UX/UI Case Study

XYZ INSTITUTE® FOR EDUCATION

UX/UI Case Study

Industry
Education

Role
UX/UI Designer

Platform
Web, Android, iOS

Tool Used
Figma, Adobe Photoshop

What is

XYX Institute for education

XYZ is a leading STEM-focused educational website that offers an extensive array of products tailored for both students and teachers. This case study emphasizes the pivotal role of user experience(UX) in enhancing the platform's navigation, product categorization and purchasing process. The primary objective is to boost accessibility and usability, positioning XYZ as a frontrunner in the STEM educational domain. By meticulously analyzing user interactions and feedback, the case study aims to identify existing pain points and propose targeted design improvements. These enhancements are intended to streamline the shopping experience, foster deeper engagement in learning, and ultimately solidify XYZ's status as a top-tier educational platform

Problem Statement

Educators, students and parents often face challenges in finding reliable, high-quality STEM educational products tailored to their specific needs. Generally, the market lacks centralized, user-friendly platforms that provide high-quality resources. This gap results in inefficiencies and suboptimal learning experiences. ZYZ aims to resolve these issues by offering a comprehensive, intuitive online platform. It features a wide range of STEM products, resources and community support, addressing the diverse needs of all stakeholders. Through its robust offerings. XYZ strives to enhance the educational experience the educational experience and foster a thriving learning environment.

Solution

XYZ offers a user-friendly online platform for reliable, high-quality STEM educational products, tailored to educators, students, and homeschooling parents. The platform features organized navigation, advanced search and filtering, detailed product pages, and a streamlined checkout process. It fosters community engagement through forums, webinars, and events, and provides a robust resource hub with lesson plans and study guides. The responsive design and consistent visual language ensure an inclusive, seamless user experience across all devices.

Design Thinking process

Empathize | Define | Ideate | Design | Testing

Conducted extensive user research through interviews and focus groups to understand the specific needs of educators, students, and homeschooling parents. This empathetic

Developed and tested low-fidelity wireframes and interactive prototypes with target users, gathering feedback at each stage. This iterative process allowed for approach ensured the platform addressed real user pain points and goals.

continuous refinement, ensuring the design was intuitive and user-friendly.

Created a comprehensive design system with consistent visual language and accessibility standards, ensuring a seamless experience across all devices. Features like advanced search, organized navigation, and community engagement tools catered to diverse user groups effectively.

User Research

Conducted interviews, focus groups, and surveys with educators, students, and homeschooling parents to understand their needs and challenges. Observed usability testing of prototypes to gather feedback on navigation and functionality. Analyzed data to identify key pain points and opportunities for improving the platform.

Target Audience

The primary target audience includes educators, students, and homeschooling parents seeking high-quality STEM educational products and resources. These users need a reliable, user-friendly platform to discover, evaluate, and purchase educational materials. BrightMinds aims to meet their specific needs with tailored content and features.

Quantitative research method

Competitor Analysis

Conducting a competitor analysis for BrightMinds helps identify gaps and opportunities in the market, understand strengths and weaknesses of existing platforms, and differentiate BrightMinds by offering tailored STEM products, an intuitive user experience, and robust community support.

nsta

Overview	Strengths	Weaknesses
A leading provider of educational materials and products for children from birth through the 6th grade.	Extensive product range including hands-on learning materials. Established brand with a strong reputation. Physical store locations in addition to online presence. High-quality, durable products. Frequent sales and promotions.	Higher price points for many products. Limited product customization options. Website navigation can be cumbersome.

Opportunities
Expanding digital learning resources. Collaborating with educational institutions for bulk orders.

TeachingBooks

Overview	Strengths	Weaknesses
Focuses on creating innovative educational toys and games that make learning fun for kids.	• Unique, engaging product designs. • Strong focus on STEM education. • Effective use of social media and influencer partnerships. • Good customer service.	• Limited age range primarily targeting younger children. • Smaller product catalog compared to larger competitors.

Opportunities
Expanding product lines to include older age groups. Leveraging technology for interactive learning experiences.

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Opportunities

Expanding product lines to include older age groups.
Leveraging technology for interactive learning experiences.

Qualitative research method

To better understand the needs, behaviors, and preferences of users for XYZ, a STEM-based educational website, the following qualitative research methods can be employed:

User Interviews

- **Purpose:** Gain in-depth insights into users' motivations, needs, and pain points.
- **Method:** Conduct one-on-one interviews with different user personas, including teachers, students, and homeschooling parents. Prepare open-ended questions to explore their experiences with educational products and online shopping habits.
- **Example Questions:**
- "Can you describe your experience with purchasing STEM educational products online?"
- "What features do you find most useful on an educational website?"
- "What challenges do you face when looking for STEM resources?"

