



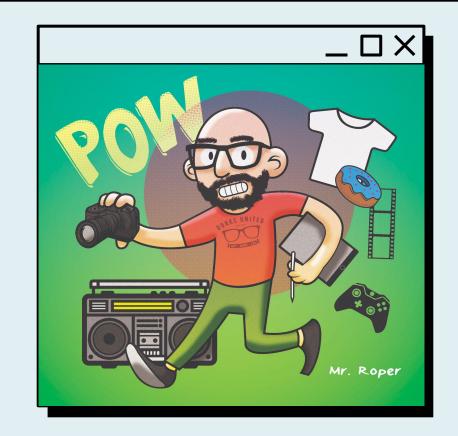
Hi, I'm a dork.

Zach Roper
Digital Media & Film Teacher
San Luis Obispo High School
CTE Department Chair

Life-long doodler, Illustrator, Designer, Photographer, Comic Book Nerd, Film Fiend, Silkscreener, and big ole Dork.

• • • •







previously...

Taught Middle School all subjects & Math at Capitol School, Phoenix, AZ

Moved to Milan, Italy to teach Digital Media at The American School of Milan

Transferred to ACS International School in London, England

Landed in San Luis Obispo, CA





SCHOOL

currently...

San Luis Obispo High completed a 10 year, \$100 million renovation project thanks to the passage a Measure D.

Completely rebuilt main classroom structures and stadium, added a pool and cafeteria Commons, and upgraded technology throughout the campus



CTE at SLOHS

San Luis Obispo High offers 17 different pathways and six dual enrollment courses.

Trimester System = 5 trimester classes to complete a pathway, for a total of 300 hours.





San Luis Obispo High School **College & Career Pathways**

AGRICULTURE AND NATURAL RESOURCES



AGRICULTURE BUSINESS

Intro: Ag Leadership P Concentrator: Aq Speech Comm. A&B Capstone: Agribusiness Sales & Marketing A&B

AGRISCIENCE

Intro: Aq Biology A&B Concentrator: Chem & Agriscience A&B Capstone: Agriculture System Management A&B

CONSTRUCTION

DESIGN, VISUAL & MEDIA DESIGN

Intro: Digital Design P Concentrator: Intermediate Graphic Design Capstone: Advanced Graphic Design

ARTS, MEDIA AND

ENTERTAINMENT

PRODUCTION & MANAGERIAL ARTS

Intro: Digital Design P Concentrator: Intermediate Film/Video Capstone: Advanced Film/Video

> **ENGINEERING &** ARCHITECTURE

> ENGINEERING DESIGN

Intro: Engineering Draw I Concentrator: Engineering Draw II Capstone: Engineering Draw III

NFORMATION, COMMUNICATION & TECHNOLOGY

> SOFTWARE & SYSTEMS DEVELOPMENT

Intro: Exp. Comp Sci A (Dual Enrollment) Concentrator: AP Computer Sci Principles A&B Capstone: AP Computer Sci A&B (Dual Enrollment)

& SERVICES

Intro: Exp Comp Sci B Concentrator: Cisco Essentials Capstone: Cybersecurity Essentials BUILDING AND

RESIDENTIAL & COMMERICAL

Intro: Wood I Concentrator: Construction I A&B (BITA 1) Capstone: Construction II A&B (BITA 2)

CABINETRY, MILLWORK & WOODWORKING

Intro: Wood I Concentrator: Wood II A&B Capstone: Wood III A&B

FASHION & INTERIOR DESIGN

FASHION & INTERIOR DESIGN

Intro: Introduction to Fashion Interiors Concentrator: Fashion Design A&B and Interior Design A&B Capstone: Fashion Interior Merch A&B

MANUFACTURING & PRODUCT DEVELOPMENT

WELDING & MATERIALS

Intro: Metal I/ Welding Tech Concentrator: Metal II A&B (Dual Enrollment) Capstone: Metal III A&B (Dual Enrollment)/ Metal IV

