

# Direct Research Read Spec Ed

## SPED-7782

Fall 2022 Section E02 4 Credits 08/10/2022 to 12/09/2022 Modified 08/10/2022

### Description

In-depth readings of research articles related to special education practices.

#### Requisites

Prerequisites:

Corequisites:

### Contact Information

#### Dr. Elizabeth M. Pope

Email: [epope@westga.edu](mailto:epope@westga.edu)

Office: Education Annex #114

Phone: 678-839-6119

Website: [https://www.westga.edu/profile.php?emp\\_id=92155](https://www.westga.edu/profile.php?emp_id=92155) ([https://www.westga.edu/profile.php?emp\\_id=92155](https://www.westga.edu/profile.php?emp_id=92155))

#### Office Hours

Education Annex 114 & CourseDen/Zoom

I will have in-person and virtual office hours on the following days at the following times. I will be in my office and logged into a Zoom room. The days and times below are hyperlinked with the appropriate Zoom link (which you can also find in CourseDen):

- [Mondays from 1 PM to 3:30 PM \(https://www.westga.edu/zoom/j/86876454629?pwd=QzRNd3RTV0h6c0VHNTRUSG84U1dOQT09\)](https://www.westga.edu/zoom/j/86876454629?pwd=QzRNd3RTV0h6c0VHNTRUSG84U1dOQT09)
- [Thursdays from 1 PM to 3:30 PM \(https://www.westga.edu/zoom/j/81543165608?pwd=ZFY0cVVTa1M5SXhuRXF5M0NrY3ZDdz09\)](https://www.westga.edu/zoom/j/81543165608?pwd=ZFY0cVVTa1M5SXhuRXF5M0NrY3ZDdz09)

In addition to these times, I will also be in my office for in-person office hours on Mondays and Fridays from 8:30 AM to 11 AM. I will not be logged into a Zoom room at this time, but will be easily accessible through email and CourseDen.

If these days/times do not work for you and you would like to meet with me, please just send me an email!

### Meeting Times

- Asynchronous
- 100% Online

Instruction in this course will be delivered entirely online using UWG's CourseDen system. Proficiency using online tools such as discussion boards and chat rooms is required. Students are expected to use CourseDen for information and communication.

As this course will be delivered 100% online, this requires the online equivalent of 2250 minutes of instruction (seat-time).

Additionally, it is anticipated that students will need to work independently for twice the number minutes listed above to complete the

online activities, hence requiring an additional 4500 minutes of supporting efforts from students. As such, students will be required to complete the following online activities during this course:

#### Activity Instructional Equivalent

Discussion Posts	720 minutes
Audio/video Instruction	420 minutes
Online Assignments	1110 minutes

## Materials

---

### Single Case Research Methodology: Applications in Special Education and Behavioral Sciences

**Author:** Jennifer R. Ledford & David L. Gast (Eds)

**Publisher:** Routledge

**Edition:** 3rd

**Availability:** UWG Library

The link to this textbook are in CourseDen.

### Other Required Materials

All required readings and videos will be made available through CourseDen.

## Outcomes

---

The student will:

1. Identify basic elements and strategies of single-subject research, including designs and analysis techniques (Alberto & Troutman, 2013; Kennedy, 2005; Richards, Taylor, Ramasamy, & Richards, 1999) [CEC standards: 3, 4];
2. Identify an appropriate single-subject research design based on their research question and goals (Alberto & Troutman, 2013; Kennedy, 2005; Richards, Taylor, Ramasamy, & Richards, 1999) [CEC standards: 3, 4];
3. Demonstrate knowledge of the pros and cons of different single-subject research designs (Alberto & Troutman, 2013; Kennedy, 2005; Richards, Taylor, Ramasamy, & Richards, 1999) [CEC standards: 3, 4];
4. Write observable and measurable research questions (Alberto & Troutman, 2013; Kennedy, 2005; Richards, Taylor, Ramasamy, & Richards, 1999) [CEC standards: 3];
5. Demonstrate understanding of the IRB process and the importance of IRB approval and CITI training as it relates to ethical research practices (Alberto & Troutman, 2013; Kennedy, 2005; Richards, Taylor, Ramasamy, & Richards, 1999) [CEC standards: 3].

