITY + BELONGING

## QUESTIONS

How might we better harness value from students' communities?

How might we inspire a sense of belonging at school?

## HYPOTHESIS

We believe that students who can effectively engage with their community, while remaining true to themselves, will adopt a bigger picture view that will aid decision-making.

## Students engage with their personal networks for help selecting courses.

Multiple of our research activities involving students informed our understanding of what resources students use to choose courses. Their personal networks (including friends, family, teachers, counselors, and more) proved to play a big role in decision-making. In multiple instances, students shared anecdotes about discovering or developing their passions through interactions with their network, including a counselor suggesting a healthcare-related club and shadowing a family friend in the field the student was interested in.





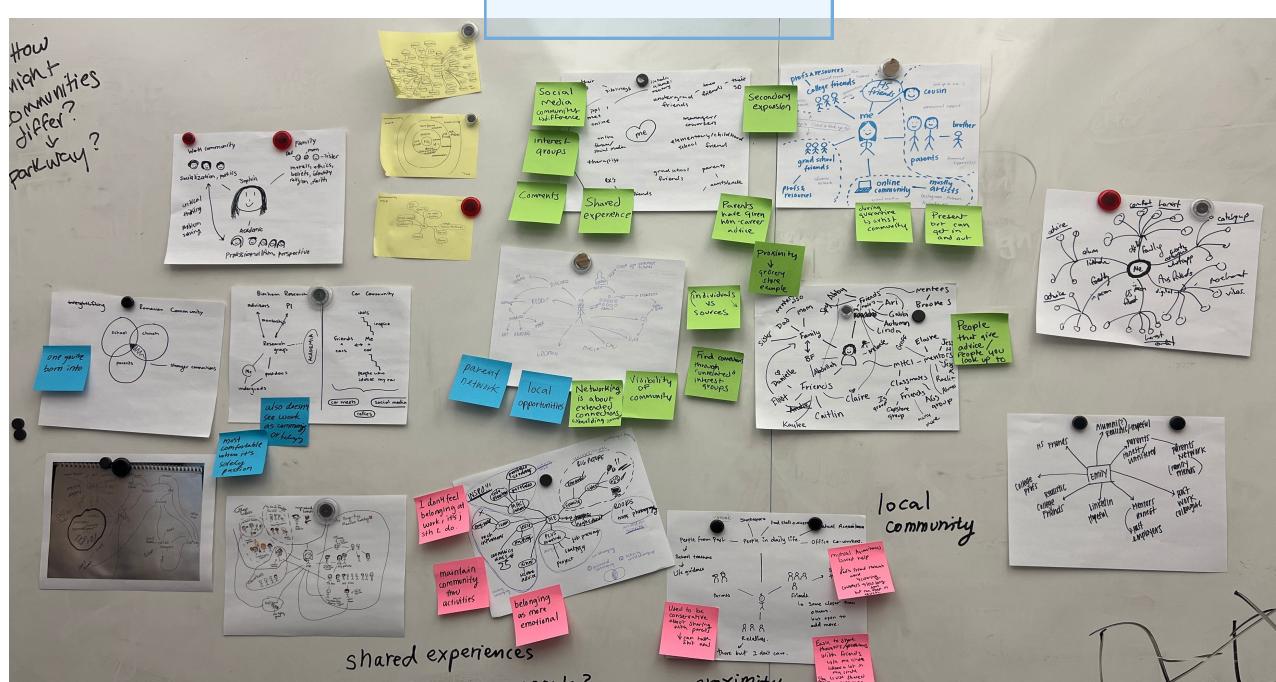
# RESEARCH ACTIVITY: PERSONAL COMMUNITY MODELS

Given the emphasis on personal networks, we wanted to investigate this idea of personal communities and how they promote good decision-making and belonging. We engaged with 15 participants, asking them to draw and discuss their own personal communities.

**Hypothesis:** If we can help students form stronger or bigger personal communities, it will help them explore their interests and feel empowered and supported in decision making.

## **Key Learnings:**

- People form communities through shared experiences or interests.
  - People do not engage their entire community for decision-making. They rely on different members for different types of support and information.





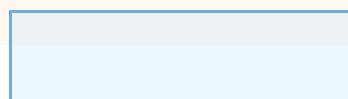
## PRETOTYPING: THE BOARD

This idea of a chosen subset of people in a personal community that are consulted for important decisions encouraged us to shift our model to a decision-making board. In this model, we imagine that the student is the CEO of their own life, with a board of directors made up of trusted people. Our prototype asked students who is on their board, as well as to imagine how they would go about adding additional board members.

**Hypothesis:** Students have a “board” of trusted people that they consult to make important decisions.

### Key Learnings:

- All students agreed that the board model felt applicable to their life.
- Students primarily chose individuals who they could trust, who know them well, who were older, and who have experience relevant to what the student was or will go through.



