Do Non-Traditional Course Offerings Help Students Succeed?

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Statement of the Problem

- Community colleges are tasked with improving student achievement while responding to demands for non-traditional instruction (Almquist, 2015).
- Faculty assume that struggling students need more time to learn course content and argue that longer class times are necessary to achieve knowledge mastery (Logan & Geltner, 2000).
- College stakeholders often fear that students are not equipped to succeed in non-traditional courses (Deka & McMurry, 2006).

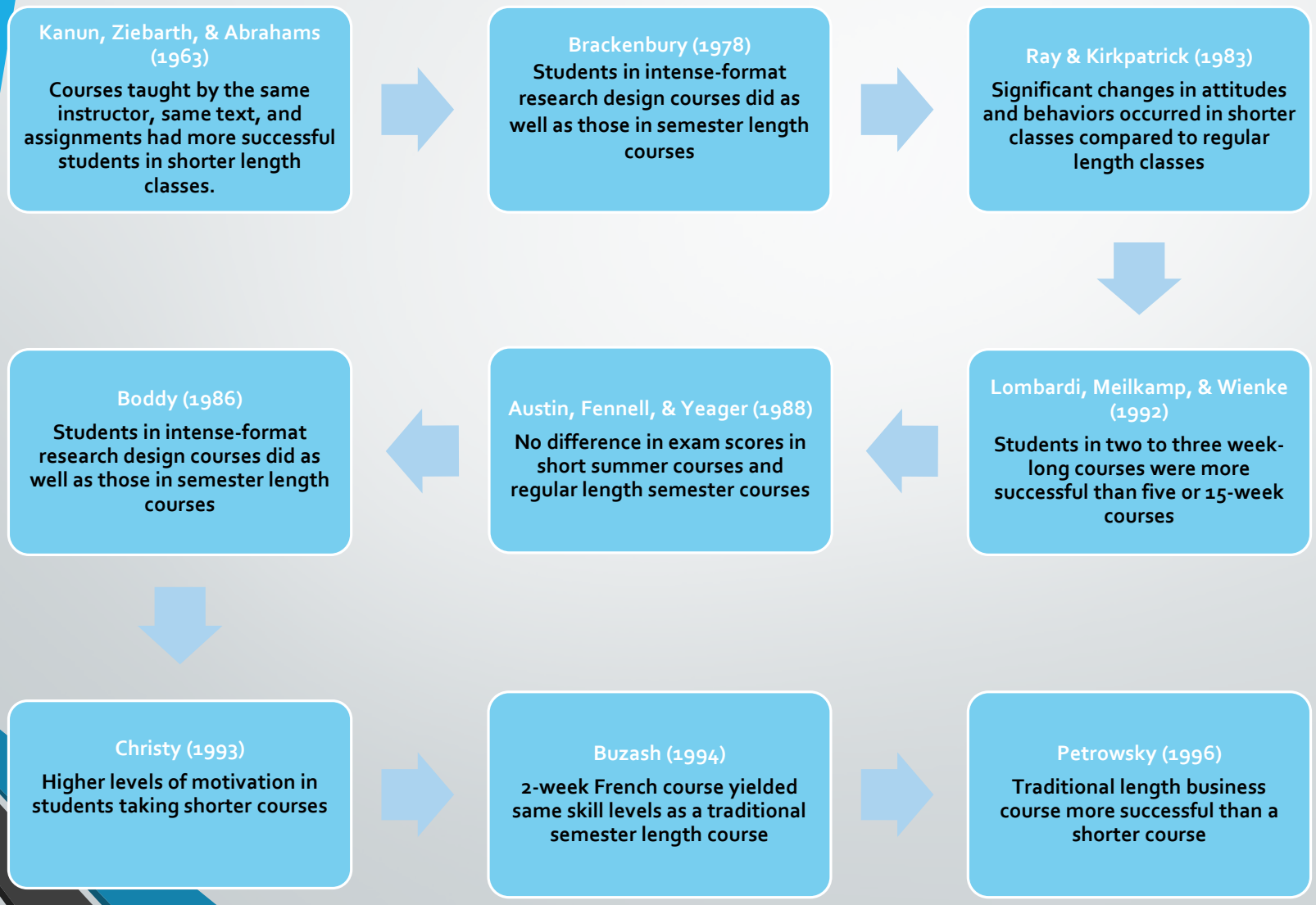
Significance of the Study

- Federal focus on the increase of college degrees needed in the workforce and higher education institutions responding to meet the needs.
- Locally, deans wanted to determine whether students in shorter sessions or non-traditional courses were as successful as students in regular length, face-to-face courses.
- Outcomes from this investigation may help faculty to increase non-traditional course offerings (modality and length).

