

BUSINESS STUDENTS' First Year Experience:

**A Campus-Wide Collaboration
of Research and Reform
For Student Success**

**Presented at the Society for Teaching and Learning in Higher Education Conference
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Bruce Anderson Brian Schumacher Kate McGovern



The Motivation

- Wally — Understand differences
- Brian — Accelerate the learning
- Kate — Build bridges – admin & faculty
- Bruce — Improve experience & success



Our Team

- Dr. Wallace Lockhart: PI, Faculty member, BUS100 Instructor
- Bruce Anderson: Centre for Management Development, BUS100 Instructor
- Brian Schumacher: Associate Dean, BUS100 Instructor
- Kate McGovern: Office of Resource Planning, data coordinator
- Don Balas: Grad student, high school teacher, part of the Sask Ed writing assessment team.
- UofR Student Success Centre
- UofR Centre for Teaching and Learning



How We Came Together

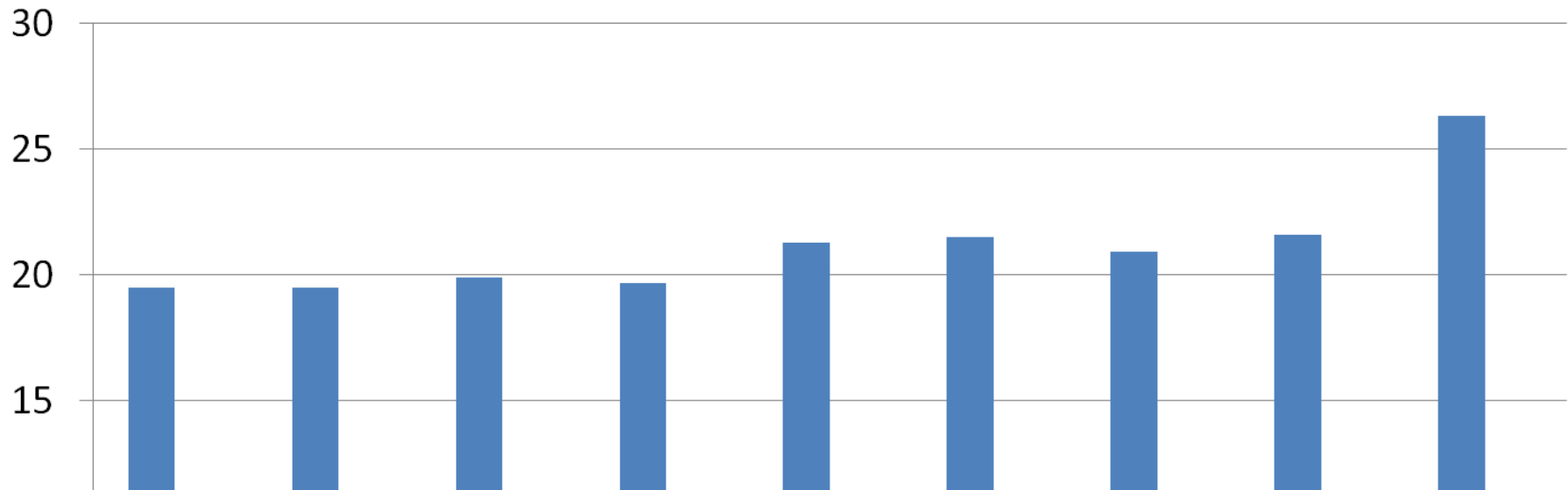
- A passion for teaching & learning
- Intro to Business – pilot courses & new core class
- Across UofR: shared values, focus on student success, increasing student diversity



OUR STUDENTS: A PROFILE



AGE: Depends on Term
Fall: 19. Low SD. Winter: 21-27, Large SD



Age differed between terms.
 So did student experience and need.
 We teach the course as an “Intro to University” Class.

WE WILL CHANGE!
 Registration and winter teaching pedagogy will change.

■ Mean ■ Std. Deviation

Profile of Fall 2012 Undergraduate UR and Business 100 Students

Student Characteristic	All UR Students (n=11,272)	All BUS 100 Students (n=254)	Business 100 Classes			
			Sec 001 (n=64)	Sec 002 (n=66)	Sec 003 (n=63)	Sec 004 (n=61)
Female	62%	48%	45%	42%	46%	57%
International	8%	12%	20%	6%	16%	5%
Full-time	81%	96%	97%	95%	94%	100%
Age (Avg)	20.6	18.8	18.8	18.6	19.4	18.5
Admit GPA	81.8%	80.8%	81.2%	80.1%	81.1%	80.8%



