Rigorous and Relevant Writing in the Academic and Technical Classrooms

Presented at the
Career Clusters Conference, June 21, 2011, Atlanta

By Carol Larkin,
Lakeland College Tech Prep Consortium
And Mentor Public Schools

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Successes:

- 90% of our students enter either 2-4 year colleges
- 90% need no remediation in writing
- 50% or more score within remediation range when Compass tested as juniors

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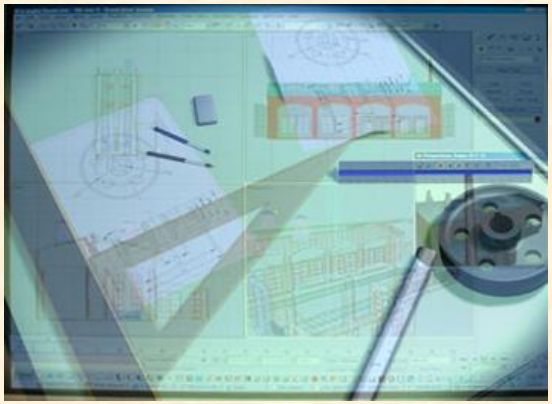
Writing Across the Career Pathways: A Dual Process

Language Arts Classroom

Career and Technical Classroom



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Fortune 500 Information Technology V.P.

- **"Write to instruct"**
  - **Conciseness**
  - **Clarity**

- **"Present in a variety of ways"**
  - **E-mail**
  - **Power point**
  - **Word**
  - **Excel**
  - **Visio**

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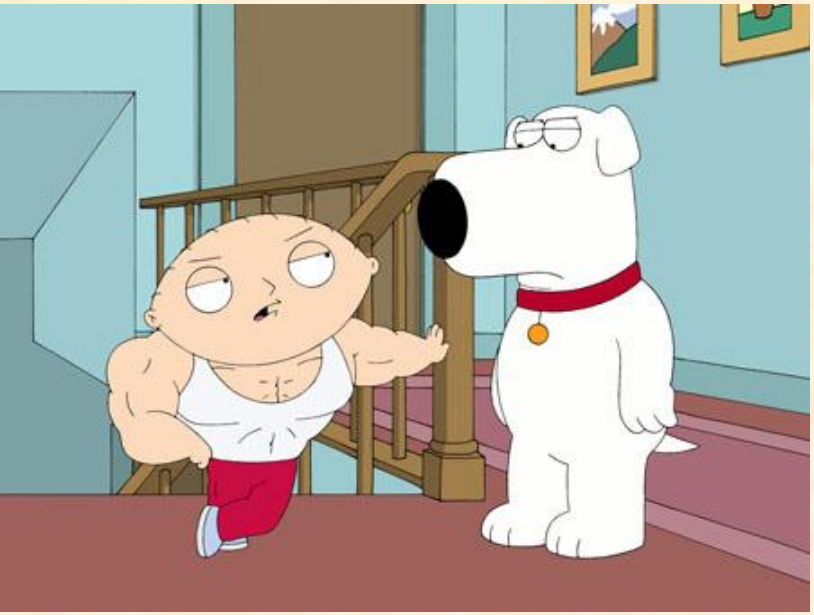
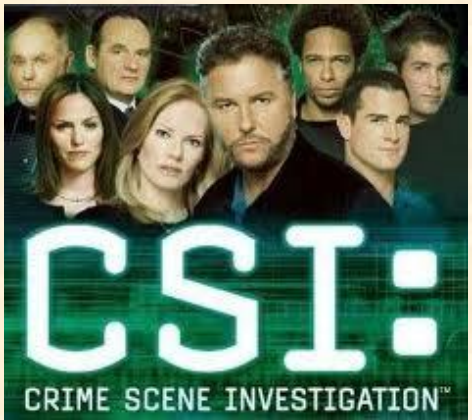
Sue cn u lnd me 5$
No $ sorry
TEXTING
Killing genuine human interaction two thumbs at a time.



Current Generation of Students?

"Multi generational" communication in the Work Force



The Pot Roast

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Thinking and Writing

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WHAT IS TECHNICAL WRITING?

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Describe this scene

Frothy white waves crashing against a verdant coastline of rugged trees and wondrous beaches.

The Three C's

Clear, Concise and Cohesive Communication

Technical Writing Trademarks

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Technical Writing

- Follows specific formats
- Uses White Space
- Structured in style and content

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What is the difference between what we teach in school and technical writing for the real world?

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Academic vs. Technical Differences

Knowledge
Audience
Criteria for Evaluating
Use of Graphics/Page Design
Language
Format

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How Does Technical Writing fit into the Academic Curriculum and Standards?

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Types of Technical Writing

Trip Reports, Project Updates
Proposals, Resumes, Letters
Instruction and Process manuals, flyers, brochures
Equipment and Product evaluations
Technical Research
Lab Reports
Equipment and Product Testing, lab reports
Technical research and Project Proposals

Types of Technical Writing	Discourses of Writing:
Trip Reports, Project Updates	Informative
Proposals, Resumes, Letters	Persuasive
Instruction and Process manuals, flyers, brochures	Descriptive
Equipment and Product evaluations	Compare/Contrast
Technical Research	Argument
Lab Reports	Analysis
Equipment and Product Testing, lab reports	Evaluation
Technical research and Project Proposals	Research

Ohio Common Core Standards

Text types and Purpose

Research to Build and Present Knowledge

Integration of Knowledge and Ideas

Collaboration

Knowledge of Language

Conventions of Writing

WHY TEACH TECHNICAL WRITING?

Teaching Literacy

The 21st Century Worker:

- 80% or more of writing and reading will involve
  - Non-fiction tasks—
    - Reading and responding to quantitative information and documents.

The 21st Century Student:

- 80% of time writing involves reading and writing
  - Fiction responses
    - Affective tasks of connecting to literature

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Implications

- **Fiction requires:**
  - Personal reflection/connection
  - Emotional response

- **Non Fiction requires:**
  - Adaptive thought, reasoning and behavior
  - Patterns to decode
  - Information to apply

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Technical Writing—
Unique Characteristics

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#1 Clarity

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SLOW
BLIND
PERSON
Street
Cleaning
1st & 3rd Tuesday
of EACH MONTH, April 1 to November 30
8am - 12noon
TOW ZONE

Punctuation defines Clarity

Eats, shoots,
and leaves.

Eats shoots, and leaves.

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A woman without her man is nothing.

A woman, without her man,
is nothing.

A woman, without her,
man is nothing.

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Dear John:

I want a man who knows what love is all about you are generous kind thoughtful people who are not like you admit to being useless and inferior you have ruined me for other men I yearn for you I have no feelings whatsoever when we're apart I can be forever happy will you let me be yours.

Gloria

source: The Internet

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Punctuation Guffaws

Two million dollar comma error---

All foreign fruit plants, etc. according to an agreed tariff revision were to be allowed into the country free of tariffs.

With misplaced comma it read "all foreign fruit, plants," etc.

Consequence--

tariff charges--- over $2 million in lost revenue.

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2 Conciseness

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How long does it have to be??????

Say it once, clearly and move on.

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In my experience school writing is the most important skill one can have while trying to get an education and gain knowledge to use later on in the future with whatever life has in store.

Stretching a sentence!
Repetitious!
Passive Voice!

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"The Park Lock cable on your tractor may not be adjusted properly resulting in park not engaging after the transmission shift level is moved to the 'park' position. As a result, unexpected non-powered tractor movement may occur"

John Deere Safety Notice

Translation:

“Park Lock Cable” may not lock, resulting in unsafe conditions.

Check the cable before leaving machine unattended.

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Active and Passive Voice

“We have not passed that subtle line between childhood and adulthood until we move from the passive voice to the active voice-that is until we stop saying 'it got lost' and start saying 'I lost it‘”

Sydney J Harris

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3 Organization

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Organization

- **Paragraph 1**
  - **Purpose for writing**
  - **Overview of content**
- **Paragraph 2+**
  - **Detailed reporting, or presentation of data**
- **Closing Paragraph**
  - **Summation of the content with analysis of data**

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#4 Page Design

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Page Design/Layout Tools

- Columns
- Headings and Sub-headings
  - "Navigational Aids"
- Graphics:
  - Charts, Illustrations, drawings
- Bullets
- Tables

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"Global Warming and Dog Flatulence"

Flatulence brings relief to the perpetrator, but can be deadly to the environment. As the number of people on the planet increase, the number of animals and pets increase, and the amount of flatulence increases proportionally. Where does it all go? Into the atmosphere! The gaseous makeup of flatulence contains at least 20% nitrogen, 40 % methane 30 % carbon dioxide, and 10 % hydrogen. In the last 50 years, this gas expulsion has more than doubled. Couple this increase with all other pollutants to the atmosphere and one wonders how our fragile environment can sustain itself.

to show.

You can show
document, th
or both.

Press F1 fo

Comment [C1]: Insert Graph identifying percentages of gases

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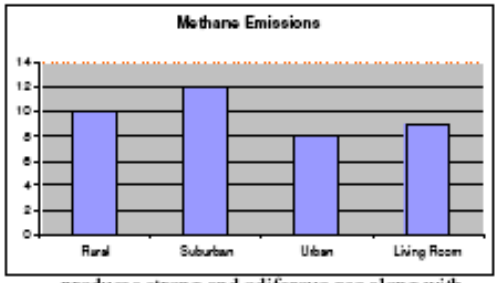
Revised into a Technical Report

Feed, Flatulence and Global Warming

You just sat down in your favorite chair, ready for some relaxation when those big brown eyes peep over the arm and catch your gaze, your buddy, your loyal companion, comes running ready for a hug and affection. As he jumps to meet your gaze and lick your cheek, Fido pauses, lifts his tail and passes flatulence. Dog owners everywhere accept this phenomenon as part of the ownership relationship. We accept, we make excuses, we cover our noses, and we continue on in our love and affection for our Fidos. But do we have concerns over Fido's gas and global warming?

In the past thirty years the production of methane and its leakage into our environment has almost doubled. With global warming not merely a fear but reality, people blame the greenhouse affect on farm animals for their burps, droppings and flatulence. But Dogs, like cows, pigs and other animals, suffer from flatulence, and their flatulence produces that same deadly gas called methane. The difference? This methane is right in your living room, in your yard, in your neighborhood! Unlike farm animals miles away, your pet's methane is right next to you, adding to the global warming crisis that is happening right in your living room.