## WHO'S ON YOUR BOARD?



\_\_\_\_\_  
Spot 1:

\_\_\_\_\_  
Spot 2:

\_\_\_\_\_  
Spot 3:

\_\_\_\_\_  
Spot 4:

\_\_\_\_\_  
Spot 5:

\_\_\_\_\_  
Spot 6:



## **Organic interactions are key to connection building.**

The school community values opportunities to connect with each other, but when opportunities to community build are forced, they may have the opposite effect.

In our investigation of personal communities, participants described making close connections through shared experiences and interests. When discussing opportunities for community building, a teacher at South Fayette echoed that forced interaction is typically less meaningful for students.

## **Students seek out opportunities to receive guidance that is authentic to them.**

In theory, students could get significantly more information about courses and career paths from documented channels and secondary sources like the internet, than they do now. However, our work on communities highlighted that a benefit of seeking guidance from people you know and trust is that the guidance is interactive and tailored to the student. For instance, one of the most prominent criteria for people on students' imagined boards was that the person knows them well.

## Relying on personal networks is a double edged-sword.

While students may reap valuable information from others, this strategy can also invite bias, misinformation, and pressure.

### Student, Contextual Inquiry

"I don't want to take classes that people that I know have struggled in, because I probably will too."

While difficulty level can be an important factor to consider when choosing courses, one South Fayette teacher warned about how students may be misled by gauging difficulty from their peers (who may have different strengths than that particular student).

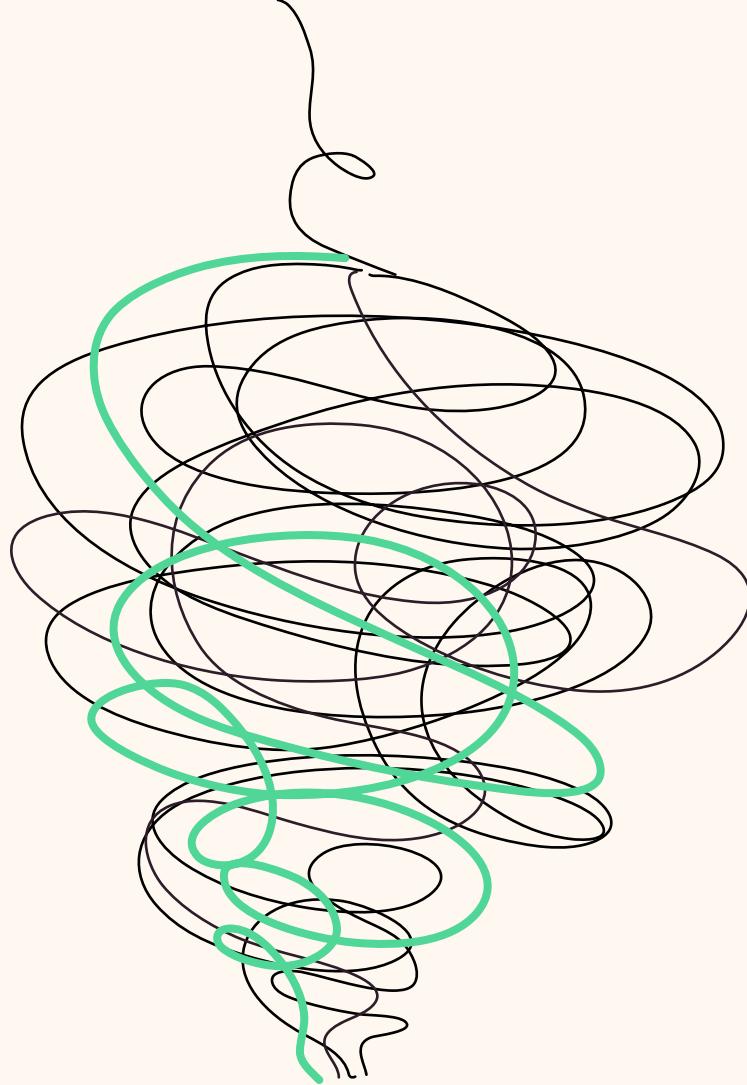
### Student, Contextual Inquiry

"My parents try to make me do the hardest courses I can manage"

While many students cited their parents as resources for decision-making, for some, there is pressure from their parents to make certain decisions, that may or may not be right for the student.

A teacher at South Fayette described how a culture of competitiveness can deter community building, as students have a scarcity mindset about opportunities that discourages them from making connections or sharing information with peers.

Given this insight, we need to consider how to leverage community while mitigating the risk of reinforcing the current system where norms have been established by the community.



# CAREER THINKING

## QUESTION

How might we encourage students to explore connections between courses, career paths, and the world around them?

