



**LOS ANGELES UNIFIED SCHOOL DISTRICT
MEMORANDUM**

TITLE: High School Integrated Coordinated Science Curriculum Training for the 2008-2009 School Year

NUMBER: MEM-4328.0

ISSUER: Ronni Ephraim, Deputy Academic Officer, Professional Development

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Assistant Superintendent
Secondary Instruction, Interim

DATE: July 10, 2008

ROUTING

Local District Superintendents
Local District Administrators of Instruction
Secondary Directors, School Support Services
Local District Specialists, Science
Local District Experts, Science
Local District Advisors, Science
Secondary Principals
Assistant Principals
Department Chairs, Science
Secondary Teachers, Science

PURPOSE: This Memorandum sets forth the requirements and expectations for the implementation of the District's Integrated Science 9th Grade curriculum and professional development training.

MAJOR CHANGES: The changes in this Memorandum reflect new professional development dates for the 2008-09 school year.

BACKGROUND As a result of school site support over the past four years, student achievement has increased in Integrated Coordinated Science 1 (ICS1), as evidenced on the California Standard Test (CST). There is evidence that we are making key advances in inquiry-based standards-driven science teaching. Data indicates that students taking ICS1 perform better on subsequent science CST's and go on to complete three or more years of science (PERB, 2006). On the other hand, there are challenges in maintaining a leadership core, increasing teacher content knowledge and practice, facilitating collaboration, and retaining ICS1 teachers for more than one year. ICS1 is a rigorous standards based course based on the LAUSD adopted textbook, *Integrated Coordinated Science for the 21st Century*. In the past four years, over 500 teachers have been trained to use the ICS1 curriculum.

The curriculum provides a full year of standards-based lessons and supports the establishment of a disciplinary science framework that, in concert with research-based practices, provides a curricular foundation for success in future laboratory science courses. The ICS1 curriculum includes at least 20 percent supervised hands-on laboratory components and is aligned with the



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certification criteria outlined by the University of California in that it “takes an approach that is consistent with the scientific method in relation to observing, forming hypotheses, testing hypotheses, through experimentation and/or further observation and forming objective conclusions; and includes hands-on scientific activities.”

The ICS1 course is a rigorous laboratory based course that meets both High School Physical Science Graduation and University of California “g” requirements. It is intended for 9th grade students as an introductory science course and provides in-depth science content that meets a portion of the equivalent California Science standards in Earth Science, Biology, Chemistry and Physics. The ICS1 course was adopted to meet grade-level standards for a 9th grade student audience and meets the UCOP (University of California Office of the President) A-G guidelines for a College Preparatory elective. ICS1 is a UC “g” requirement and according to the UCOP guidelines is a College Preparatory course that allows students to “achieve mastery of fundamental knowledge that prepares them for University Work or a future career path” (<http://www.ucop.edu>).

INSTRUCTION: Description of Integrated Coordinated Science 1 Professional Development (PD):

To help with addressing our challenges, the fifth year of implementation invites non-trained teachers of ICS1 to attend two (2) days of training on each module of the ICS1 curriculum program, aligned with California Science standards, throughout the year, or a one-week (six-day) ICS1 PD that will cover all four modules. Priority for the one-week institute will be given to teachers who are on a 4x4 schedule. As the budget permits, consumable materials kits will be provided for the implementation of each module. The durable kits that are available at each school site must be used to support the teaching of the Integrated Science Modules. There is limited space available. The modules include Earth Science, Physics, Chemistry, and Biology. The two-day training includes a Friday and Saturday. The school site must provide substitute coverage for Fridays. The LAUSD Science Branch will pay training rate (\$25.00/hour) on Saturdays for all participants in attendance.

The PD will build the capacity of the teachers to perform and examine the ICS1 Curriculum activities and understanding how the activities build on the content standards/big ideas. The teachers will learn about a problem-based approach to learning content through creation of a Chapter Challenge. The teachers will utilize science inquiry and content literacy strategies for English Learners such as: using graphic organizers, accurate use of



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academic language, creating instructional conversations, and cooperative grouping strategies.

Participating teachers are expected to:

1. Obtain their Principal's signed approval to attend all Friday & Saturday training dates. School sites are responsible for providing substitute funding for Fridays.
2. Submit the **Administrator Approval Form** (Attachment A) to the LAUSD Science Branch.
3. Sign Up for each module on the Learning Zone: www.lz.lausd.net. Use the **Learning Zone Instructions** (Attachment B).
4. Make arrangements for Principal approval of substitute coverage upon receipt of confirmation.

Teacher participants must choose either the two-day, four-training series or the one-week training when signing up on the Learning Zone. Teachers must sign up for four two-day trainings in order to receive a full year's worth of training in the entire ICS1 curriculum.

