The Arizona Geographic Alliance will be hosting a STEMSS Institute in Fall 2017 through Fall 2018. We are looking for Arizona K-12 teachers to apply!

**WHAT?** This 10-day institute will include:
- STEMSS content information
- Innovations in STEMSS pedagogy
- New uses of technologies and additional classroom resources
- Field experiences to build geographic knowledge
- Presentations of exemplary Arizona standards-based lessons
- Networking with other educators

**Who is ELIGIBLE?**
- Employed, full-time K-12 teachers
- Must be available in winter 2017 through fall 2018 for this project
- Have English language learners in your classroom
- Must recruit a colleague from similar school and at same grade level to compare student achievement on a teacher-created pre and post assessment

**WHY ATTEND?** Participants who complete all requirements will receive:
- 60 recertification hours and reimbursement for travel costs
- A stipend payable when requirements are completed
- Eligibility for support to present at national/state conferences as a TC
- Geography resources and opportunities
- Certification as a Teacher Consultant (TC) of the Arizona Geographic Alliance

This opportunity is supported in part by a grant from National Geographic.
**STEMSS CRUISE EL**

**A Grant-Funded Teacher Professional Development Opportunity**

**“The Human Journey” 10-Day Institute**

Create your own 10-day PD institute including several mandatory sessions plus optional sessions of your choice.

**Day 1 Winter Orientation (1 day)**
- This is a **mandatory meeting** on **Dec 1, 2017, from 5-8 pm** at ASU Tempe campus. Orientation topics include: Goals and requirements of “The Human Journey” Project, push-pull factors, cultural diffusion, video journaling, and Program Pre-Survey. Dinner will be included.

**Days 2-6 Spring/summer Residential Workshop (5 days)**
- A residential intense workshop will have two choices. The first option will be **from March 10-17, 2018.** This institute will take place on a Carnival Cruise of the Mexican Riviera leaving from Long Beach, California, on March 10. The second choice for an institute will take place the week of **June 25-29, 2018,** at Arizona State University and surrounding areas. Both institutes will include learning from experts in geography, STEM, technology, EL strategies, and pedagogical practices.
- **Note:** The March option does require personal expense to attend the cruise, the project does not cover the costs of the cruise. This expense is optional and is not a requirement for participation in the institute.
- Each of these residential workshops will include two field experiences linked to “The Human Journey”. The March 10-17 institute field experiences will occur in Mazatlán, Puerto Vallarta and/or Los Cabos. The June 25-29 institute will have field experiences at local museums and other places of learning in the Phoenix Metro area or state.
- In both residential workshops, there will be an emphasis on how to communicate what you have learned to others with the intention that you implement and disseminate what you have learned at your school and school district.
- During both residential workshops, you will be given time and support to begin development of an original STEMSS lesson that will include strategies for teaching language learners (a requirement of the institute). You will also receive strategies for giving effective presentations to adults.

| Days 7-9 | Optional Selections relating to the theme of “The Human Journey” include a mix of online and face-to-face options but must equal 3 days. Hotel rooms can be provided for those who live outside the Metro Phoenix area. Consider all workshops below being all-day workshops, times TBD. Note: Additional options will be shared at the orientation.
 | December 2, 2017 | **Giant Map Training, Lock Box, & Integrating Geography Into Your Classroom** (Tempe) |
 | January 20, 2018 | **GeoDayTrip—Exploring Cultural Diversity: The Human Journey** (Phoenix) |
 | February 3, 2018 | **GeoDayTrip-- Tales of the Crypt: Learning Geography and History from Your Local Cemetery** (Tempe and Mesa) |
Other requirements include:

- **Keep and post a video journal** of your experiences to document your “human journey”.
- **Utilize knowledge** from this institute to create an original geography lesson on a topic in your curriculum.
- **Create a pre and post assessment** for your lesson. Give the pre and post assessment to your students to measure student achievement.
- **Enlist a teacher** in a similar school and at the same grade level to give the same pre and post assessment to his/her students who have not completed your lesson so their scores can be compared to your class’s achievement.
- **Provide feedback** on your lesson and your students’ achievement.
- **Conduct a school event** using the Giant Map or other resources shared at the institute.
- **Present your lesson** to other educators at the GeoConference on Sept. 22, 2018.
- **Once all requirements are met, stipends and travel reimbursements will be paid.**

**The STEMSS Institute objectives are to:**

- Develop strategies, technology tools, and instructional materials for teachers that drive improvement of academic vocabulary for ELs in the classroom.
- Professionally develop teachers’ use and implementation of technologies, strategies, and instructional materials that drive improvement of academic vocabulary of ELs in the classroom.
- Create and implement parent/family PD events, from a community of wealth perspective, through building on social capital as a way to build knowledge and familiarity with technologies and instructional strategies that parents/families can use to support their EL children’s academic vocabulary at home.
2017-18 STEMSS Human Journey Institute – APPLICATION FORM

Please type or print clearly. NOTE: Please email an ‘intent to apply’ so that we are watching for your application.

Name ________________________________________________________________

Mailing Address_____________________________________________________

Home Phone ____________________________ email __________________________

School Name & Address _________________________________________________

School Phone ____________________________ School District _________________

School email _________________________________________________________

What is the ethnic mix of your school?

