

Laguna Beach High School



Authentic Exploratory
Research

Mentor Handbook

2024-2025

Laguna Beach Unified School District





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WELCOME

Dear Mentors,

Thank you for volunteering to be a part of Laguna Beach High School's Authentic Exploratory Research (AER) program. You are a vital part of this program because of the professional expertise and guidance you can provide our students. It is the real-world application and development of durable "soft" skills that make this program such a success.

This program would not be possible without gracious mentors like you.

Gratefully,

Jun Shen and Kellee Shearer
AER Coordinators

ABOUT AER

The Authentic Exploratory Research (AER) Program is an independent research course in which students propose their own driving questions in order to explore their passions and career pathways in a variety of fields. Our program is inspired by Palo Alto Unified School District's highly successful Advanced Authentic Research program.

Students are matched with adult mentors to aid in their research and analysis. Mentors include LBHS staff, Industry experts or leaders, and university-level academics. Students can conduct their projects through various approaches including internships, action projects, and academic research. Students are expected to spend about 60 hours per semester on coursework, roughly half of which are on the project itself, and the other half on instruction, reflection, organization, and other weekly tasks.



Throughout their experience in the AER program, students will learn essential academic skills in preparation for post-secondary education, such as research, argumentation, critical thinking; as well as life and career skills, such as time management, communication, professionalism, and organization.

For more information about the LBHS AER program, please visit lbusd.org/aer.



WHAT STUDENTS DO IN AER

The AER program is a unique opportunity for students in grades 11 through 12 to engage in original research in an area of their choosing. Upon registering for AER during the Spring of the previous academic year, students are interviewed by the AER staff. They are provided with online resources to gain a deeper understanding of potential career paths and interests, then as they commit to a field of study, the mentorship matching process begins.

During the academic year, the AER class works in a blended model. The entire class meets with the instructor only one hour a week during which students receive instruction, weekly check-in assignments, and program updates. Students also have dedicated small-group session times throughout the week to receive more individualized guidance. The rest of the 3-4 hours of weekly work is done by students independently.

Grading is balanced between the academic side of the course - mainly the project itself, and the skills side of the course - mostly organizational and professionalism standards.

15%

Professionalism and
Etiquette

15%

Assignments and
Online Check-in's

20%

Correspondence and
Organization

50%

Project Milestones

Students can try to conduct their AER project from one of three approaches, depending on the availability and willingness of their mentors.



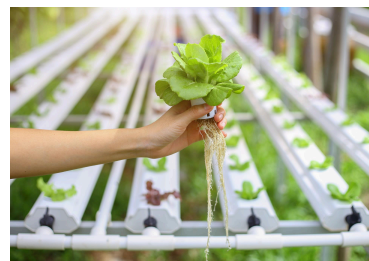
BUSINESS CHALLENGE

Job shadow with mentor
Mentor poses a business
challenge
Research
Propose business plan



ACADEMIC RESEARCH

Create own research
question
Research and collect data
Write thesis
Defend conclusions