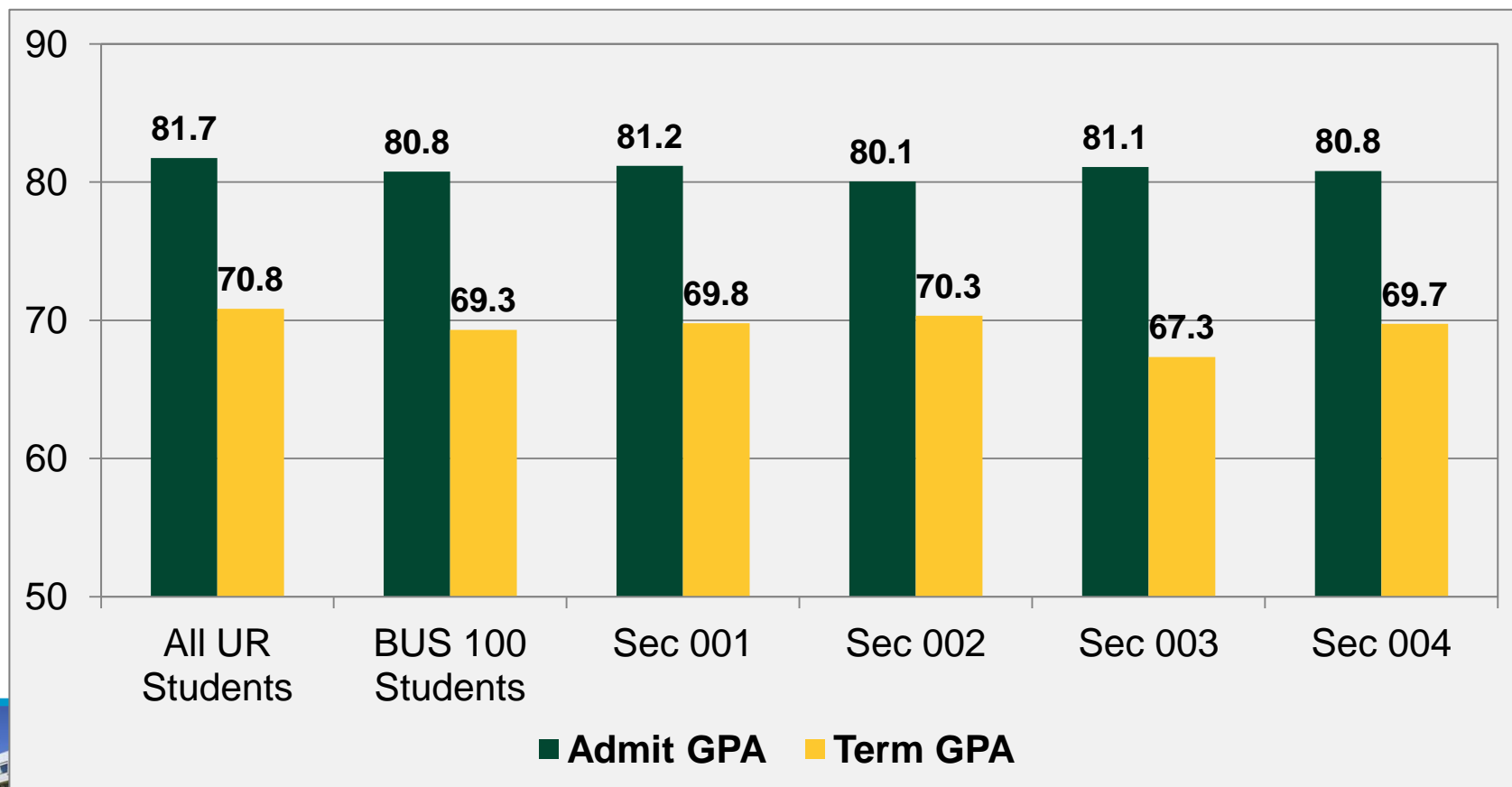
Our Students:

Fall 2012 Undergraduate Students Admit GPA

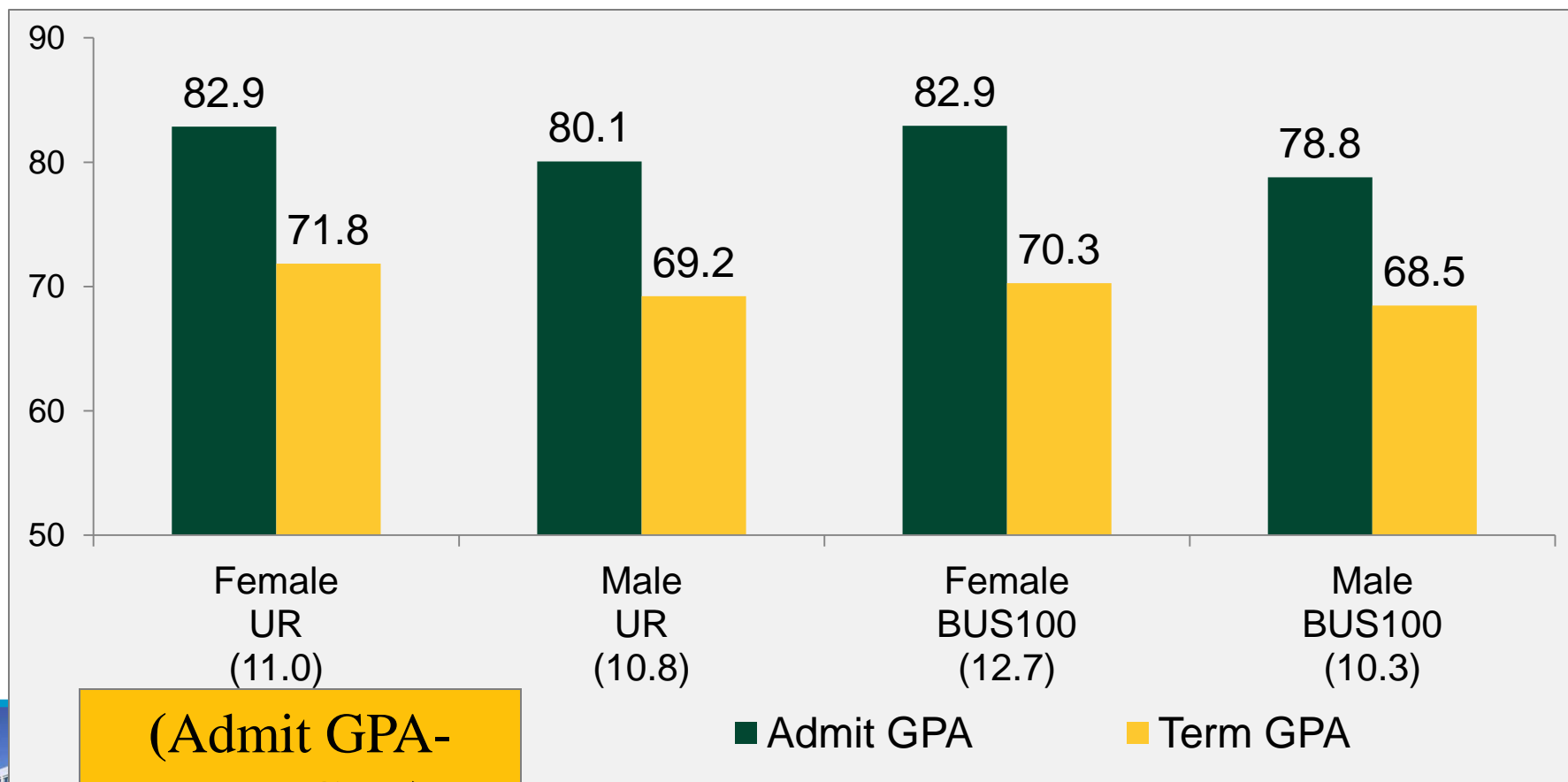
Admit GPA		Domestic	Inter- national	Female	Male
All UR Students		82.0%	77.6%	83.0%	80.1%
All BUS 100 Students		80.9%	79.2%	82.9%	78.8%
Business 100 Classes	001	81.0%	82.5%	83.3%	79.6%
	002	80.1%	77.5%	82.8%	78.4%
	003	81.4%	78.9%	82.4%	79.7%
	004	81.1%	65.8%	83.2%	77.5%



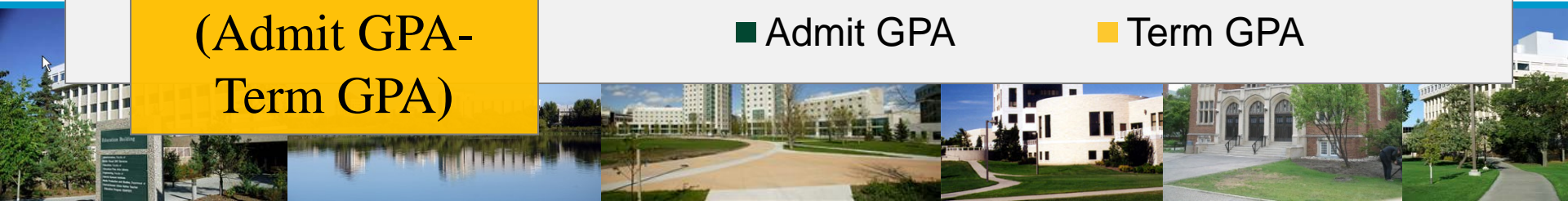
Fall 2012 Undergraduate Students Admit GPA and 201230 Term GPA