Definitions

- Non-Traditional Course Offerings
  - Course Modality
    - Internet
    - Blended
    - IVC-Interactive Video Conference
  - Course Length
    - 4 weeks
    - 8 weeks
    - 12 weeks
- Student Success
  - Grades of A, B, C, or P (success)
  - Student did not withdraw from the course (retention)

Brief Review of Literature



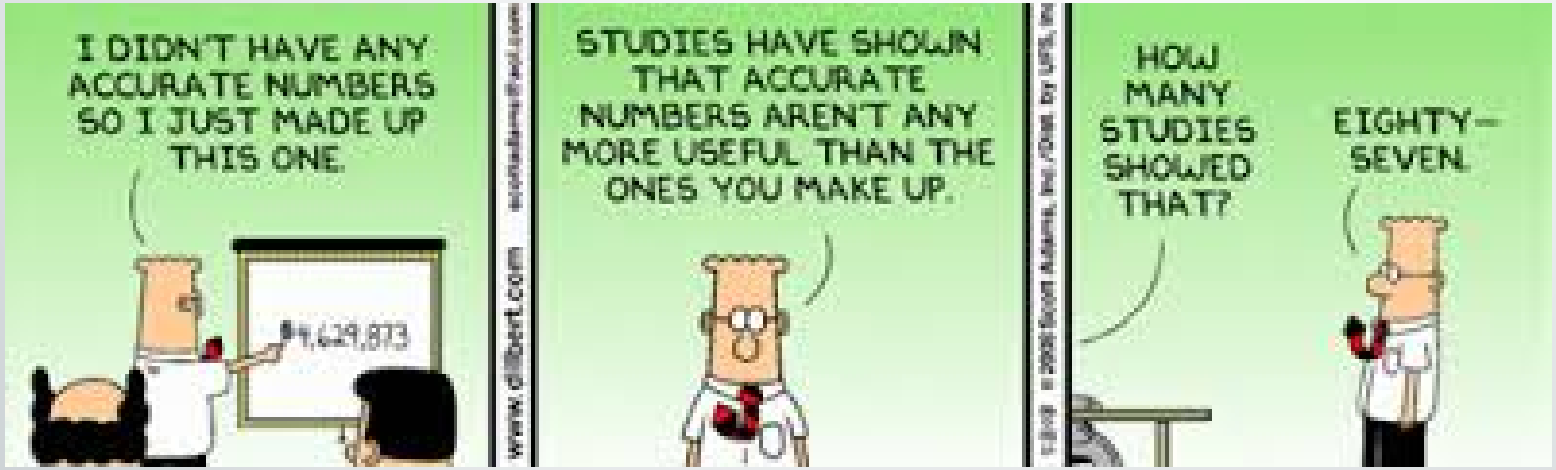
Compressed Length Courses

Faculty and administrators perceive that shorter classes lead to decreased student learning and success (Anastasi, 2007; Austin & Gustafson, 2006).

Additional research is needed to evaluate the possible impact of shorter courses on struggling or at-risk students (Logan & Geltner, 2000).

Many non-traditional students take compressed length courses and are more motivated and better prepared than younger, traditional age students (Daniel, 2000).

Data Analysis



Method

- Participants
  - All students enrolled at Blinn in courses offered in Fall semesters (Fall 2012-Fall 2015)
  - Excluded clinical and practicum courses
  - Excluded 10-week, 17-week, and year long dual credit courses
- Instrumentation
  - Data downloaded from Blinn College ODS
  - Inferential and descriptive statistics used
  - Comparison of same courses offered in multiple lengths and/or modalities
- Data Analysis
  - Factorial ANOVA used
  - Alpha level of .05
  - Effect sizes partial eta squared, η^2

Variables

- **Independent Variable(s)**
  - Course Session Length
    - 4 weeks, 8 weeks, 12 weeks, 16 weeks
  - Course Instructional Method (Modality)
    - Traditional, Internet, Blended, IVC
- **Dependent Variable(s)**
  - Success Rates-Received grades A, B, C, P
  - Retention Rates-Students did not withdraw

