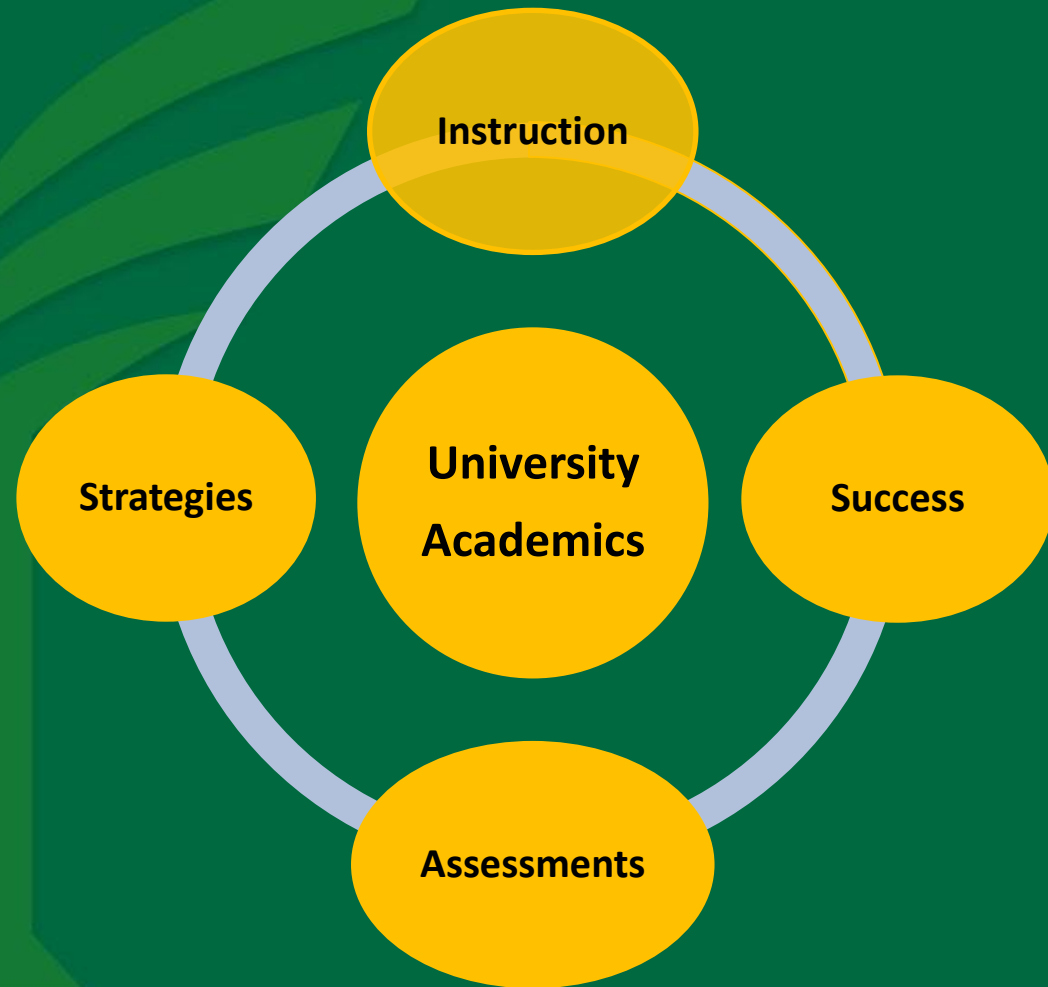


# Facilitating College Academics for Young Adults with Intellectual Disabilities



College of Education and Human Development

Graduate School of Education . School of Recreation, Health, and Tourism

# Purpose

This study explores the use of peer-assisted learning and mentoring to facilitate the comprehension of college level content and improve academic performance for students with intellectual disabilities (ID) and/or developmental disabilities (DD) who participate in a four-year university program.