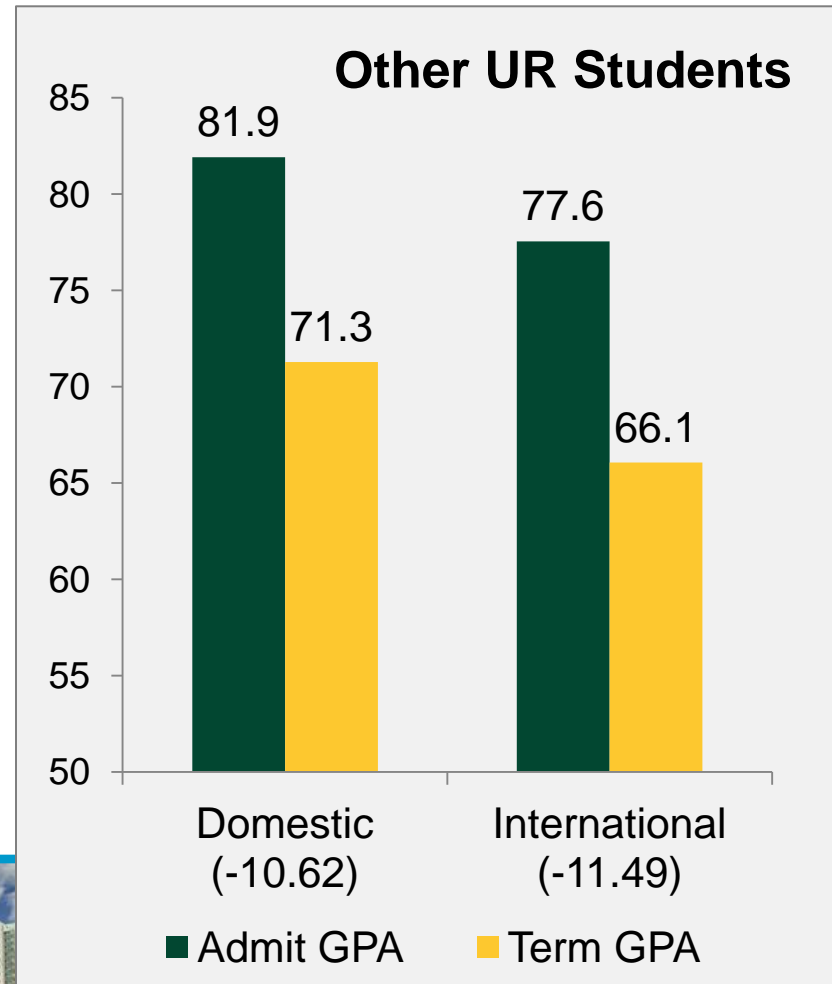
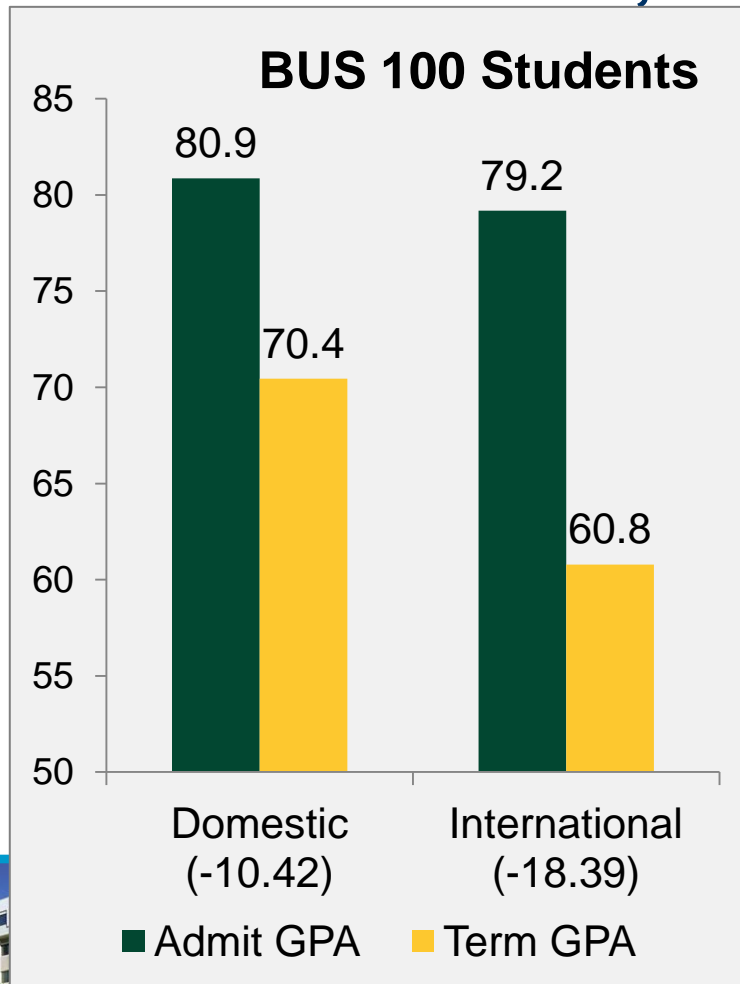
Fall 2012 Undergraduate Students by Gender Admit GPA and Term GPA