Focus Groups

- **Purpose:** Gather diverse perspectives and foster discussions around user experiences and expectations.
- **Method:** Organize focus group sessions with 5-8 participants from similar user personas. Encourage participants to share their thoughts and ideas about the website, products, and overall user experience.
- **Example Topics:**
  - User preferences for product categories and features.
  - Common frustrations and pain points when using educational websites.
  - Ideas for improving the website's usability and functionality.

Usability Testing

- **Purpose:** Identify usability issues and areas for improvement by observing users as they interact with the website.
- **Method:** Recruit users from different personas to complete specific tasks on the website, such as searching for a product, making a purchase, or finding educational resources. Observe their interactions and note any difficulties they encounter.
- **Example Tasks:**
  - "Find and purchase a STEM kit for a high school science project."
  - "Locate resources and materials for homeschooling a 10-year-old."
  - "Search for a specific type of product and read user reviews."

Card Sorting

- **Purpose:** Discover how users categorize and perceive different types of products and information.
- **Method:** Provide participants with cards representing different product categories, features, and sections of the website. Ask them to organize the cards in a way that makes sense to them.
- **Example Activity:**
  - Organize product categories into groups that reflect how you would expect to find them on the website.
  - Arrange website features and sections in a way that feels logical and easy to navigate.

User Persona

Persona 1

- **Name:** Emily Parker
- **Age:** 34
- **Occupation:** High School Science Teacher
- **Education:** Master's degree in Education with a focus on STEM
- **Location:** Suburban area
- **Technology Usage:** Proficient in using computers, tablets, and smartphones; familiar with online shopping and educational platforms.

Bio

Emily has been teaching science at a high school for over 10 years. She is passionate about incorporating innovative STEM products into her classroom to enhance her students' learning experiences. She frequently searches for new teaching tools and materials that can make complex scientific concepts more accessible and engaging for her students.

Goals

- To find high-quality, reliable STEM educational products for her students.
- To discover new teaching resources that align with her curriculum and enhance her lesson plans.
- To efficiently browse and purchase products, saving time in her busy schedule.
- To access resources and tools that support both in-class and remote teaching.

Challenges

- Limited time to explore and evaluate a vast array of products.
- Difficulty in finding products that cater to different learning levels and styles.
- Ensuring that the products are cost-effective while maintaining high educational value.
- Navigating through complex websites that are not user-friendly.

Behaviors

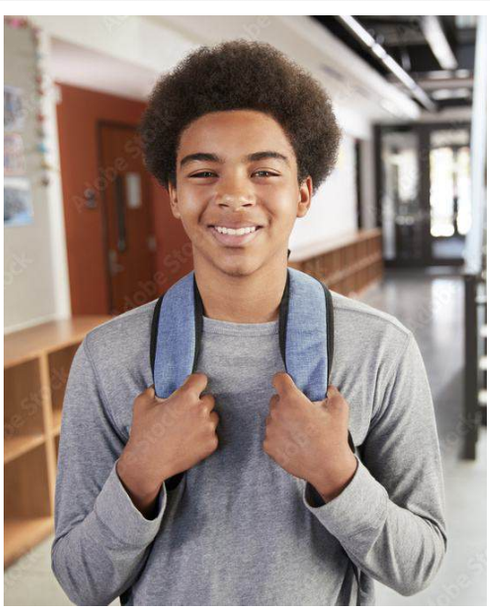
- Frequently visits educational websites and online marketplaces for teaching materials.
- Participates in online teacher communities and forums to share and seek recommendations.
- Prefers websites with clear categorization, detailed product descriptions, and user reviews.
- Values websites that offer dedicated sections for teachers, providing curated content and special deals.

Needs

- An intuitive and user-friendly website that allows for easy navigation and quick access to relevant products.
- Detailed information and reviews on products to make informed purchasing decisions.
- Special offers or discounts for educators.
- Resources that are updated regularly to keep up with the latest educational trends and technologies.

"As a teacher, I need reliable and innovative STEM resources that can make learning both fun and effective for my students. Time is precious, so I appreciate websites that make finding and purchasing these products straightforward and hassle-free."

