

# Crossing Disciplinary Boundaries: Getting Small Groups to Actually Work in the Classroom

Gary Moore



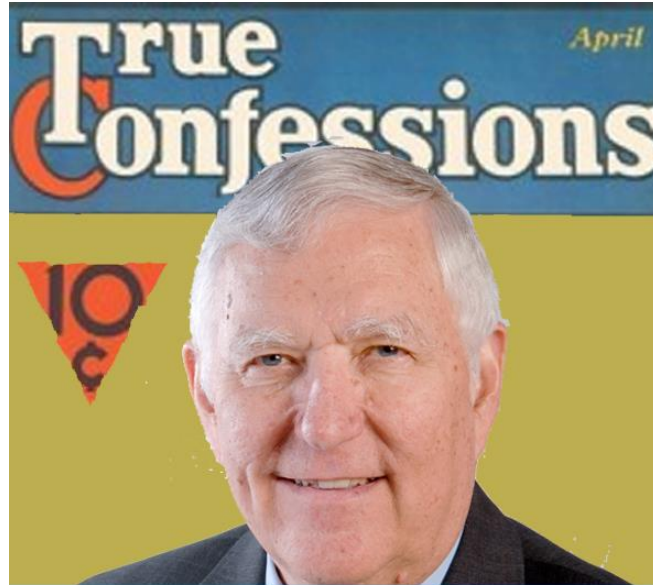
Proceedings of the 59th Annual North American Colleges and Teachers of Agriculture Conference, Blacksburg, VA. June 19-21, 2013



**BECAUSE ONCE I LIVED IN SIN**



**MY SOUL FOR HIS KISSES**  
COMPLETE BOOK-LENGTH TRUE NOVEL IN THIS ISSUE



**I Don't Like  
Small Group Work!**

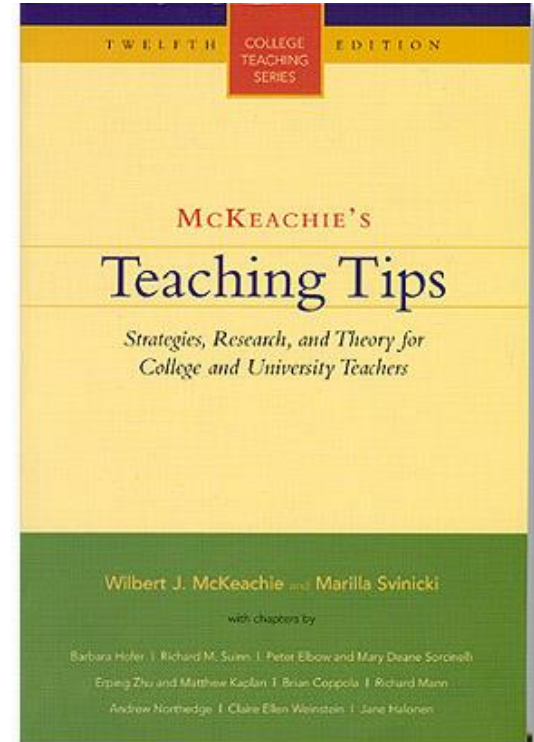
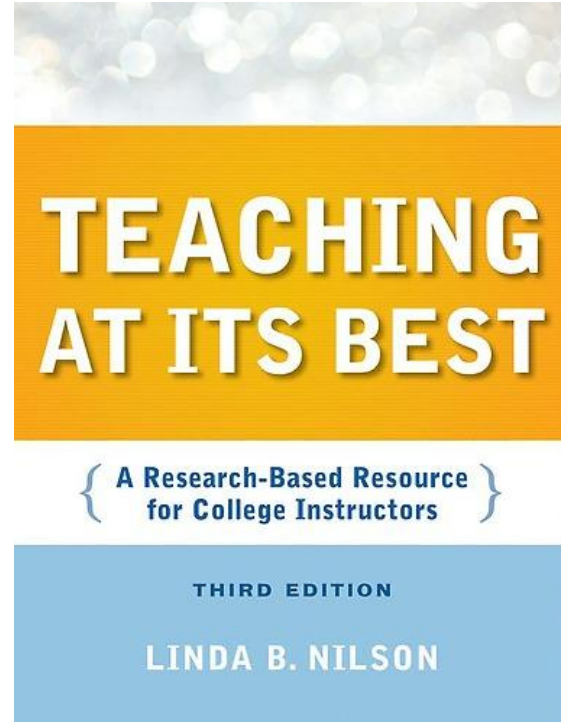
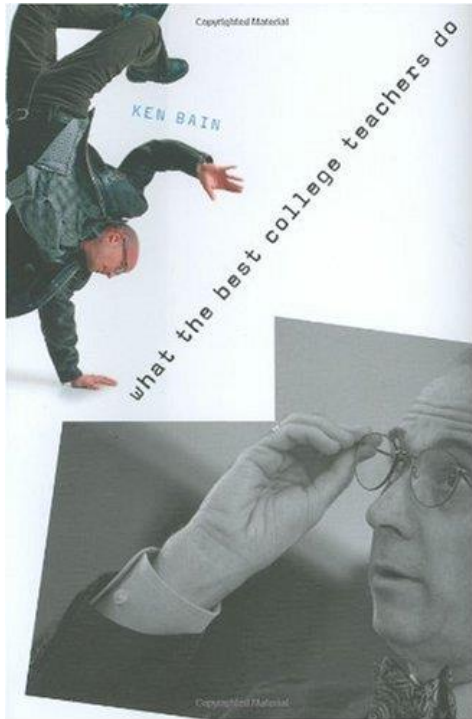