**(Admit GPA-
Term GPA)**



Fall 2012 Undergraduate Students by International Status, Admit GPA and Term GPA



CUSC 2010

Reasons for choosing this University¹

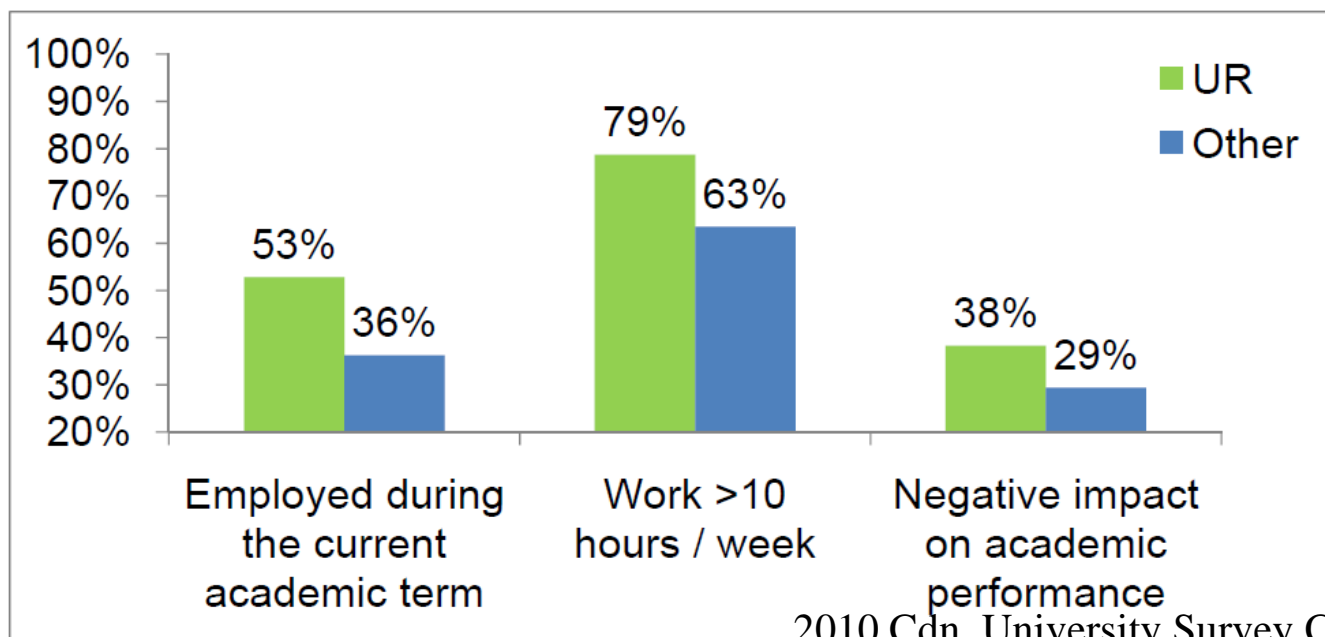
Single most important reason	Business	
	U of R	Other U.
■ Wanted to live close to home	41%	18%
■ Quality of academic programs	5%	19%
■ University has a good reputation	-	11%
Total	5%	30%

¹2010 Cdn. University Survey Consortium data



No Time to Study

Employment & Impact on Academic Performance



2010 Cdn. University Survey Consortium data



OUR RESEARCH PROJECT



Research Goals

■ Student Diversity

- Does it matter?
- What can we do about it?

■ Continuous Improvement

- What to measure?
- What levers work?
- Support students through transition



Research Design

STUDENT PROFILE

- Gender, Age, Int'l, Urban / Rural
- Jung Typology (MBTI)
- Writing Skills
- Autonomous Learning

THE EXPERIENCE

- Student effort, extra seminars, class section

OUTCOMES

- Grades (BUS100, GPA)
- Student Perceptions
 - Value
 - University Skills
 - Content Knowledge



The Instruments

- 1) Consent & Student Profile
 - Data from registration / course activities
- 2) End of Term Survey
- 3) Following Term – Interviews
- 4) Following Term – Focus Groups
- 5) Grades – Now & ongoing



Term of Research Project

- All BUS100 classes for 3 years
 - *Shouldn't all SOTL projects do this?*



The Expectations

- 1) Understand our students
- 2) Outcomes will improve over time
- 3) Many will use the data / results
admissions, support, faculty, competencies
- 4) Today's research → tomorrow's routine



Pedagogy Meets Research

- Seminar Series: University Skills
- Core skills: Writing, Reading
- Understanding self:
 - MBTI, autonomous learning, learning style



MBTI:

- Human Metrics: “Jung Typology Test”™
- 72 questions – online – instant result
- Extras: Explanations, applications
- Permission granted to use the tool in our study



