



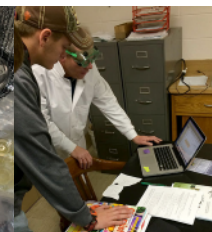
Explore science concepts hands-on



Share ideas with other teachers



Bring new resources into the classroom



## Composting - Building a Laboratory Worm Home!

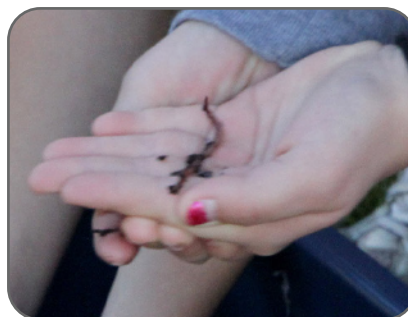
Enhance your science knowledge using the ITQ 2015 theme of "Composting – Building a Laboratory Worm Home!" Exploration topics include **composting**, **recycling**, **soil**, **water**, **air**, **food**, **shelter**, and of course, **WORMS**. These topic areas provide the context and content for exploring the relevance of science in our Minnesota Academic Standards.

Designed with input from elementary teachers, this workshop helps you better prepare students for science assessments. We focus on further developing your understanding of the scientific inquiry process and how it relates to your classroom.

Using Minnesota Department of Education (MDE) resources, you further your understanding of Minnesota Science Standards and developing rubrics for assessments. You implement question-writing techniques based on Webb's Depth of Knowledge as used by the MDE.

As an ITQ participant, you work at discovering and utilizing your "composting lab", which you receive as a resource for your own classroom. This lab is specifically designed to engage your students in hands-on, active learning experiments and observations involving laboratory data gathering, interpretation, analysis, and summary. Time is allocated for lesson preparation incorporating grade level standards with your "composting lab".

Minnesota Academic Science Standards are provided. Participants must bring their school's science curriculum as it pertains to this topic and a computer or tablet to research and develop lesson plans utilizing workshop equipment and content.



### Workshop Instructors

- Dr. Vernon Cardwell, Ph.D., retired Professor of Agronomy, University of Minnesota
- Rolf Mahlberg, Agriculture Faculty, Minnesota West Community & Technical College
- Assistant Scientists at the University of Minnesota Southwest Research & Outreach Center
- University of Minnesota Southwest Research & Outreach Center K-12 Education & ConnectU Team

Hear ITQ participants Shelly & Trista share their experiences! Visit:

[http://youtu.be/k\\_p4GW5SLsU](http://youtu.be/k_p4GW5SLsU)



### Fees, Stipends & Other Benefits

- \$50 returnable registration deposit - returned after attending class.
- Stipend of \$150 for each 5 days attended - total of \$300 for entire workshop.
- Mileage paid at half the allowable government rate with carpooling encouraged.
- Lodging and a \$15 daily meal allowance provided for participants commuting more than 100 miles from SWROC and who wish to stay in the area - SWROC will assist you with finding lodging
- Lab equipment and other resources and materials for participants to take back to their own classrooms provided.
- Meals and snacks provided daily.

### Credits & CEUs

- A tuition waiver for three graduate credits offered from the University of Minnesota is offered to course participants. Receiving graduate credit involves a 2-4 page reflective paper as well as attending the course.
- 60 CEUs

For more information on ITQ, visit:

<http://goo.gl/EMtzDA>

## ITQ Registration Form

*We will accept up to 24 participants,  
so early registration is essential!*

Name: \_\_\_\_\_

### School Information

School: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Grade Taught: \_\_\_\_\_

### Home Information

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Return registration form and \$50.00 check  
made out to University of Minnesota to:

**Southwest Research & Outreach Center**  
**23669 130th St.**  
**Lamberton, MN 56152**

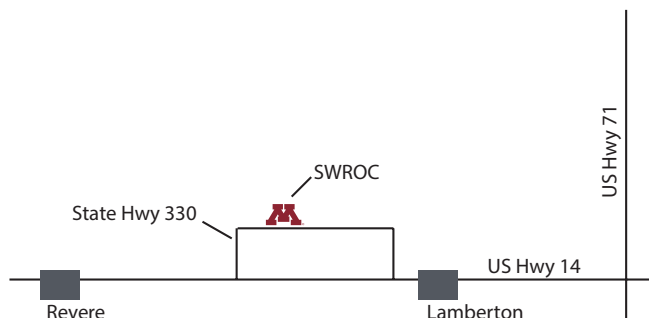
*Additional registration forms can be found  
online at <http://goo.gl/prVqdV>  
or by contacting Gretchen Thillen at  
[gthillen@umn.edu](mailto:gthillen@umn.edu) or 507-752-5094.*

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Quality Grant from the  
Minnesota Office of Higher  
Education in cooperation with  
the University of Minnesota  
Southwest Research &  
Outreach Center and area  
school districts.*



### For more information:

- **Ken Kraemer**  
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- **Pauline Nickel**  
*Coordinator of K-12 Education*  
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[nicke002@umn.edu](mailto:nicke002@umn.edu)



### University of Minnesota Southwest Research & Outreach Center

23669 130th St.  
Lamberton, MN  
Phone: 507-752-7372  
Fax: 507-752-5097  
<http://swroc.cfans.umn.edu>

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# IMPROVING TEACHER QUALITY

## Composting - Building a Laboratory Worm Home!

2015 Dates:

**June 8-11, June 23-25, July 7-9**

*(Workshop is a total of 10 days over three sessions)*

Location:

**University of Minnesota  
Southwest Research &  
Outreach Center  
Lamberton, Minnesota**

*(Located 3 hours southwest of the Twin Cities)*

  
UNIVERSITY OF MINNESOTA  
**EXTENSION**

**Southwest Research  
& Outreach Center**  
UNIVERSITY OF MINNESOTA

**K-12 Education & ConnectU Team**