Dietary Habits, Methane Production and Commercial Pet Foods

Diet is the critical factor in the flatulence production of methane. Flatulence consists of gases produced by the bacteria and yeasts living in the airless intestinal tract of mammals. Flatulence emits methane, carbon dioxide and a small but deadly set of odiferous sulfuric compounds into the environment.

Foods producing flatulence are high in carbohydrates. Most of us don't read the composition of Fido's dinner. But we must realize that those little nuggets we feed our pets are loaded with carbohydrates. These flatulent producing meals include yams, sweet potatoes, chickpeas, citrus rinds, chestnuts, broccoli, cabbage, and yeast products.

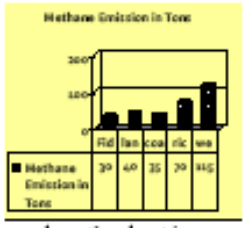
Beans are the biggest culprit however, in the production of flatulence. It seems that the molecular structure of beans resists digestion by the stomach gases. What is left of the undigested beans reaches the intestines where bacteria try to further break down the beans but this only produces strong and odiferous gas along with methane, which intensifies in dogs who

- Gulp their food
- Breathe in air while gulping
- Consume large quantities of carbohydrates

Kangeroos are one of the animals studied and found to not emit methane in their flatulence. Scientists are now analyzing the Kangeroo's diet to find out why. They have discovered that kangaroos

- Don't gulp food
- Consume fewer bean products
- Don't gulp air while eating.

Scientists are studying how to transfer this knowledge into the production of pet and livestock foods that can reduce methane emissions.



Flatulence and Global Warming

Flatulence brings relief to the perpetrator, but can be deadly to the environment. As the number of people on the planet increase, the number of animals and pets increase, and the amount of flatulence increases proportionally. Where does it all go? Into the atmosphere! The gaseous makeup of flatulence contains at least 20% nitrogen, 40 % methane 30 % carbon dioxide, and 10 % hydrogen. In the last 50 years, this gas expulsion has more than doubled. Couple this increase with all other pollutants to the atmosphere and one wonders how our fragile environment can sustain itself.

Although farm animals produce the largest amount of greenhouse gas—over 80 million metric tons per year, household pets such as Fido can collectively emit over 30 million tons of methane. Other big sources of methane are landfills 40 tons, coalmines 35 tons, rice paddies 70 tons and wetlands with 115 tons of methane emissions annually.

Prevention

We know that reducing the demand for beef can reduce the greenhouse effects, but what can we do about Fido? Scientists are making headway in the following manner: adjusting a cow's diet, or adding certain methane reducing agents such as garlic to their diet will eliminate the elimination issue. Scientists have also begun studying how to use cow poop and its methane emissions more beneficially. Cow poop can be converted to methane then tapped, bottled and used for energy, Dog manure however, cannot be treated in the same fashion. Their poop does not emit the same level of methane therefore it is not cost efficient to scoop up the poop and prepare it for conversion. We are left with one choice—change Fido's diet!

Conclusion

	COW	SHEEP
Reasonable Food Size	[illegible]	[illegible]
Methane produced*	[illegible]	[illegible]
CO2 produced*	[illegible]	[illegible]
Tax per head	[illegible]	[illegible]
Tax per horse	[illegible]	[illegible]

* Litres per year

We know that the greenhouse affect is caused in part by the methane emitted by flatulence. The question becomes how to solve it. Do we all become vegetarians? Do we give up our pets? Do we all avoid eating beans? The solution lies in creatively thinking outside the box. Why not create a flatulence tax? There could be a percentage of income used for emission control. Perhaps scientists could develop flatulence catchers—something like a diaper which absorbed the gases/ or filters out the methane and nitrogen. Another idea would be to develop a plan of burning off farmyard flatulence? Last but not least, we could just all eat more sensibly, and demand our feed stock for both pets and farm animals contain a healthy mix of dietary needs that, like the kangaroo, eliminate the methane emission into the atmosphere.

A Lesson in Page Design:

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Use of White Space

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A lesson using Robert Frost's "Road Not Taken"

The Road Not Taken

A Fork in the Road Beckons You

1.

2.

3.

4.

Take the Road Less Traveled

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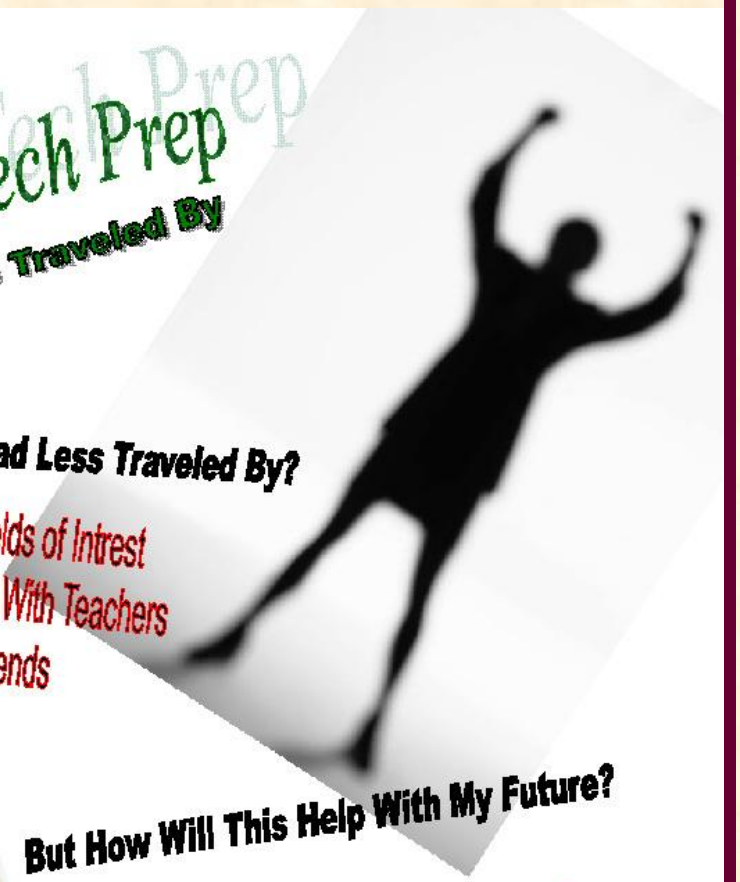
College Tech Prep

The Road Less Traveled By



Why Choose The Road Less Traveled By?

-Gain Knowlege in Fields of Intrest
-Acquire Great Relations With Teachers
-Make Good Friends

But How Will This Help With My Future?

-Get Acustomed to College Environments
-Build up People-- Skills
-Understand What Lies Ahead of You

**"I took the road less traveled by,
And that has made all the difference."
-Robert Frost**

COLLEGE TECH PREP
CONSORTIUM
Nationally Recognized for Excellence in Education

Integrated Academics

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How can we bring Tech and Academic Teachers together to create blended lessons?

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Bringing Academic and Tech Teachers Together

- Climate
- Opportunity
- Leadership of Administration
- Planning
- Creating Common Writing and Presentation Rubrics

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A Crosswalk of Academic and Technical Standards for Integration of Technical Writing

CTE Embedded Standards	Language Arts Content Standards	Rhetorical Device/format of writing	Writing Product

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A Crosswalk of Academic and Technical Standards for Integration of Technical Writing

CTE Embedded Standards	English Content Standards	Rhetorical Device	Writing Product
Utilize tables, charts, and graphs to clarify textual explanations and support arguments	Write functional documents (e.g., requests for information, resumes, letters of complaint, memos and proposals) that:	Compare/ Contrast	Equipment Evaluations Memo/Reports

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Develop Common Rubrics

- Share different qualities of technical writing—good, bad and ugly.
- Rate papers
- Discuss what makes them good/bad and ugly
- Create the rubric from discussion

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A Work in Progress—developing a Writing Rubric

Area	4	3	2	1	0
Format (template)	No error – Perfect form.	Displays knowledge of format with 1 – 2 errors.	Displays knowledge of format with 3+ errors.	Displays major lack of knowledge.	OMG!! No form.
Structure (organization)	Information flow is logical, interesting and easy to follow.	Information flow is not always logical, interesting or easy to follow	Information flow is disjointed (choppy), and is somewhat difficult to follow	Information flow lacks logical order and makes it extremely difficult to follow	OMG!! Information flow is not present
MUGS -Mechanics -Usage -Grammar -Spelling	No errors exist that interfere with making sense of the reading: Clear evidence of thorough proofreading	A few errors exist that interfere with the sense of the reading: evidence of moderate proofreading	Some errors exist that interfere with the sense of the reading: evidence of minimal proofreading	Many errors exist that interfere with the sense of the reading: no evidence of proofreading.	OMG!! MUGS Elements not present
Content	All expected data is present, desired content is explained clearly	Majority of expected data is present, desired content is explained clearly			OMG!! Very limited data present

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Embedded Academics and Integrated Technical Writing

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Business Profile

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Instructions:

- Research a Tech related company
- Report research in memo format
- PowerPoint presentation

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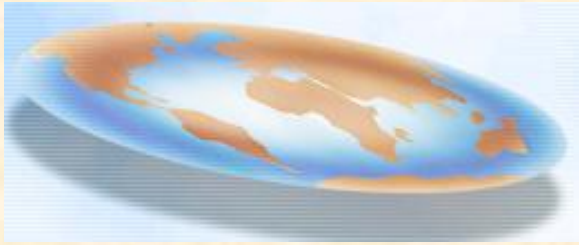

Think Global, Educate Local

- Extend Company Profile
- Study customs, education and business practices in a foreign country
- Create a “Survival” Dictionary
- Present Report
- Re-in-act a business transaction with a representative of the country they studied.

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A Brochure

- The Declaration of Independence
  - bullet the grievances against the king
- Ben Franklin's Autobiography,--Moral Perfection
  - Choose from his list of virtues
- Virtues for Success
  - Workplace Brochure

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Virtues in the Workplace

- Have a Happy Attitude
- Treat Any Customer as a Friend
- Work Hard at Any Legal Job (or illegal job if you want to take the risk)
- Never Slack Off

- Follow Corporate Rules
- Respect Co-Workers
- Be Serious in Work Situations
- Be Consistent With Your Work
- Be Courteous and Kind to Everyone in Your Work Environment

- Be Cooperative
- Never Make Excuses
- Don't Be Expendable

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PROGRESSIVE

WHAT a better PLACE to work.

With over 20,000 employees, who wouldn't want to work with us?