## Evaluation

---

### Criteria

Assignments vary in their level of complexity and length. As such, the time required to provide feedback on assignments can vary as well. In most situations, for reliability purposes, grading of assignments will not commence until after the due date. Every effort will be made to return graded assignments in a timely fashion (within 1-2 weeks).

The grading scheme in this course will follow the University's grading policy for graduate students. For information on the grading policy, [please follow this link \(https://catalog.westga.edu/content.php?catoid=4&navoid=175#grading-system-for-graduate-students\)](https://catalog.westga.edu/content.php?catoid=4&navoid=175#grading-system-for-graduate-students).

Generally, the grade breakdown is:

- 90-100 is an A (Superior Scholarship)

- 80-89 is a B (Average Performance)
- 70-79 is a C (Below Average Performance)
- 69 and below is an F (Below Average Performance)

## Assignments

I will evaluate your performance in this class based on the assignments below (for which there are additional details in CourseDen). All work submitted for this course must represent original work developed by you for this course during this semester. Any work that does not meet these criteria will earn an automatic zero.

This course is the first course in a research sequence. In this sequence, you are designing and conducting a single-subject research study based on an area of your interest in special education. In this course, SPED 7782, you are developing a plan for your single-subject study and presenting a slide show expressing that plan. The second course in this sequence is SPED 8783 during which time you will conduct the study you design in SPED 7782. So, in this course you are merely planning and preparing for your study, you are not actually doing it yet.

I encourage you to select a topic for your study that you find interesting and one that could actually prove beneficial in your professional setting(s). Please feel free to meet with me to discuss or clarify the direction of the project at any point during the semester! The assignments discussed below are intended to help build this project.

ASSIGNMENT	OBJ	%	ASSESSMENT	SUBMIT VIA	DUE DATE
Mandatory Meeting	NA	5	Attendance	Zoom Meeting	August 11 @ 4 PM
Syllabus Quiz	NA	5	Answer Key	CourseDen Quizzes	August 14 by 11:59 PM
Discussions	1-5	50	Rubric	CourseDen Discussion Boards	Various - See Course Schedule
Design Quizzes	1 & 3	20	Answer Key	CourseDen Quizzes	Various - See Course Schedule
Research Proposal Presentation	1-5	20	Rubric	CourseDen Discussion Board	September 26 by 11:59 PM

### Mandatory Course Meeting (5%)

There is one mandatory meeting this semester. We will meet virtually, through Zoom. In this meeting, I will introduce the course content, purpose, and assignments. I will review the syllabus and answer any questions you have. I scheduled this meeting so that you would have time to begin reviewing course materials yet do not have to have taken the Syllabus Quiz yet should you like to do so after the meeting. [The link to the room is here \(https://westga-edu.zoom.us/j/86478273908?pwd=RnVvcmsrOUxEQmlld2t5TlZWSy9jQT09\)](https://westga-edu.zoom.us/j/86478273908?pwd=RnVvcmsrOUxEQmlld2t5TlZWSy9jQT09). I've also sent everyone calendar invitations through Google Calendar.

If you are unable to attend this meeting, you must view the recording and submit a 1-page response following guidelines in the CourseDen dropbox no later than the specified due date.

### Syllabus Quiz (5%)

The syllabus is one of the most important documents created for this course. It's almost like a contract and it outlines all expectations and requirements for the course. To be sure you read and understand the syllabus (and what you'll be expected to do this semester), you're required to complete a quiz in CourseDen. Read the syllabus carefully and take the quiz before midnight on the due date. You will have 2 tries to complete the quiz and the highest of the 2 grades will be your final score. More information is available in CourseDen.

### Discussions (50%)

Online discussions allow students to share thoughts, exchange ideas, and consider new perspectives. It is my intent that these discussions will promote virtual interaction thus leading to a more interactive learning environment. I expect that you will monitor CourseDen regularly and respond appropriately to discussions.

There will be 5 discussion posts required this semester. I will provide the prompt for each discussion which I intend to encourage reflection and critical thinking based on the course readings. They will also encourage you to apply course material to your own work in the course. The discussions are also an important opportunity for you to receive feedback, from myself and your peers, on the slides for your final presentation.

Each one of you is expected to individually provide constructive feedback to your peers by replying to at least 2 other discussion threads no more than 48 hours after the initial post is due. More information about this assignment will be available on CourseDen.

