

# Systematically Writing Free Articles and Texts

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# Overview

- Information centralization (Stop repeating work!)
- Separating “Training” from “Education” – “lecture paradigm inversion”
- Multi-disciplinary teams required
- IPDE Method of Instruction
- Wikipedia Campus Ambassadors


# Information centralization (Stop repeating work!)

- Rather than start from scratch, improve or add to existing content!
- If I had a nickel for every independent Calculus tutorial website, I'd be rich
- Wikiversity/Wikibooks/GlobalText SHOULD be the solution – we just have to get everyone to agree to use it!





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# Separating “Training” from “Education”

- Training – the “How?”
- Education – the “When and why?”
- Technology allows us to separate the two



# History of Lectures

- Long ago, there was a single person in a city who everyone believed to be very knowledgeable
- The towns people would gather around him and have him transfer his knowledge orally
- This was the only way to transfer knowledge
- Not the case anymore...



# Lecture Paradigm Inversion

- Traditionally, students go to class to learn (“training” – the “how?”) – then go home practice (“education”)
- Wikiversity should be able to provide the training
- Face time with instructors can then be used for “education” (sharing experiences, the “why?” and “when?”)
- This allows the gap between “ivy-league” style universities and everyone else to be greatly reduced



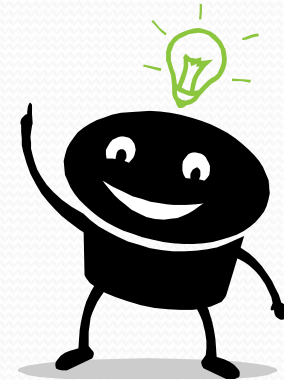
# IPDE Method of Instruction

- A systematic way of ensuring information is conveyed in an useful way
  - I - Idea
  - P - Procedure
  - D - Details
  - E - Examples



# IPDE - Idea

- Answers questions such as:
  - What are we learning about?
  - Why are we learning it?
  - When we are done studying this topic, what is it that we are able to do that we could not do before?
  - What is the point?





# IPDE - Procedure

- Even with this "what's the point?" attitude in mind, the step by step process of how to perform the task at hand is still required
- A “one sentence” explanation of each step should be given
- Should be appropriate to title the procedure "4 Easy Steps To XYZ"

# IPDE - Details

- In some cases, there is a particularly troublesome point in the procedure or a "magic" number that appears in an equation
- “Helpful hints” or in-depth explanations should be presented when necessary





# IPDE - Examples

- To tie the three previous sections together, it is extremely helpful to work through a typical example problem
- The problem that is chosen should be one which clearly represents the most typical usage of idea that is being taught
- It is VERY important that the example NOT contain overly complicated mathematics which simply serve as a distraction from the point
- The I, P, and D should be clearly pointed out



# Student Volunteer Campaign

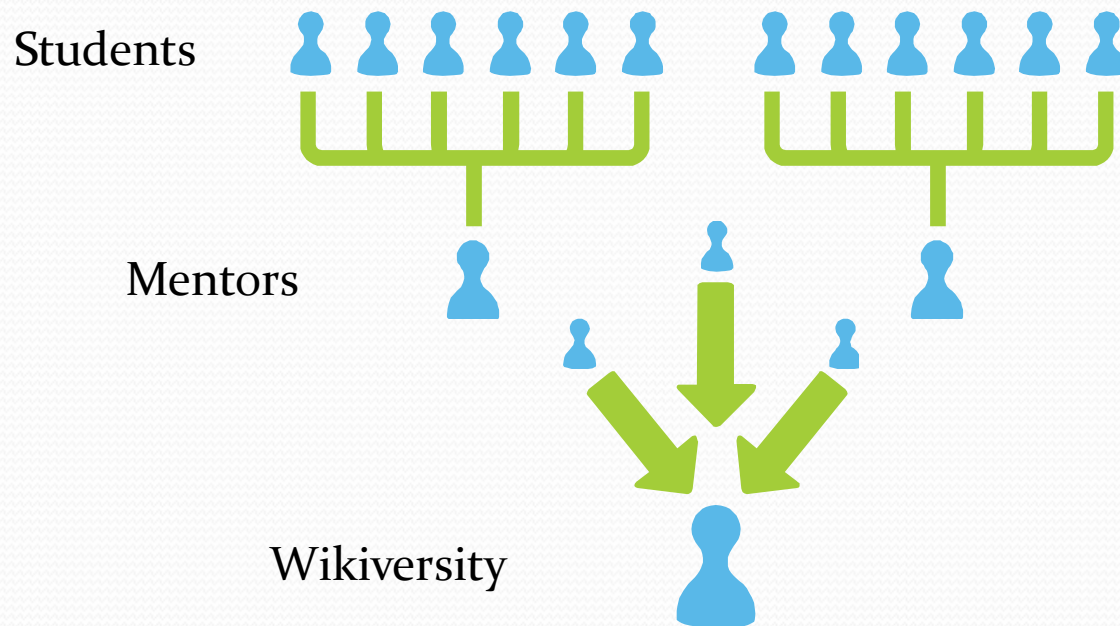
- Recruit students currently enrolled in “brick and mortar” versions of courses
- It is burdensome to produce/improve content in parallel with a post-college life
- During an "in-college" life, this exercise is mutually beneficial
  - Generating material is one of the best ways to help the student really learn the material
  - If you can't explain it, you don't know it!
  - Prepare for exams, etc.