**Why He Had  
The Key  
to My Apartment**



Complete in this issue—  
**They Called Me "Bad Girl"**





Yet—the Literature on Teaching says we should use small groups!

# My Challenging Course

- **AEE 226 - Computer Applications and Information Technology in Agricultural & Extension Education**

- **Required of:**

- **Agricultural Education**
- **Extension Education**
- **Agricultural Business Management**
- **Agricultural and Environmental Technology**

- **Elective for numerous others**



# AEE 226 Major Instructional Units



Web Design



Social Media



Microsoft Excel



Microsoft Word



Microsoft PowerPoint



Photoshop

# Some Issues/Challenges

- Meeting the needs of the various majors
- Overcoming the “I already know this” mentality
- Subject Centered approach
- Substantial time spent grading major projects



# Overall, this course was excellent



# What is one to do?

Why not try a  
problem-focused  
approach with  
substantial  
**FORMAL** small  
group activity?





# What Was Done!

Class divided into 4 teams

- More in a minute

Each class started with a problem scenario

- See next slide

Group Projects replaced Individual Projects

- Stay tuned

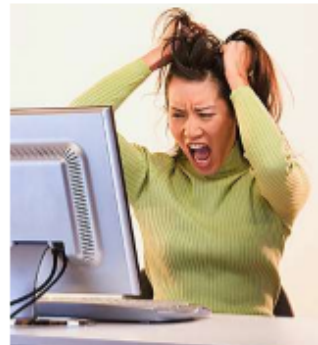
1. Susan was in a panic. She had received a mid-term academic report for the AEE-226 class and had a grade of D. The instructors' comments were they could not find several project files she was to create and turn in for a grade. Susan was positive that she had created them and submitted them.



What are some possible reasons why the files were not found by the instructors?

What is the solution to this problem?

¶



2. Ann was frustrated. Late last night she had finished a major project on her computer and saved the file. She had been up 24 hours straight working on the project and was brain dead by the time she finished the project. She was pretty sure she had saved the file in the My Documents folder on her computer but can't find it because she can't remember the file name and there are over 2,000 files in this folder.

How could Ann find the lost file?

What should Ann do to prevent this in the future?

¶

¶

























3. Tom worked on a PowerPoint presentation last night and saved it to his computer and USB thumb drive then hurried off to class this morning but forgot to take the thumb drive with him. The thumb drive was still plugged into the computer back in the apartment. He has to present it to a class in 20 minutes but doesn't have time to go home to get it! He has a laptop with him. Is there any way to retrieve the file from his home computer?