# Introduction

Peer-assisted learning strategy (PALS) is a research-based practice using explicit instruction to promote comprehension of difficult/complex content. Commonly referred to as:

- Peer teaching
- Peer tutoring
- Peer modeling
- Peer monitoring
- Peer assessment
- Peer mentoring

# Consideration for Selection of PAL

- Context-environment/setting, structure
- Objectives- why implement PAL? To:
  - Improve academic success
  - Provide remediation
  - Foster collaborative learning
  - Practice principles of teaching & learning
- Curriculum area
- Selecting & matching participants-Near peers or with peers, Voluntary or mandatory,
  - Incentives, Fixed or reciprocal roles
- PAL technique-Peer teaching, Peer tutoring, Peer modeling, Peer monitoring, Peer assessment, or Peer mentoring
- Contact-who initiates, how many hours/sessions, where, and when
- Materials-textbooks, instructional strategies, work/study space
- Training-Written instructions, Verbal instructions, Demonstrations, Role playing, Guided practice
- Evaluation-feedback, progress reports, pre-assessment, and graded work.

Topping K. Peer Assisted Learning: a practical guide for teachers. Newton, MA: Brookline Books; 2001

# University Academic Courses-2011/2012

- Acting I and Acting II
- Aerobics/Basic Conditioning
- Basic Video Game Design
- Beginning Ballet
- Beginning Modern Dance
- Beginning Judo for Men and Women
- Beginning and Intermediate Yoga
- Elementary Arabic
- Elementary Japanese
- Foundations-Ecology/Evolution
- Intermediate Japanese
- Intermediate Swimming
- Interpersonal & Group Interaction
- Introduction to Artist Studio
- Introduction to Information Technology
- Introduction to Sports Management
- Introduction to Teaching
- Introduction to Technical Theater
- Introduction to Visual Arts
- Music - Piano and Viola
- Painting I
- Public Speaking
- Self-Defense for Men and Women
- Tai Chi
- Women/Gender Studies

# Sample Courses Selected for Study

- Computer Hardware Fundamentals– IT 212 \*
  - Conservation Biology– BIOL 318\*
  - Elementary Japanese – JAPA 110
  - Foundations of Ecology/Evolution – BIOL 302
  - Found. in Intercultural Comm– COMM 100
  - Interpersonal & Group Interaction – COMM 101
  - Introduction to Information Technology – IT 102
  - Introduction to The Artist Studio – AVT 103
  - Introduction to Teaching – EDUC 300
  - Human Growth & Development– EDUC 302\*
  - Introduction to Sports Management – SPMT 201
  - Video Game Design – GAME 210
- \*Denotes courses in fall 2012 using peer-assisted learning.**

# Methods

## Participants

- 9 young adults (18-23 yrs. old), 6 residential/3 commuter MLP college students, English speakers, intellectual/developmental disabilities. 1 independent, 6 with individual support, 1 with faculty support, and 1 with PI support.

## Setting

- College academic classrooms, study room, and computer classrooms/labs.



# Methods contd.

## Study design

- single-subject
- qualitative

## Materials

- Textbooks, computers, websites resources, visual aids, prepared outlines, guided notes, lecture notes, and outlines.



# Methods contd.

## Procedures

- Individual Support staff prepare outlines, study with students, take lecture notes, review lecture and course handouts with student, discuss, conduct pre-test, score assessments, and evaluate performance. Review study guide with students and determine readiness for formal quizzes/tests/exams/presentations/performances.
- Some participants MLP class or classes were waived and the participants received a modified MLP academic schedule.
- Each student had different accommodations such as preferred seating arrangement, extended time on work completion, preference in presentation time, mode, and assistance with managing technologies, reduced coursework, extended time on tests and exams, and excused absences due to illness or doctor appointments.

# Methods contd.

## Procedures contd.

- Copies of MLP students' completed coursework (independent and assisted) and feedback from professors (critique, graded work, concerns, and/or recommendations) are provided to the private investigator (PI).
- PI tracked students' progress and compiles descriptive data on the effectiveness of each strategy implemented for each student.
- Using the rubric below (figure 1), numerical data on the progress and quality of students' classroom participation, skill and knowledge development, and work completion was entered into an Excel spreadsheet (figure 2) for data analysis.