BENEFITS →

Progressive works 24 hours a day, 7 days a week

JUST to name a few...

At Progressive, there are many benefits to provide you with a relaxed atomosphere, better education, and enjoyment.

casual dress

vacation pay

artwork

medical benefits

tuition reimbursement

and more ...

artwork along the walls provides a relaxed atomosphere

MOVING UP?

Progressive provides many jobs that allow you to gain a higher position. You may also move around the company, in all directions, so you may never be stuck with a job that you don't like.

WHAT are you WAITING FOR?

To gain more information about Progressive:

1-800-PROGRESSIVE

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Career Pathway Research

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Research Mechanics

- IT instructors teaching Access and Excel
- Spreadsheets to manage note-taking for research papers:

Type	Notes	Slug	Bib Ref #

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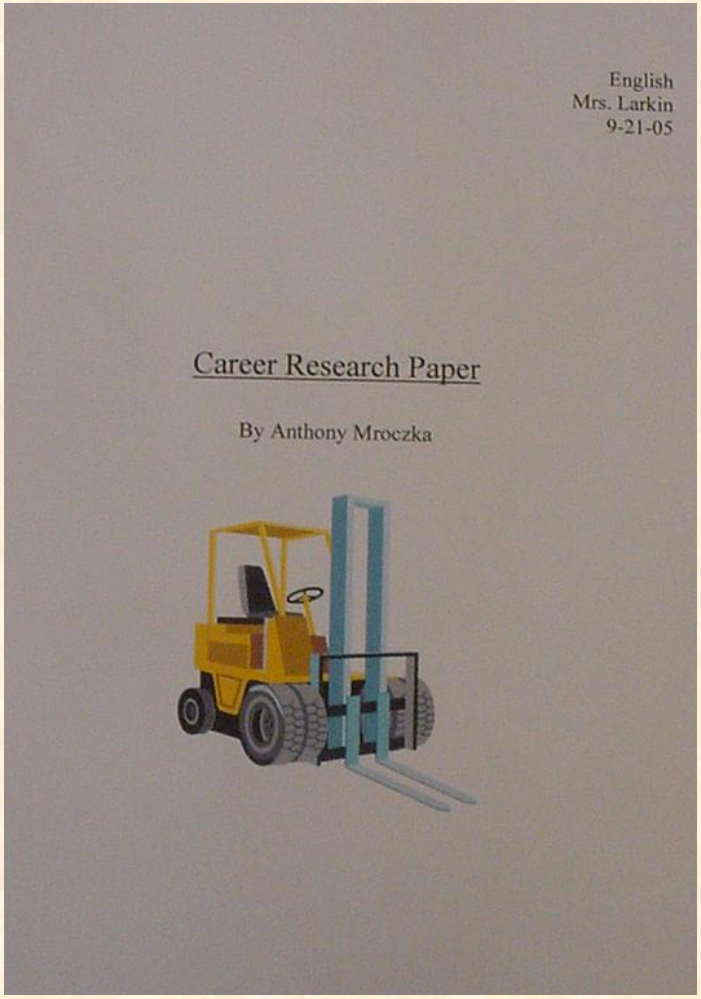
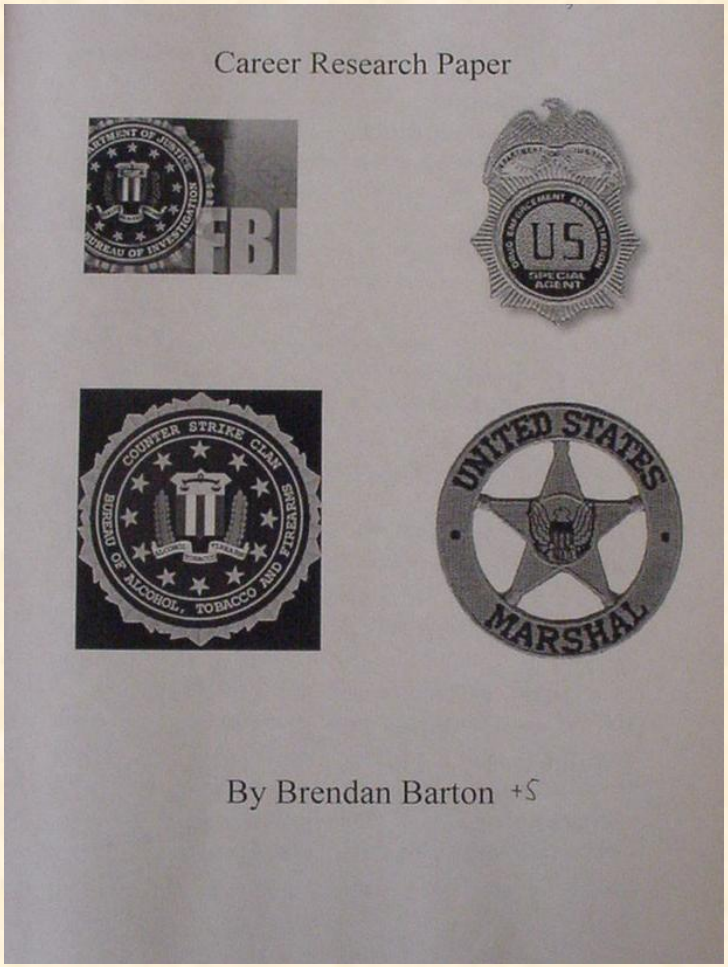
Career Research





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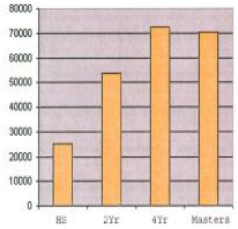
With a High School Diploma the salaries for common jobs in IT are very low compared to getting an Associates or Bachelors degree. For example, a Proof Operator would make around $25,000 a year with a High School Diploma, while a Webmaster would generally make around $53,910 a year with an Associated Degree.

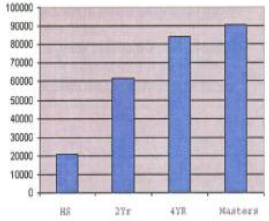


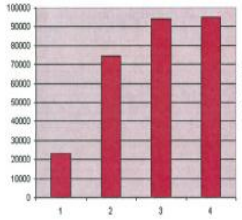
This large jump is illustrated when the salaries of different levels of education are put next to each other.

The average salary of someone with an Associates degree is less than someone with a Bachelors degree, as shown in the graph.

People with a Bachelors degree usually make more than people with an Associates degree.

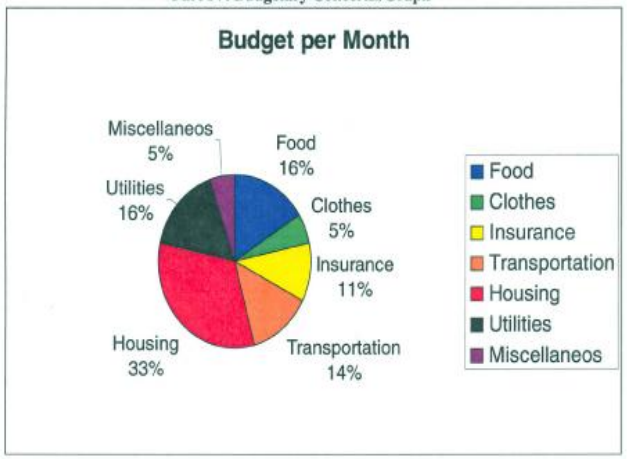
The more college experience you pursue can really help in determining your income.





Not only can you gain a lot of the skills needed to work with computers, you will also gain the experience earned from going to college and studying a specific field.

Part IV. Budgetary Concerns/Graph



Budget

Housing-$600
Clothes-$100
Food-$300
Transportation-$250
Utilities-$300
Insurance-$200
Miscellaneos-$100

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Collaboratively writing-

Mission Statements and Core Values instead of rules and regulations

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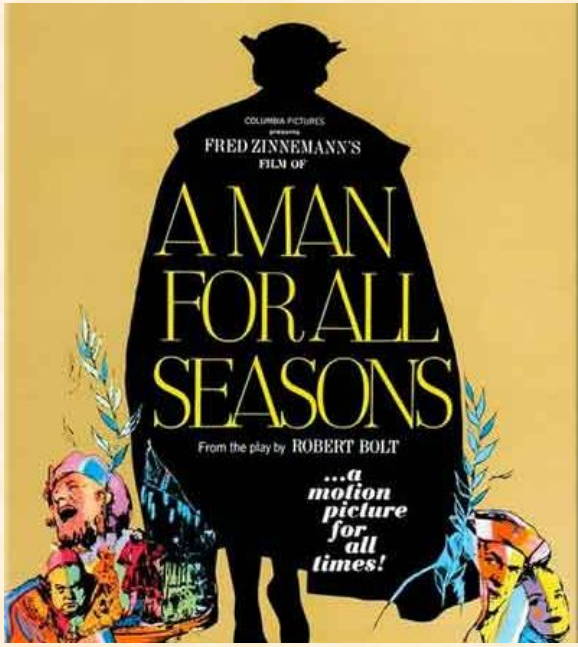
Job Description

Macbeth

A Man for All Seasons

Huckleberry Finn



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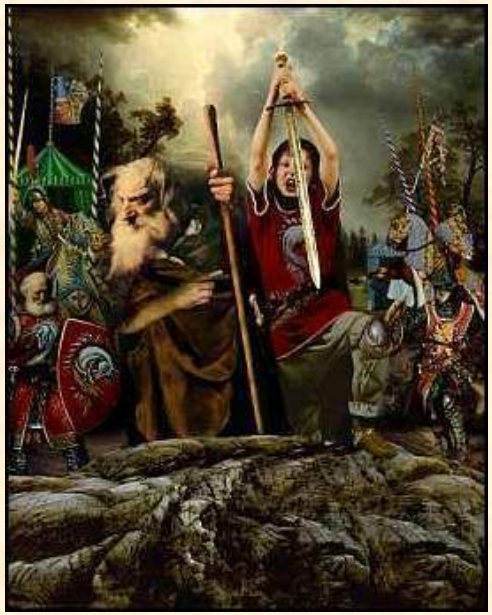
Job Evaluation

King Arthur



The Crucible—Judge Hawthorn

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Lab Reports

- Dr. Heidegger's Experiment

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Business Proposals

- Jonathon Swift's
  "*A Modest Proposal*"
  (a business proposal to
  eliminate a pressing
  social concern)

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Resumes and Letters of Inquiry

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Beowulf's Resume:

Job Objective:

- To eliminate any threat or potential harm towards the land through force and violence.