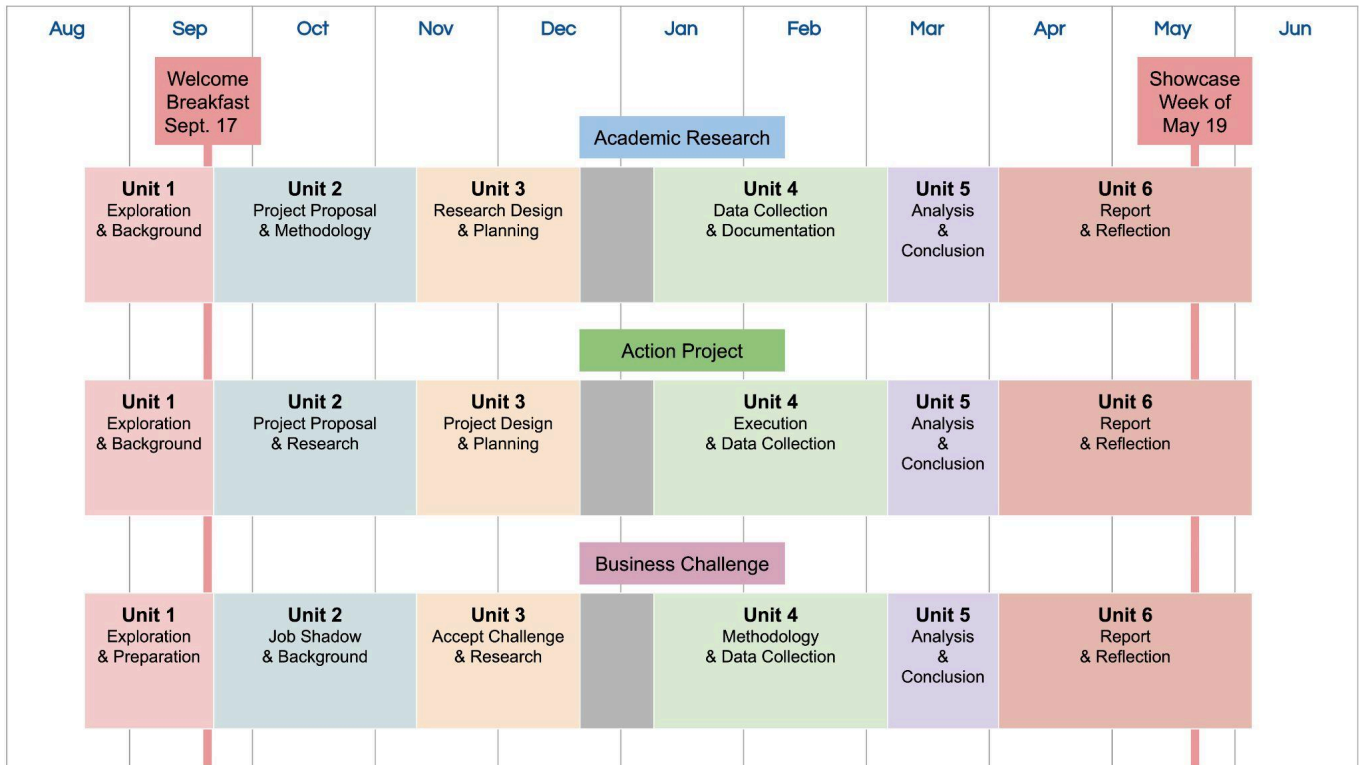


ACTION PROJECT

Create own project proposal
Research and planning
Create a good or service
for the real world
Reflective writing

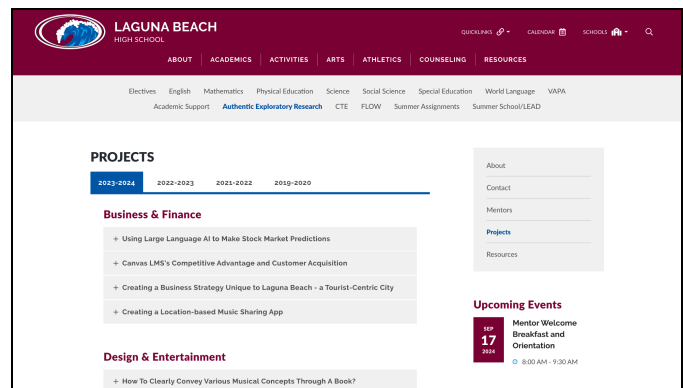


The AER curriculum consists of six major units which would eventually culminate in students' completed projects. In the first three units, students learn the professional and academic skills to design, plan, and implement their research. The second half of the units is when students, mostly independently, collect data, analyze findings, and draw their conclusions. At the end of each unit, students must complete a milestone assignment that will form the building blocks of their final papers and symposium presentations.



All of the students' efforts will be celebrated in an AER Showcase at the end of the school year, during which students will present their findings, defend their conclusions, and share their experiences with the mentors, staff members, and the general school community.

To view past student project presentations, please visit busd.org/aer and click "Projects" on the right-hand navigation menu.





YOUR ROLE AS A MENTOR

Every student will be matched with a mentor that has professional expertise in the student's focus area. The nature and frequency of a mentor's interaction with students will depend on the scope of the project and the needs of the student. Overall, mentors are there, when possible and appropriate, to provide guidance, expert advice, encouragement, and resources to their students.



