

# RESEARCH BRIEF



TEXAS A&M UNIVERSITY

Center for Research & Development in  
Dual Language & Literacy Acquisition



TEXAS A&M UNIVERSITY

Education Leadership  
Research Center

## Component 1: Master's Degree in Educational Administration

Beverly J. Irby, Ed.D., Rafael Lara-Alecio, Ph.D., Fuhui Tong, Ph.D., Laura Cajiao-Wingenbach, Ph.D., Elsa Villarreal, Ph.D., Zihan Geng, & Mikaela Spooner

### Introduction

Over three years, 100 school leaders were recruited across Texas to earn their M.Ed. in Education Administration, along with Texas English as a second language (ESL) teacher certification (Exam #154), an Texas principal certification (TExES #268, PASL #368). These new qualifications will serve as preparation to lead campuses and influence policy in districts that serve diverse learners, particularly those with English learners (EL) and low-income schools. This program was formatted as an online cohort model with an accelerated pace of four semesters (including summer), and participants could remain in a full-time teaching role.



Figure 1. APLUS graduation ceremony (TAMU ELRC Facebook, 2019)

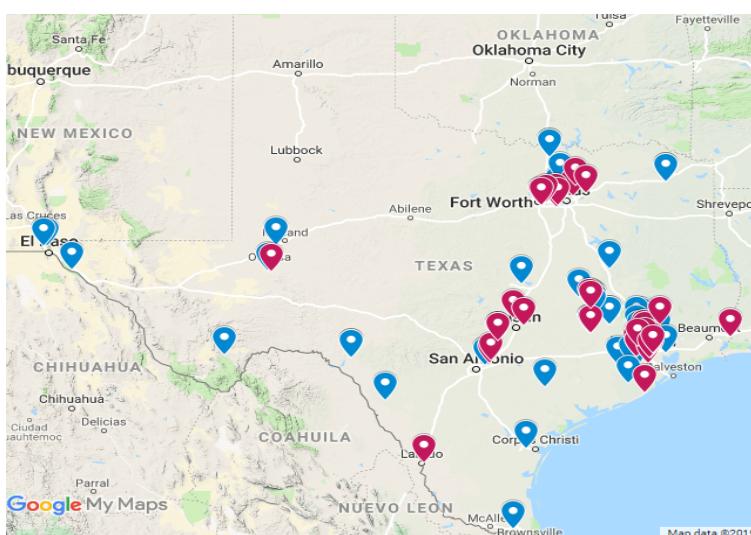


Figure 2. Map of APLUS school districts across Texas. The blue represents Cohort 1, and red is Cohort 2.

### Cohorts 1 and 2

Cohort 1 started in fall 2018 with 47 participants, who graduated fall 2019.

Cohort 2 launched in summer 2019, consisting of 5 participants. They graduated in summer 2020.

### APLUS Master's Program Online Course Sequence

This program was formatted as an online cohort model with an accelerated pace of four semesters (including summer). Courses were taught in a five-week consecutive sequence, with the exception of summer courses. The summer courses were offered simultaneously within a ten-week period.

The program course sequence is on the next page.

**Table 1***APLUS Master's Program Course Sequence*

	<b>Course Number</b>	<b>APLUS Master's Program Course Sequence</b>	<b>Credit Hours</b>
<b>First Semester</b>	EDAD 687	Principles of Professional Practice in Education	3
	BIED 614	Bilingual Education Curriculum Development	3
	BIED 632	Research in Second Language Education	3
<b>Second Semester</b>	<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
	BIED 689	Special Topics: Programs Serving ELs in High-needs Campuses for Administrators	3
	EDAD 605	School Principalship	3
	EDAD 635	Administration of Special Services	3
<b>Third Semester</b>	EDAD 684	Internship	1
	<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
	EDAD 609	Public School Laws	3
	EDAD 638	Developing School and Community Partnerships	3
<b>Fourth Semester</b>	EDAD 624	Administration of Special Populations & Special Programs	3
	EDAD 684	Internship (Summer Residency for Cohort 1)	1
	<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
	EDAD 606	Instructional Leadership Development	3
	EDAD 608	K-12 Finance & Budgeting	3
	EDAD 684	Practicum (Summer Residency for Cohort 2)	1

**Replicable, Standards-aligned, and Competency-based M.Ed. Program**

With the cooperation of the university faculty, course alignment and competency-based curriculum, campus-level practicum residency, and mentoring/coaching were developed for aspiring principals. We ensured that the curriculum covered all the principal competencies stated in the Texas Examinations of Educator Standards. Field-based activities were offered for the students to implement new knowledge and skills into real-world practice. Different rigorous assessment methods (e.g., class participation, papers, presentations, and practicums) were used to assess students' learning outcomes.