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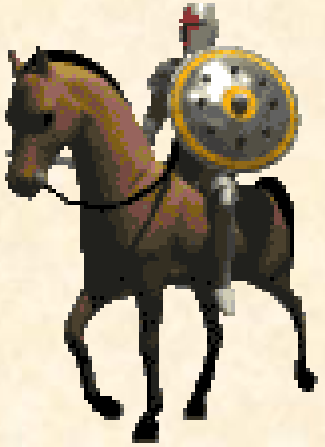
Education

- Edgetho's Kinder Fight Club, 512-513
- International Battle Training Academy 514-520
- Gifted Geat University, 522-524



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Wiglif's Letter of Recommendation for Beowulf

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Heraldry: A Technical Research Paper

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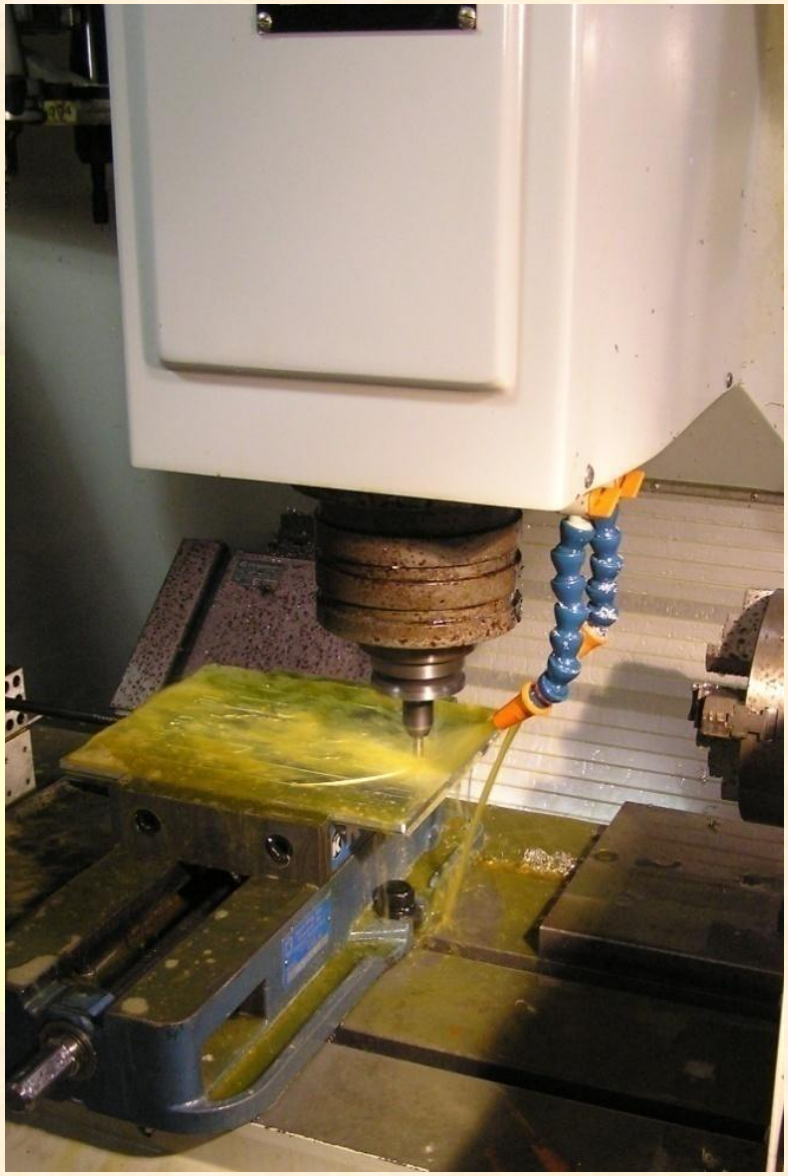
Design and Mill Shield



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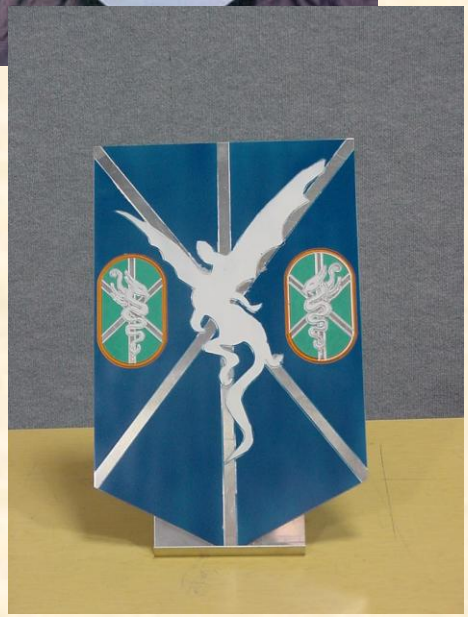
Student Designs



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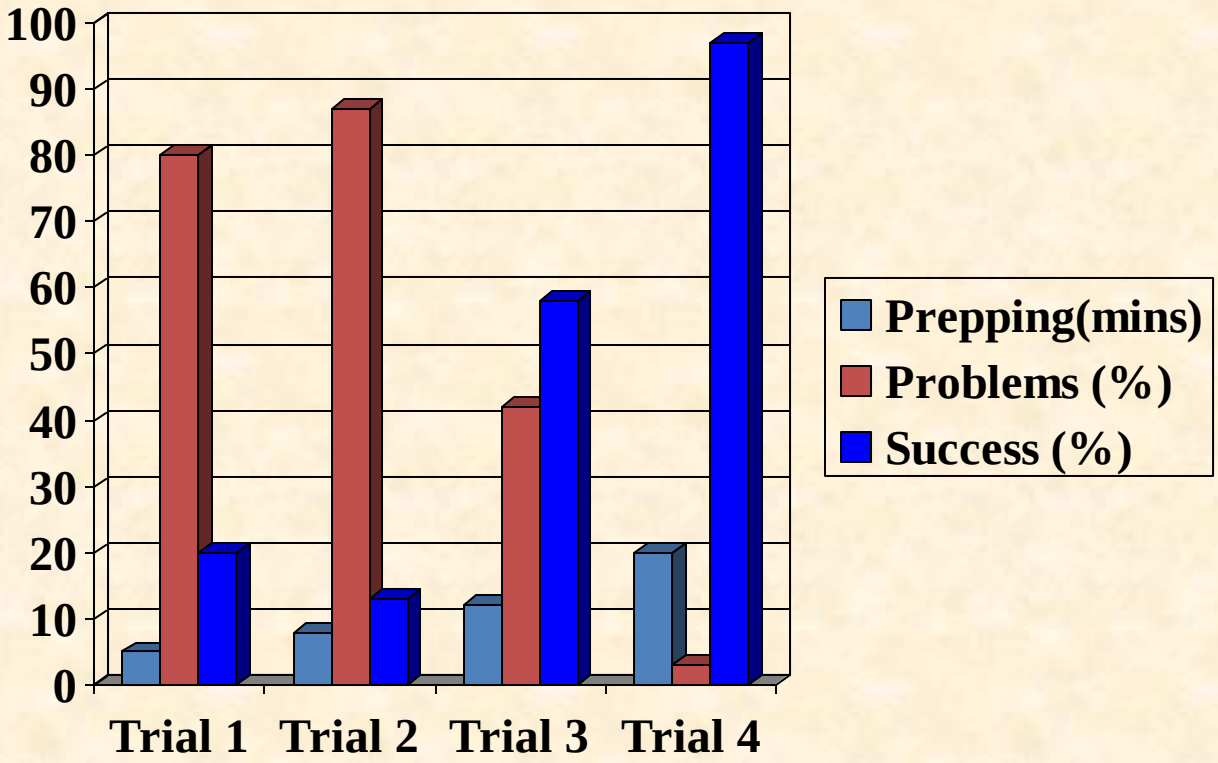
Manufacturing Costs



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Bercilak de Hautdesert

"I be only a judge of chivalry."

Male
17 years old
EASTLAKE, Ohio
United States

Online Now!

Last Login:
11/7/2007

Mood: blank
View My: **Pics** | **Videos**

Contacting Bercilak de Hautdesert

Send Message	Forward to Friend
Add to Friends	Add to Favorites
Instant Message	Block User
Add to Group	Rank User

Bercilak de Hautdesert's Interests

General	Battle, jousting, swords and axes, flower arrangement.
Music	Heavy metal, celtic hymnals.
Movies	Excalibur, evil dead.
Television	i don't watch it.
Books	The Canterbury Tales.

Bercilak de Hautdesert in your extended network

Bercilak de Hautdesert's Latest Blog Entry [**Subscribe to this Blog**]

chivalry, if not dead, is dying (**view more**)

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Bercilak de Hautdesert's Blurbs

About me:

I am what many would call legendary, i am known by many simply as the green knight. Some associate me with the devil and evil, I assure you this is far from the truth. I am a man of nature, I uphold the values of life and rebirth, I also follow the code of the night in its truest form, I am a protector of all in my domain, I am also a judge of others worthyness to be called knights. I have barbarian blood in my vains, and I enjoy the rush of battle, but I am as civilised and as honorable as any knight worth his salt.

Who I'd like to meet:

Anyone who lives with honor, is true to themselves, and fights the good fight.

Bercilak de Hautdesert's Friend Space

Bercilak de Hautdesert has 3 friends.

Tom

aloo

RoGuE {sEcOnD iN hElL}

Blog on Chivalry and Modern Times

Wednesday, October 24, 2007

chivalry, if not dead, is dying
Current mood: accomplished

So i came across this kid the other day, he was about 20, when i was his age i was already an established knight with a few victories under my belt, but i was humble about it, but here he was claiming to be some hard-ars when i could clearly tell he was just some blowhard. He was soiling the title of knight, he claimed to be one "knight of blang" [blong, bling, whatever], and was picking a scrap with me about my garments. Now i was just going to the market to get some milk and some chips in my saturday lime green oxford shirt, and apperantly he decided he didn't like it. At first i figured to i'd ignore him, it was sabboth day after all, and i was in a rather chipper mood, but he insisted on pestering me through the check out line, and when he struck a lady who was accompanying him i lashed at him. After a few choice words were said on either side i challanged him to my usual challenge, a 'blow for a blow'. Now he was at first frieghtened that i would let him stab me in the neck with that puny dagger of his, but he did it [and nearly skyted his trousers]. I told him to meet me at my house later that day so i could return the favor. And when i mentioned houses he brought up all this "my house is the shit" skyte and how he wanted to live in some mansion, but he didn't say skyte when he saw my all mighty CASTLE. I pulled a suitable smallsword from my collection and awaited his [late] arrival. When he finnaly showed up he sent that wench traveling with him to my door to threaten me about how he was going to rip me a knew 'one' [again, whatever]. I told her to get his ars out of his carraige and face me like a man, when his woman finnaly forced him out of the car he started appologising to me and gave me all this other hogwash. I sent him home with an upset lady and an obviously bruised ego. Manalive, i tell you, where have all the good and brave warriors gone. Tell me there are a few good gentlemen [and as a sign of the times, gentlewomen?] out there. the moral of this tale is that nobody likes blowhard bastards, and don't piss off an immortal.