## HYPOTHESIS

We believe that by implementing interactive and experiential learning opportunities that bridge the gap between courses, career paths, and real-world contexts, students will be more engaged in exploring these connections.



# South Fayette School District values preparing students for their journey beyond high school.

There's a wide range of career-focused initiatives happening in the district, but they vary in effectiveness and implementation status.

## JUNIOR INTERVIEWS

Every student meets with the career counselor (and optionally their parents) sometime during their junior year to discuss pathways after high school, and how the school can support them in their educational journey. This seems to be effective in engaging students in career thinking.

## PS CAREER CLUSTERS

"I don't use it [career clusters], it's never really taught to the students, and it's not embedded in what students do" - Career Counselor

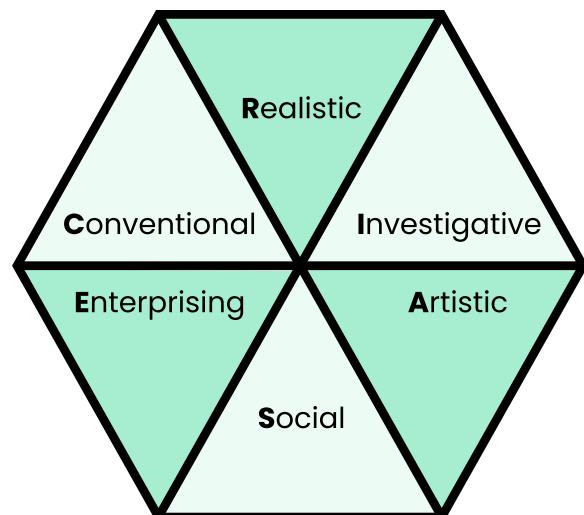
While there is an attempt to connect courses to careers in the current PS, it seems that the section is outdated and leftover from an initiative that has been discontinued.

## THE WORLD OF WORK

The World of Work program is characterized by two pillars: self exploration and career exploration. This is guided by Holland's RIASEC personality traits which help students find personality-career matches, alongside hands-on career exposure.

This program has been proven by other school districts and seems to be successful at SF so far, but is implemented into the high school yet.

Given the strengths of World of Work, we are interested in exploring how we can integrate it into our designs at the high school level.





## **High school is a great opportunity for students to explore interests and career paths, but students are not necessarily taking advantage of it.**

The World of Work coordinator at South Fayette has noticed that many students lean towards career paths that seem like they make a lot of money, not taking the time to reflect on strengths, what they enjoy, or workplace preferences. Some students focus just on getting into college, and see exploration and potential failure as a risk to their chances, rather than thinking farther into their future.

### **Bill Burnett and Dave Evans, "Designing Your Life."**

"In the United States alone, more than thirty-one million people between ages forty-four and seventy want what is often called an "encore career" – work that combines personal meaning, continued income, and social impact."

The earlier students can discover the work they are passionate about, the better they are set up for a fulfilling and whole life after college. Additionally, it may save them significant time, energy, and money throughout their lives if they can use high school as an opportunity for broad exploration, instead of costly college programs or years of work. This broad exploration may very well reveal careers that are lucrative and fulfilling for students, and it may be easier to pivot when they discover what they don't like.



## **When students have a goal in mind they can better see connections between school and their intended career goals.**

### **World of Work Coordinator, Semi-Structured Interview**

“When someone can identify what they’re good at and passionate about, it sets them up for success because they understand themselves as an individual.”

A teacher pioneering the WoW program at the middle school shared an anecdote about a student who “hated school”, but was then engaged by a hands-on activity through WoW that introduced him to mechanical work, which he could later pursue through career-focused pathway options at the high school. After that, the student became noticeably more engaged in school and saw connections between his coursework and career goals. Finding passions or career paths that resonate with students helps them look long-term, and be less focused on just the present moment.





## **Students need enough guidance to support exploration and development, without being so prescriptive that it limits them.**

Exploration and exposure can spark “aha” moments in career and personal development. For example, the World of Work coordinator at South Fayette shared a success story of a young girl with no interest in diesel technology being exposed to hands-on engine work as part of a unit on diesel technician as a career path. The student discovered a new passion for putting things together that she may not have discovered without the program. This demonstrates the idea that students don't know what they don't know, and giving them chances to explore can help them learn about themselves and the type of work they value.

South Fayette staff who facilitate World of Work also described students' tendency to take things literally as a big limitation. When first taking a RIASEC quiz, some students were steered away from certain traits because of their connections to specific activities – like working with engines – and others were discouraged by results that they felt were not true to them. However, these RIASEC traits are simply supposed to be a tool to help students learn about themselves and their work preferences, and when presented as such, the students connected with them more meaningfully.