What Students May Expect from Their Mentors

As an AER mentor, you will:

- mentor 1-2 students (depending on the projects and topic areas)
- create an atmosphere that empowers and encourages students to ask questions without being made to feel intimidated
- communicate with students as often as necessary and appropriate
- serve as a content expert to support and facilitate students' work
- Introduce students to relevant materials for their chosen field of study (i.e., previously published research)
- guide students' progress and ensure each project is on track
- supervise students' work in lab, office, or other appropriate environment (as necessary)
- monitor students' work and provide appropriate and timely feedback
- spend approximately 20-30 total hours mentoring over the course of the school year (Mid-September to Mid-May) depending on the number of students
- attend the AER Showcase in May (if possible)

What Mentors Should Expect from Their Students

As part of their education and evaluation, students must:

- always conduct themselves with respect and professionalism when interacting with you
- communicate with you regularly, approximately every two weeks via email, to update you on their progress
- maintain an organized project website and journal that allows you to easily monitor their progress
- reply to all your correspondence in a professional and timely manner
- show a great deal of initiative and independence in their work, so as not to overly rely on you to provide them with easy answers



Job Shadowing (Business Challenge Students)

Some students may request to conduct their project through the Business Challenge approach in which they job-shadow you at your business. Then, instead of formulating their own driving research question, they are given a challenge by you that relates to your business, for example, how your business can increase market share by 5%. The student will then design a research project to complete the challenge.

We fully realize that this is the most imposing or intrusive type of research project on you as a mentor, and may not appeal or be feasible to everyone. Therefore, you are under no obligation to fulfill a student's desire to complete their project from the Business Challenge approach if it becomes an undue burden to you. We recommend that you state your comfort level with your student and seek to come to some compromise that would satisfy all parties involved.

Mentorship Checklists

BUSINESS CHALLENGE	ACADEMIC RESEARCH	ACTION PROJECT
Unit 1: <u>Exploration & Preparation</u> <input type="checkbox"/> Get to know student interests <input type="checkbox"/> Get to know student strengths <input type="checkbox"/> Get to know student work styles	Unit 1: <u>Exploration & Background</u> <input type="checkbox"/> Get to know student interests <input type="checkbox"/> Help student find good background research	Unit 1: <u>Exploration & Background</u> <input type="checkbox"/> Get to know student interests <input type="checkbox"/> Help student find good background research
Unit 2: <u>Job Shadow & Background</u> <input type="checkbox"/> Supervise student job-shadow <input type="checkbox"/> Provide in-depth, experiential knowledge of the industry	Unit 2: <u>Proposal & Methodology</u> <input type="checkbox"/> Help student refine research question <input type="checkbox"/> Help student understand research methodologies	Unit 2: <u>Proposal & Research</u> <input type="checkbox"/> Help student decide on a project <input type="checkbox"/> Help student find relevant industry research and information
Unit 3: <u>Accept Challenge & Research</u> <input type="checkbox"/> Pose Business Challenge <input type="checkbox"/> Help student find relevant industry research and resources	Unit 3: <u>Research Design & Planning</u> <input type="checkbox"/> Help finalize research methodologies <input type="checkbox"/> Help student plan logistics for data collection	Unit 3: <u>Project Design & Planning</u> <input type="checkbox"/> Help student design execution plan <input type="checkbox"/> Help student find and organize relevant resources
Unit 4: <u>Methodology & Data Collection</u> <input type="checkbox"/> Help student design a research plan <input type="checkbox"/> Help student collect and compile data	Unit 4: <u>Collect & Document Data</u> <input type="checkbox"/> Help student compile, organize, and summarize data	Unit 4: <u>Execution & Data Collection</u> <input type="checkbox"/> Help student compile, organize, and summarize data
Unit 5: <u>Analysis & Conclusion</u> <input type="checkbox"/> Help student interpret findings and draw conclusions <input type="checkbox"/> Help student prepare Showcase presentations	Unit 5: <u>Analysis & Conclusion</u> <input type="checkbox"/> Help student interpret findings and draw conclusions <input type="checkbox"/> Help student prepare Showcase presentations	Unit 5: <u>Analysis & Conclusion</u> <input type="checkbox"/> Help student interpret findings and draw conclusions <input type="checkbox"/> Help student prepare Showcase presentations
Unit 6: <u>Report & Reflection</u> <input type="checkbox"/> Attend the AER Showcase	Unit 6: <u>Report & Reflection</u> <input type="checkbox"/> Attend the AER Showcase	Unit 6: <u>Report & Reflection</u> <input type="checkbox"/> Attend the AER Showcase



MENTORSHIP GUIDELINES

In order to provide students with a safe, easily-navigable, and meaningful AER experience, please refer to the following essential information.