3:21 AM - 0 Comments - 0 Kudos - Add Comment - Edit - Remove

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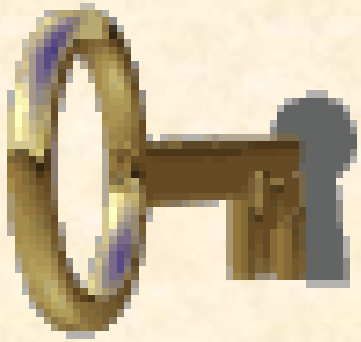
Instructional Manuals



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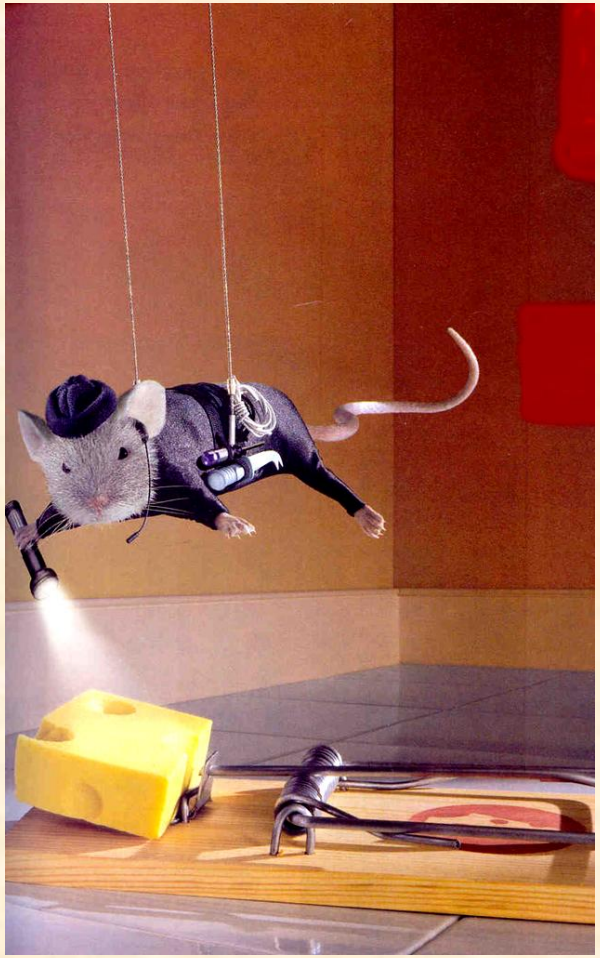
Mouse Trap Operation Manuals



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Mouse Mangler 2000

Owners Manual

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Warning:

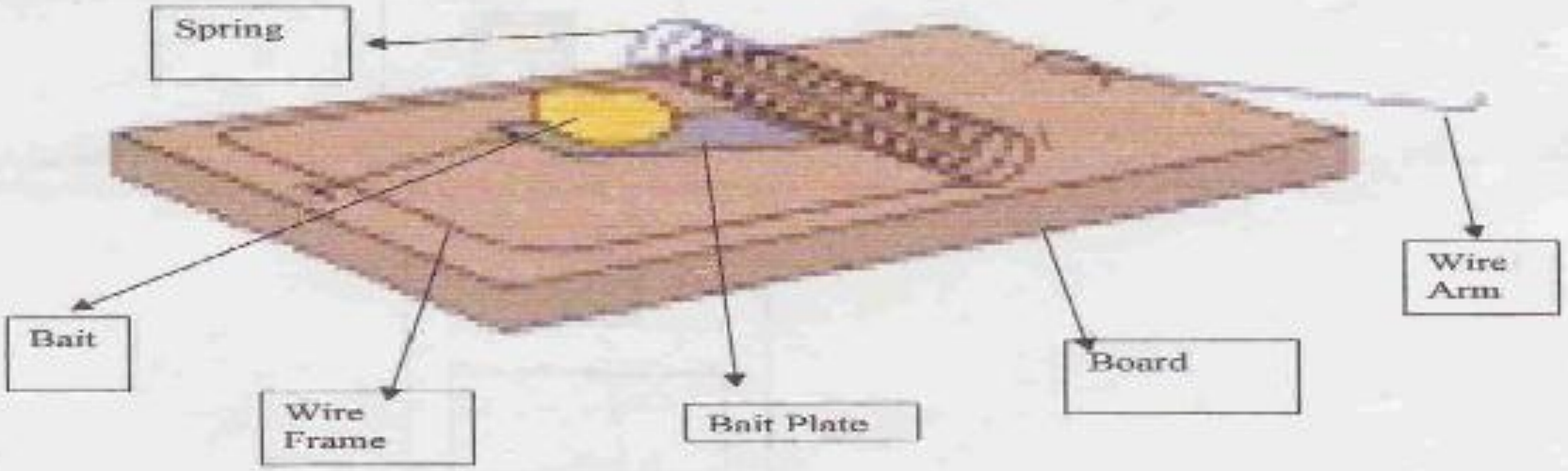
Please be advised of the following precautions:

The mousetrap is harmful. Take caution in handling mousetrap at all times. It contains sharp edges and points. We do not take any responsibility for accidents regarding the Mousetrap 2000.

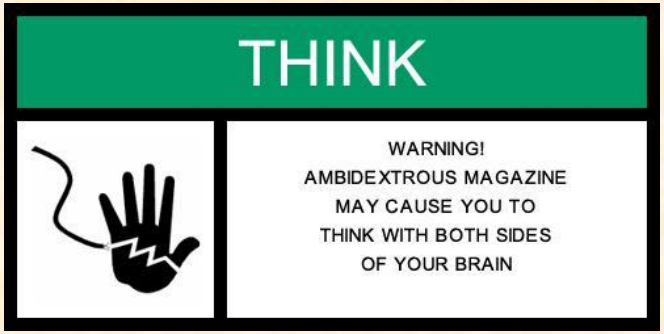
Specifications:

Materials and other information:

You will need bait, The Mousetrap 2000, evidence which rodents occur in area and our Mousetrap 2000 manual. (Be aware: Extra parts might be included.)



Liability Disclaimers



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Mousetrap Manuals become:

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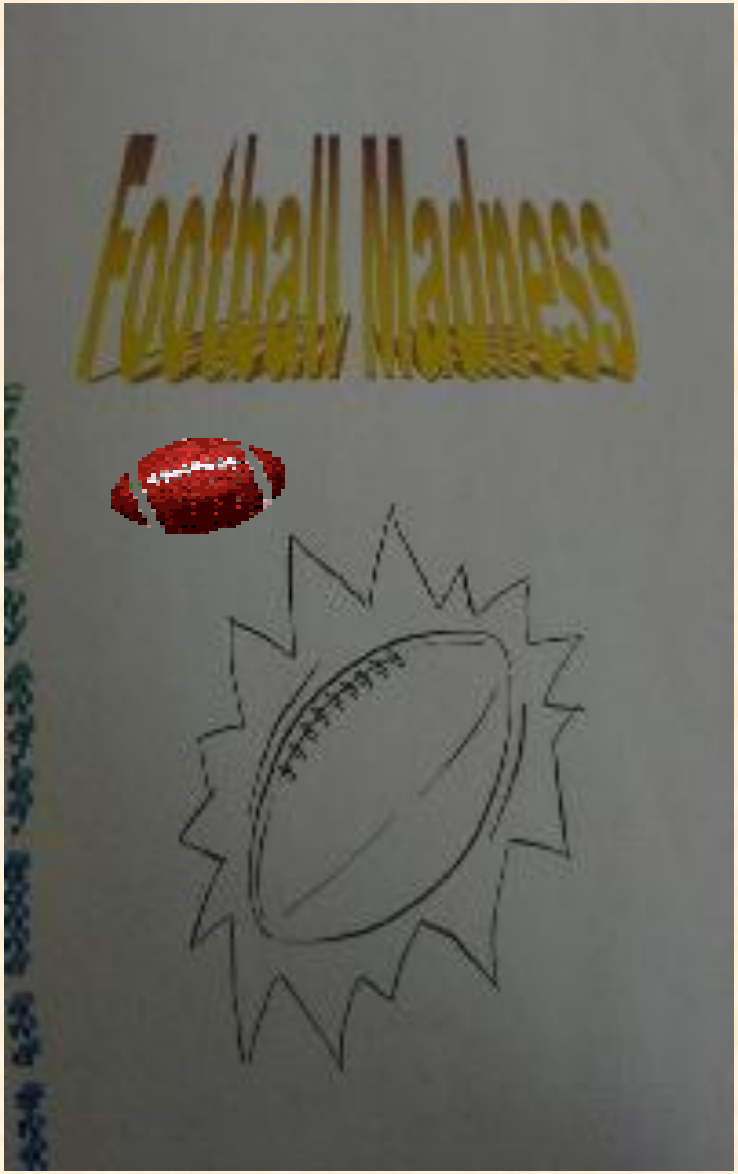