# Sample Problem Scenarios

## My Guidelines for Forming Groups

- No gender isolated
- Weaker student in between stronger students or vice versa
- Weak students easily accessible to me

	Seat-F (wall-side)	Seat-E	Seat-D	Seat-C	Seat-B	Seat-A (near-door)	Door Side of the Room	
Row-4	 Shannon (ABM, 2.91)	 Maria (ABM, 2.58)	 Ian (ABM, 3.62)	 Matte (ANS, 2.75)	 James (Turf, 3.01)	 Tito (FYC, 2.25)	Door Side of the Room	
Row-3	 Nick (ABM, 2.77)	 Andrew (ABM, 1.69)	 Wilson (ABM, 3.17)	 Lily (ABM/BA, 2.74)	 Becca (AET, 3.21)	 Gracie (ABM/ANS, 2.73)		
Row-2	 Katie (AED, 3.07)	 Abby (AED, 2.36)	 Breanna (AED, 3.37)	 Abbi (AEE, 2.34)	 Emily (NTR/AEE, 3.50)	 Jilliane (AED, 2.18)		
Row-1	 Danielle (AED, 3.77)	 Erin (AED, 4.0)	 Catherine (AED, 2.89)	 Lynn (ABM/AEE, 3.29)	 Jessica (AEE, 4.0)	 Charlotte (Transition, 1.86)		
Front-of-Class								



# Hillsborough High School





# Mooreland Cooperative Extension



# Carolina Equipment





# The Hidden Valley Ranch

Hillsborough High School Agriculture Department

Search this site

<b>Home</b>
▼ <b>Chapter Activities</b>
Community Service
Fundraisers
<b>Courses</b>
<b>Facilities</b>
▼ <b>Faculty</b>
FFA Officer Team
Teachers
▼ <b>FFA</b>
Degrees
Supervised Agricultural Experience
<b>Sitemap</b>

Home

# Welcome to the Hillsborough High School Agriculture Department!



Here at Hillsborough High School our mission is to provide educational experiences. Hillsborough High School boasts a department is equipped with up-to-date classrooms, shops, and skills common in a variety of agricultural fields. We offer many courses cover all aspects of agriculture from

Agriculture education, to us here at Hillsborough High, specific, agricultural of agri

Facilities



The shop is a place where students can build and fabricate many different ideas and projects. The shop consists of a variety of machines and tools that allow students to fabricate any project that is assigned to students throughout the semester as well as learn to how to use all of the different machines that are in our shop. Students in Agricultural Mechanics level I and II will complete:

- Various metal projects
- Building bird houses
- Building Adirondack chairs
- Construction projects that need to be done to make repairs to equipment in the shop and around the school.



Horticulture level I and II classes will spend many class periods working in our greenhouse working with various plants and performing seasonal projects such as growing Mums in September, Poinsettias around Christmas and Easter lilies in March just in time for the Easter holiday. All of our plants that are for sale our tended to by students during their designated class periods. Students in Horticulture level I and II will complete:

- Water plants
- Transplant
- Pull weeds out of the flower beds
- Plant propagation
- Landscaping projects around the school
- Re-planting dead shrubs
- Trimming back hedges and bushes each Spring around the school.



The Hillsborough High School agriculture department purchased a storage center for students and faculty members to store equipment that is used in our greenhouse and other projects in the metal shop. Inside the barn various tools for landscape projects are housed as well as small equipment such as a tiller and weed eaters. Throughout the year when other various and seasonal projects are being assigned our barn serves a storage facility to house potting soil, plant trays and plant pots that are used for the Mum potting in the fall.

Faculty >

**FFA Officer Team**

**President- Breanna Williams**

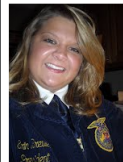


"The rising sun is the token of a new era in agriculture. If we will follow the leadership of our president, we shall be led out of the darkness of selfishness and into the glorious sunlight of brotherhood and cooperation."

**Duties:**

1. Preside over meetings according to accepted rules of parliamentary procedure.
2. Appoint committees and serve on them as an ex-officio (non-voting) member.
3. Coordinate the activities of the chapter and evaluate the progress of each division of the Program of Activities.
4. Represent the chapter in public relations and official functions.

**Vice President- Erin Brewer**



"The plow is the symbol of labor and tillage of the soil. Without labor, neither knowledge nor wisdom can accomplish much. My duties require me to assist at all times in directing the work of our organization. I preside over meetings in the absence of our president, whose place is beneath the rising sun."

**Duties:**

**Secretary- Katie Teator**



"I keep an accurate record of all meetings and correspond with other secretaries wherever corn is grown and FFA members meet."