**Virtual Mentoring and Coaching**

Two virtual mentors/coaches (VMC) with K-12 school administrator experience supported the master's students through their coursework. The virtual coaches met with students biweekly for up to an hour to discuss coursework and fieldwork. Videos of the coaching sessional were recorded with GoToMeeting video conferencing software.

Leadership-related topics that emerged from the VMC sessions included:

- developing a realistic and actionable school vision,
- evaluating and interpreting student performance,
- creating a collaborative working environment,
- building a responsive learning environment based on students' diverse backgrounds,
- supporting ELs,
- multi-task management, and
- teacher observations.

We also evaluated the overall quality of the VMC intervention through a self-report survey. Among 24 participants in Cohort 1 treat group group, 95.75% of them rated VMC at the highest level (Mean=4.7, SD=0.1). The top three most effective and beneficial learning areas identified were situational problem solving, operational management, and leadership communication. They reported that their coach built a safe and comfortable communication environment (95.65%), and they were satisfied with the strategies the coaches used to enhance their understanding of leadership learning (91.3%).

## Mentoring and Coaching

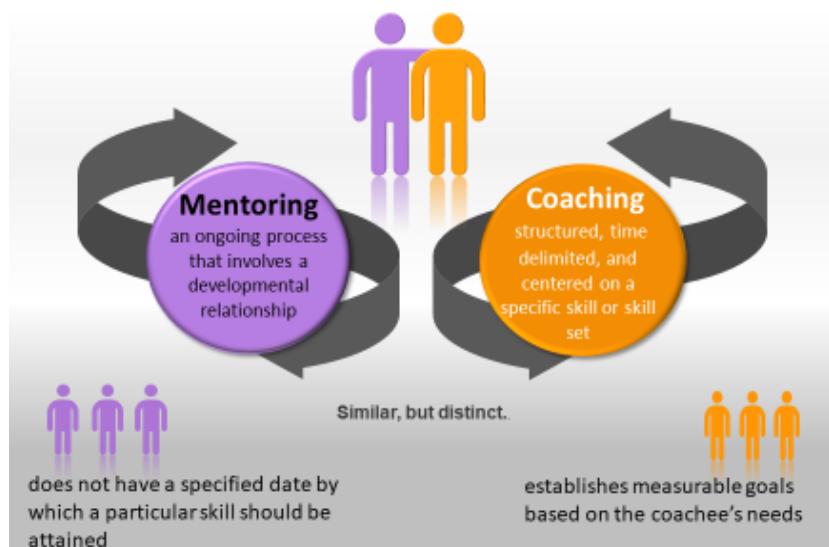
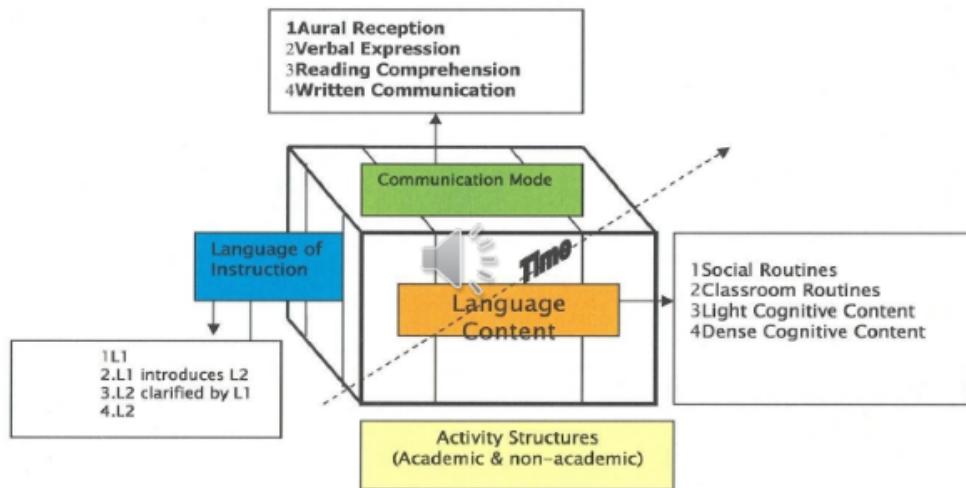