Autonomous Learning

- Ann Macaskill and Elissa Taylor – UK
- Simple: 12 likert scale questions
- The Autonomous Learning Scale is now a 12-item measure with two subscales measuring:
 - Independence of Learning, *I tend to be motivated to work by assessment deadlines* (item 10), and
 - Study habits, *I frequently find excuses for not getting down to work* (item 2).
- Permission granted to use the tool in our study.
- Macaskill, A., E. Taylor: “The development of a brief measure of learner autonomy in university students”. *Studies in Higher Education*, Vol. 35, No. 3, May 2010 351-359



Learning Styles

- BW James – University of South Dakota
 - Simple tool: 16 mx questions A-B-C
 - Visual – Auditory – Kinesthetic
 - Permission granted to use the tool in our study
- Source: <http://people.usd.edu/~bwjames/tut/learning-style/index.html> Adapted from Instructor Magazine 8-89



Writing Skills

Saskatchewan Education Assessment for Learning Program

- Grade 11 Writing Skills Assessment Tool
- Don Balas: Co-developer; grad student!
- 5 items. We use: Organization and Fluency
- Saskatchewan Education Assessment for Learning (AFL) Conceptual Framework for the Provincial Writing Assessment, Grade 11 (2010). <http://www.education.gov.sk.ca/AFL/writing-2010-gr-11-table-specifications>
- 5 Core writing skills: 1) Demonstration of Writing Process. 2) Quality of Writing Product. 3) Messaging and Content. 4) Organization and Coherence. 5) Language Use and Syntax



Lit Review:

Carol Geary Schneider

- **“High Impact Practices”** (Banff 11/2012)
- Hey ... we do many of those things!
 - Experiential Learning
 - Intellectual skills
 - Focus on outcomes
 - Knowledge of the world



The Literature - UofR

Heather Ritenburg: Transitioning With Success (2011)

Recommendations to Transitions Committee:

1. strengthen the University of Regina's message of support during first year
2. familiarize parents to the experience of first year
3. consider if first-year university needs to be recognized as a unique year
4. consult, involve or include students in the ongoing work of the committee.