**Duties:**

1. Prepare and post the agenda for each chapter meeting.
2. Prepare and present the minutes of each chapter meeting.
3. Place all committee reports in the designated area
4. Be responsible for chapter correspondence.
5. Maintain member attendance and activity records and issue membership cards.
6. Keep the Program of Activities wall chart up-to-date.
7. Have on hand for each meeting Official FFA Chapter Secretary's Book including minutes of the previous meeting, Copy of the Program of Activities including all standing and special committees, Official FFA Manual and the *National FFA Student Handbook*, Copies of the chapter constitution and bylaws

**Treasurer- Danielle Blake**



"I keep a record of receipts and disbursements just as Washington kept his farm accounts-carefully and accurately. I encourage thrift among the members and strive to build up our financial standing through savings and investments. George Washington was better able to serve his country because



# From the Mooreland Extension Site



Home Departments Faculty Events

Home

Welcome to Mooreland County Cooperative Extension!



Mooreland County, as part of North Carolina Cooperative Extension partners with communities to deliver education and technology that enrich the lives, land and economy of North Carolina. Extension professionals in 100 counties and the Cherokee Reservation provide education and technical assistance based on research from the state's land-grant universities: NC State University and NC A&T State University.

## About Our Extension Agents



**4-H Youth Development - Abbi Davis**  
Major: Extension Education | Junior  
Minors: Agricultural Business Management, Entomology



**Animal Agriculture - Lynn Knopp**  
Major: Agricultural Business Management | Junior  
Minor: Extension Education



**Nutrition - Emily Love**  
Major: Nutrition Science - Applied Nutrition | Sophomore  
Minor: Extension Education



# From the Carolina Equipment Web Site



DEALER OF THE YEAR

• 2010 •

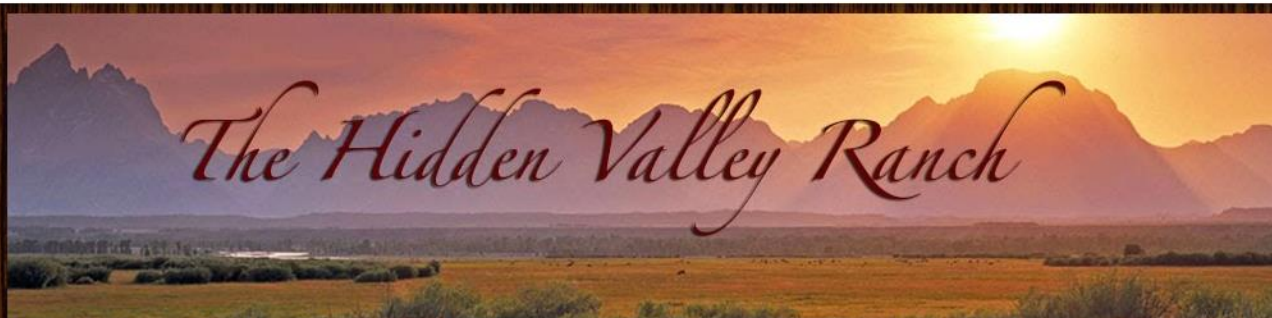


## More About The Actual People Behind It All

- Joe Reece - Being recent graduate from North Carolina State University, he is experienced in all the latest equipment appraisal practices. He grew up on a family farm that used only Case equipment. They are some of our best customers and would never think of going anywhere else.
- Andy Michael - Graduated from The Ohio State with a degree in Mechanical Engineering. After graduating, he then decided that he felt at home working on farm equipment. He went through the Case mechanics program, and is fully qualified to work on your equipment.
- Shannon Legget - Having a Masters in Business Management, makes Shannon the perfect person for our office manager and CFO. If it happens in the office, Shannon knows about it. She handles the accounts receivable, account payable, payroll, and all incoming and outgoing phone calls.
- Maria Restrepo - Maria graduated from North Carolina State University with a degree in Marketing. Being bilingual makes her the perfect person to handle any and everything that happens with our marketing program. She runs all of our events and helps to promote our growing business. With her help, we will eventually be able to expand into foreign markets.
- Nick Johnson - The president of sales makes Nick the perfect person to contact about anything Case related. He is experienced in Case tractors and combines, as well as Case's Advanced Farming Systems. He can set you up with the proper sized equipment for your operation and needs.
- Ian Swaim - Ian has the hardest job of all, he is CEO of operations. Keeping us all busy and working can prove to be difficult at times, but it is a job that he takes seriously. Being so dedicated to the growth of the business makes him the perfect person for the job. If there are any questions, please feel free to contact him. His door is always open.