OPPORTUNITY AREAS →  
IMAGINING THE FUTURE



- O1 IDENTITY + CONFIDENCE**
- O2 PERCEPTION OF VALUE**
- O3 COMMUNITY + BELONGING**
- O4 CAREER THINKING**



## How might we help students make better decisions about course planning and their journey beyond high school?

We recommend that design solutions tackle this question by empowering students to...

### BUILD CONFIDENCE + SELF-IDENTITY

We believe that students who are confident in themselves will make better decisions that feel authentic to them given the information they have, and will be better able to adapt to change, even when those decisions do not work out.

### FIND THE RIGHT COURSES FOR THEM

We believe that student's current perception of value may limit them from having a holistic educational journey.

### LEVERAGE THEIR COMMUNITY

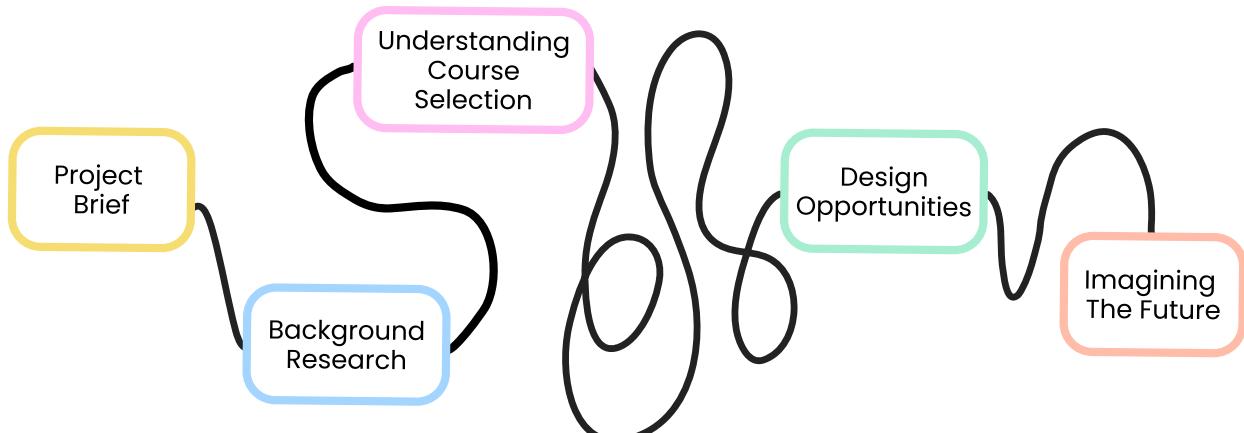
We believe that students who can effectively engage with their community, while remaining true to themselves, will adopt a bigger picture view that will aid decision-making.

### SUPPORT CAREER THINKING

We believe that by implementing interactive and experiential learning opportunities that bridge the gap between courses, career paths, and real-world contexts, students will be more engaged in exploring these connections.

# APPENDIX

## OUR JOURNEY



**O1 PROJECT BRIEF**

**O2 BACKGROUND RESEARCH**

**O3 UNDERSTANDING COURSE SELECTION**

**O4 DESIGN OPPORTUNITIES**

**O5 IMAGINING THE FUTURE**

# RESEARCH ACTIVITIES

## BACKGROUND RESEARCH

- Co-creation of stakeholder map with client
- Co-creation of journey map with client
- Desk Research about South Fayette
- Literature Review
- Review of analogous products
- Co-creation with South Fayette Administration
- Subject Matter Expert interviews

## UNDERSTANDING COURSE SELECTION

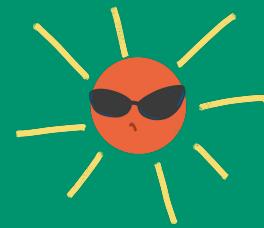
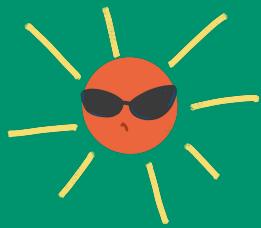
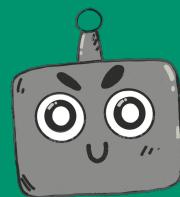
- Intercept Interviews with students
- Contextual Inquiry about course registration with students
- Intercept Interviews with teachers
- Semi-structured interview with teachers
- Directed storytelling with counselors
- Observation (Scheduling Assemblies)

## DESIGN OPPORTUNITIES

- "What's on Your Radar" co-creation activity with students
- Abstraction Laddering
- Pretotyping
- Worst Possible Ideas activity
- Semi-structured interviews with staff implementing career initiatives at South Fayette

## IMAGINING THE FUTURE

- Creative Matrix Ideation
- Storyboarding
- Parallel Prototyping



THANK YOU FOR READING!