## Design Quizzes (20%)

Of key importance in this course is that you are able to identify major elements that distinguish the various single-subject research designs we will cover in this class. You'll be designing your own studies based on these characteristics, so knowledge of them is essential. To assess your knowledge, you will complete 4 design critique quizzes. You will have 2 chances to complete the quiz and the highest of the two grades will be your final grade.

Please see additional information available in CourseDen and the Course Schedule for due dates.

## Research Proposal Presentation (20%)

This assignment is your opportunity to present your plan for your research project that you will complete in SPED 8783. In this assignment, you will create an audio-recorded presentation that will be shared through a discussion board in CourseDen. Think of this as a virtual class presentation. In this assignment you will introduce your topic, your research problem, your research question, review the literature, and explain the design of your single-subject research study. More information and a rubric for this assignment are available in CourseDen.

## Schedule

This schedule offers a complete list of reading assignments and learning activities for each week as part of the corresponding module on CourseDen. Modules each last 1 week. Modules will open once students have completed each item on the checklist from the previous module. The checklists ensure students have completed all required activities before moving forward.

I structured the course this way to allow flexibility - students will be able to move ahead if they wish. A word of caution - much of the course involves concurrent dialogue and interaction between students and the instructor on consistent and timely topics. I encourage you to remain on the prescribed schedule for the course as best as you can. This will ensure that you neither fall behind nor get too far ahead of your peers.

Due dates are included in blue on the schedule.

When	Topic	Notes
Week 1: Aug. 10-16	Course Information & Module 1: Introduction to Single-Subject Research & Research Ethics	<p>Required Readings:</p> <ul style="list-style-type: none"> <li>Syllabus</li> <li>Course Information (Start Here!) Module</li> <li>Readings &amp; Viewings in CourseDen</li> </ul> <p><b>Mandatory Course Meeting on Thursday, August 11th @ 4 PM (make-up paragraphs due Sunday, August 14th by 11:59 PM)</b></p> <p><b>D1 due Friday, August 12th by 11:59 PM (replies due Sunday, August 15th by 11:59 PM)</b></p> <p><b>Syllabus Quiz due Sunday, August 14th by 11:59 PM</b></p>
Week 2: Aug. 17-23	Module 2: Research Problems & Variables	<p>Required readings &amp; viewings provided in CourseDen.</p> <p><b>D2 due Monday, August 22nd by 11:59 PM (replies due Wednesday, August 24th by 11:59 PM)</b></p>

When	Topic	Notes
Week 3: Aug. 24-30	Module 3: Literature Reviews, Research Questions, & ABAB Designs	Required readings & viewings in CourseDen.  <b>ABAB Design Quiz due Friday, August 26th by 11:59 PM</b>  <b>D3 due Monday, August 29th by 11:59 PM (replies due Wednesday, August 31st by 11:59 PM)</b>
Week 4: Aug. 31-Sept. 6	Module 4: Multiple Baseline Designs	Required readings & viewings in CourseDen.  <b>Multiple Baseline/Probe Quiz due Monday, September 5th by 11:59 PM</b>
Week 5: Sept. 7-13	Module 5: Alternating Treatment Designs	Required readings & viewings in CourseDen.  <b>Alternating Treatments Design Quiz due Friday, September 9th by 11:59 PM</b>  <b>Midpoint evaluations due Sunday, September 11th by 11:59 PM (voluntary)</b>  <b>D4 due Monday, September 12th by 11:59 PM (replies due Wednesday, September 14th by 11:59 PM)</b>
Week 6: Sept. 14-20	Module 6: Changing Criterion Designs & Graphing Data	Required readings & viewings in CourseDen  <b>Changing Criterion Design Quiz due Friday, September 16th by 11:59 PM</b>  <b>D5 due Monday, September 19th by 11:59 PM (replies due Wednesday, September 21st by 11:59 PM)</b>
Week 7: Sept. 21-27	Module 7: Presenting Academic Research	Required readings & viewings in CourseDen.  <b>Research Presentation Proposal due Monday, September 26th by 11:59 PM</b>

## \* Course Policies and Resources

### Technological Prerequisites & Skills

In this course, you will be required to have competence with certain technology such as a basic knowledge of computers, email, and online access. This includes but is not limited to access to:

- High-speed internet
- A working computer (with speakers, headset, and microphone) and free disk space
- A computer operating system compatible with the LMS (CourseDen)
- Microsoft Office or comparable word processing software (as a UWG student, you have complete access to [Microsoft Office 365](#))
- A printer

As this course will occur completely in CourseDen, you must have working knowledge for competent navigation of the LMS. Please contact UWG Online Support if you have any technical issues with the LMS over the course of the semester.