Principal, Rollin Dickinson Department Chair, Zach Roper

ANIMAL SCIENCE

Intro: Animal Science A&B Concentrator: Small Animal Pre Vet A&B Capstone: Animal Anatomy/Physiology& Vet Med A&B

ORNAMENTAL HORTICULTURE

Intro: Ornamental Horticulture Concentrator: Art & History of Floral Design A&B Capstone: Floral Design Field Experience A&B

> EDUCATION, CHILD DEVELOPMENT & FAMILY SERVICES

> > EDUCATION

Intro: Developmental Psychology of Children Concentrator: Careers with Children I A&B Capstone: Careers with Children II A&B

HOSPITALITY, TOURISM & RECREATION

HOSPITALITY, TOURISM & RECREATION

Intro: Culinary Arts I

Concentrator: Culinary Arts II A&B Capstone: Culinary Arts & Hospitality Management

PERFORMING ARTS

PROFESSIONAL THEATRE

Intro: Intro to Professional Theatre Concentrator: Intermediate Professional Theatre Capstone: Advanced Professional Theatre

TRANSPORTATION

SYSTEMS DIAGNOSTICS SERVICE &

Intro: Auto I (Dual Enrollment) Concentrator: Auto II A&B (Dual Enrollment) Capstone: Engine Diagnostics Chassls & Drivetrain

Learning Today For Careers Tomorrow





Digital Media Pathway Goals

 Expose students to the vast array of Digital Media career opportunities and recruit talent to our pathway 2. Provide students with real-world opportunities to apply the skills they are learning on campus and in the community.

3. Collaboration with other pathways and departments to show the interconnectedness of industries, knowledge and skills.

COMMON ENTRY POINT FOR ALL STUDENTS

Intro Digital Design

CONCENTRATOR

Intermediate Graphic Design



CAPSTONE

Advanced Graphic Design

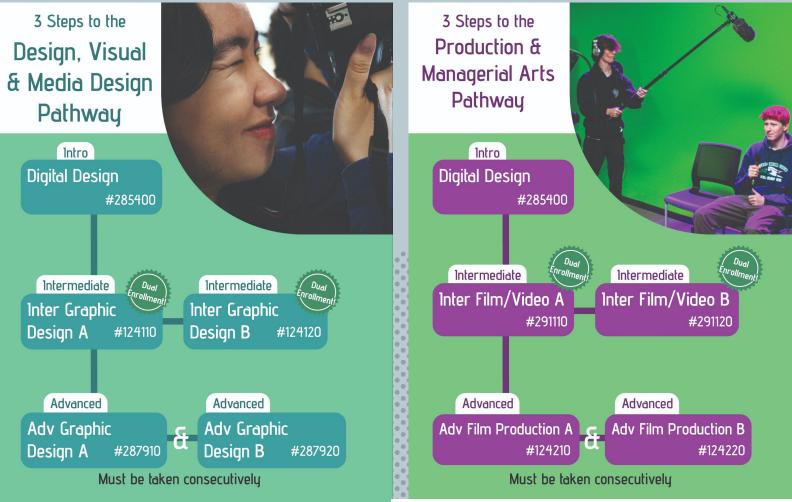
THEN THEY CHOOSE TO SPECIALIZE IN ONE OR BOTH PATHWAYS CONCENTRATOR

Intermediate
TV & Video



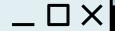
CAPSTONE

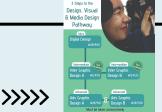
Advanced Film Production



Designed by Adv. Graphic Design student Cal Lanier!

