EVALUATION of *Facilitating the use of Earth Science Data in G6-12 Education*

How did you hear about this ESIP teacher workshop? _____
A: Cossee-west List Serve Roomate, **B:** Email from Santa Barbara county office of education
C: Sue Johnson, UCSB, **D:** email, **E:** NSTA, **F:** email, **G:** flyer/internet/principal, **H:** a friend
I: an Email from Margaret Mooney, **J:** from another teacher, **K:** SMI (Caltech) through UCSB
L: CalTech UCSB SMI program, **M:** email from SBCOE ,**N:** colleague, **O:** Margaret Mooney
P: Dan Shculties, **Q:** email, **R:** email ad via school district, **S:** email from Nesta ,**T:** Prof Sue Johnson, **U:** Sue Johnson UCSB ,**V:** email forwarded from my Dept chair

Please rate each of the following aspects of your experience on a 5-point scale by checking the box that best describes your opinion.

	Not at all	Very little	Somewhat	A fair amount	A great deal
	1	**2**	**3**	**4**	**5**

BENEFITS

To what extent did the experience:

Increase your *awareness* of available Earth Science data tools			1	2	19
Increase your *knowledge* of Earth Science topics & related data tools		1	2	4	15
Increase your understanding of potential applications of technologies to teach & study Earth Science topics in your classroom			1	5	16
Increase the likelihood that you will use the new Earth Science data tools demonstrated at this workshop in your classroom				5	17

CONTENT

To what extent was the content covered:

Easily understandable –			2	10	10
Relevant to your needs –				11	11
Suitable to your current knowledge –				9	13
In accordance with your expectations –			1	5	16

DELIVERY

To what extent was information:

Well organized			1	11	10
Presented at the right pace			1	13	8
Clearly explained				12	10
Communicated clearly				13	8

To what extent did presenters:

	Not at all	Very little	Somewhat	A fair amount	A great deal
Emphasize important points			1	10	11
Allow for sharing of ideas and experiences		1	2	12	7

ESIP Conference

Were the ESIP plenary talks a good use of time at this workshop?	4	1	8	3	1
Was the ESIP poster session a good use of your time at this workshop?	3		5	7	2
How useful were your interactions with ESIP Federation partners and other meeting attendees?			3	8	10

OVERALL WORKSHOP RATING *(Teacher Track & ESIP Meeting)*

	Poor	Fair	Good	Very good	Excellent
Overall, how do you rate this teaching-learning experience?				5	17

NOAA Educational Resources

1. How often do go to the NOAA web site(s)?

A: about once a month but after training can go more often with students
B: never
C: once a month
D: on/two times a semester
E: 1 to 2 times a year
F: occasionally
G: not very
H: very often
I: varies w/ the topic I am teaching in school, over 100 times a year
J: not often
K: not often, but will not that I have surfed/search around
L: never prior to this conference
M: daily
N: during fall quarter when I teach weather, when we have tropical storms in FL
O: rarely (I have had more occasions to use the USGS site)
P: I haven't in the past but plan on doing so now
Q: often
R: very rarely in the past

S: never
T: once every two weeks
U: weekly
V: once or twice a year

2. If you visit NOAA web sites, please describe what areas you access and how easy or difficult it is to access that information? What suggestions do you have to improve the process?

   A: was very informational can get more data about many things about earth
   C: I appreciate PDF files so that I can make copies
   E: looking for classroom activities
   F: weather info
   H: education ideas, weather, teacher at sea, pictures of climatic events
   I: I use NOAA sites I get to through the AMS
   K: I am excited to use the 5 minute videos on various ES topics I found at Monterey institute.
   M: weather data, easy
   N: satellite images, its easy to maneuver
   Q: satellite information, weather satellite imagery
   S: new research and news findings
   U: lesson plan ideas sometimes difficult to find thinks quickly
   V: usually when I would do a random google search fro something the NOAA website would pop up

3. What NOAA materials do you use in your classroom?

   A: just temperature but can do more with data as 8th grade final project
   B: none
   D: images of hurricane and other storms
   E: videos, lessons from web
   G: none, but will
   H: posters, bookmarks, CDs, buttons (as prizes for students), teacher at sea books
   I: websites, posters
   K: posters, web links
   L: none
   M: weather data
   N: online resources
   Q: GOES archive
   R: I will use the websites presented in the workshops, such as real-time weather data, sea ice, etc
   S: none
   T: haven't used any yet, but will
   U: Images satellite weather (following weather systems daily)
   V: none officially in the past

4. What kind of NOAA materials do you need for your classroom? (Lesson plans, curricula, hands-on experiments, or other resources)

   A: now that I am department chair 6th grade teachers look at me for guidance so now I have places to go to help them
   B: Lesson plans, experiments
   C: lesson plans, DVDs, posters; out classrooms are not equipped with very high level computers or with enough computers to every student
   E: activities that meet CA earth science standards
   G: once I have more time to explore, I would say lessons and hands on experiments
   H: hands-on experiments for elementary school
   I: curricula, hands-on experiments
   J: lesson plans, curricula, hands on experiments, etc
   K. lesson plans, hands-on experiments
   L: I would be open to exploring all NOAA has to offer my students
   M: an easy lesson plan explaining how to put weather data into excel
   N: hands-on experiments
   Q: polar orbiter imagery
   R: Inquiry-based "discover it yourself" lessons aligned to state standards
   S: will use extensively
   T: hands on experiments, curriculum that is interactive and relates to standards
   U: lesson plans, hands on experiments; downloadable animations, short videos
   V: Lesson Plans, curricula, experiments, power points, video clips

5. What could NOAA do (in the long term and short term) to assist you with teaching environmental or earth science more effectively? Please be specific in your recommendations. Which one of your recommendations would you rank as the highest priority?