Welcome! Updated Feb 18, 2013, 1:56 PM

✎ 📄 More ▾ Share



[Welcome!](#) [About Us](#) [Contact Us](#) [Sponsors](#)

- ▼ **Welcome!**
  - [About Us](#)
  - [Contact Us](#)
- Riding Lessons**
- Boarding**
- ▼ **Breeding**
  - [Broodmares](#)
  - [Stallions](#)
- For Sale**
- Sold**
- Sitemap**

## Welcome!

It is our goal to breed and raise quality quarter horses specializing in cutting, cowhorse, roping, and rening lines while providing our customers with both a relaxing and professional experience. Located in South Park, Wyoming, we welcome you to come and stay a while.





# Group Projects

- Web Site (at least 6 different pages) (10%)
- Social Media Campaign (5%)
- Newsletter & Brochure (5%)
- Excel Spreadsheet (5%)
- PowerPoint (5%)

A blue, multi-pointed starburst graphic with a white outline, containing the text '30% of the grade' in white. The starburst has approximately 12 points of varying lengths, creating a dynamic, star-like shape.

30% of  
the  
grade





**Peer-Rating-of-Team-Members**

Name \_\_\_\_\_ → Group# \_\_\_\_\_

Please write the names of all of your team members, INCLUDING YOURSELF, and rate the degree to which each member fulfilled his/her responsibilities in completing the homework assignments. The possible ratings are as follows:

- Excellent** → Consistently went above and beyond—tutored teammates, carried more than his/her fair share of the load
- Very good** → Consistently did what he/she was supposed to do, very well prepared and cooperative
- Satisfactory** → Usually did what he/she was supposed to do, acceptably prepared and cooperative
- Ordinary** → Often did what he/she was supposed to do, minimally prepared and cooperative
- Marginal** → Sometimes failed to show up or complete assignments, rarely prepared
- Deficient** → Often failed to show up or complete assignments, rarely prepared
- Unsatisfactory** → Consistently failed to show up or complete assignments, unprepared
- Superficial** → Practically no participation
- No-show** → No participation at all

*These ratings should reflect each individual's level of participation and effort and sense of responsibility, not his or her academic ability.*

Name of team member	Rating	Reason for Rating
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Your signature: \_\_\_\_\_

# The Autorating System was Used

# Authorating Continued

## Authorating System

1. → Determine group project or average homework grade.
2. → Convert individual verbal ratings to numbers:

Excellent = 100  
 Very good = 87.5  
 Satisfactory = 75  
 Ordinary = 62.5  
 Marginal = 50  
 Deficient = 37.5  
 Unsatisfactory = 25  
 Superficial = 12.5  
 No show = 0

3. → On a spreadsheet, enter numerical ratings received by team members in rows. In the "Vote 1" column are the votes given by Betty to herself, Carlos, John, and Angela; under "Vote 2" are all of the votes given by Carlos, etc.
4. → Average individual marks, calculate overall team average, calculate adjustment factors as individual average divided by team average. **Impose an upper limit of 1.05 on any individual student's adjustment factor.** Doing so avoids raising grades of teammates of students with very low ratings by more than half a letter grade.
5. → Individual project grade = (team grade) x (adjustment factor). **The instructor reserves the right to disregard anomalous ratings.**

### Example

Team project grade	80							Indiv. Proj. Grade
Name	Vote 1	Vote 2	Vote 3	Vote 4	Indiv. Avg.	Team Avg.	Adj. Fctr.	
Betty	87.5	87.5	75	87.5	84.4	82.0	1.02	82
Carlos	87.5	100	87.5	87.5	90.6	82.0	1.05	84
John	62.5	75	50	75	65.6	82.0	0.80	64
Angela	87.5	87.5	87.5	87.5	87.5	82.0	1.05	84

# My Observations

- The “more diverse” the group, the better it “clicked” (majors, gender)
- If a student missed a class or was having a problem, the other team members brought the student up to speed
- Overall, quality of assignments was higher
- Time spent on grading was greatly reduced



# Overall, this course was excellent