Important Dates

September 17, 2024 8:00-9:30AM	Welcome Breakfast Mentor Orientation	<ul style="list-style-type: none">■ Program introduction■ Meet the staff and fellow mentors■ Get to know your students■ Sign the AER Mentor Agreement■ Live Scan
October 22, 2024 8:00-9:00AM	Pitch Day Luncheon	<ul style="list-style-type: none">■ Students pitch their project proposals
December 20, 2024	End of Semester 1	<ul style="list-style-type: none">■ Students should have their research fully designed and planned, and ready to begin data collection in semester 2
March 11, 2025 8:00-9:00AM	Breakfast Forum	<ul style="list-style-type: none">■ Reflect on your AER experience with other mentors and students
May 21, 2025 6:00-7:30PM	AER Showcase	<ul style="list-style-type: none">■ View all AER students' projects■ Ask questions and challenge findings■ Encourage and support your student

Live Scan

As a volunteer at a public school in the state of California, the California Department of Justice requires that you undergo the Live Scan process before becoming an AER Mentor. Laguna Beach Unified School District (LBUSD) will provide a Live Scan technician free of charge to you at the Welcome Breakfast on September 17, 2024. A [Request for Live Scan Service Form](#) will be provided to you and needs to be completed before undergoing the Live Scan.

STATE OF CALIFORNIA
DEPARTMENT OF JUSTICE
REQUEST FOR LIVE SCAN SERVICE
(Public Schools or Joint Powers Agencies)

Print Form Reset Form

Applicant Submission
CPI: ☐ 000000 Type of Applicant: ☐ Classified School Employee ☐ Credentialed School Employee

The following selections are for Public Schools only:
☐ License, Certification, Permit ☐ Peace Officer ☐ Law Enforcement Officer ☒ Volunteer

Type of License/Certification/Permit/CB Working Title: New Hire Classified

Contributing Agency Information
Agency: 01773 Mail Code (Not High School assigned by DOJ)
Street Address: 000 Blumens Street Ashworth Code
City: Laguna Beach CA: 92651 Contact Name (mandatory for all school submissions)
State: CA Zip Code: 92651-7700 Contact Telephone Number:

Applicant Information
Last Name: First Name: Middle Initial: Suffix:
Other Name (AKA or Alias):

DOB: Sex: ☐ Male ☐ Female Birth Number: (Client pays all fees)
Height: Weight: Eye Color: Hair Color: Min. Number: (Agency Min. Number)
Place of Birth (State or Country): Social Security Number: (Other Identification Number):

Name: Street Address or P.O. Box: City: State: Zip Code:

I have received and read the included Privacy Notice, Privacy Act Statement, and Applicant's Privacy Rights.

Applicant Signature: Date:

Your Number: Level of Service: ☒ DOJ ☒ FBI

If re-submission, list original ATI number: Original ATI Number:

Live Scan Transaction Completed By:
Name of Operator: Date:

Transmitting Agency: ATI Number: Amount Collected/Billed:



Student Interaction

Students have the option, with parental consent, to interact with you in the following methods. These methods, as outlined in Section III of the AER Mentor Agreement, include:

- LBUSD Email
- personal phone
- personal or company email
- video conferencing
- in-person visits at a work or public site
- in-person at a private site.

Upon request by the student, the parent, or you the mentor, LBUSD can provide you with a @lbUSD.org email address to be used for student-mentor communication. In addition to email, the @lbUSD.org credentials will also provide mentors with access to documents shared by their students in Google Drive, an online productivity and collaboration space. In order to receive and activate the @lbUSD.org account, mentors must first sign the LBUSD Acceptable Use Policy for District Email in [AER Mentorship Agreement](#).

As soon as the AER Mentor Agreement is signed by students, parents, and mentors, giving permission and approval, students may begin interacting with their mentors in the agreed-upon methods, as long as they follow all other related (e.g. attendance, field trip, transportation) school guidelines.

Privacy and Liability

The mentor will

1. not pay the student for AER-related work, nor use the student's work to replace a paid employee.
2. supervise and advise the student throughout the research process and prioritize the student's learning over production. The mentor will also notify the AER program of any accidents involving the student.
3. complete the student evaluation forms periodically as needed. All forms will be delivered electronically by AER staff.
4. reserve the right to discharge the student for just cause; however, reasonable effort should be made to consult the AER Mentor Coordinator prior to such action.