Figure 3. Mentoring and coaching concept

### Transitional Bilingual Observation Protocol (TBOP)

TBOP is an instrument utilized by principal candidates to observe teachers' instruction based on a low-inference teacher observation scale. TBOP was also used to determine the level of quality of principal candidate competency and outcome-based instructional feedback for the observed teachers based on differences between treatment principal candidates (those who had VMC) and control (without VMC).

## Teacher/Classroom Characteristics Theory



Four Dimensional Transitional Bilingual Pedagogical Theory (Lara-Alecio & Parker, 1994)

Figure 4. TBOP Model (Lara-Alecio & Parker, 1994; reprinted with permission)

## Differences Between Treatment and Control on TBOP Performance

The clinical supervision involved three stages: (a) pre-observation conference, (b) observation, and (c) post-observation conference. During the pre/post conferences, the candidate met with the teacher to discuss the observation. After the clinical supervision, candidates submitted a reflection cycle report per observation.

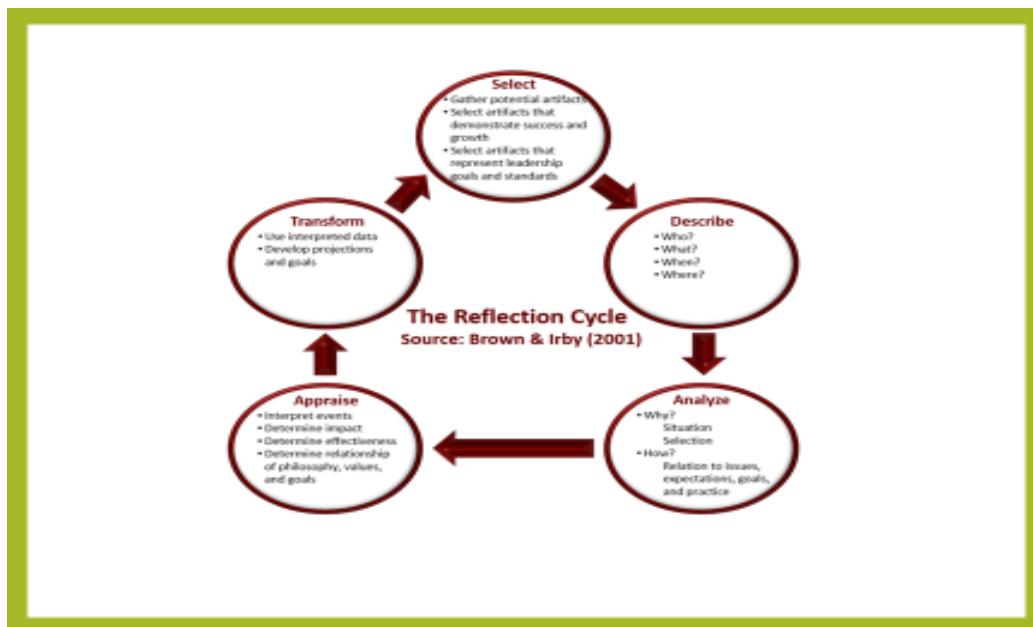


Figure 5. The Reflection Cycle framework (Brown & Irby, 2001; reprinted with permission)

The average score was 46.13 ( $SD=0.38$ ) for the treatment (T) group, and 45.82 ( $SD=0.44$ ) for the control (C) group, suggesting that the T group demonstrated consistently better performance than the C group. Although there was no statistically significant difference between the two groups in the independent  $t$ -test results ( $t(44)=0.5$ ;  $p=0.6$ ), the qualitative analysis of the candidates' Reflection Cycle reports revealed great differences between the T and the C groups.

## Qualitative Differences Between Treatment and Control in Reflection Cycle Reports

### Pre-conference

- While the C group simply informed the teacher about the observation, the T group specifically clarified the purpose and the objectives of the observation. Many candidates from the T group also discussed the lesson plan with the teacher.