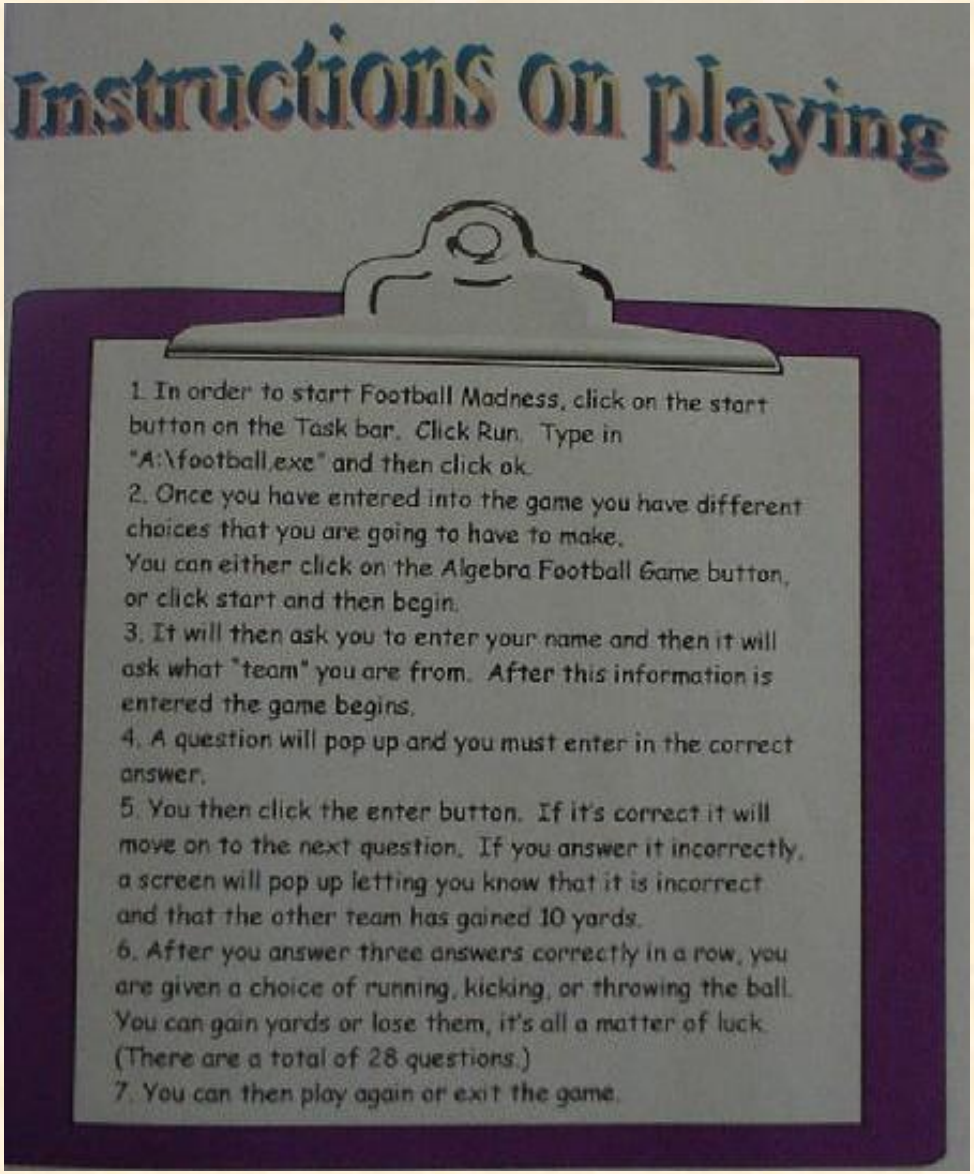

Computer Game Instruction Manuals

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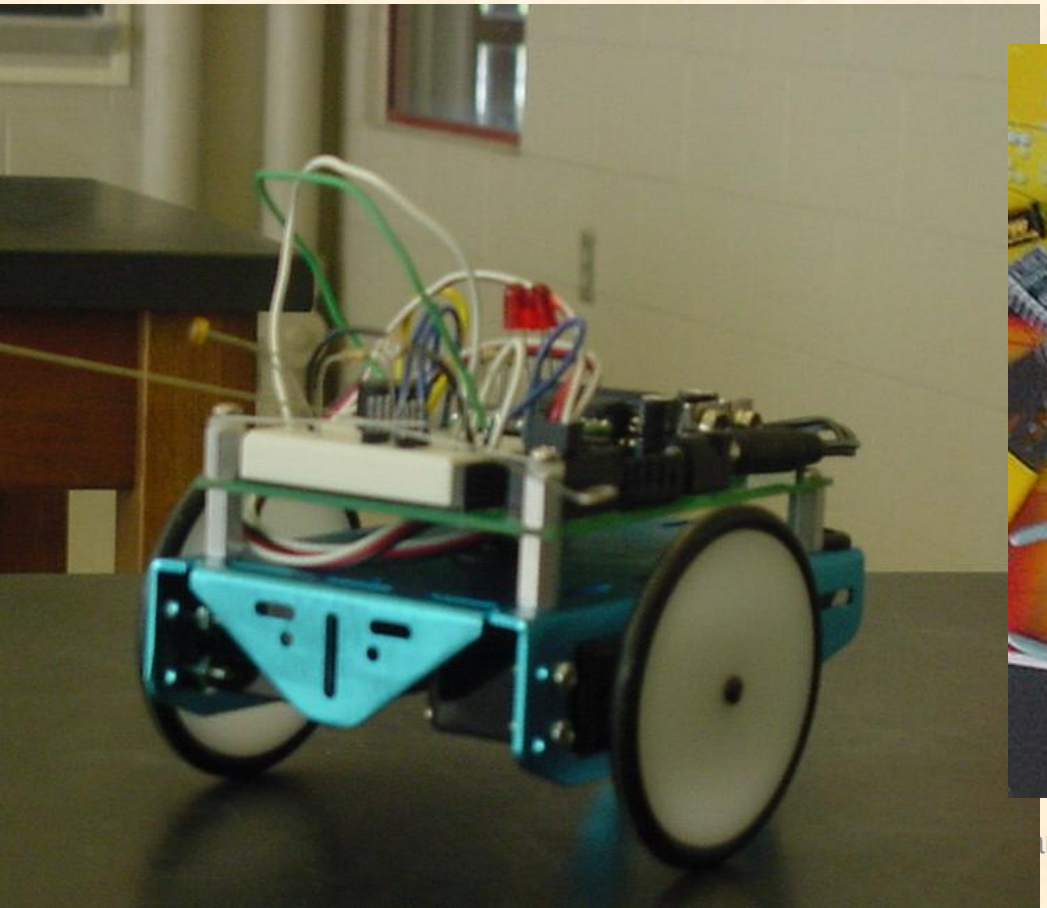
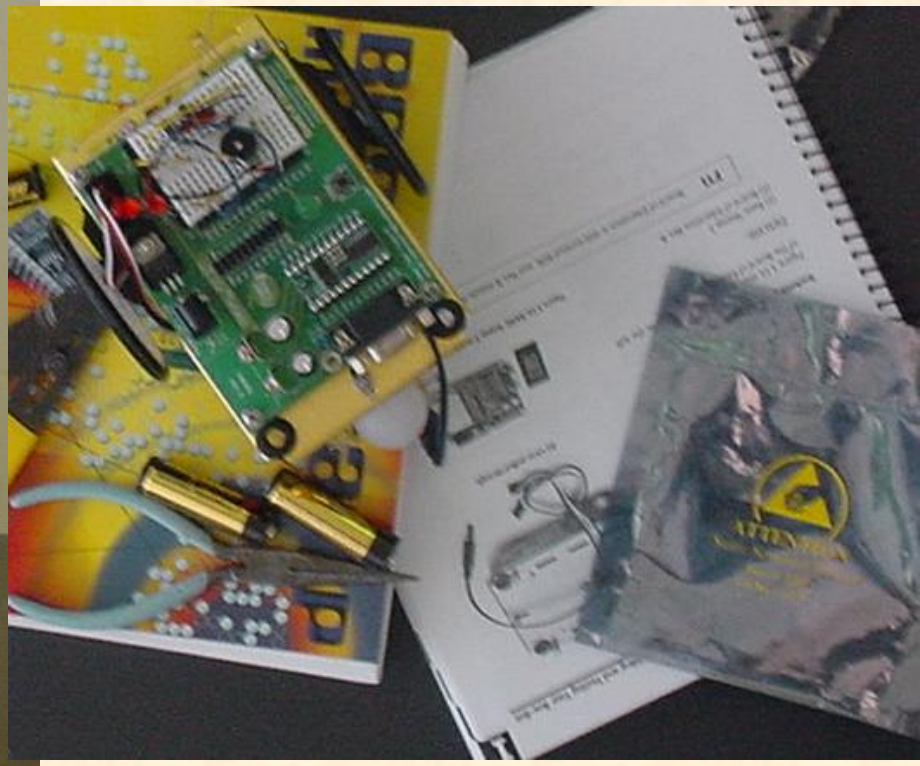
Machine Operation Manuals