### Academic Honesty

This university requires students to adhere to the highest standards of academic integrity and expects them to encourage others to do the same. I have a strong respect for academic integrity and academic dishonesty will not be tolerated in this course. All work completed in this course must be students' original work developed this semester. Students are expected to adhere to the highest standards of academic honesty. Examples of plagiarism and academic dishonesty include (but are not limited to):

1. When a student uses or purchases ghostwritten papers;
2. When a student utilizes ideas or information obtained from another person without giving credit to that person;
3. When a student uses an assignment (in full or part) created for one class as a new assignment in a second class.

Plagiarism or another act of academic dishonesty on any assignment will result in the student earning a zero on the assignment. The student will also be reported to the Office of Community Standards as violating UWG's Academic Honesty Policy. Students should all review the academic misconduct policy as stated in the latest Student Handbook and the Graduate Catalog.

## Attendance

Attendance will include participation in online discussions and through email. Students who are absent from CourseDen bear the responsibility of notifying me and keeping up with class materials and assignments.

## Extra Credit

Students will earn one point of extra credit added to their final course grade for completing course evaluations. One-half of a point will be earned for completing the midpoint evaluation and one-half of a point for completing the final course evaluation.

Midpoint evaluations will be completed in Qualtrics, [the link for which can be found here](https://westga.co1.qualtrics.com/jfe/form/SV_3QtLpYtywq2xbJY) ([https://westga.co1.qualtrics.com/jfe/form/SV\\_3QtLpYtywq2xbJY](https://westga.co1.qualtrics.com/jfe/form/SV_3QtLpYtywq2xbJY)). The survey will open on September 1st and will close on September 11th. Students must submit a screenshot of the "Thank You" message that appears at the end of the survey to a dropbox in CourseDen to earn credit for completing the evaluation.

For final course evaluations, students must send proof of survey completion from the CourseEval system to earn credit. Instructions to do so [can be found here](#).

## Late Work

**Late Work Policy:** Students who are absent from CourseDen bear the responsibility of notifying me and keeping up with class materials and assignments. Students should keep in mind that due dates are intended to set a pace and structure for this course. Assignments submitted after the due date will be penalized ten percent (10%) for each day after the due date. I do not accept late work more than 5 days late. Assignments submitted late are not guaranteed detailed feedback.

Failure to submit an assignment will result in a zero grade for the assignment. If you know you will have a conflict with an assignment deadline, please email me as soon as possible beforehand. If you have an unexpected conflict leading to a late submission, please contact me to discuss exemption from late penalization. Otherwise, I will not be able to provide you with assistance or an extension out of respect for your classmates.

**Mulligan System:** While I'm always willing to work with you when life gets in the way of assignments, sometimes we just forget or drop the ball (or, quite honestly, never pick up the ball...). With that in mind, I have a "mulligan system" in which everyone gets one mulligan for late work. This means that you may submit one assignment up to 3 days late with no penalty. After the 3 days, the normal late work policy takes effect. If you would like to take your mulligan, you must email me when you submit the late assignment and let me know you're using your mulligan.

## Professional Conduct

Professionalism is essential for all graduate students and is expected in graduate education. Professional dispositions promote class interaction and facilitate learning. Professional expectations for this course include:

- Reading all assigned readings and completing all assignments each week.
- Participating and interacting in online discussions to contribute and enhance learning for everyone.
- Treating colleagues and the instructor with respect. This includes respecting differences in opinions that may arise and engaging in professional and respectful dialogue.
- Asking questions of colleagues and the instructor; and offering insight and assistance to those with questions.

## Course Changes

This syllabus is a binding document. However, changes to the syllabus or schedule may be required, including changes to assignments, readings, and/or due dates, in order to best accommodate the needs of the class as a whole and fulfill the goals of this course. Students will be informed of all changes in a timely manner.

## Communication Rules

There are etiquette expectations for online learning contexts. Students are expected to abide by class policies and procedures.