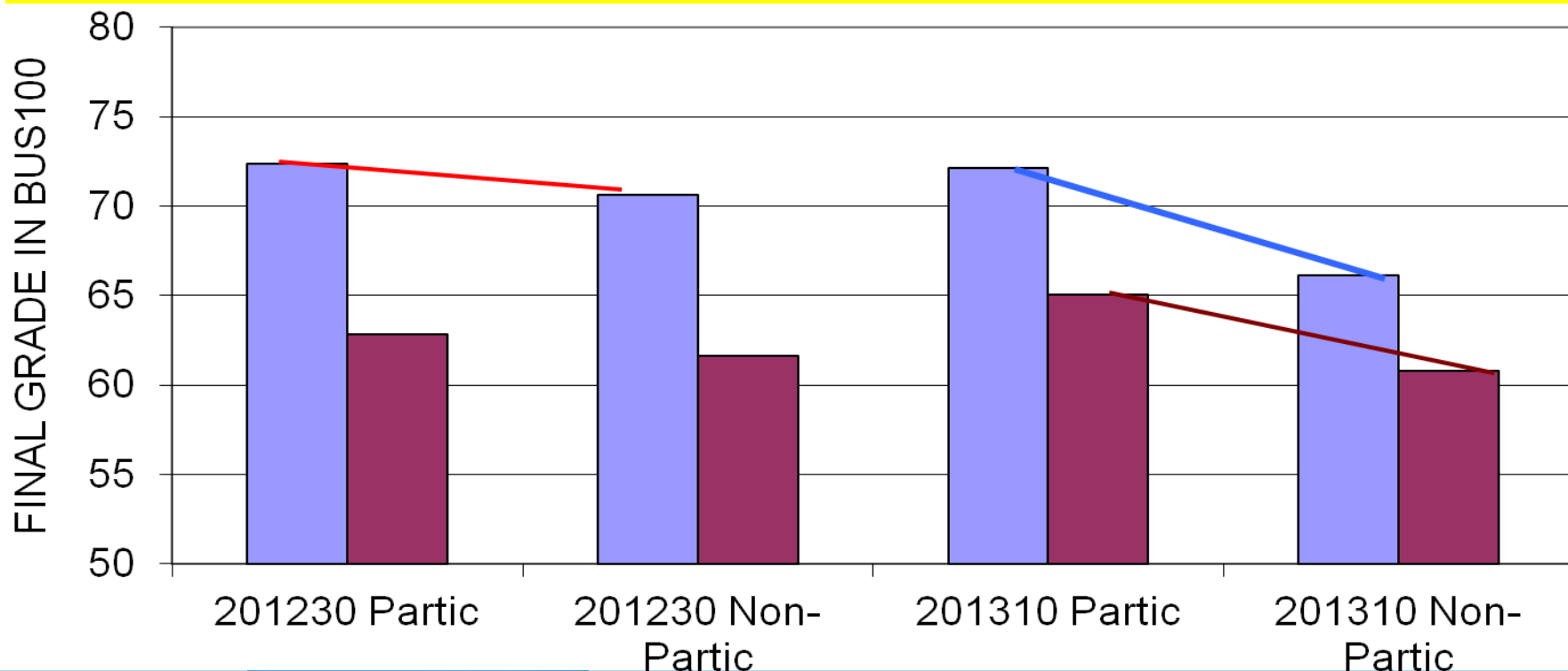


The Literature

- Mary Hoefft: “Why University Students Don’t Read: What Professors Can Do To Increase Compliance”
 - *International Journal for the Scholarship of Teaching and Learning*
<http://academics.georgiasouthern.edu/ijsotl/v6n2.html> Vol. 6, No. 2 (July 2012) ISSN 1931-4744 @ Georgia Southern University
- Sharon Clinebell & Mary Stecher: “Teaching Teams to be Teams: An Exercise Using the Miers-Briggs® Type Indicator and the Five-Factor Personality Traits”
 - *Journal of Management Education* 2003 27: 362 <http://jme.sagepub.com/content/27/3/362>
- Christina Rideout & Susan Richardson: “A Teambuilding Model: Appreciating Differences Using the Myers-Briggs Type Indicator with Developmental Theory”
 - *Journal of Counselling and Development* Vol 67, May 1989 529-533



There was a significant **participant bias** in Winter 2013 term.
Non-participants (**38%**) earned lower grades.
We don't know: How else did their experiences differ?





GRADES not affected by my effort? Oh my, dig deeper Wally
GRADES not affected by seminars? I expected: High Int'l partic.
YES ... I did find the answers ... both explained by Int'l student gaps.
STUDENT PERCEPTION (RH 3 columns): Few X ... good!

STUDENT DIFFERENCES / OUTCOME DIFFERENCES 201310 (WINTER)					
X: SIGNIFICANT	MEASURED		STUDENT PERCEPTION - SURVEY		
	GRADE	GPA	VALUE	U-SKILLS	CONTENT
GENDER	X	X			
AGE					
DOM/INT'L	X	X		X	
URBAN/RURAL					
MBTI E / I					
MBTI J / P		X			
WRITING: ORG	X	X			
WRITING: FLU	X				
ALS INDEPENDENCE			X	X	
ALS STUDY SKILLS	X	X			
HS AVERAGE					
HS PREP'D ME					
CLASS SECTION				X	X
FRIDAY SEMINARS		X		X	
MY EFFORT			X	X	X

STUDENT DIFFERENCES / OUTCOME DIFFERENCES 201310 (WINTER)

X: SIGNIFICANT	MEASURED		STUDENT PERCEPTION - SURVEY		
	GRADE	GPA	VALUE	U-SKILLS	CONTENT
GENDER	X	X			
AGE					
DOM/INT'L	X	X		X	
URBAN/RURAL					
MBTI E / I					
MBTI J / P		X			
WRITING: ORG	X	X			
WRITING: FLU	X				
ALS INDEPENDENCE			X	X	
ALS STUDY SKILLS	X	X			
HS AVERAGE					

Blue Section: Student Characteristics

NOTE: Between Group Differences in Grades & GPA

But Very Few Differences in Student Perceptions of value, university skills and learning course content.



STUDENT DIFFERENCES / OUTCOME DIFFERENCES 201310 (WINTER)

X: SIGNIFICANT

MEASURED

STUDENT PERCEPTION - SURVEY

GRADE

GPA

VALUE

U-SKILLS

CONTENT

Bottom section: **Student Experience Variables**

Note how differences are opposite:

Class experience affects student perception of learning.
Experience does not affect grades or GPA.

NOT in design: Class section a key criteria in experience!

HS PREP'D ME					
CLASS SECTION				X	X
FRIDAY SEMINARS		X		X	
MY EFFORT			X	X	X



Fall 2012 results

STUDENT DIFFERENCES / OUTCOME DIFFERENCES					
X: SIGNIFICANT	Measured		Student Perception - Survey		
	BUS100 Grade	Fall GPA	Value	Univ Skills	Content Knowl.
Gender					
Age					
Domestic / International	X				
Urban vs Rural					
Personality: E/I					
Personality: J/P	X			X	X
Writing – Organization	X	X			
Writing – Fluency	X	X			
ALS – Independence				X	X
ALS – Study Habits	X	X		X	
HS Average Grade	X	X			
HS Prepared Me	X	X			
Class Section				X	X
Friday Seminars	X	X			
My Effort	X	X	X	X	X

ALS STUDY HABITS

- **ALS study habits:** In winter 2013, only 2 participants scored in the “highest” group based on the scoring used in 201230. As a result I had to rejig the benchmarks for hi-med-lo. It also tells us: **The winter group did not self-rate as having strong study habits.**



Gender matters. Age doesn't.