# Methods contd. – Rubric

Figure 1

## Rubric for Evaluating MLP Students UAC Weekly Activities

A=18-20 points, B=15-17 points, C=12-14 points, I (Incomplete)=1-11 points.



CRITERIA	BENCHMARKS				POINTS	
	1 Poor	2-4 Acceptable	5-6 Great	7 Exemplary	Possible	Earned
Participation	Shows little effort.	Participates sometimes.	Participates most of the time	Participates all the time.		
Skill and knowledge.	Still learning skills and acquiring knowledge.	Progressing in learning skills and has knowledge of concept.	Applying skills and improved knowledge.	Mastered skills and using the knowledge.		
Project, presentation, or performance.	Contents have several errors and/or are incomplete. Demonstrates little understanding.	Contents have few errors and/or are 50% complete. Demonstrates some understanding.	Contents are of good quality or are 80% complete. Demonstrates quality understanding.	Contents have minimal errors or are 95% complete. Demonstrates competent understanding.		
Total Points Possible	→→→→→	→→→→→→→→	→→→→→→	→→→→→→	<b>20</b>	

# Methods contd. – Data Chart

Figure 2

Progress of Comprehension Strategies for Participation in University Academic Courses

Participants	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14
1	10	8	9	11	9	15	8	11	13	13	16	16	16	16
2	9	9	9	16	16	16	16	16	16	16	16	16	16	16
3	8	11	11	13	15	17	17	18	16	18	18	18	16	18
4	11	13	15	15	16	16	18	16	18	13	16	18	16	18
5	18	15	16	18	18	18	18	18	18	17	16	18	18	18
6	19	13	15	18	18	18	18	18	18	18	18	18	18	18
7	18	17	19	18	18	18	18	18	16	16	16	18	18	18
8	18	16	13	13	13	11	11	10	15	9	16	16	16	16
9	18	18	18	16	16	16	15	15	15	18	18	18	18	18

Measured using descriptive rubric in figure 1 and translated into numerical data based on points earned each week.

18-20 points=A, 15-17 points=B, 12-14 points=C, 1-11 points=I (Incomplete)

# Intervention

- Prepared Outlines-summarize textbook content.
- Guided Notes-from the course professor or instructor.
- Explicit instruction.
- Lecture Notes-from the peer mentor/support .
- Individual tutoring sessions.
- Group sessions (same courses or assigned strategies).
- Implemented for 14 weeks.
- Minimum one hour per session.
- Several hours across weeks.
- Followed PALS strategies assigned each participant.

# Results

- Results of this study indicates that all students benefited from the strategies that was implemented for them.
- Students who utilized the peer mentor services appeared to have better comprehension of their UAC content, exhibit sustained level of interest in continuing their UAC, are motivated to complete all their UAC coursework, and initiated registration for a UAC course the following semester.

# Results contd.

Figure 2

**Progress of Comprehension Strategies for Participation in University Academic Courses**

Participants	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14
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2	9	9	9	16	16	16	16	16	16	16	16	16	16	16
3	8	11	11	13	15	17	17	18	16	18	18	18	16	18
4	11	13	15	15	16	16	18	16	18	13	16	18	16	18
5	18	15	16	18	18	18	18	18	18	17	16	18	18	18
6	19	13	15	18	18	18	18	18	18	18	18	18	18	18
7	18	17	19	18	18	18	18	18	16	16	16	18	18	18
8	18	16	13	13	13	11	11	10	15	9	16	16	16	16
9	18	18	18	16	16	16	15	15	15	18	18	18	18	18