They are expected to treat faculty and other students in a respectful, professional manner. We all have something to learn from each other. I expect a willingness to engage with diverse opinions and views that may be uncomfortable or disorienting for you. **Abusive behavior will not be tolerated.** In all academic discussions, it is crucial to maintain an open mind and be respectful within discussions. Sincerity and thoughtfulness in the expression of your ideas and opinions will contribute greatly to an engaging and secure classroom environment.

Communication in an online class takes special consideration. Please read the short list of tips below:

- Be sensitive and reflective to what others are saying.
- Don't use all caps. It is the equivalent of screaming.
- Don't flame - These are outbursts of extreme emotion or opinion.
- Think before you hit the post (enter/reply) button. You can't take it back!
- Don't use offensive language.
- Use clear subject lines.
- Don't use abbreviations or acronyms unless the entire class knows them.
- Be forgiving. Anyone can make a mistake.
- Keep the dialogue collegial and professional.

## Expected Response Times

University of West Georgia students are provided a MyUWG email account. It is the student's responsibility to check this email account for important, University-related information. The primary means of communication between instructor and students in this course will be through the CourseDen, my.westga.edu email, and the Announcements feature in CourseDen. Students are responsible for knowing how to access email within the CourseDen system and for checking email and Announcements postings regularly.

I will respond to emails usually within 24 hours. Any emails sent after 5 PM will typically be answered on the next day. On weekends and/or when I'm away from campus (i.e. at a conference, workshop, etc.) my response to email will be irregular. Additional methods of communication include calling the office phone number listed on this syllabus or attending in-person office hours. You may also contact me about setting up meetings (virtually or in-person) outside of office hours if those times do not work for you.

## College/School Policies

---

### College of Education Vision

The College of Education at the University of West Georgia will be recognized for *Innovation in Teaching, Leadership, and Wellness* with programs designed to transform lives and contribute to the betterment of society.

### College of Education Mission

Locally connected and globally relevant, the Mission of the College of Education is to prepare graduates for professional careers in diverse settings within three dynamic areas of focus: *Teaching, Leadership, and Wellness*. With programs that range from undergraduate through doctoral study, the College of Education is committed to excellence in pedagogy, professional service, engaged partnerships, and applied research.

### Diversity and Inclusion Statement for the College of Education

The College of Education (COE) embraces diversity across dimensions, including, but not limited to, age, religion, creed, education, ethnicity, gender expression, national origin, physical and cognitive ability, race, sex, sexual orientation, socioeconomic class, and veteran status. Building on these identities, we support empathy, social and environmental justice, and an ethical framework for our actions. In accordance with the University of West Georgia and all of our departments, the COE denounces institutional and systemic racism and other forms of biases and is committed to taking actionable steps toward dismantling these systems and working toward equity and inclusion. The full COE Diversity and Inclusion Statement may be viewed on the website homepage of the College of Education.

## Institutional Policies

---

## Academic Support

**Accessibility Services:** Students with a documented disability may work with UWG Accessibility Services to receive essential services specific to their disability. All entitlements to accommodations are based on documentation and USG Board of Regents standards. If a student needs course adaptations or accommodations because of a disability or chronic illness, or if he/she needs to make special arrangements in case the building must be evacuated, the student should notify his/her instructor in writing and provide a copy of his/her Student Accommodations Report (SAR), which is available only from Accessibility Services. Faculty cannot offer accommodations without timely receipt of the SAR; further, no retroactive accommodations will be given. For more information, please contact [Accessibility Services \(https://www.westga.edu/student-services/counseling/accessibility-services.php\)](https://www.westga.edu/student-services/counseling/accessibility-services.php).

**Center for Academic Success:** The [Center for Academic Success \(http://www.westga.edu/cas/\)](http://www.westga.edu/cas/) provides services, programs, and opportunities to help all undergraduate students succeed academically. For more information, contact them: 678-839-6280 or [cas@westga.edu](mailto:cas@westga.edu).

**University Writing Center:** The [University Writing Center \(https://www.westga.edu/writing/\)](https://www.westga.edu/writing/) assists students with all areas of the writing process. For more information, contact them: 678-839-6513 or [writing@westga.edu](mailto:writing@westga.edu).

