Transforming Rural Education in the 21st Century

The Pedagogy of the 21st Century 1.0

By William A. Draves and Julie Coates

With William A. Draves

Wisconsin Rural Schools Alliance
Nine Shift: Work, life and Education in the 21st Century

With William A. Draves

SINCLAIR LEWIS
MAIN STREET

[Book images and diagram]
Nine Shift

Shift Five: Dense Neighborhoods Replace Suburbs
Shift Four: Trains Replace Cars
Shift Three: Networks Replace Pyramids
Shift Two: Internets Replace Offices
Shift One: People Work From Home
Nine Shift

Life is better for our children and grandchildren
Shift Nine: Education Becomes Web-based
Shift Eight: Half of all Learning Is Online
Shift Seven: Values Change: Cheating to Collaboration
Shift Six: The Rich Get Poorer

1900 ------------------------ 1920

2000 ------------------------ 2020

50% Teaching

Jobs

Farming

Factory

1900 1920
The Organization Chart is a Pyramid

Knowledge Workers

- Use their brain and the Web
- Produce something intangible
- Have four year college degree
- Work from home

**Telecommuting forecast**

By 2009, 27.6 percent of Americans will be teleworkers, according to Gartner Dataquest.

Percent penetration of employee populations

- United States
- Worldwide

Source: Gartner Dataquest (April 2007)
Part II
Values at Work and School
Immoral

- Driving or working or shopping on Sunday
- Gaining money without working (Stocks; winning the lottery)
- Leaving home and moving more than 11 miles away
- Sending elderly to a retirement home
- Breaking an oral agreement
- Going outside without a hat on

Outdated 20th Century Values

- 7:30 am In school or at work
- Show up on time
- Time input = accomplishment
- Work alone, study alone

Hello Willie how are you doing? Here's your envelope that you wanted!
New Way #1
Information goes online.

"They call it collaborative learning.
When I was in school,
they called it cheating."

The first
Gen Y
teacher
New Way #2
Collaboration is superior to individual effort

Half of all learning in this century will be online

New Way #3
Every student has a laptop
Every school wireless

New Way #4
Learn Anywhere
Anytime
(not just Schools)
New Way #5
We learn using all of our senses.

Gaming is good. New Way #6

We each learn differently
“Mrs. Gascoyne said they didn’t want to treat me differently from everyone else in the school because then everyone would want to be treated differently and it would set a precedent.”

- Christopher

New Way #7

THE New Way

Education becomes personalised and offers choice

- Prof Diana Laurillard, Education and Skills Department, United Kingdom

Transforming Rural Education in the 21st Century

Wisconsin Rural Schools Alliance
Your 21st Century Mission

To prepare your students to enter and graduate from a four year college or university.

Your Mission

- In order for our society to remain prosperous, we must have 50% of our youth graduate from college with a four year degree.
- They become knowledge workers.
- Knowledge workers support the rest of society, just like factory workers did in the last century.
- Your mission is no longer to create high school graduates, but to prepare most of our youth for college.
A Model for Rural Schools in the 21st Century

I. The World Wide Web

II. Stage not Age

III. Specialization

World Wide Web

- Turn your cell phones on
- Online courses
- Study from home or from a friend's house or at the library or .....
Stage not Age

• The best of the rural one room schoolhouse
• Children of different ages meet with teacher in the nearest local room.
• Andragogy
• Groups (class size) revised annually to reflect student population
• Students teaching each other

Stage not Age

• Traveling teachers and specialists.
• Utilize existing space in the closest communities - churches, libraries, storefronts, etc.

Specialization

• Subjects requiring either specialized facilities and/or teachers are located 100 miles away (give or take).
• Travel further, less often, for better facilities and teachers
• Not everyone arrives and departs at the same time
• Chemistry, Physics, Japanese, Art, Music, etc.
These things are now your albatross:
Reduce or eliminate:
* School buses
* Buildings
* Non-academic activities
* Classroom management
* Behavior control
* Responsibility teaching

We are experiencing a serious shortage of large animal or food animal veterinarians.
USA Today calls the situation "threatening" to our food supply
Males go into large animal vet med.
Females do not.
Females are now 76% of vet med students.
As a result, there are too few male veterinarians to go into large Animal vet med

Women have better language ability

[Diagram of human brain with labels]
Men have better spatial ability

Not enough boys in the pipeline

SAT score over 1200
(average SAT around 1000)

GPA = 2.0

No university in the country would accept him.

Kentaro
Does 10 math problems out of 30.

Gets all 10 correct.

His grade?

---

Solution

- Stop grading students based on their behavior.
- Grade only based on learning and knowledge
- This will send another 2 million smart boys to college, including smart rural boys
- This will end the food animal vet shortage

---

To Do

- Allow 3-5 teachers in your school district to grade solely on learning and knowledge.

They should be teachers who already want to grade solely on learning and knowledge.
Objections to grading solely on learning and knowledge

1. "But we're teaching responsibility here."
   Actually, penalizing males for late work does NOT teach responsibility.

2. "But we're preparing them for the work place."
   Actually, males in the work place show up on time and deliver work on time. There is no study showing males do not do as well in the work place.

“Man gets ahead, in other words, by discarding the theory of to-day for the feet of to-morrow.”

H.L. Mencken

Summary

- There are neurological (hard wired) reasons why male and female learn and behave differently in the classroom.
- Give your teachers training on how boys and girls learn differently.
- Engage in gender neutral grading.
- Begin to treat students differently, not the same.
10 Things To Do Now

1. Encourage 3 teachers to grade solely based on learning and knowledge.
2. Let teachers know that boys and girls learn differently. Train them on gender in the classroom.
3. Train teachers on the brain with regards to the neurology of learning.
4. Mandate all progress reports, scores and grades be posted online by all teachers.
5. Mandate all assignments be posted online on or before they are given to students.

For more information:
draves at lern.org
www.NineShift.com

Nine Shift
Work, life and education in the 21st century

William & Draves and John Centers
6. Prohibit teachers from writing in cursive to their students.
7. Challenge female students to spend less time per module, and to tackle more challenging modules.
8. Teach boys how to fidget.
9. Allow and encourage teachers to move their classrooms to hybrid.
10. Encourage teachers to allow re-work and re-testing.
10+1. Praise teachers for innovation.