### Post-conference

- Both T and C groups praised the teachers about their areas of strength and provided suggestions. Nevertheless, the T group candidates were able to analyze the observation in-depth by assisting the teacher in conducting his or her own reflection on the lesson, analyzing specific examples, and providing constructive feedback.
- Most candidates from the T group reflected on how the use of the observation protocol may promote continuous improvement for teachers in classrooms as well as direct and improve students' learning accordingly, which was notably absent in the reports from the C group.

## **Parent and Family Engagement Systematic Plans and Community Engagement Plans**

Parent and family engagement systematic plans and community engagement plans from both Cohorts 1 and 2 were developed, implemented, and collected in the following course: EDAD 638-Developing School and Community Partnerships. Examples of the service projects included conducting Spanish translations, implementation of literacy curriculum for ELs, and coordination of community outreach activities.

For Cohort 1, a total of 46 parent and family engagement plans were collected (22 – T group and 24 – C group). For Cohort 2, a total of 49 parent/family and community engagement plans were submitted (26 – T group & 23 – C group). One participant's plan was pending due to extenuating circumstances. The plans were evaluated based on a rubric (on a four-point Likert scale) that included the following domains: (a) community identification, (b) rationale for the service, (c) family/community engagement, (d) EL profile, (e) dissemination, (f) multicultural activities, (g) advocacy plan, and (h) implementation.

## **Differences Between Treatment and Control on Parent and Family Engagement Plans**

### **Cohort 1**

The descriptive statistics indicated that the average score was 3.07 (SD=0.38) for the T group, and 2.79 (SD=0.42) for the C group, suggesting that the T group had consistently better performance than the C group. The independent *t*-test results revealed a statistically significant difference between participants' performance on the engagement plans. Further analysis of the scores across each domain showed that the T group outperformed the C group across all eight domains.

### **Cohort 2**

The descriptive statistics indicated that the average score was 2.86 (SD=0.47) for the T group, and 2.61 (SD=0.39) for the C group, suggesting that the T group slightly outperformed the C group. There was no statistically significant difference between the two groups found with the independent *t*-test results ( $t(47)=2.01$ ,  $p=0.05$ ); however, the T group outperformed the C group in terms of assessing community resources, noting the imperative role of ELs' and/or economically challenged students' families and providing multiple ways of family/community engagement.

## **Student Action Resource Plans**

In order to enhance the understanding of culturally and linguistically responsive leadership, pre-service principals were required to analyze the current curriculum at their schools and develop a dual language (DL) model to facilitate ELs' learning in a particular school setting. Student action research projects from both Cohorts 1 and 2 were developed, implemented, and collected in the following two courses: BIED 614: Research in Secondary Language Education and BIED 632 Special Topics: Programs Serving English Learners (ELs) in High-need Campuses for Administrators. Action research reports were evaluated based on a rubric (on a four-point Likert scale) that included the following domains: (a) problem identification, (b) significance of study, (c) research-base evidence, (d) DL model plan presentation, and (e) evaluation and implementation.

## **Differences Between Treatment and Control on Differences in Dual Language Models**

### **Cohort 1**

For Cohort 1, a total of 46 action research reports were collected (24 - T group and 22 - C group). The descriptive statistics indicated that the average score was 3.63 (SD=0.28) for the T group, and 2.73 (SD=0.54) for the C group. An independent *t*-test was completed to compare the mean scores between the two groups. The results showed that the T group significantly outperformed the C group ( $t(44)=7.11$ ,  $p=0.001$ ,  $d=2.10$ ).

- The T group participants were able to identify and provide more insightful and accurate description of the challenges they encountered at their schools.
- T participants' evaluation of the DL model was more systematic than those from C group.
- More comprehensive and accurate plans for future implementation of the revised DL models were addressed more often by participants in the T group.

## **Cohort 2**

For Cohort 2, a total of 50 action research reports were collected (26 - T group and 24 - C group). The descriptive statistics indicated that the average score was 3.36 ( $SD=0.32$ ) for the T group, and 3.25 ( $SD=0.32$ ) for the C group suggesting that the T group slightly outperformed the C group. There was no statistically significant difference between the two groups revealed in the independent  $t$ -test results ( $t(48) =1.16$ ,  $p=0.25$ ). The solid performance from both groups indicated strong instruction and curriculum related to dual language leadership development being delivered to all participants involved in the master's program.