Descriptive Statistics Results

Course Length and Modality	Success Rates			Retention Rates		
	n of courses	M	SD	n of courses	M	SD
4 weeks						
Blended						
Internet	52	84.8	8.2	52	90.4	7.3
IVC						
Traditional	47	85.0	14.8	47	89.8	12.1
8 weeks						
Blended	27	74.8	17.3	27	88.8	9.1
Internet	43	59.2	21.0	43	75.9	17.0
IVC	2	68.8	44.2	2	100.0	0
Traditional	106	74.7	17.3	106	86.5	13.9
12 weeks						
Blended	8	54.1	30.4	8	80.3	16.0
Internet	40	56.3	11.5	40	73.0	13.0
IVC						
Traditional	40	64.4	20.0	40	84.8	13.5
16 weeks						
Blended	271	72.6	16.8	271	84.2	12.7
Internet	454	71.1	15.2	454	82.7	11.6
IVC	133	83.2	20.1	133	91.7	14.0
Traditional	1468	82.3	15.4	1468	90.0	10.4

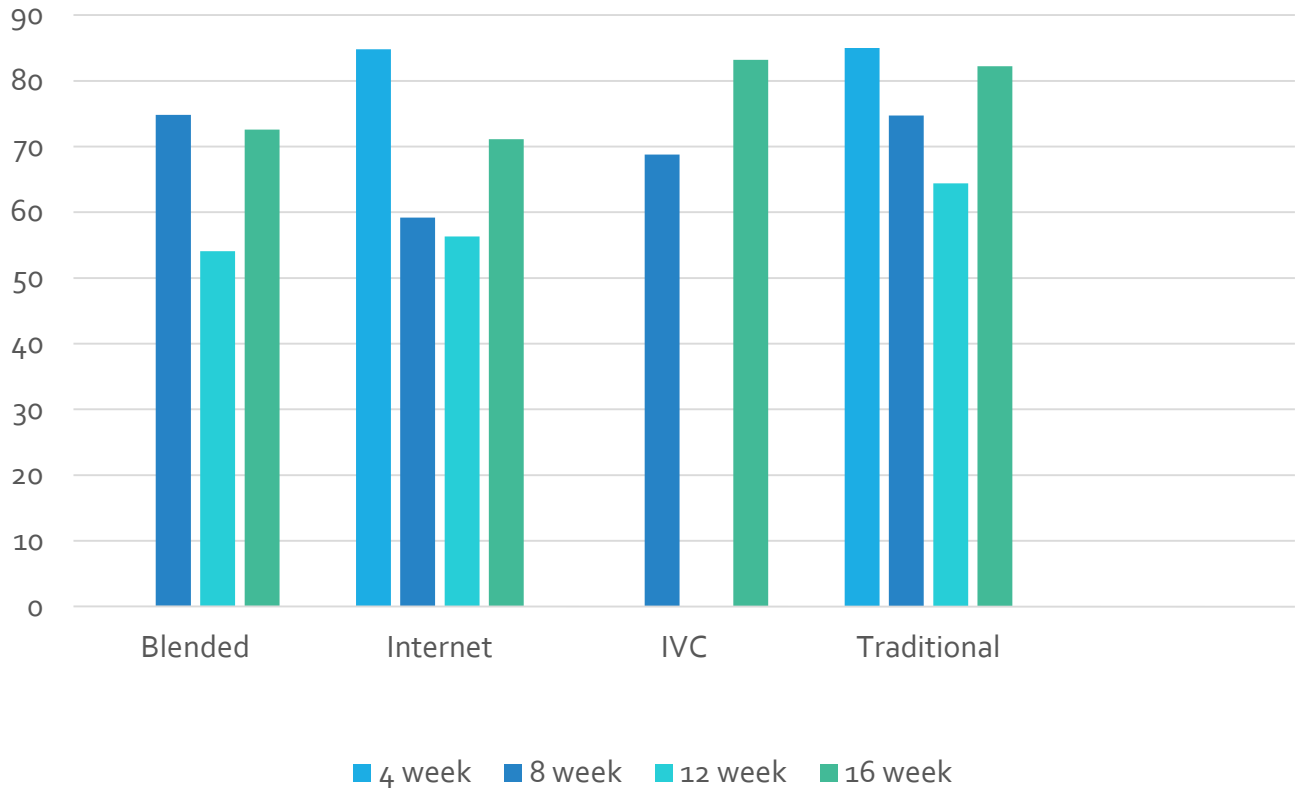
Inferential Statistics Results

Course Length and Modality	Success Rates			Retention Rates		
	Statistical Significance	Effect Size	Highest Rate	Statistical Significance	Effect Size	Highest Rate