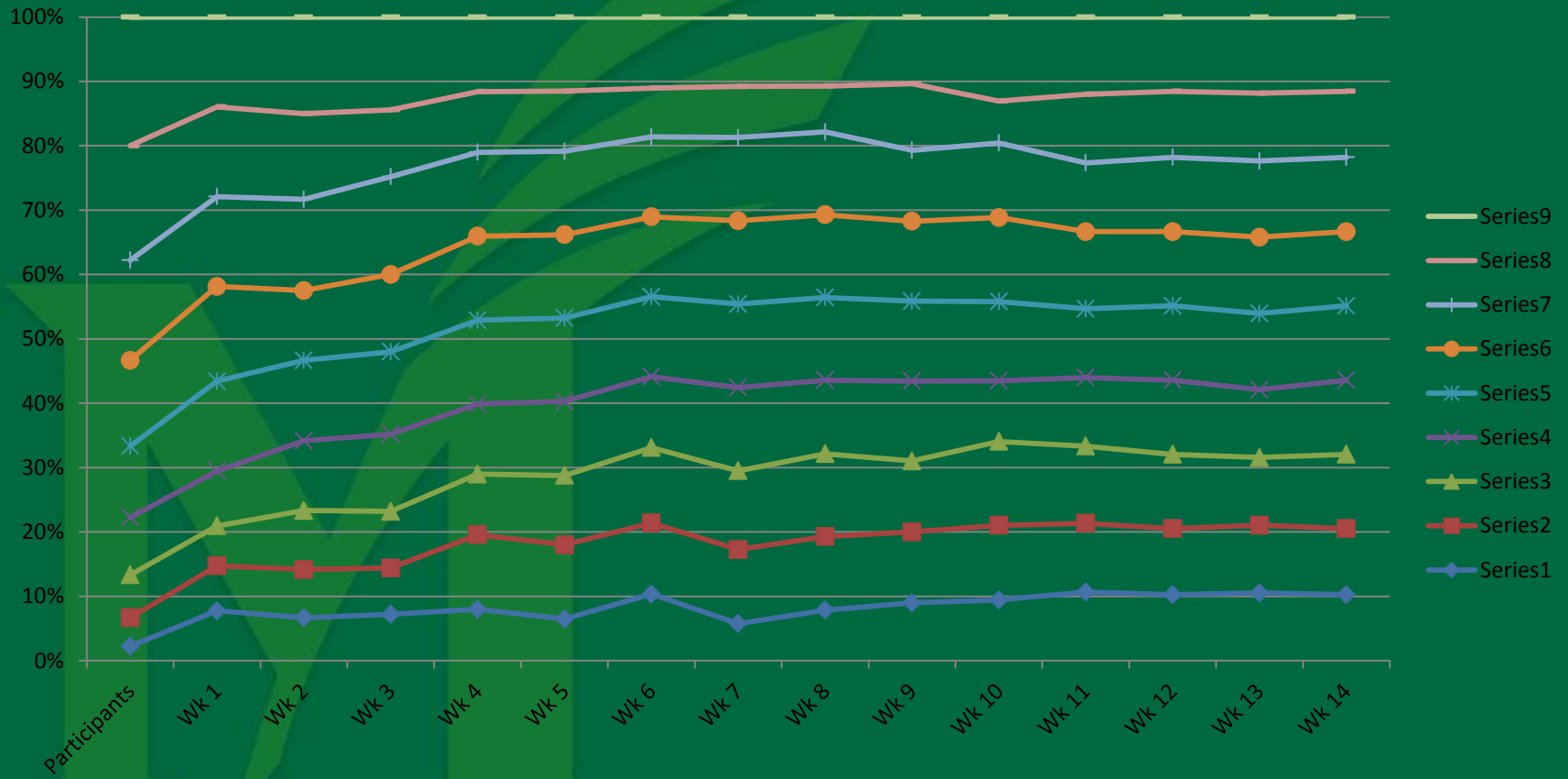
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# Results contd.

## Progress of Comprehension Strategies for Participation in University Academic Courses



# Conclusion/Discussion

- PALS enhanced comprehension for individuals with ID and DD.
- PALS is an effective strategy to close the achievement gap between students with ID/DD and their peers.
- PALS can be used for any subject.
- PALS can be used with any age group, in any setting.
- PALS skills can be generalized into non-skilled activities (remembering the rules for playing a game).
- PALS is a form of natural support.

# Limitations

- Schedule conflicts-peer mentor unavailable
- Participant absent, tardy, distracted, fatigue
- Missing materials-textbook, online access
- Matching challenges-classroom support vs. learning support
- Time constrains -8 a.m. to 4:30 p.m. due to participant's social activities

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