   A: NOAA – with new technology today could have forums of many topics that teachers could comment to online and discuss. Also online video conferencing to use with students in classrooms
   B: provide financial support for the time I spend developing ESIP-related lessons
   C: NOAA could offer more teacher workshops in the Santa Barbara are. We need to have renewals of conferences like these so that we can share
   E: 1. Quick, 1 class period activities.
   2. Activities specific to CA standards – about ocean currents, salinity, waves, life zones
   3. short videos that are "teenage-friendly"
   G: add new material to websites, add some teacher feedback, pitfalls to the lesson; keeping material updated and teacher friendly
   H: help me get more of my teachers to that satellites and education conference (we live in Maine)
   J: 1. show alignment with state standards from the most populous states
   2. make 10-12 minute animations on big topics in ES available to all
   K: continuing to invite/welcome K-12 teachers to events like these and offering stipends to offset costs
   L: provide quick and inexpensive hands on lab ideas, speakers/videos
   M: more workshops like this!

N: annual or semi-annual educator conferences
Q: there is a critical need to involve elementary and middle school teachers and students with NOAA materials, but don't forget high school level. Specifically ways NOAA data can be used in Biology, Chemistry, and physics in high school
R: 1. Assist the states to modify their standards to include more earth science at higher levels than 6th grade. Teachers are under great pressure to teach only to the standards
2. more workshops like this, interactions w/ scientists is great
S: needs to supply access for teachers, too many disjointed efforts that have much overlap
U: easy access to local images (ie red tide along coasts, clear cutting, strip mining, land slides, etc)
V: creating power points with info correlated to standards. Computers (our school is sadly lacking computer access for students)

ADDITIONAL COMMENTS

Please provide *any* additional comments, suggestions, or observations about your experience, thank-you.

A: I'm trying to change the way science is taught at my school, more project based learning, Data collection, etc would like to be a part of future development programs for elementary and middle grade students. More interaction with NASA and NOAA people also. Could add much more donnatteach@aol.com
B: Having Brian Rogan's presentation at beginning of teacher workshop instead of plenary that occurred
C: Thank you for offering this conference to teachers. I wish more Santa Barbara area teachers had come
G: I would suggest a short teacher intro first instead of the morning ESIP talk with other attendees or start teacher workshops right away
H: you this was your first one. Great Job!
I: thank you very much for making it possible for me to attend ESIP by helping w/ the cost of travel and lodging
K: excellent conference! I hop to attend in the future
L: I truly enjoyed this conference. It was worth giving up days in the summer and I hope to attend in the future
N: we need reps from USGS and AGS
O: Sometimes it went a little too fast. This was an excellent first session to teachers at ESIP!
P: thank you for this opportunity to enhance my understanding and delivery of this information to my students. I enjoyed this very much
R: second plenary talk was not a good use of time. This was an excellent mix of teacher's collaboration, prepared talks and informal meetings
S: abstract of sessions should include HNKS and specific specializations
V: This was great. I was a little nervous the first morning because the talks were over my head, but the break at sessions was great. I got a lot of pertinent info. The talk by Brian explaining ESIP would be good to have the first day.

G6-12 Educators Attending the Teacher Track of the ESIP Summer Meeting, July 8th & 9th, UCSB

first name	last name	school	city	state
John	Arvedson	La Puente High School	Los Angeles	CA
Carol	Barrett	Burroughs High School	Ridgecrest	CA
Jen	Checchio	Kellogg School	Goleta	CA
Carrie	Coombs	Twin Lakes Academy	Jacksonville	FL
Clint	Dawson	Pacifica High School	Oxnard	CA
Kristina	Duran	Pioneer Valley High	Santa Maria	CA
Christine	Earls	Peabody Elementary	Santa Barbara	CA
Jeff	Foote	Kermie McKenzie Jr. High	Guadalupe	CA
Elizabeth	Garcia	LAUSD	Los Angeles	CA
Brigitte	Haley	Kellogg School	Goleta	CA
Marea	Inghram	Brentwood School	Los Angeles	CA
Kristen	Kent	Pioneer Valley High School	Santa Maria	CA
Argy	Leyton	Montclair High School	Montclair	CA
Kim	Miller	Goleta Valley Junior High	Goleta	CA
Bonnie	Mondragon	Etiwanda High School	Ontario	CA
Rebecca	Reid	Olive Grove Charter School	Los Olivos	CA
Tom	Richardson	Golden Valley High	Bakersfield	CA
Lauren	Rodriguez	Peabody Charter	Santa Barbara	CA
Jean	Rogers-O'Reilly	Cleveland School	Santa Barbara	CA
Don	Schulteis	Ontario High School	Ontario	CA
Suzanne	Squires	Los Olivos School	Los Olivos	CA
Shelley	Thompson	West High School	Santa Barbara	CA
Wendy	Van Norden	Harvard-Westlake School	No. Hollywood	CA
Edie	Walker	South Gate Middle School Magnet	LAUSD	CA
Pamela	Whiffen	Mohave Middle School	Phoenix	AZ

University Educators

Sue	Johnson	Cal Teach undergrads & UCSB preservice grads	CA
Paula	Arvedson	California State University	CA
Peggy	Lubchenco	UCSB education department	CA
Debbie	Bereki	UCSB PhD student	CA