- Compared to the C group, participants in the T group were able to provide more detailed plans with steps needed for implementation, content and curriculum change, as well as specific instructional practices.
- The T group also provided a clearer and more strategic evaluation process with varied assessment tools tightly aligned to the DL models.

## **School Accountability and Action Projects**

We were interested in knowing if the principal candidates made a difference in their EL students' English proficiency growth. In order to explore any differences in principal candidates' performance between T and C, as measured by the campus English proficiency before and after the master's program, the campus Texas English Language Proficiency Assessment (TELPAS) scores were collected in the spring of 2018 and 2019. The total number of students who were in the principal candidates' campuses and participated in TELPAS testing was 6,311 in 2017-2018, and 6,423 in 2018–2019.

Campus English proficiency was assessed in the areas of listening, speaking, reading, and writing. The percentage of students scoring at the Advanced High level in each of the language areas were calculated for the two academic years. The progress between the two academic years was then calculated for both T and C campuses. Both groups improved across three language domains – listening (by 3.47%), speaking (by 3.15%), and reading (by 0.08%).

Campus English proficiency was then compared between the T and C conditions. The results indicated that both T and C campus English proficiency improved in listening (by 4.87% for T and 2.06% for C) and speaking (by 3.38% for T and 2.91% for C), with greater progress in the T group. Taken together, the findings indicated that the principal candidates in the T group outperformed the C group in terms of fostering the English proficiency of students on their campus by developing and implementing successful DL models. For Cohort 2, TELPAS scores for 2018-2019 were collected as baseline, and TELPAS scores for 2019-2020 were not available due to COVID-19.

## **Component 1 Research Dissemination: Presentations and Professional Media Sources**

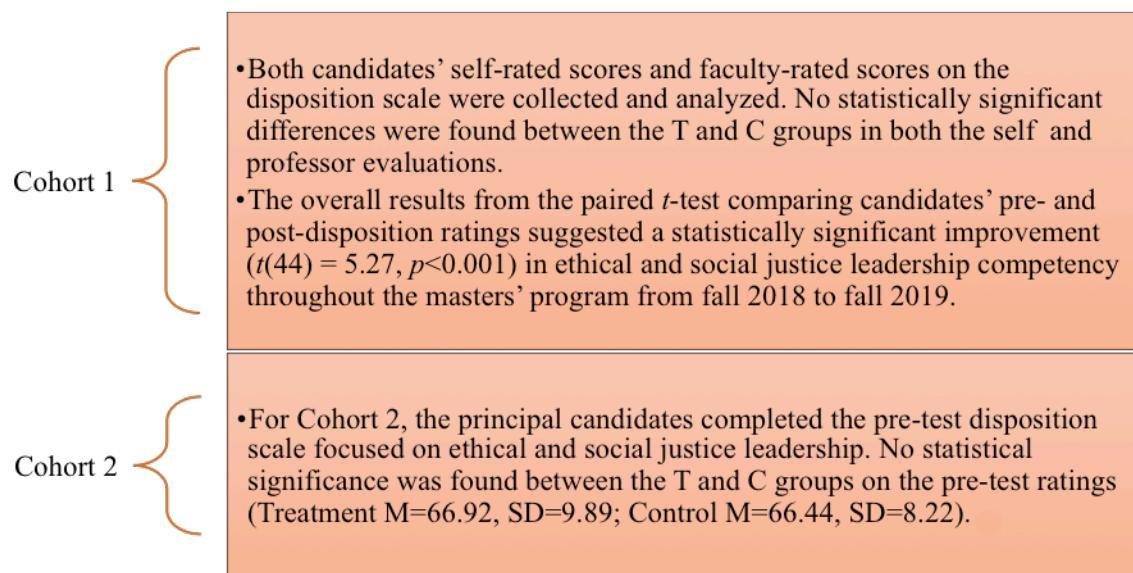
Component 1 has been featured on multiple media sources throughout its project life. For instance, the research was shared through university social media, such as the Facebook pages for the Education Leadership Research Center (ELRC) and Center for Research & Development in Dual Language & Literacy Acquisition (CRDLA). Below is a breakdown of some the presentations and media sources that featured APLUS Component 1 research:

**Table 2***Presentations and Media Sources Featuring APLUS Component 1 Research*

Date	Presentation or Media Source Type	Description
June 4, 2019	La Feria ISD Facebook	Summer Residency in La Feria ISD
June 19, 2019	ELRC Facebook	Summer Residency in Gainesville ISD
June 24, 2019	Gainesville Daily Register	Summer Residency in Gainesville ISD
June 24, 2019	The Eagle Newspaper	Summer Residency in Hearne ISD
June 25, 2019	Calallen ISD School Presentation	Summer Residency in Calallen ISD
June 27, 2019	KBTX TV Station News	Summer Residency in Hearne ISD
June 27, 2019	ELRC Facebook	Summer Residency interview with teacher
June 28, 2019	ELRC Facebook	Summer Residency experience in Hearne ISD
June 28, 2019	Navasota ISD School District Website	Summer Residency experience in Navasota ISD
July 2, 2019	iEducate Website	Description of partnership with APLUS program
July 17, 2019	ELRC Facebook	Cohort 2 master's program orientation
September 6, 2019	ELRC Facebook	Advancing Educational Leadership training
December 14, 2019	CRDLLA Facebook	APLUS Cohort 1 graduation
December 22, 2019	ELRC Facebook	APLUS Cohort 1 graduation ceremony
December 22, 2019	CRDLLA Facebook	APLUS Cohort 1 graduation ceremony
February 10, 2020	ELRC Facebook	Article on APLUS Cohort 1 graduate students
February 10, 2020	CRDLLA Facebook	Article on APLUS Cohort 1 graduate students
February 10, 2020	CRDLLA Website	Article on APLUS Cohort 1 graduate students
April 17-21, 2020	American Educational Research Association	2020 Conference Paper

**Disposition Scale Rubric**

The students completed a self-evaluation utilizing the Disposition Scale to assess their own ethical and social justice leadership behaviors. Students completed the Disposition Scale Rubric in the first and last semester of the program.

**Figure 6. Disposition Scale treatment and control comparisons for Cohorts 1 and 2****GPA Differences Between Treatment and Control**

Cohort 1 principal candidates' course GPAs were collected from fall 2018 (3 courses), spring 2019 (3 courses; one-credit hour course); summer 2019 (3 courses; 1 one-credit hour course), and fall 2019 (3 courses; 1 one-credit hour course). The average GPA was 3.86 (SD=0.18) for fall 2018, 3.97 (SD=0.14) for spring 2019, and 3.9 (SD=0.08) for summer 2019.

A comparison of course GPAs between the T and C groups was computed for each semester. Although the results did not show any statistical significant differences between the two groups: fall 2018 (Treatment M=3.83, Control M=3.88,  $t(44) = -0.85$ ,  $p=0.42$ ), spring 2019 (Treatment M=4.0, Control M=3.94,  $t(44)=1.52$ ,  $p=0.14$ ), summer 2019 (Treatment M=3.97, Control M=3.99,  $t(44)=-0.51$ ,  $p=0.61$ ), and fall 2019 (Treatment M=3.98, Control M=4.0,  $t(44)=0.96$ ,  $p=0.34$ ). High GPAs from both groups indicated a strong program and curriculum being provided to all participants. The percentage of students whose GPA was 3.5 and above was 100% for T and 100% for C (no difference). Although the VMC did not distinguish T from C based on GPA, the VMC did impact instructional feedback and capacity building, as evidenced in other performance measures, such as:

- TBOP reflection cycles (Qualitative Performance Measure 5.b),
- Summer residency (Qualitative Performance Measure 6.c), and
- VMC effectiveness survey (Quantitative and Qualitative Performance Measure 9a and 9b).

### Cohort 1 Summer Residency and Partnership with iEducate

Part of the principal preparation program included a summer residency for principal candidates to practice the leadership skills in the school setting. The majority of the T group summer residencies were comprised of four weeks of instruction, and its duration adhered to each school district's summer program schedule. APLUS also partnered with iEducate, a non-profit organization that identifies and brings together motivated undergraduate college students and high school students to assist elementary school students in underserved and underperforming schools. College and high school students engaged in a 3-1 ratio with up to 48 K-2 elementary students in summer bridge/enrichment school.