Gender	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
Male	68.8	67.4	3.51	3.22	3.38
Female	72.6	72.8	3.53	3.25	3.34

AGE	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
17 - 18	71.6	66.7	3.67	3.49	3.51
19	70.3	70.5	3.53	3.16	3.27
20-21	71.0	70.6	3.42	3.24	3.32
22+	70.3	70.7	3.57	3.19	3.39



Where You're From?

CDN / INT'L	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
CANADIAN	73.4	71.9	3.46	3.12	3.27
INT'L / NEW CDN	62.0	65.0	3.77	3.63	3.65
Sask Urban vs Rural	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
SK URBAN	72.8	71.4	3.41	3.08	3.15
SK RURAL	74.1	71.9	3.61	3.10	3.45



MBTI Personality Profile

Note: Fall 2012 J/P Had Huge Gaps

Extrovert-Introvert	GRADE	TERM GPA	VALUE	U-SKILLS	CONTENT
Extrovert	71.5	70.2	3.48	3.23	3.44
Introvert	70.8	72.3	3.55	3.18	3.15
Judging-Perceiving	GRADE	TERM GPA	VALUE	U-SKILLS	CONTENT
Judging	71.8	71.9	3.53	3.18	3.38
Perceiving	68.8	66.5	3.41	3.32	3.16



AUTONOMOUS LEARNING: Study Skills, Independence

ALS INDEPENDENCE	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
LOWEST (ag score up to 23)	68.7	69.7	3.25	3.02	3.16
MED (ag score 24-26)	69.3	68.9	3.69	3.48	3.49
HIGHEST (ag score 27+)	73.4	72.1	3.51	3.06	3.28
ALS STUDY SKILLS (SPECIAL)	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
LOWEST (8-16)	63.9	65.1	3.69	3.25	3.27
MID (17-18)	72.6	70.9	3.36	3.31	3.45
HIGHEST (19+)	76.9	75.9	3.47	3.06	3.28



HIGH SCHOOL AVERAGE

Note Dip for 85-90

Diffs not significant (high STDEVs)

HS AVG GROUPED	GRADE	TERM GPA	VALUE	U-SKILLS	CONTENT
Up to 75	66.9	65.0	3.41	3.24	3.42
75.1 - 80	69.9	66.7	3.86	3.38	3.57
80.1 - 85	72.6	70.5	3.49	3.26	3.29
85.1 - 90	70.3	70.0	3.44	2.79	3.22
90.1 and Above	80.3	81.7	3.32	2.87	2.70



OPTIONAL SEMINARS (6)

Do Seminars → Performance?

# SEMINARS	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
0-1	69.7	67.9	3.43	3.07	3.20
2-3	73.5	71.9	3.95	3.15	3.44
4-6	71.9	73.8	3.56	3.52	3.59

From seminar attendance, we expected unusual results in the aggregate data. So of course we dug deeper ...



Seminars: DIG DEEPER!

CANADIAN BORN					
# SEMINARS GROUPED	GRADE	TERM GPA	VALUE	U-SKILLS	CONTENT
0-1	72.1	69.8	3.39	2.99	3.14
2-3	76.4	72.6	3.71	3.18	3.38
4-6	75.8	77.1	3.54	3.41	3.58
INTERNATIONAL / NEW CANADIAN					
# SEMINARS GROUPED	GRADE	TERM GPA	VALUE	U-SKILLS	CONTENT
0-1	54.1	58.3	3.81	3.75	3.77
2-3	65.5	69.8	4.36	3.10	3.56
4-6	66.0	69.0	3.59	3.70	3.61



STUDENT EFFORT

What's this? Minimal difference in grades?

MY EFFORT GROUPED	GRADE	T-GPA	VALUE	U-SKILLS	CONTENT
Up to 3.6	68.4	67.7	3.26	2.86	3.00
3.7 - 4.0	72.0	71.0	3.29	3.33	3.27
4.1 & Higher	72.0	73.0	3.85	3.43	3.63



Student Effort – DIG DEEPER

CANADIAN BORN						
MY EFFORT GROUPED	GRADE	TERMS	SPA	VALUE	U-SKILLS	CONTENT
Up to 3.6	70.1			3.16	2.64	2.84
3.7 - 4.0	74.5			3.19	3.25	3.27
4.1 & Higher	74.8			3.83	3.34	3.56
INTERNATIONAL / NEW CANADIAN						
MY EFFORT GROUPED	GRADE	TERMS	SPA	VALUE	U-SKILLS	CONTENT
Up to 3.6	56.5	70.5		3.50	3.60	3.56
3.7 - 4.0	63.9	64.6		3.65	3.56	3.24
4.1 & Higher	64.9	66.9		3.92	3.69	3.88



So let's talk about this:

- A set of tools: **Research / Practice**
 - Survey and assess students on intake
 - Learn how their experiences differ
 - Adjust teaching, pedagogy, evaluation ...
- Let's do this project at your university!
 - Or modify it to suit what you're looking for



Thank You!

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