Course Length	Yes	Small; partial $\eta^2 = .043$	4 weeks	Yes	Small; partial $\eta^2 = .017$	4 weeks
Modality	Yes	Small; partial $\eta^2 = .014$	IVC	Yes	Small; partial $\eta^2 = .022$	IVC
Interaction	Yes	Small; partial $\eta^2 = .009$	4 weeks traditional	Yes	Small; partial $\eta^2 = .012$	4 weeks internet

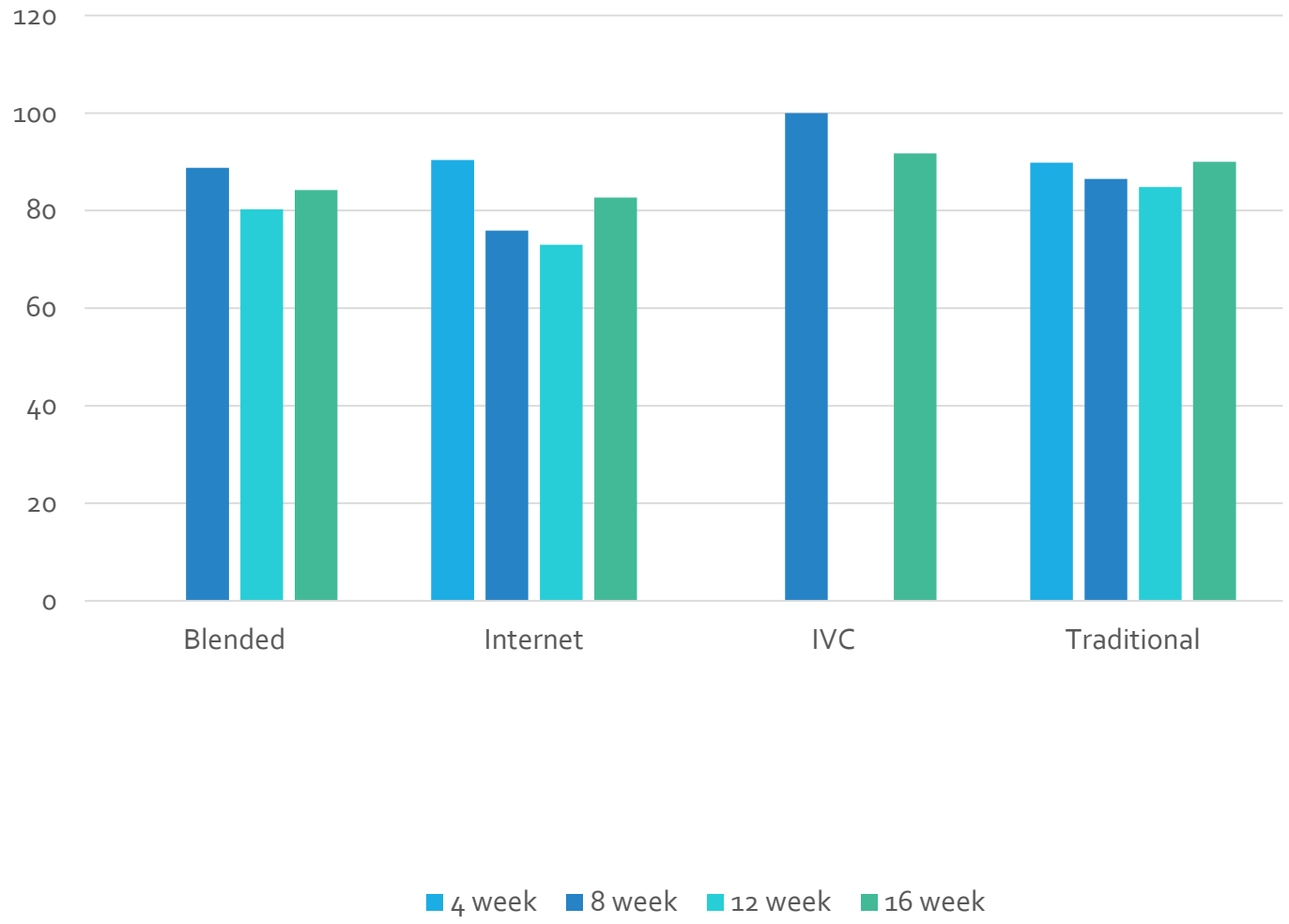
Discussion

- Four fall semesters of data included
- Success Rates
  - Statistical significance with small effect size for modality, course length, and interaction
  - Length of course and modality of course has little impact on student success
- Retention Rates
  - Statistical significance with small effect size for modality, course length, and interaction
  - Length of course and modality of course has little impact on whether a student is retained
- Conclusion-Course modality and length has a small impact on student success or retention