# Student Volunteer Campaign - Mentors

- Students must work under a mentor (Content Expert) who will help them follow guidelines
- Hierarchy is key



# Student Volunteer Campaign - Hierarchy



# Student Volunteer Campaign (Cont.)

- Wikiversity should reach out to universities calling for this type of volunteer
- Enter the Public Policy Initiative!

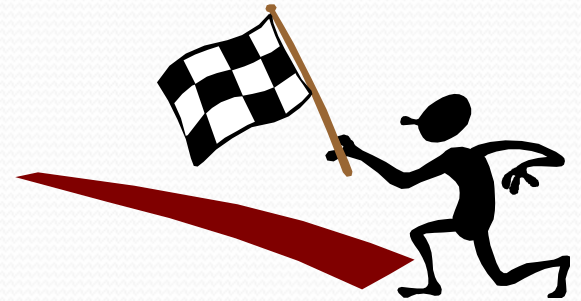




# Student Volunteer Campaign

## “Finite-ness”

- This should be a very finite process
- There are “countably many” courses
- With only two or three iterations (less than a year!), we should be DONE



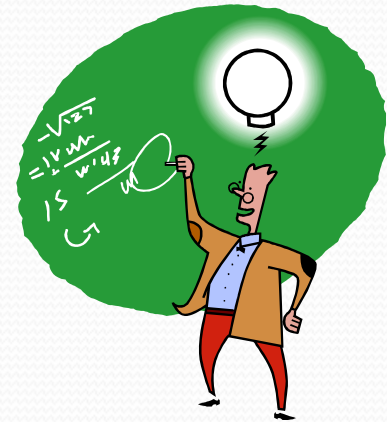


# Multi-disciplinary teams

- Content Expert
- Web Programmer
- Education Expert
- Graphic Artist
- Narrator
- Human Factors Expert

# Content Expert

- The current lecturer
- Highly trained in the technical material
- In almost all learning situations, this is the one and only person on the team!
- The technical material on Wikiversity is already excellent!



# Web Programmer

- Responsible for ensuring that the system is modular and reusable
- An expert in modern web technologies
- Will work closely with Graphic Artist and Human Factors Expert



# Education Expert

- Trained in the art of education
- Bring to the table an understanding of various learning styles and teaching methodologies



# Graphic Artist

- Make things "look good"
- Must working closely with Human Factors Expert and Education Expert to ensure graphics are suitable



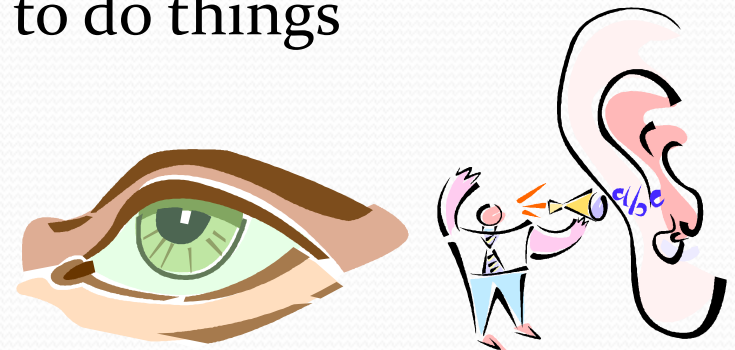
# Narrator



- Typically a lecture is improvised
- Work with the Content Expert to develop a script to go along with modules
- Record these scripts in an engaging tone - a "voice actor" if you will!

# Human Factors Expert

- Work with the Education Expert to ensure that the system is designed in a fashion that makes efficient use of
  - Screen space
  - Human visual and audio capabilities
  - Knowledge of how people "like" to do things







# Open Articles/Books

- Wikipedia
- Wikiversity
- WikiBooks
- GlobalText
- Campus Ambassadors

# Wiki\* Projects

- Under the Wikimedia Foundation – very established
- Large user base, but...
  - Not directed/systematic
  - Infighting



# GlobalText

- Small self selected groups of authors
- Non-wiki based
- Open Office based
- Rolling versions



# Campus Ambassadors

- Wikipedia initiative
- Currently only public policy-ish topics (this is where the funding is from)
- “Harness” the power of current students
- Encourage faculty to build wiki editing into their classes



# Call for Action

- RCOS – write a book about open source licensing
- RPI Associate for Computing Machinery (ACM)
  - Programming books
  - “Computer” books
- Other clubs
  - Other books!



# Not 600 page books...

- This is exactly what we are trying to avoid
- There are plenty of these already
- These should be ~50 page “guides” more than real “books”
- A book written by 10 students should be much better than a book written by 1 professor



What are you waiting for??  
Go get started!