My Pathways





Arts, Media & Entertainment: Design Media & Visual Arts



TRIMESTER

Intro Digital Design

Fast-paced,
high-engagement
selection of projects to
introduce students to
the wide variety of
careers in digital media

2 TRIMESTERS

Intermediate Graphic Design

Photography,
Typography and Design
Principles in greater
depth, developing
portfolios of work

2 TRIMESTERS

Advanced Graphic Design

Real-world design projects for school and local businesses. Focus on marketing your skills through portfolio

My Pathways





Arts, Media & Entertainment: Production & Managerial Arts



i trimester

>>>>>

Intro Digital Design

Fast-paced,
high-engagement
selection of projects to
introduce students to
the wide variety of
careers in digital media

2 TRIMESTERS

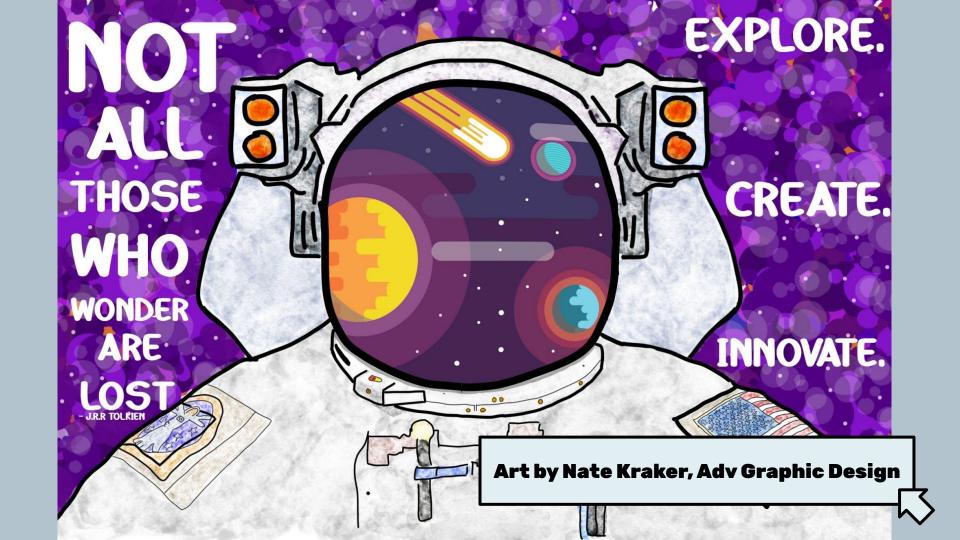
Intermediate TV Video Production

Planning, Shooting, Editing and Producing video content for school and community

2 TRIMESTERS

Advanced Film Production

From script to screen:
Students explore the
entire film production
process and produce
their own short film for
festival competition



Software Considerations







Approx. \$7500/year for 10,000 seats

Access to ALL industry-standard programs such as Photoshop, Illustrator, Premiere, AfterEffects and more.

Students can earn certification via <u>Certiport</u> <u>testing</u> during your program











Free Alternatives

<u>Krita.org</u> - Photoshop Alternative <u>GIMP.org</u> - Basic Photoshop Alternative <u>Inkscape.org</u> - Illustrator Alternative

<u>DaVinci Resolve</u> - Powerful Video Editing <u>Blender</u> - 3d Modelling, Animation, Editing, Special Effects and more

Intro Digital Design

13 Weeks - 5 days a week

Overview of Digital Media Careers with creative projects

"Salad Bar" Design - try a bit of everything!

High Engagement, Low Risk

Grading on completion, work at your own pace, extend where you find interest.

Topics Covered:

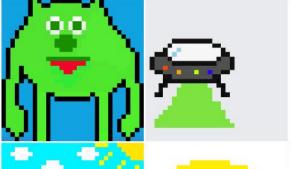
- What are pixels?
- Digital Images & File Formats
- Collage & Compositing Images
- Concept Art/Photobashing
- Digital Painting
- Vector Art
- Graphic Design Essentials
- Typography
- Logo Design
- Character Design for Animation
- 3D Modelling and Animation
- Working in 3D space
- Level Design for Games
- 3D modelling for printing

Digital Design 1 Pixel Art Winter 2022

Nov 30, 2022 · Shared





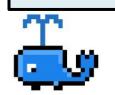
















Students begin with a 32X32 grid paper and sketch designs for pixel characters. Then they learn the basic tools of Adobe Photoshop to design with pixels and animate simple "sprites" that could be used for games. The history of video games and early special effects are explored.