Success Rates by Course Length and Modality



Retention Rates by Course Length and Modality



Comparison of Courses with the same modality across session lengths

- Internal study evaluating courses offered using the same instructional method (traditional, internet, IVC, or blended) across different session lengths were included in the evaluation.
- Analyses were conducted by discipline and course level across sessions and instructional method, and also between instructional methods (e.g., internet vs. blended in a 12-week session).
- 8-week sessions were evaluated separately versus combined as in the inferential statistics analysis.
- Less than 30% of available disciplines represented and 8% of course offerings included.
- Success and retention rates of short session courses were compared to full-term courses.

Range of Discipline Success Rates

	Highest Success Rate			Lowest Success Rate		
Session	Blended	Internet	Traditional	Blended	Internet	Traditional
First 8-weeks	ECON 93.8%	ARTS 86.2%	GOVT 89.6%	BCIS 41.7%	ENGL 58.3%	MATH 58.4%
Second 8-weeks	HIST 90.1%	RELE 64.9%	BITC, BUSG EDUC, ITSC, ITSW 100.0%	BCIS 56.6%	DRAM 25.0%	SOCI 46.7%
12 week	GEOL 70.8%	GOVT 60.2%	EDUC 93.8%	SPCH 36.0%	MATH 34.6%	SOCI 38.1%
4 weeks	NA	ARTS 94.6%	GEOG 100.0%	NA	ENGL 68.0%	MATH 73.6%
16 weeks	GEOL 82.6%	ARTS 79.9%	BITC 100.0%	ENGL 58.7%	MATH 52.6%	MATH 59.2%

Discipline Success Rates by Session Length and Modality

Modality	4 weeks	First 8 weeks	Second 8 weeks	12 weeks	16 weeks
Blended	NA	76.9% (8)	72.4% (7)	46.8% (5)	67.7% (11)
Internet	85.1% (15)	67.5% (4)	55.6% (6)	56.7% (9)	66.8% (17)
Traditional	82.0% (10)	64.7% (6)	76.0% (22)	58.8% (14)	70.7% (31)

Range of Discipline Retention Rates

	Highest Retention Rate			Lowest Retention Rate		
Session	Blended	Internet	Traditional	Blended	Internet	Traditional
First 8-weeks	BCIS, BIOL 100.0%	ARTS 96.6%	NURA 100.0%	PSYC 85.4%	SPCH 66.7%	MATH 73.8%
Second 8-weeks	HIST 95.8%	DRAM 85.7%	ACNT, ARTC, BITC, BUSG, CJSA,EDUC, HITT, IMED, ITNW,ITSC, ITSW 100.0%	MUSI 80.0%	ITSW 30.0%	EMSP 50.0%
12 weeks	PSYC 93.1%	PSYC 79.6%	READ 100.0%	SPCH 48.0%	MATH 38.5%	GEOG 54.2%
4 weeks	NA	ITSW 100.0%	GEOG 100.0%	NA	MUSI 73.5%	PHIL 83.2%
16 weeks	GEOL 92.4%	RELE 88.2%	BITC 100.0%	HIST 76.8%	MUSI 64.6%	MATH 76.7%

Discipline Retention Rates by Session Length and Modality

Modality	First 8 weeks	Second 8 weeks	12 weeks	4 weeks	16 weeks
Blended	91.7% (8)	87.3% (7)	77.0% (5)	NA	81.1% (11)
Internet	80.5% (4)	75.4% (6)	71.8% (9)	90.8% (15)	79.2% (17)
Traditional	79.2% (6)	89.1% (22)	82.2% (14)	90.2% (10)	84.3% (31)

Future Research

- Comparison of different types of students within the courses
- Inferential statistics controlling for courses offered in a single modality or course session length
- Comparison of subjects across modalities or session lengths
- Evaluate fall-to-fall retention rates

Questions/Comments

Thank you for your time.