5. advise students only via the methods that the student has specifically requested and the parent has consented. Meetings via videoconferencing or in private locations, such as the mentor's home, are not permitted without the parent's consent or a Laguna Beach Unified School District AER staff member present. Mentor shall not request the student to provide personal information such as the student's address, phone number, or personal email account(s). If the mentor allows students to access their professional workspace, AER staff may visit the research site.
6. provide his/her mentoring services strictly as a volunteer. Providing such services shall not be deemed to create any association, partnership, joint venture, or relationship of principal and agent, master and servant, or employer and employee between Laguna Beach Unified School District and the mentor or any of the mentor's employees, agents, affiliates, or other representatives, or between the Laguna Beach Unified School District and any individual assigned by the mentor to perform the mentoring services. Laguna Beach Unified School District does not assume any liability under the California Workers' Compensation Insurance and Safety Act for, by, or on behalf of the mentor or any of the mentor's employees or volunteers while on the premises of Laguna Beach Unified School District or while performing the mentor services.
7. shall, during the course of the mentorship services, keep any and all proprietary or confidential information which may be owned or controlled by Laguna Beach Unified School District in strict confidence and will use it only in performance of the mentoring services, unless disclosure is required by law or court order. Mentor shall exercise the same standard of care to protect such information as is used to protect his/her own proprietary or confidential information. At the end of the mentorship services, mentor agrees to provide all documents they obtain from the student to the AER coordinator and not keep copies for themselves.
8. NOT keep or make use of the student's research data or other work products for any reason, personal or professional, without prior written consent from the student and their parent or guardian.
9. maintain, during the course of the mentorship services, all records regarding students as required by state and federal laws and regulations. "Records" includes, but is not limited to, pupil records defined by California Education Code section 49061(b); documents used to record mentor service provisions and student progress reports. At the end of the mentorship services, mentor agrees to provide all documents they obtain from the student to the AER coordinator and not keep copies for themselves
10. comply at all times with the requirements of the Family Educational Records Privacy Act ("FERPA") and relevant state law regarding the confidentiality and handling of student records, including but not limited to California Education Code section 49073 et seq. At the end of the mentorship services, mentor agrees to provide all documents they obtain from the student to the AER coordinator and not keep copies for themselves.
11. only access confidential student information/records (although such access is neither anticipated nor expected by the mentor) pursuant to prior written consent, legitimate



educational interest in performing mentor services, or other provision of federal and state law permitting access to confidential student information/records. Mentor shall not use confidential student information/records for any purposes other than providing mentor services. Mentor shall not re-disclose confidential student information/records to any third party without the prior written consent of Laguna Beach Unified School District and any release shall at all times be consistent with state and federal law. At the end of the mentorship services, mentor agrees to provide all documents they obtain from the student to the AER coordinator and not keep copies for themselves.

12. maintain records in a secure location to ensure confidentiality and prevent unauthorized access. Mentor shall maintain a current list of the names and positions of mentor's employees and volunteers who have access to confidential student records. Mentor shall maintain an access log for each record which lists all persons requesting or receiving information from the record and the legitimate interests thereof. Such log shall be maintained as required and include the name, title, and date/time of access for each individual requesting or receiving information. At the end of the mentorship services, mentor agrees to provide all documents they obtain from the student to the AER coordinator and not keep copies for themselves.
13. forward all records in its possession regarding any Laguna Beach Unified School District student mentored within fifteen (15) days once the mentor services have ended. Mentor agrees that during the course of the mentor services, Laguna Beach Unified School District shall have access to and receive copies of any and all such records upon request within five (5) business days.
14. submit to a criminal background check with the Department of Justice and the Federal Bureau of Investigations (pursuant to Education Code section 49024) OR obtain an Activity Supervisor Clearance Certificate from the Commission on Teacher Credentialing ("Commission") pursuant to California Education Code section 44258.7(f). This requires submission to fingerprinting and a criminal background check and answering personal fitness questions, as further set forth at <https://www.ctc.ca.gov/credentials/submit-online>. The mentor agrees to comply with all volunteer requirements as set forth in Laguna Beach Unified School District's Board Policies and Administrative Regulations pertaining to instructional volunteers, and provide the mentoring services under the immediate supervision and direction of certificated AER staff pursuant to California Education Code section 35021
15. agree to defend, indemnify, and hold the Laguna Beach Unified School District harmless from any and all liability resulting from any act or omission of the mentor providing mentoring services for the AER program.



Communicating with the AER Staff

Jun Shen

AER Program Coordinator
AER Instructor

(949) 497-7750 ext. 1379

jshen@lbusd.org

Contact if you have questions or concerns regarding

- The AER curriculum
- Issues with student projects
- Issues with student interaction

Kellee Shearer

AER Mentor Coordinator
LBUSD Coordinator, Career Education

(949) 497-7700 ext. 5327

kshearer@lbusd.org

Contact if you have questions or concerns regarding

- Mentor-mentee matching