## Online Courses

UWG takes students' privacy concerns seriously: technology-enhanced and partially and fully online courses use sites and entities beyond UWG and students have the right to know the privacy policies of these entities. For help with your online classes, additional online tutoring and other student success services, information on privacy and accessibility, and technology requirements, visit this [UWG Online \(https://uwgonline.service-now.com/kb/\)](https://uwgonline.service-now.com/kb/) Help site.

Students enrolled in online courses can find answers to many of their questions in the [Online/Off-Campus Student Guide \(http://uwgonline.westga.edu/online-student-guide.php\)](http://uwgonline.westga.edu/online-student-guide.php).

## Honor Code

At the University of West Georgia, we believe that academic and personal integrity are based upon honesty, trust, fairness, respect, and responsibility. Students at West Georgia assume responsibility for upholding the Honor Code. West Georgia students pledge to refrain from engaging in acts that do not maintain academic and personal integrity. These include, but are not limited to plagiarism\*, cheating\*, fabrications\*, aid of academic dishonesty, lying, bribery or threats, and stealing. When a student chooses to enroll at the University of West Georgia students pledge the following:

*Having read the honor code of UWG, I understand and accept my responsibility to uphold the values and beliefs described, and to conduct myself in a manner that will reflect the values of the institution in such a way as to respect the rights of all UWG community members. As a UWG student, I will represent myself truthfully and complete all academic assignments honestly.*

*I understand that if I violate this code, I will accept the penalties imposed, should I be found responsible for violations through the processes due to me as a University community member. These penalties may include expulsion from the University. I also recognize that my responsibility includes willingness to confront members of the University community, if I feel there has been a violation of the Honor Code.*

For more information on the University of West Georgia Honor Code, please visit the [Office of Community Standards \(https://www.westga.edu/administration/vpsa/ocs/index.php\)](https://www.westga.edu/administration/vpsa/ocs/index.php) site.

## UWG Email Policy

University of West Georgia students are provided a MyUWG e-mail account. The University considers this account to be an official means of communication between the University and the student. The purpose of the official use of the student e-mail account is to provide an effective means of communicating important university related information to UWG students in a timely manner. It is the student's responsibility to check their email.

## Credit Hour Policy

The University of West Georgia grants one semester hour of credit for work equivalent to a minimum of one hour (50 minutes) of in-class or other direct faculty instruction AND two hours of student work outside of class per week for approximately fifteen

weeks. For each course, the course syllabus will document the amount of in-class (or other direct faculty instruction) and out-of-class work required to earn the credit hour(s) assigned to the course. Out-of-class work will include all forms of credit-bearing activity, including but not limited to assignments, readings, observations, and musical practice. Where available, the university grants academic credit for students who verify via competency-based testing, that they have accomplished the learning outcomes associated with a course that would normally meet the requirements outlined above (e.g. AP credit, CLEP, and departmental exams).

## HB 280 (Campus Carry)

UWG follows University System of Georgia (USG) guidance: [http://www.usg.edu/hb280/additional\\_information#](http://www.usg.edu/hb280/additional_information#) ([http://www.usg.edu/hb280/additional\\_information](http://www.usg.edu/hb280/additional_information))

You may also visit our website for help with USG Guidance: <https://www.westga.edu/police/campus-carry.php> (<https://www.westga.edu/police/campus-carry.php>)

## Mental Health Support

If you or another student find that you are experiencing a mental health issue, free confidential services are available on campus in the [Counseling Center](#). Students who have experienced sexual or domestic violence may receive confidential medical and advocacy services with the Patient Advocates in [Health Services](#). To report a concern anonymously, please go to [UWGcares](#).

[Online counseling \(https://www.westga.edu/student-services/counseling/index.php\)](https://www.westga.edu/student-services/counseling/index.php) is also available for online students.

## ELL Resources

If you are a student having difficulty with English language skills, and / or U.S. culture is not your home culture, specialized resources are available to help you succeed. Please visit the [E.L.L. resource page](#) for more information.

## COVID-19

The University System of Georgia recognizes COVID-19 vaccines offer safe, effective protection and urges all students, faculty, staff, and visitors to get vaccinated either on campus or with a local provider.

## Additional Items

---

I have organized and designed this course in conjunction with Dr. James Schwab, Dr. Phillip Grant, Dr. Marsha Simon, Dr. Lauren Rollins, and Dr. Katy Green. I offer my appreciate for their collaboration and expertise.