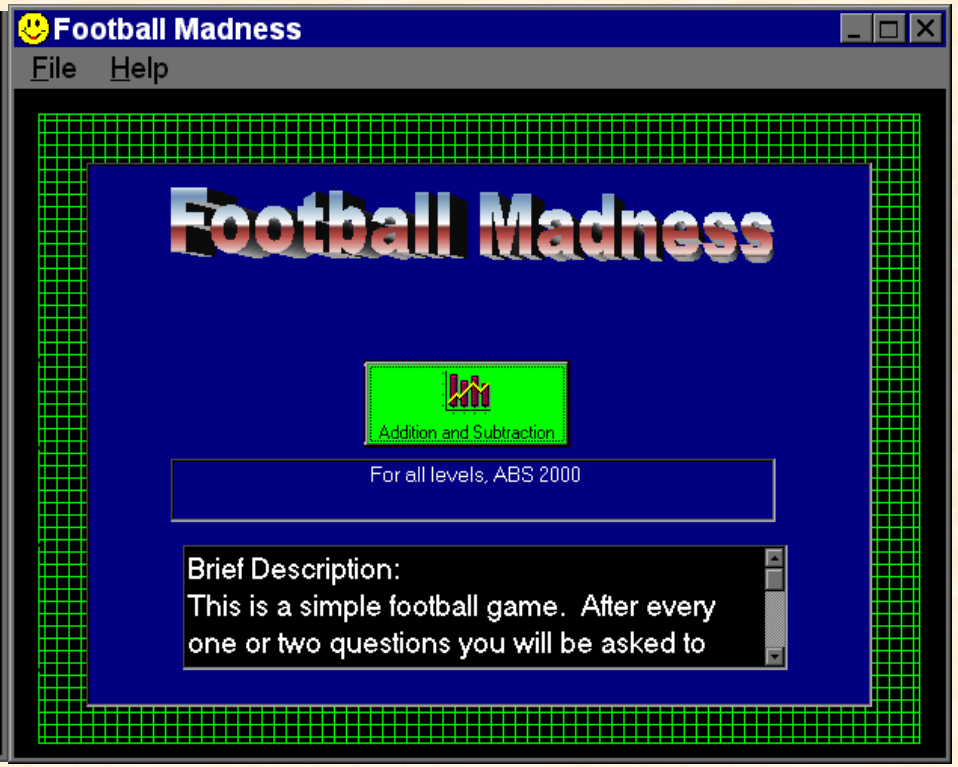
Robotics

Construction Manuals





Educational Software Games



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Electronic Story Books

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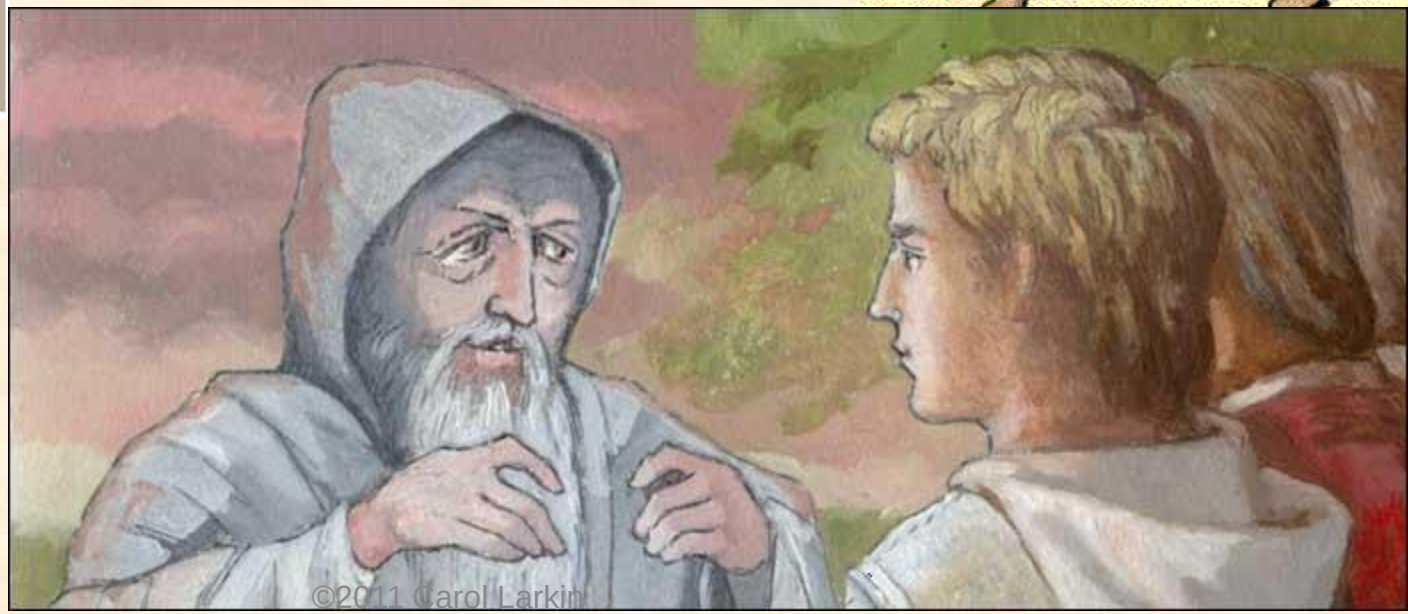
Chaucer For Children



A Showcase Project

A fully integrated Information Technology and Language Arts Project

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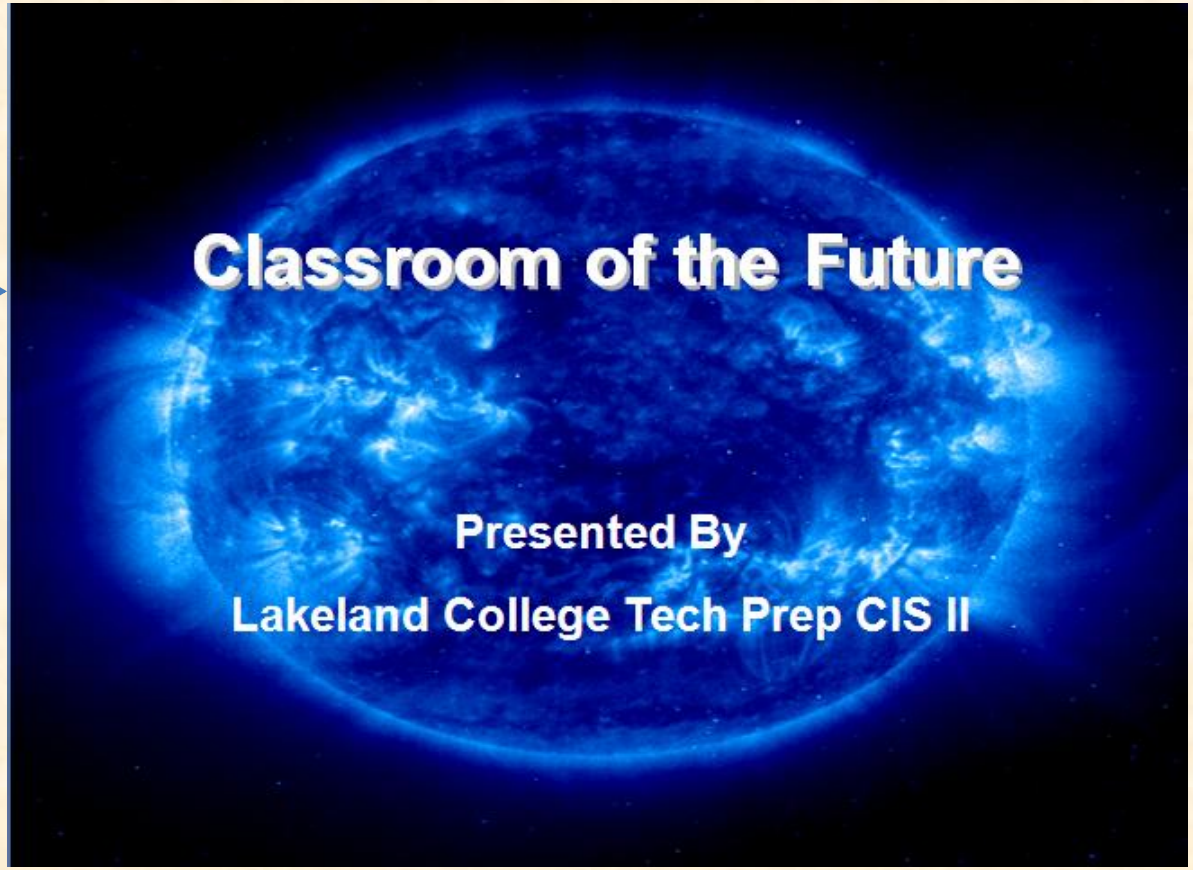
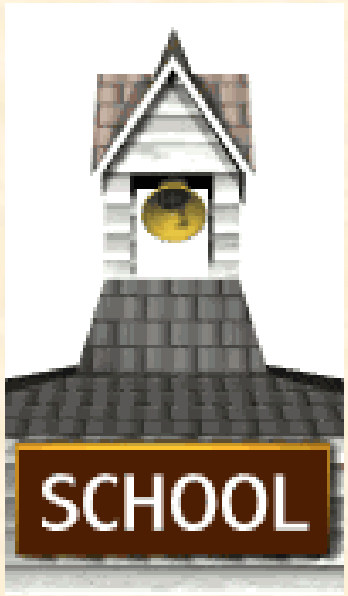
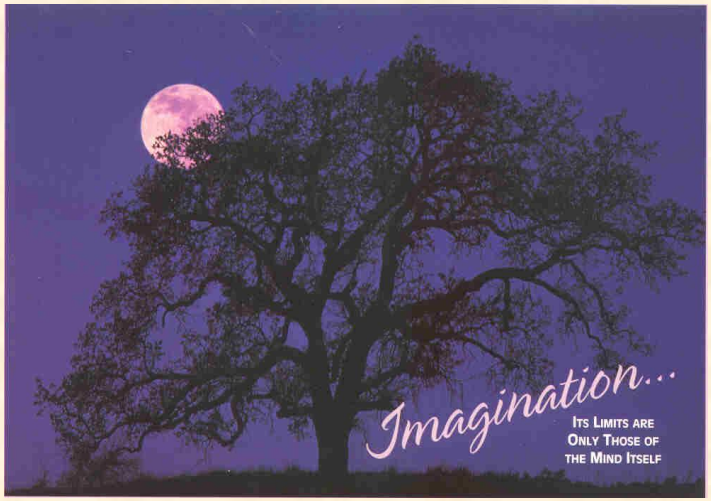
Company Logo →

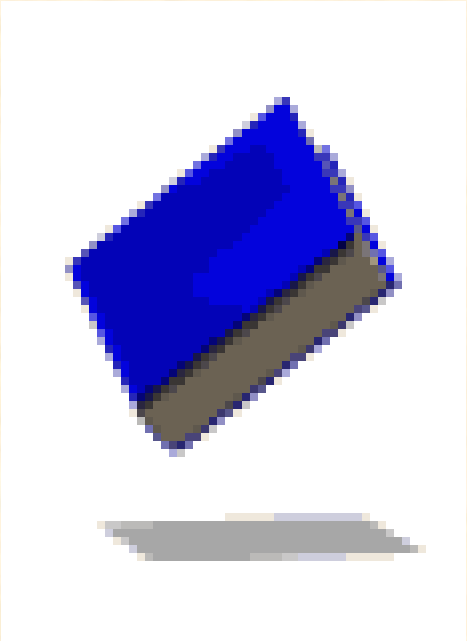
Business proposal for funding →



The Virtual Classroom







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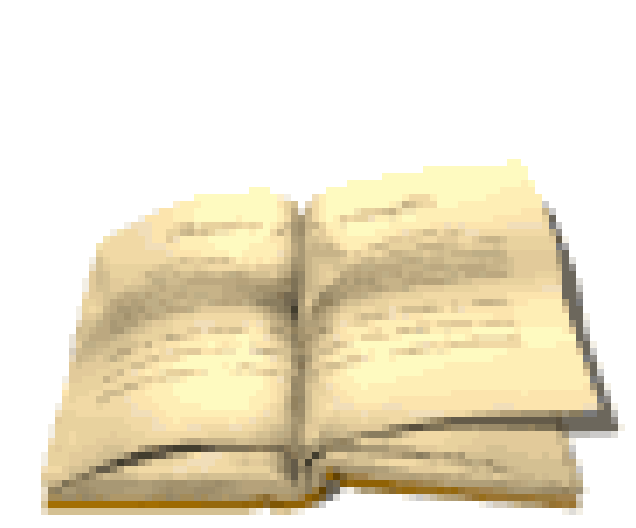
The Virtual Reading Room



