Benefits to Teachers and School Systems

To Teachers:

- Stipend ($75/day x 17 days per year)
- Housing and mileage reimbursement (for eligible participants)
- Earn up to 3 hrs tuition free chemistry graduate credit each year
- Increase chemical content knowledge and conceptual understanding
- Learn teaching and assessment strategies that increase student achievement
- Develop skills to serve as a collegial coach, workshop presenter and an instructional leader in your school system

To School Systems:

- Knowledgeable, enthusiastic science teachers
- Hands-on, minds-on science classrooms
- Active Learners
- Close collaboration with regional University
- Follow-up support from project staff and leadership trained teachers
- Networking opportunities with other school systems
- On-going support from teacher-leaders

Multi Year Program

Year One—Chemistry Concepts and Collegial Coaching Skills

- 2 Wk Summer Institute
- Extensive Academic Year Follow-up
- Workshops
- Participation in LSTA Conference
- Electronic Networking
- Newsletters
- Classroom Visits

Year Two—More Chemistry Concepts and Leadership Skills

- 2 Wk Summer Institute
- Extensive Academic Year Follow-up
- Teacher-led Workshops
- Participation in LSTA Conference
- Electronic Networking
- Newsletters
- Classroom Visits

Chemical Concepts and Connections (C_3) For Teacher Leaders

Developing Conceptual Understanding and Leadership Skills.

Returning Participants:
June 21—July 2, 2004
(orientation June 20)

New Participants:
June 7—June 18, 2004
(orientation June 6)

C_3 Office

Louisiana Tech University
PO Box 3179
Ruston, LA 71272
(318) 257-4772 tel
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http://c3.latech.edu

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Chemical Concepts and Connections (C_3) For Teacher Leaders

A Professional Development Program for Teaching Chemistry Through Hands-On Discovery

C_3 is a professional development program for Louisiana high school teachers of physical science and chemistry that prepares them with in-depth chemical content knowledge, a conceptual understanding of chemistry, and the skills to transfer their knowledge to additional teachers. During Year One, participants attend an initial 2-week summer institute, participate in extensive academic year follow-up, and serve as collegial coaches to 3 peers. During Year Two, participants attend a second 2-week institute, work on additional leadership skills, participate in academic year follow-up, and continue to work with 3 peers. C_3 is modeled after the successful Project LIFE program. Project LIFE has revitalized science education in its participating school systems because it embodies the spirit of the national science reform movement. C_3 staff model a hands-on, discovery-first, learning cycle of teaching. Teachers work as scientists to gain new knowledge and practice process skills through investigative activities; learn how to transfer their understanding and experience to their classrooms; and develop leadership skills to guide others in their school system to success.

Active Learning

- **Working as Scientists**
  - ~ Learning by Inquiry
  - ~ Investigating
  - ~ Designing Experiments
  - ~ Analyzing Data
  - ~ Communicating Results
  - ~ Incorporating Writing and the History of Science
- **Transferring to the Classroom**
  - ~ Hands-on/Minds-on Learning Experiences
  - ~ Cooperative Learning
  - ~ Learning Cycle
  - ~ Classroom Management
  - ~ Developing Conceptual Understanding
  - ~ Math/Science Integration
  - ~ Technology Integration
  - ~ Alternative Assessment
  - ~ Review Available Chemistry Curricular Materials
- **Developing Leadership Skills for:**
  - ~ Working with Colleagues
  - ~ Presenting Workshops
  - ~ Serving as an Instructional Leader
  - ~ Securing Funding