The Cohort 1 summer residencies took place in 14 Texas school districts:

- |                                     |   |
|-------------------------------------|---|
| 1. Bryan ISD (two residencies)      | 8. Huffman ISD                                |
| 2. Buffalo ISD                      | 9. La Feria ISD                               |
| 3. Calallen ISD                     | 10. Little Elm ISD                            |
| 4. Eagle Pass ISD                   | 11. Mount Pleasant ISD                        |
| 5. Gainesville ISD                  | 12. Navasota ISD                              |
| 6. Hearne ISD                       | 13. San Felipe Del Rio CISD (two residencies) |
| 7. Heritage Academy Charter Schools | 14. Tornillo ISD                              |

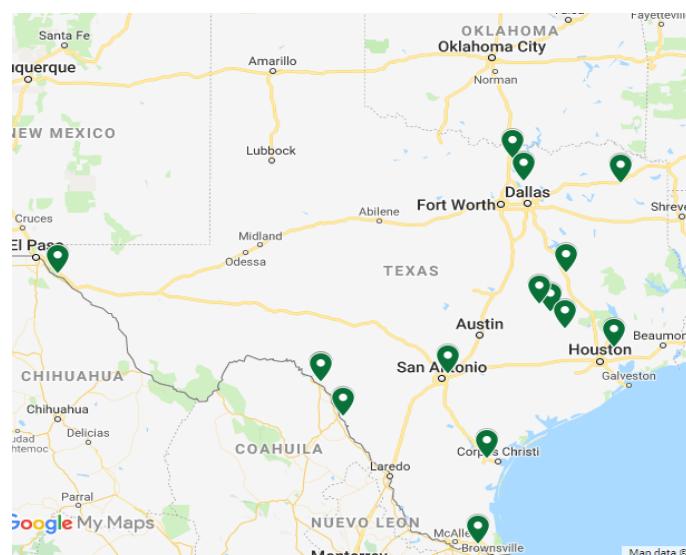


Figure 7. Map of Cohort 1 Summer Residencies

## **Cohort 1 Differences Between Treatment and Control in Perceived Effectiveness of the Summer Residency**

When interviewed, 88% of the participants from the T group and 73% from the C group evaluated the summer residency program positively in terms of their leadership learning experiences and practices. The candidates in the T group reported that, with assistance from iEducate, they served as actual principals in the summer residency program. Working as instructional leaders, they managed modules and curriculum, and coached teachers for effective instruction. They also practiced being an administrator, as they collaborated with the district for service and resources, and communicated with parents about policies and procedures. They reported that their coaches provided them with useful resources, critical feedback and suggestions, and psychological support during the internship.

In contrast, while participants in the C group were also able to experience real school problems, they were mostly learning by observing the administrator. They reported that the summer school internship provided them with an opportunity to shadow an administrator, but their role was still that of the observer, who was not directly involved in resolving school issues.

## **Cohort 2 iEducate Summer Residency**

On April 6, 2020, the Texas A&M Sponsored Research Services Office informed iEducate of a Stop Work order. The iEducate/APLUS summer residency partnership was paused due to a shelter-in-place order causing the closure of schools across Texas in an effort to reduce the spread of COVID-19. APLUS principal investigators and staff met to plan alternative options to the summer residency.

It was decided that all principal candidates would complete the following activities:

- Participate in APLUS Component 3 Virtual Professional Learning Communities (VPLCs) and interact with Texas practicing principals.
- Participate in Massive Open Online Professional Individual Learning (MOOPIL) professional development based on curriculum content they received in the master's program. They completed the following MOOPILs:
  - Leading and Learning in Professional Learning Communities,
  - Using Data to Make Instructional Decisions,
  - Monitoring Curriculum and Instruction,
  - Understanding English Learners' Needs and Dual Language Programs, and
  - Critical Dialogues.
- Create one MOOPIL professional development based on curriculum content they received in the master's program. Each principal candidate was eligible to earn a stipend for creating a credible MOOPIL. Treatment students (formerly the iEducate Summer Residency Group) had their assigned VMCs attend the VPLCs with them in order to assist with the writing of their MOOPILs.

## References

- Brown, G., & Irby, B. J. (2001). *The principal portfolio* (2<sup>nd</sup> ed.). Corwin Press.
- Irby, B., J., Lara-Alecio, R., Tong, F., & Torres, M. (2017). Accelerated Preparation of Leaders for Underserved Schools (A-PLUS): Building Instructional Capacity to Impact Diverse Learners. Project Sponsored by the Supporting Effective Educator Development Grant Program. (SEED), U.S. Department of Education.