Bethune College FYE Initiatives
John Amanatides
Background

• audience is science/engineering students

• hierarchical curriculum, common curriculum in early years

• sensitive to 1st-year mastery

• sensitive to math mastery
Typical Student

• First in family at university
• Average marks
• Commuter
• Part-time work
• Career-oriented
Problems

- university different from high school
  - no one checks attendance, homework
  - lecturers go fast, don't review
- haven't learned study skills/don't have university-level study skills
- "freedom at last"
- big, impersonal university
- Isolated
- many bomb in 1st term/year
Strategy

- Concentrate of first year and help students transition
- Help them make connections with other students
- Fit their schedule
- Try to make a big university feel small
- Bring services to students
Bethune Interventions

- Peer Mentoring
- Math Background Quiz/Tutorials
- Academic Orientation
- Peer Tutoring
- Supplemental Instruction (PASS)
- Class Reps
- Workshops
- Early Alert
Peer Mentoring

- all incoming students are assigned peer mentor
- Peer mentor in same major, 20:1 ratio
- Grouped by lab
- Contact by email in summer
- Tour leader during Academic Orientation
- Monthly e-mail in fall
Math in First Year (2012-13)

- MATH 1013 3.0: Drop + F = 31%
- MATH 1014 3.0: Drop + F = 36% (only 43% pass both)
- MATH 1019 3.0: Drop + F = 56%
- MATH 1300 3.0: Drop + F = 34%
- MATH 1310 3.0: Drop + F = 27% (only 48% pass both)
- MATH 1505 6.0: Drop + F = 36%

Source: OIRA
Math Background Quiz

• All incoming students in Science & Lassonde asked to take online quiz before enrollment advising
  • bethune.yorku.ca/math

• Tests Algebra and Trig that they should have covered

• Developed by Kim Maltman (Math & Stats)

• If low score encouraged to take free Math Background Tutorials before classes start
Math Background Tutorials

• Voluntary
• 4 days long, 4 hrs/day
• Weeks of Aug 11, 18, 25
• 20 students/class max, 100 per week
• Led by faculty member or CUPE instructor
• Students go over problem sets and get feedback from instructor
• Repeated during Fall CoCurric Days & Reading Week
Math Background Tutorial Results

- Overall Dropout/Failure rate cut almost in half
- GPA up about 0.5-1

<table>
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<th>COURSE No.</th>
<th>BT attendes</th>
<th>non-attendees</th>
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<tbody>
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<td></td>
<td>[#] drop+fail% GPA</td>
<td>[#] drop+fail% GPA</td>
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<tr>
<td>MATH 1013</td>
<td>[68] 17.6 4.0</td>
<td>[775] 45.5 3.5</td>
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<td>[226] 37.6 4.0</td>
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Data for 2012-13 courses: Kim Maltman
Academic Orientation

• Welcome, Bethune + University Resources, Success in your Major, University Tour + BBQ
• Connect with BCC, community formation
• Followed by Social Orientation
• 77% attendance of new Science students
Peer Tutoring

- free peer tutoring in core first-year courses
- weekdays 2:30-6:30 pm
- peer tutors: took course in previous year and got A
- Two locations
  - LSB 103: Biology & Chemistry
  - BC 102F: CS, Math, Physics
Supplemental Instruction (PASS)

- “study groups on training wheels”
- Voluntary, regularly scheduled, informal, review study sessions
- 2 x 90 min/week
- For “problem” courses (>30% drops, Fs, Ds)
- Led by upper-year student leaders:
  - Took course and did well and act like model students
  - Not a TA (don’t re-lecture or solve assignments)
  - Paid 10 hrs/week
  - Trained (1-2 days) by certified SI supervisor
Courses (F13)

- BIOL 2020, BIOL 2040
- CHEM 1000, CHEM 2020
- CSE 1020
- MATH 1013, MATH 1300, MATH 1505
- PHYS 1010, PHYS 1420
SI Results (FW11)

- Overall: 1 grade point higher
- The higher the attendance, the bigger the impact

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<th>ΔGPA</th>
<th>(attendees/total)</th>
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<td>BIOL 1001:</td>
<td>+0.6</td>
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<tr>
<td>CHEM 1000:</td>
<td>+1.8</td>
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<td>(166/816)</td>
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<tr>
<td>PHYS 1410:</td>
<td>+1.3</td>
<td>(11/389)</td>
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</table>

source: Mazen Hamadeh
Class Reps

• In Nat Sci for over decade
• CR is student enrolled in class
• Liaison between instructor and students in class
• Provide feedback and any concerns that arise to the attention of course instructor
Weekly Workshops

- Every Wednesday at 2:30 and 5:30 pm
- Learning Skills
- Career Centre
- SOS Professional School workshops
Early Alert Pilot

- First-year instructors note who did badly on first midterm
- Sticky note on quiz, list of failing students to Bethune

Interventions:
  - peer mentors contact, direct to resources
  - Faculty mentors (Lassonde)
  - Learning Skills workshops during Fall Cocurric Days
  - Math Background Tutorials during Fall Cocurric Days
  - bethune.yorku.ca/backontrack
Critical Mass of Services at Bethune

- Study space, club space, social space, cafeteria
- SOS Peer Advising
- Peer Tutoring
- Study Groups/PASS
- Bethune Writing Centre
- Career Centre Advising
- Wednesday Workshops
- Academic Advising
Our Peer Leaders (FW13)

- 21 Peer Advisors
- 57 Peer Mentors
- 21 Grad Peer Mentors
- 47 Peer Tutors
- 11 SI Leaders
- 49 Class Reps
- 5 Science Student Ambassadors (Lassonde separate)
Supporting Peer Leaders

• Training
  • bethune.yorku.ca/sos/training

• Biweekly meetings

• Letters of recommendation

• Work-study/CLAY for those with 10 hr/week

• Recognition on transcript:
  • BC 3000 0.0: Peer Leadership
  • BC 3010 3.0: Advanced Peer Leadership
  • BC 3900 0.0: Peer Leadership Practicum
Community …

… is where they know your name and they miss you when you’re not there.

Isaac Sacks