Believable Space projects Fall 2023

Sep 13 - 15, 2023











*adapted from edex.adobe.com













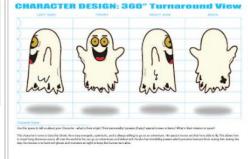


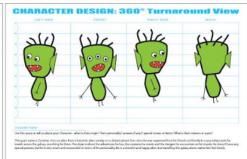
Students choose a fictional character and design a simulated 3D room for them by selecting, manipulating and lighting images they collect online. Fundamentals of working in layers, adjusting color and lighting, perspective and concept art are discussed.

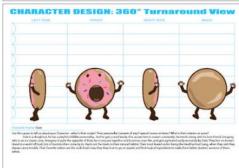
Week 8 Project: Character Design Pitch Your New Animated Series

Students are told they've been hired to develop a new animated series for Cartoon Network. They develop character designs using vector art and pitch their story concepts to the class.







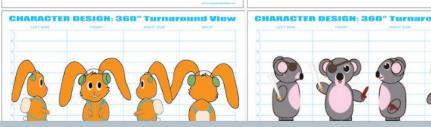






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<u>Week 11 Project:</u> 3D Modeling with Blender Isometric Rooms

Learn the fundamentals of working in 3D space by creating an isometric room, modelling furniture, windows, and personal items, then they add realistic materials and lighting to the scene. Overview of game design, creating assets, modelling from real-life reference and online resources for learning how to model complex objects.

Isometric Room Digital Design 1 Winter 2023

Feb 22, 2023



















Final Projects: Student's Choice

Students choose their favorite software or skill they've learned during the trimester and pitch an idea for their own final project. They have 6-7 class periods to work on it and then present to the class their creative process and goals for extending their learning.



Digital Design 1 Final Projects 2022-23

May 31 - Oct 30, 2023





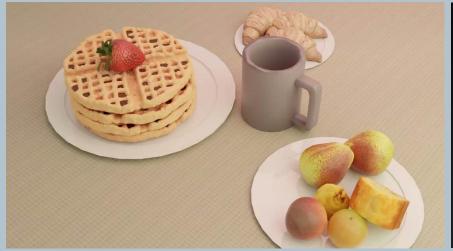


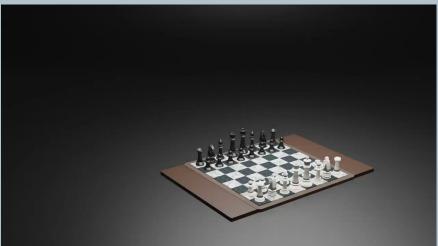


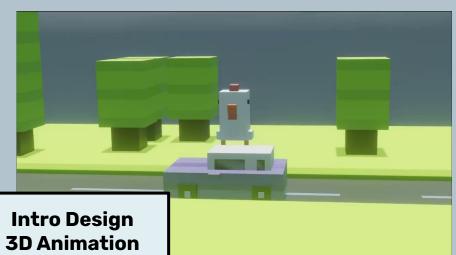


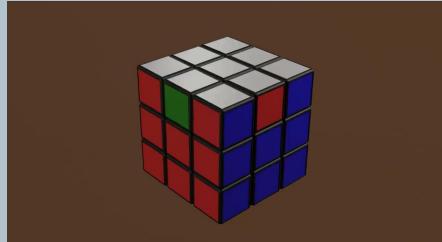












Intermediate Graphic Design

2 Trimesters for Part A and B

Digital Camera Basics with a 1-to-1 equipment ratio

Deeper dive into Photoshop skills for editing and graphic design

Adobe Certification Test at end of Part B

Real-world creative tasks for a client

Topics Covered:

- Operation of a Digital Camera
- Adv. Digital Images & File Formats
- Portraiture, Landscapes, Product
 Photography, Advertising
- Graphic Design and Typography
- Working with Clients
- Self-Assessment and Creative Growth
- Preparing an exhibition
- Studying for and achieving professional certification



<u>Intermediate Design/Photo</u> <u>Portraits of a Client</u>

After watching a
documentary of photographer
Antoniou Platon, students are
paired with a classmate they
don't know and conduct
interviews to get to know
their personalities and
interests. They then plan and
execute a package of
portraits for their "client"

Handout link

Outdoor Portraits

Training for taking Senior Portraits!



Intermediate Design/Photo:

Movie Poster Design

Students plan, shoot and assemble a movie poster for a target audience, exploring typography















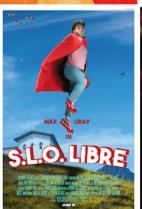










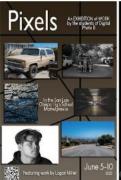




Final Exhibition Posters T3 2022

Aug 30, 2019 - Jun 9, 2022





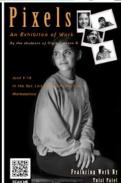


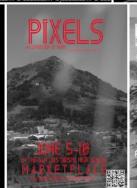












<u>Intermediate Design/Photo</u> <u>Final Exhibitions</u>

At the completion of the course students plan an exhibition of their work for the school community.

They select their best images, print and mount them, and design a poster advertising their show to the community.

Work is displayed in our Commons















Intermediate TV Video TNN Daily News Show

Students are responsible for the daily production of our school new channel on **Youtube. They** rotate through the various production roles and produce stand-alone video packages for broadcast.



Intermediate TV Video TNN Daily News Show



<u>Intermediate TV Video</u> Sports Broadcasting & Livestream









- Students are trained and employed to run our scoreboard screen and remote control cameras at our home stadium.
- Games are live-streamed on Youtube so that family in other cities can watch along.
- Advanced Graphics students design billboard ads for local sponsors and game graphics to engage the crowd!

Advanced Graphic Design

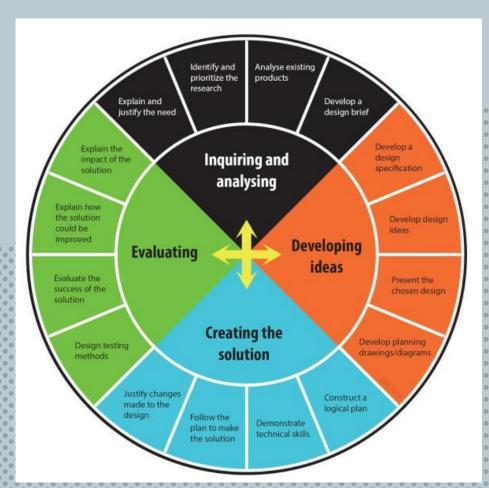
2 Trimesters for Part A and B

Serves as the school's design studio

Client-focused projects based on the ideas of the MYP Design Cycle

Focus on advertising, product design, packaging, motion graphics, merchandise, and more

Where possible, create opportunities for students to be paid for their work!



MYP Design Cycle

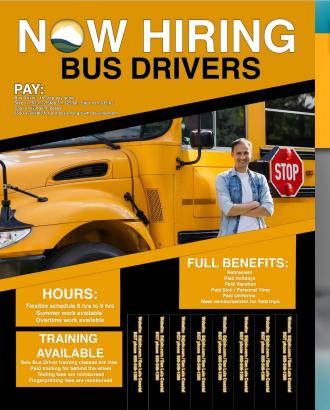
Capstone Class: Adv. Graphic Design:

Sports Schedule Posters



Adv. Graphic Design:

SLCUSD Human Resources Hiring Flyers







WE'RE HIRING UNIFIED SCHOOL DISTRICT BUS DRIVERS



.com / San Luis Coas

Hours

Flexible schedule 6 hrs to 8 hrs Summer work available Overtime work available

Training Available

New Bus Driver training classes are free Fingerprinting fees are rimbursed Testing fees are reimbursed Paid training for behind the wheel

Pay

Bus Driver: 18 Step pay scale Step 1 = \$23,.22 Step 3 = \$25.60, Step 18 = \$35.82 \$500 availble for professional growth development Cost of living increases

Full benefits

Paved holidays/Vacation Meal reimbursement for field trips Paid Sick/Personal time Retirement Paid Uniforms

> 05-549-1390)5-549-1390

Adv. Graphic Design:

Food Truck Project collaboration with Culinary Arts



filipino app rolls filled with beef, onions, and carrots

Adv. Graphic Design:

Food Truck Project collaboration with Culinary Arts







PRINTING T-SHIRTS

DigitalMedia

A Step-by-step Guide



 First come up with a Design idea. You can email us examples of similar designs you'd like to emulate or let our Advanced Graphic Designs students create an original design for you. Just give us some basic information about what exact TEXT and IMAGES need to appear on the shirt.





2. Once the artwork is created, we'll send you a MOCK-Up showing how the design will look on a shirt. If you approve it, we upload that design to www.norcalsps.com, and affordable service that "burns" that design into a screen for printing. Total Cost is around \$80 payable by credit card on their website, and it's delivered in 3-4 days.



3. We'll also need to order BLANK TEES! We have an account with www.alphabroder.com and can order blanks tees at wholesale prices (usually \$2-\$4 each depending on fabric quality and fit). Shirts ship from Fresno and can usually arrive in 1-2 business days! Just give us the sizes, colors and quantities you want and we'll help order them with a credit card payment.



4. Once the SCREEN and BLANK TEES arrive, we'll schedule a time to print shirts with your students. Lunches, 4/5th period, or afterschool works best. We can print 50-70 shirts in one class period if we have student help!

NOTE: Funding for t-shirt projects can be tricky, so talk to your AP or Dept Head about your idea and how it will be funded before starting this process. Black & Gold offers grants for shirts, ASB can help sponsor Clubs, or your students can fundraise ahead of time to cover the costs. Just remember that in the end, we will need to purchase both the screen and shirts online using a credit card, so get everything lined up ahead of time to avoid delays.

Email zroper@slcusd.org for more info!

2 Great California-based Business partnerships:

www.alphabroder.com for wholesale pricing on blank t-shirts and apparel from all major brands. Great prices and quick shipping in-state!

<u>www.norcalsps.com</u> Sacramento-based supplier for all things screen-printing, they sell supplies, inks, printing presses and even offer day-long classes to learn how to print!

Our student-led t-shirt printing program allows us to produce spirit apparel on campus for clubs, sports and special events.





SAN LUIS OBISPO HIGH

Film Festival



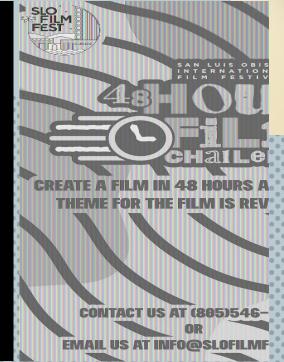
at the PALM THEATRE, Downtown SLO

WED. APRIL 19th 7PM

featuring the Short Films of the students in SLOHS's Arts, Media & Entertainment Pathway









SLO Film Fest Animated Logo By Indiana Coetzee Adv. Graphic Design 48 Hour Film Challenge by Cal Lanier Adv. Graphic Design





"Camp Hideout"
Now streaming on Hulu!

Tyler Kowalski Class of 2022

9th Grader (!) Mila Shih Animated Explainer Video





What's next...

