Aviation

• Degree Training For
  – Management
  – Flight
• Ground
ACTIVE CLASSROOM PARADIGM

• I AM CAPTAIN IN COMMAND (PIC) AND CLASS IS GOING ON A FLIGHT
• SET ENVIRONMENT THAT FORCES THEM TO ACT AS A TEAMMEMBER BUT ARE
  – ACCOUNTABLE FOR FAA EXAM
  – CRITIQUE OTHERS IN CLASS IF ERROR IS MADE
Aviation Training Parts

1. Knowledge Training

2. Flight Training
PILOT TRAINING

• NOT ENOUGH **TIME** TO COVER ALL MATERIAL

• USE PUBLISHED TEST QUESTIONS AND MATERIAL AS “FLIGHT PLAN” TO ADDRESS ISSUES AND TRAIN STUDENTS
MSU MANKATO FLIGHT PROGRAM

LEADS TO

• FAA CERTIFICATIONS/STUDENT SUCCESS

• INSTRUCTOR ACCOUNTABILITY

• PROGRAM ACHIVEMENT
MEASUREMENTS of SUCCESS

OUTCOMES MEASURED BY PASSING FAA EXAM

1. 1362 ATP QUESTIONS
2. 80 ON EXAM
AVIATION DEPARTMENT

• CLASS GOALS
  – PASS FAA WRITTEN
    • COMMERCIAL PILOT
    • FLIGHT ENGINEER RATING
    • AIRLINE TRANSPORT RATING
  – DEVELOP LEADERSHIP SKILLS
  – FUNCTION IN LARGE GROUP
  – DEVELOP PRESENTATION SKILLS
  – DEVELOP COMMUNICATION ABILITY
  – DEVELOP FLIGHT INSTRUCTOR SKILL AND FLYING SKILLS
  – BECOME FLIGHT INSTRUCTOR (TEACH)
ACTIVE CLASSROOM TOOLS

- PORTFOLIO - 9 SUBJECTS
- PROJECT PRESENTATION
  - 3000 WORDS
  - 12 MINUTE PRESENTATION
- BOOK REPORT – 15 MINUTES
- AIRLINE TEAM PRESENTATION -
- STUDENTS CONDUCT CLASS
- GAIN ENDORSEMENT TO TAKE FAA EXAM
STUDENTS RECOGNIZED THEIR ROLE IN THE PROCESS WHEN THIS HAPPENED

- I WENT FOR “CHECK RIDE” WITH DR STEWART (CLASSROOM VISIT WITH CRITQUE)
- ONE MINUTE SURVEY
- HOW WOULD THE CLASS BE BETTER?
SURVEY
HOW WAS THIS CLASS?

• Good    Not so Good    Bad
  – 1____2______3_______4________5-

• HOW WOULD MAKE THIS CLASS BETTER?
ACCOUNTABILITY
WAY TO ORGANIZE / PRIORITIZE MATERIAL

• FAA EXAM INFORMATION PLUS LIFE LONG INFORMATION THAT WILL PREPARE STUDENT FOR NEAR TERM CHALLENGES.
FAA Knowledge Test
ACTIVE CLASSROOM IMPROVEMENT THIS YEAR

• CHANGE FROM LECTURING MATERIAL PRIOR TO QUIZZ
• 80 TO 100 QUESTION QUIZZ EACH CLASS MEETING (14)
  – (PERFORM THE WAY YOU TRAIN)
• ENRICH CLASS WITH RELATED VIDEOS, DVD’S, EXPERIENCES, GUESTS(ATC MANAGERS, PILOTS, FIELD TRIPS)
CAPSTONE PROJECT

• IMPACT ON COURSE
  – MATERIAL REVIEW AND CHANGES
  – ADDITIONAL STUDENT INVOLVEMENT
  – CLASSROOM METHODS REVIEW
  – REFRESH INSTRUCTOR TECHNIQUES
  – INCENTIVE TO COMPLETE
  – COOPERATION AND COORDINATION EFFORTS WITH MANKATO AVIATION
CAPSTONE PROJECT

- UNDERESTIMATED STUDENTS DESIRE TO MEET SYLLABUS GOALS
- WANT THE CLASS TO RUN WITH “ACTIVE CLASSROOM TECHNIQUES”
ACTIVE CLASSROOM
LESSONS LEARNED

- START WITH A “PERFECT” SYLLABUS THAT WILL
  - ALLOW STUDENTS A “SAFETY ZONE” WHERE THEY CAN TRY THINGS AND FEEL COMFORTABLE IN MAKING MISTAKES
  - GET STUDENTS TO RUN CLASS PLUS ADD PEER PRESSURE TO SUCCEED
  - LEARN MATERIAL CONTENT SO THAT THEY -
    - GET READY FOR FAA EXAM
    - DEVELOP LEADERSHIP ABILITIES
    - MAKE MISTAKES
ACTIVE CLASSROOM TECHNIQUES USED

1. ORGANIZE STUDENTS AND ASK FOR THINGS LIKE

1. GET AN AIRLINE TEAM TOGETHER FROM CLASS MEMBERS TO MAKE JOINT PRESENTATION ON A SUCCESSFUL AIRLINE.
CAPSTONE PROJECT IMPACT

- NEW SYLABUS
- ACTIVE CLASSROOM DESIGN
  - ACTIVE CLASSROOM METHODS
- ADDED CLASSROOM ASSESSMENT TECHNIQUES
- LEADERSHIP OPPORTUNITIES AND DEVELOPMENT
CLASSROOM ACTIVITIES THAT APPLY TO REAL LIFE

• SKILLS EXERCISED
  – LEADERSHIP
  – ORGANIZATION
  – INFORMATION GATHERING
    • STUDY MULTIPLE SUCESSFUL AIRLINES
    • DESCRIBE SUCESSFUL PEOPLE
    • ELIMINATE UNSUCESSFUL ATTRIBUTES
  – DECIDE WHAT TRAITS MAKE UP A SUCESSFUL AIRLINE
  – ARTICULATE TO CLASS
FAA COMMERCIAL PILOT WRITTEN FLIGHT ENDORSEMENT

- Thursday, April 28, 2005
- ________________

I certify that I have reviewed the above individual’s preparation for the FAA Commercial Pilot – Airplane Knowledge Test (covering the topics specified in CFR 61.125(b)(1) through (16) using the Gleim Commercial Pilot FAA Written Exam book and find him/her competent to pass the pilot knowledge test.

- Timothy Brabec 1761026 31 Dec 2005
CETL
CAPSTONE PROJECT
CETL CAPSTONE PROJECT

“UNEMCOMBERED BY THE THOUGHT PROCESS”