___% Asian American ____________________________ How many English Learners do you usually have in your classroom?

___% African American ____________________________

___% Latino/a American ____________________________

___% Native American ____________________________

Is your school classified as Title I? Yes No (circle one)

Grades and classes that you teach:_________________________________________

Special skills that you bring to the institute:_______________________________

Topics you hope this institute addresses:_______________________________

ATTACHMENTS -- Please include the following with this application:

1) Your resume condensed to one page.

2) A one page, typed essay outlining:

   a) Why you believe STEMSS (Science, Technology, Engineering, Math, & Social Studies) education is important.
   b) How you currently teach social studies in your classroom. How you currently teach STEM subjects in your classroom.
   c) How you expect to benefit from participating in the 2017-18 STEMSS Institute.
   d) And how you will use what you learn in this institute with your English learners as well as your English proficient students.

3) Two letters of reference (these can be mailed or emailed separately):

   a) From your principal, arrange a letter of reference that addresses your skills in the classroom, plus your district’s willingness to facilitate your presentation of at least one staff development workshop in your district. This letter should also include information about your ability to work with English language learners.

   b) From a colleague, seek a letter that discusses your classroom effectiveness and rapport with fellow educators. We are looking for people who play well with others. Teachers applying from the same school may not write letters for each other.

4) A check for $100 made out to the Arizona Geographic Alliance. This money will be refunded in its entirety

   a) if you cancel in writing by Nov. 29, 2017,
   b) if you are not chosen as a participant, or
   c. at completion of all institute sessions.

5) The completed Application Form including 2 Letters of Reference.

6) The completed KCU Survey.

DEADLINE to apply: November 15, 2017.
Send to: Arizona Geographic Alliance
          ASU School of Geographical Sciences & Urban Planning
          P O Box 875302
          Tempe, AZ 85287-5302
          Or FAX to: 480-965-8313 c/o Gale Ekiss
          Or email Gale Ekiss at Gale.Ekiss@asu.edu

✓ I agree to participate in all sessions.
✓ I will sign all National Geographic documentation for research.
✓ I will keep a video/photo journal beginning Dec 1, 2017.
✓ I will create and present an original STEMSS lesson (based on Arizona Geography, ELL and STEM standards) at the August 18, 2018 session.
✓ I will pilot and assess my original STEMSS lesson in my classroom and revise it based on feedback.
✓ I will recruit another teacher to pre and posttest his/her students on the same lesson content and skills but NOT teach the lesson.
✓ I will submit my revised lesson for online publication.
✓ I will train other teachers in my school district based on what I have learned at this institute.
✓ I will be active in the Arizona Geographic Alliance.
✓ I will attend GeoConference on 9/22/2018.
✓ I understand that I will receive the stipend when all requirements are met (deadline 10/1/2018)

Signature_________________________________________________________
Knowledge, Confidence and Use Survey: STEMSS CRUISE EL

Name: __________________________  ID: _______________________

Date Completed: _______________________

Time Point:  • Pre  • Completion of institute  • Post

Please rate the concepts and strategies listed below using the criteria provided. Decide how knowledgeable you are about each concept or strategy. Then rate how confident you are in your ability to use or implement each concept or strategy. Finally, rate how useful each concept or strategy is for you.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Knowledge</th>
<th>Confidence</th>
<th>Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Development of ELs’ academic vocabulary in the classroom</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>2. Technology to support ELs’ academic vocabulary development</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>3. Support for ELs’ parents and families in development of ELs’</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>academic vocabulary at home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Culturally responsive pedagogy</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>5. Four language domains (Listening, Speaking, Reading, Writing)</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>6. Language and culture as assets</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>7. Comprehensible input</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>8. Formative assessments</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>9. Disciplinary discourse practices</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>10. Leadership in my school</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>11. Integrating geography across the curriculum</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>12. Binko presentations</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>13. Cultural diffusion</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>14. Five themes of geography</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>15. Push-pull factors in geography</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>16. Video notebooking</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>17. Development of spatial thinking skills</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>18. Development of STEMSS lessons</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
</tbody>
</table>
Please rate the distinction between the concepts and strategies listed below using the criteria provided. Decide how knowledgeable you are about the distinction between each pair of concepts or strategies. Then rate how confident you are in your ability to use or implement the distinction between each pair of concepts or strategies. Finally, rate how useful the distinction between each pair of concepts or strategies is for you in your disciplinary area(s).

<table>
<thead>
<tr>
<th>Distinction between concepts</th>
<th>Knowledge</th>
<th>Confidence</th>
<th>Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Content objectives vs. Language objectives</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>2. Social language vs. Academic language</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>3. Focus on form vs. Focus on meaning</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>4. Productive skills vs. Receptive skills</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>5. Language as form vs. Language as function vs. Language as action</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>6. Complexity vs. Accuracy vs. Fluency</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>7. Home language instruction vs. Home language supports</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
<tr>
<td>8. Technology for the sake of technology vs. technology to support content and language instruction</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
<td>0 1 2 3</td>
</tr>
</tbody>
</table>