California DOE adoption of Curriculum standards for **Animation, VFX and Game Production** (2024-2025)

We're beginning to introduce concepts and skills with an eye toward these industries



DRAFT: Industry Recommendations for Model Curriculum Standards for Animation, VFX, Game Production Pathway

Table View

Students refine technical animation skills and prepare for specific career paths in the animation, game production and visual effects (VFX) industries. Students learn about the production pipeline, computer generated imagery (CGI), anatomical accuracy in drawing and design, fundamentals and physics of movement, creative story development, and visual communication through a variety of animated formats and industry standard software. They also explore emerging careers and technology used in immersive media and virtual production.

Link to standards









Develop on-site internships opportunities!





Profile: Cal Lanier

During his internship trimester, Cal developed an online business designing logos for video gamers. He uses an app to track commissions, time spent on designs, and payment. He regularly makes between \$1000-\$3000 a month from his designs!

Cal also mentors younger students in the pathway, designs shirts and stickers for campus clubs, and designed informational flyers for all of our CTE pathways on campus.



Develop on-site internships opportunities!



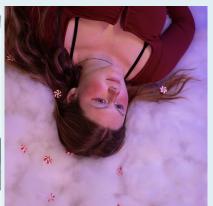


Profile: Kaitlin Turner

Kaitlin used her internship trimester to explore and expand her photographic skills. She frequently utilizes our tv studio as a studio space and experiments with lighting, backdrops and makeup for photoshoots with friends as she builds her portfolio for college.

Kaitlin also help photograph each of our CTE class for the pathway flyers she and Cal worked on.

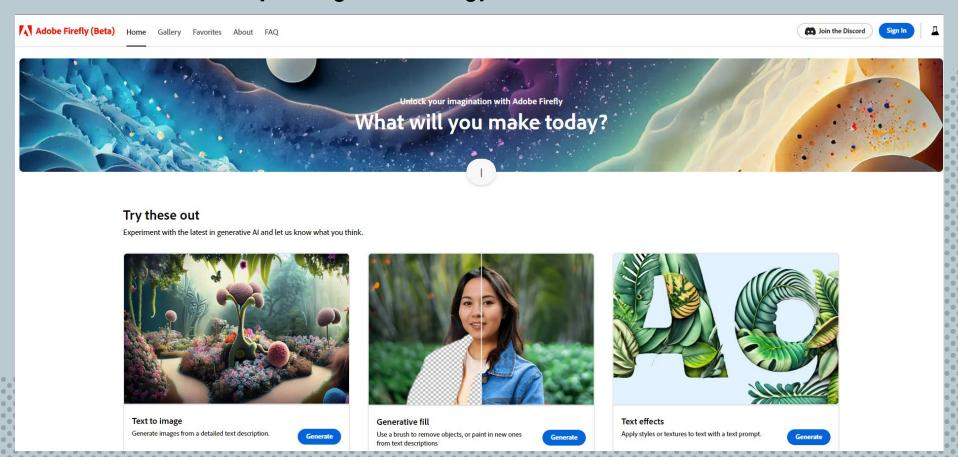








What's Next? Incorporating AI Technology into the Creative Process



Al prompts as Story Starters - Collaboration with Creative Writing Class



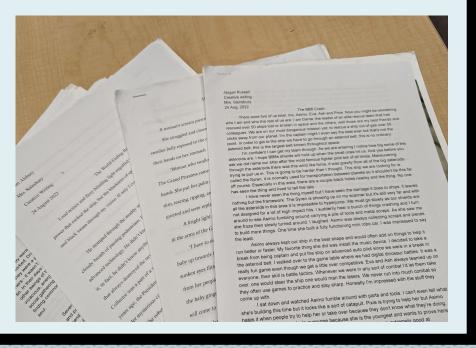








Students in the Creative Writing class were given images that were generated by AI without context. They each wrote a short story based on the image alone and these were compiled into a SciFi Collection!



FINAL THOUGHTS