I. TRAINING DATES

A. **Two-day Trainings for Four Integrated Science I Modules**

EarthComm – Aug. 1-2, 2008 or September 12-13, 2008

Active Physics – Aug. 1-2, 2008 or Nov. 7-8, 2008

Active Chemistry – Nov. 7-8, 2008 or Jan. 16-17, 2009

Active Biology – Jan. 16-17, 2009 or March 20-21, 2009

B. **One-week Integrated Science Training for Four Integrated Science I Modules**

(This institute gives priority to teachers on a 4x4 schedule).

August 18-23, 2008 (EarthComm, Active Physics, Active Chem, Active Biology).

II. CRITERIA FOR PARTICIPATION IN ICS TRAINING PROGRAM

A. Requirements for Participating Teachers:

1. Must be a Current Integrated Coordinated Science I teacher.
2. School site administration must provide substitute funding. Submission of Administrator Approval form is necessary (Attachment A).
3. Teachers must sign up for each module on the Learning Zone: www.lz.lausd.net
4. Teachers must use their lausd.net email account in order to receive confirmation that all necessary



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- approval documents have been received.
5. Teachers must demonstrate knowledge of science content and standards-based instruction.
 6. Only teachers who are first time participants will receive materials.
 7. Teachers must be willing to receive school site classroom visits and observations.
 8. School and local district leadership should provide frequent, visible and concrete support.
 9. Teachers must commit to teaching three years of ICS, including the current year.
 10. Teachers should have time for collaborative planning and to share student work.
 11. Teachers must implement the curriculum as designed and commit to teaching the California Science Standards.

***Note: As a courtesy to others wishing to attend the training, teachers unable to attend the training must unenroll from the registered course on the Learning Zone 72 hours prior to the event. This will allow the waitlisted participants to receive ample notification in order to secure a substitute. Not doing so will result in being placed on a waitlist for future professional development events.**

Teachers who are interested in participating in the training need to complete the attached form and return it to the Science Branch prior to the training date desired. Once administrative approval and registration on the Learning Zone are received, teachers will receive confirmation that they are approved to attend. This confirmation will be sent to the LAUSD email account only. Teachers that do not receive an email confirmation will not be able to participate and will be asked to return to their school sites.

Teachers who will participate in the training will receive supplies to assist them with implementation of each module. Teachers must complete each module in order to receive materials.

ASSISTANCE: For further information regarding this Memorandum, please contact Myrna Estrada at myrna.estrada@lausd.net or at 213-241-6875.



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ATTACHMENT A

**Integrated Coordinated Science Training
Administrator Approval Form**

School Name: _____

First Name: _____ Last Name: _____

Email: _____@lausd.net **(Confirmations will only be sent to this account)**

I (participant signature), _____ understand that my signature indicates my full participation in the ICS training and my willingness to teach the curriculum with my ICS1 classes.

Please copy this form if additional Integrated Science teachers will be participating.

Administrator in charge of Science _____

Administrator's email _____@lausd.net

I (Administrator signature), _____ understand that my signature indicates that I support the participating science teacher(s) and verify that they are teaching ICS1 in 2008-2009 school year. Materials that are being received are property of LAUSD and in the event that a teacher no longer is teaching the ICS1 course, these materials should be made available to teachers who are.

Please have your principal sign the following:

I support the participation of the above named teacher in the Integrated Coordinated Science 1 Program and **I will provide substitute funding for their participation.** I am aware that significant material support is being provided and I am committed to supporting this program at my school site according to the above stated criteria.

Principal's Signature: _____ Date: _____

Fax this application form to Myrna Estrada, Science Expert at 213-241-6940
Confirmations will be sent via LAUSD email.



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ATTACHMENT B

Learning Zone Registration Instructions

All registration will be done online through the Learning Zone. The Learning Zone can be accessed from the LAUSD Home Page (www.lausd.net):

1. Click on **Employees**, and then click on the **Learning Zone Catalog and Registration** on the right hand side.
2. Use your “single sign in” username and password to register (same as your email).
3. From the Learning Zone home-page, click on the “**Courses**” tab, and then click on “**Class Offerings**”.
4. From the “**Program**” pull down menu, select **District Science Programs**.
5. In the “**Keyword**” section, enter key search terms for the class that is of interest (i.e. Plate Tectonics, Immersion, Biology, etc.). If this section is left blank, all classes offered under District Science Programs will appear.
6. From the “**Classes for the next**” pull down menu, choose **6 months**, and then click **Search**.
6. Click on the **link** of the class you are interested in. The class will open in a new window.
7. Maximize the window, and then click “**Enroll Now**”.
8. **Confirmations and reminders will be sent to your LAUSD school email only!**