Persona 2



Goals

- To find engaging and challenging STEM kits and projects.
- To learn new skills and concepts through hands-on activities.
- To access resources and products that support his school projects and personal interests.
- To explore career opportunities in STEM fields.

Challenges

- Finding age-appropriate and challenging STEM products that match his interests.
- Limited budget for purchasing materials and kits.
- Navigating through websites that cater more to educators and less to students.
- Ensuring the products he buys have clear instructions and are easy to use.

Behaviors

- Frequently browses online stores and educational websites for new STEM kits and projects.

- **Name:** Jake Anderson
- **Age:** 15
- **Occupation:** High School Student
- **Education:** 10th grade
- **Location:** Urban area
- **Technology Usage:** Highly proficient with computers, tablets, and smartphones; frequently uses the internet for school projects and personal interests.

Bio

Jake is a curious and motivated high school student with a keen interest in science and technology. He actively participates in his school's robotics club and is always looking for new projects and experiments to work on. Jake enjoys exploring STEM topics outside of the classroom and often purchases kits and tools to further his knowledge and skills.

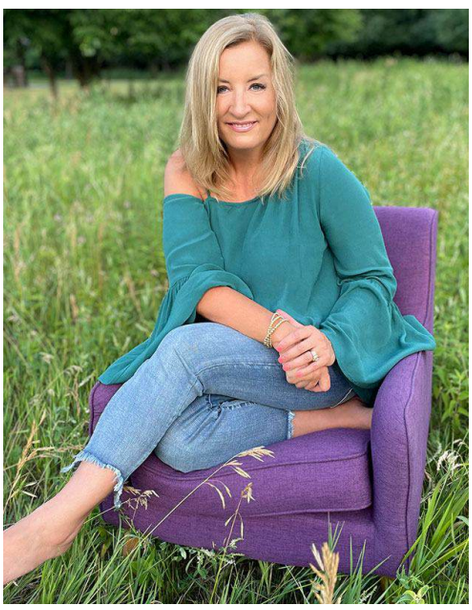
- Participates in online communities and forums for young STEM enthusiasts.
- Prefers websites with user reviews, detailed product descriptions, and tutorial videos.
- Values websites that offer products categorized by age and difficulty level.

Needs

- An engaging and intuitive website with a variety of STEM products tailored to different skill levels and interests.
- Clear and detailed product descriptions, including instructional materials.
- Affordable pricing and budget-friendly options.
- Resources that provide inspiration and ideas for new projects.

"I love working on new STEM projects and learning through hands-on activities. It's important for me to find products that are both fun and challenging, with clear instructions so I can explore on my own."

Persona 3



- **Name:** Sarah Mitchell
- **Age:** 40
- **Occupation:** Homeschooling Parent
- **Education:** Bachelor's degree in Biology
- **Location:** Rural area
- **Technology Usage:** Moderate proficiency with computers and tablets; uses online resources extensively for homeschooling.

Bio

Sarah has been homeschooling her two children, aged 8 and 12, for the past three years. With a background in biology, she is passionate about providing a well-rounded education that emphasizes STEM subjects. Sarah looks for comprehensive resources that can cater to different age groups and learning styles within her family.

Goals

- To find a variety of STEM educational materials suitable for her children's different age groups.
- To integrate engaging and hands-on STEM activities into her homeschooling curriculum.
- To ensure that the materials she uses are educational, reliable, and of high quality.
- To connect with other homeschooling parents and share resources and experiences.

Challenges

- Balancing the educational needs of children at different learning stages.
- Limited access to local educational resources due to her rural location.
- Navigating online stores that don't cater specifically to homeschooling needs.
- Ensuring that the products are safe, educational, and suitable for home use.

Behaviors

- Regularly visits educational websites and online stores for homeschooling resources.
- Participates in online forums and social media groups for homeschooling parents.
- Prefers websites that offer a broad range of products with detailed descriptions and educational value.
- Values websites that have resources specifically curated for homeschooling families.

Needs

- An easy-to-navigate website with a wide selection of STEM products suitable for different age groups and learning styles.
- Detailed product descriptions, including safety information and educational benefits.
- Access to a community of homeschooling parents and resources.
- Affordable and high-quality materials that can be used in a home setting.

"As a home-schooling parent, I need reliable and engaging STEM resources that cater to the different learning stages of my children. It's crucial to find high-quality materials that can make learning at home both effective and enjoyable."

Empathy Mapping

Empathy mapping is a collaborative tool used to gain a deeper understanding of users' experiences, needs, and emotions. It helps teams visualize and articulate what they know about users in a structured format.