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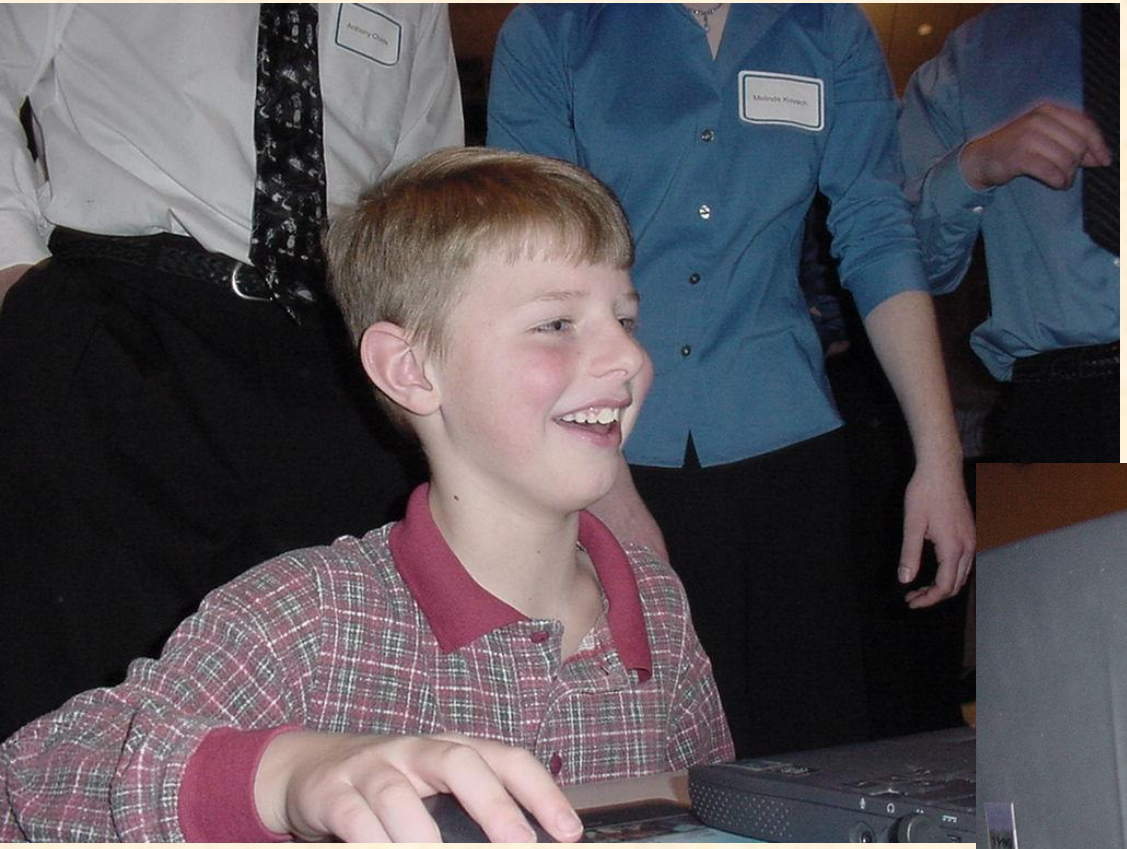
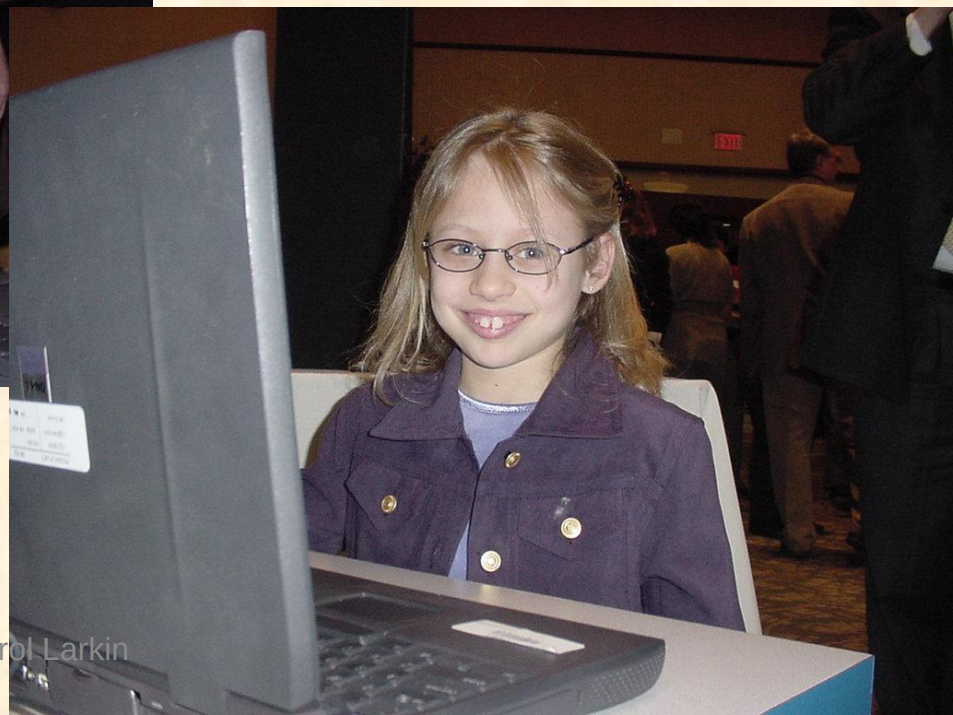
Field Testing the Product





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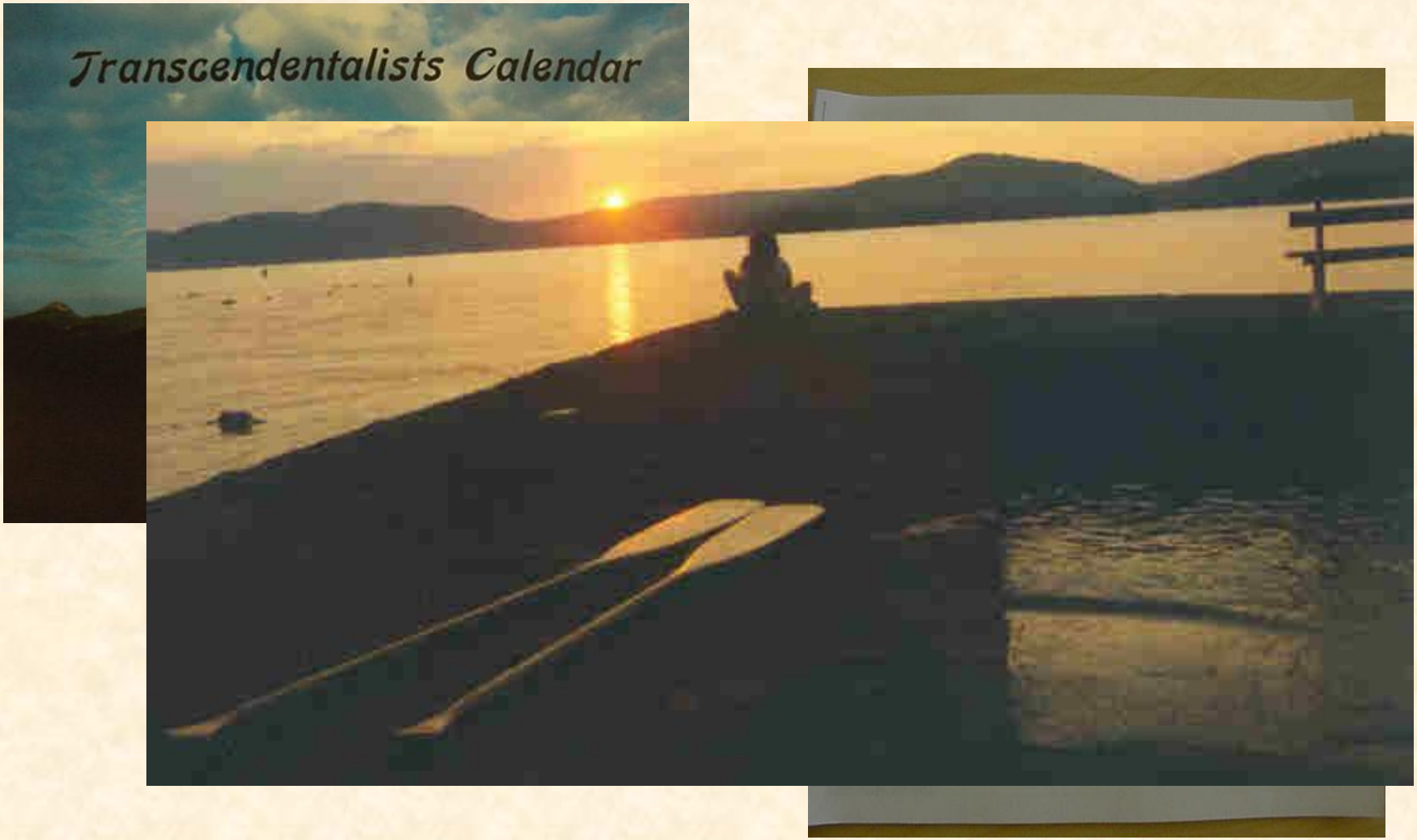
Field Testing Results

Transcendental Calendars



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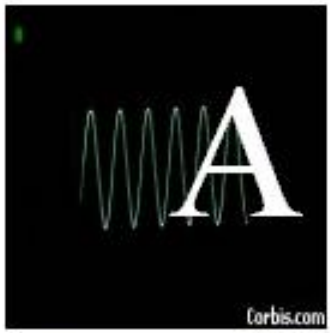
Nick Stockhaus

A Year in only Twelve Months

Rhodora



If we always do what we've always done,

We always get what we always got--

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Integrated projects challenge us to:

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Write and Think

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outside the box

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Thought for Parting

- **It appears that the most important difference between the most and the least effective classrooms is the teacher; but the most important variable appears to be what they do rather than what they know.**
- **Reeves, D. B. (2007). *Ahead of the curve*. Bloomington, IN: Solution Tree**

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Teaching to the Future is not always--

But it is challenging and fun

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FOR MORE INFORMATION

Go to:

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Welcome

Posted by Carol Larkin on Apr 1, 2010 in Teaching To The Future

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