Says

- "I need reliable and innovative STEM resources that can make learning both fun and effective for my students."
- "Time is precious, so I appreciate websites that make finding and purchasing these products straightforward and hassle-free."
- "It's essential that the products align with my curriculum and are cost-effective."

Thinks

- "Are these products going to enhance my students' learning experience?"
- "Will I be able to easily integrate these resources into my lesson plans?"
- "Is this website user-friendly and will it save me time?"
- "Are there reviews or recommendations from other educators?"

Does

- Frequently searches for new teaching resources online.
- Compares products based on reviews and detailed descriptions.
- Participates in online teacher communities for recommendations.
- Integrates new tools into her curriculum and assesses their effectiveness in the classroom.

Feels

- Frustrated when she can't find suitable products quickly.
- Excited when discovering new and innovative teaching tools.
- Confident when purchasing from a well-organized, user-friendly website.
- Appreciative of detailed product descriptions and educational resources.

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H1

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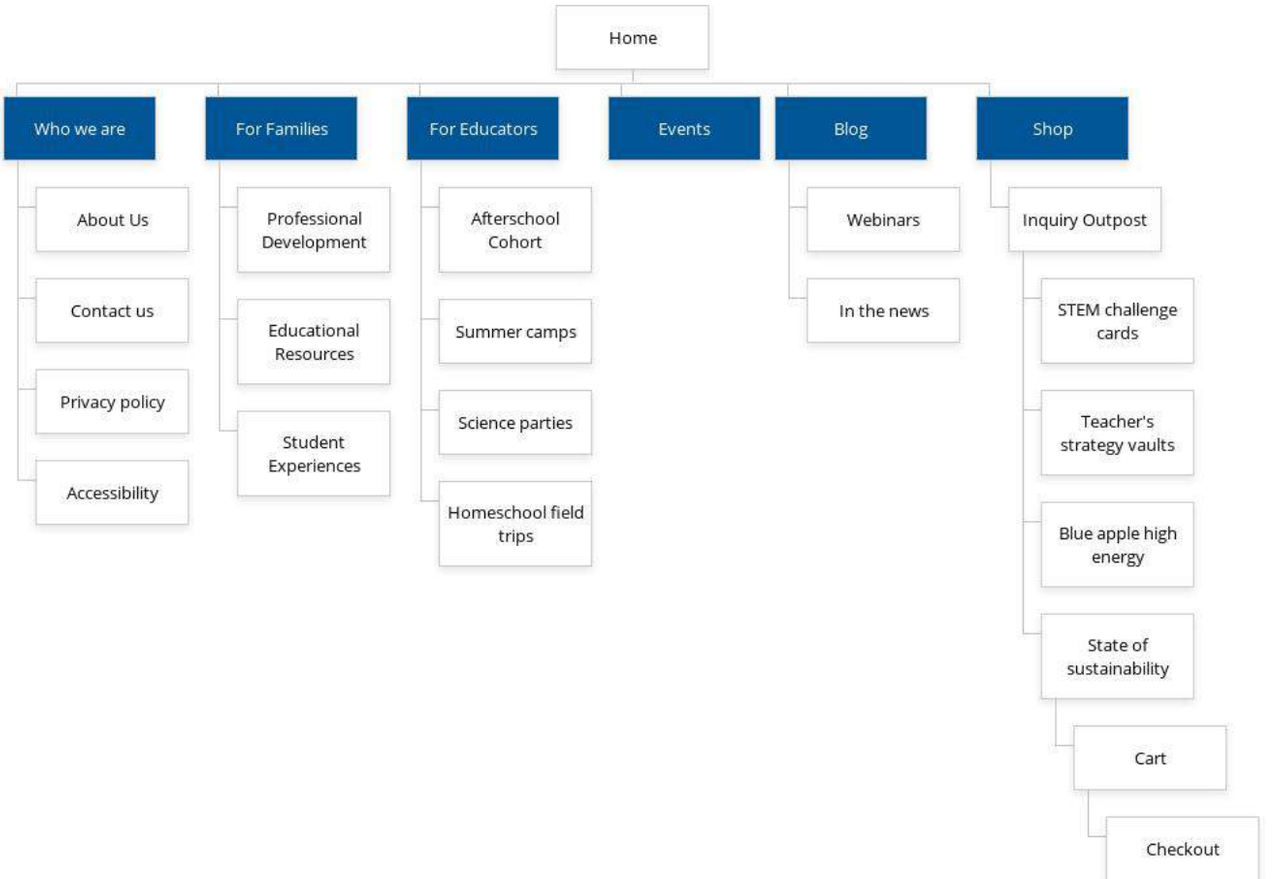
User Journey for BrightMinds

This user journey outlines the steps and experiences of a typical user interacting with the BrightMinds STEM-based educational website.

	Action	Experience
Awareness	User learns about BrightMinds through an online teacher community and a colleague's recommendation.	Positive, as she trusts the recommendations from her professional network.
Initial Visit	User visits the BrightMinds website for the first time.	User is greeted by a clean, professional design and a user-friendly interface.
Browsing and Searching	uses the search bar and filters to find STEM products suitable for her high school science classes.	The search functionality is intuitive, and the products are well-categorized by subject, grade level, and type.
Product Evaluation	reviews product descriptions, user reviews, and educational benefits.	Detailed product descriptions and reviews help her make informed decisions. She appreciates the clear alignment with educational standards.
Adding to Cart	Adds several products to her cart.	The process is straightforward, with clear indications of pricing, discounts for educators, and estimated delivery times.
Checkout	User proceeds to checkout	The checkout process is smooth, with various payment options and an easy-to-navigate interface.
Post-Purchase	User receives confirmation emails and tracking information.	feels confident in her purchase and looks forward to integrating the new resources into her curriculum.

Usage and Feedback	Uses the products in her classroom and later leaves a review on the website.	The products meet user's expectations, and she feels satisfied sharing her positive experience with other educators.

Information Archetecture



Design System

A design system is a comprehensive collection of reusable components, guided by clear standards, that can be assembled to build any number of applications. It ensures consistency and efficiency in design and development across a platform. By providing a unified language and visual consistency, a design system streamlines collaboration and accelerates the design process.

BLUE
RGB: R0 G85 B150
HEX: 005596
CMYK: C100 M58 Y0 K21
PMS: 294U, 647C

GRAY
RGB: R151 G155 B164
HEX: 9ca0a9
CMYK: C44 M34 Y29 K0
PMS: CG7U, CG7C

SKY BLUE
RGB: R87 G173 B238
HEX: 57adee
CMYK: C59 M19 Y0 K0
PMS: 2915U, 2915C

YELLOW
RGB: R251 G204 B107
HEX: fbcc6b
CMYK: C1 M20 Y68 K0
PMS: 120U, 121C

GREEN
C:40 M:0 Y:100 K:10
HEX: 96bc33
R:150 G:188 B:51
PMS 376C

BROWN
R: 98 G:47 B:0
HEX: 622f00
CMYK C:0 M:70 Y:100 K:65
PMS 731C

ORANGE
RGB: 255,163,0
HEX: FFA300
CMYK: C0 M36 Y100 K0
PMS 137 C

PURPLE
RGB: R113 G41 B154
HEX: 71299a
CMYK: C69 M97 Y0 K0
PMS: 2612U, 2603C

TEAL
RGB: R64 G162 B148
HEX: 3fa294
CMYK: C74 M5 Y48 K2
PMS: 7473U, 7473C

BLACK
RGB: R0 G0 B0
HEX: 000000
CMYK: C60
M40 Y40 K100

WHITE
RGB: 255, 255, 255
HEX: FFFFFF
CMYK: C0 M0 Y0 K0

Fonts

The Open Sans font family is to be used in body copy and subheads.

Open Sans Light
Open Sans Regular
Open Sans Bold
Open Sans Light Italic
Open Sans Italic
Open Sans Bold Italic

The Lora font family is to be used in body copy and subheads when a serif font is desirable.

Lora Regular
Lora Medium
Lora SemiBold
Lora Bold
Lora Medium Italic
Lora SemiBold Italic
Lora Bold Italic

The Barlow Condensed font family is to be used when a condensed font is needed.

Barlow Condensed Light
Barlow Condensed Medium
Barlow Condensed Bold
Barlow Condensed Extra Bold
Barlow Condensed Light Italic
Barlow Condensed Medium Italic
Barlow Condensed Bold Italic
Barlow Condensed Extra Bold Italic

Document headlines: Univers
Document subheads: Univers, Archer
Document body copy: Univers

Univers Extra Black
Univers Bold
Univers Light
Univers Bold Condensed
Univers Light Condensed
Univers Thin Ultra Condensed

Archer Bold
Archer Bold Italic

High fidelity designs

Thank You

Your Feedback is Highly Appreciated