

INVESTIGATING THE STOCKTON UNIFIED SCHOOL DISTRICT  
TEACHER SHORTAGE AND PROPOSING A TEACHER  
SUPPLY-CHAIN SOLUTION FOR THIS SHORTAGE

A Project Presented to the Faculty  
of  
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In Partial Fulfillment  
of the Requirements for the Degree  
of Master of Business Administration

By  
Kelly Leigh Townley  
October 2018

CERTIFICATION OF APPROVAL

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## DEDICATION

To my parents, for a lifetime of goodness, happiness, and love. To my husband, for appreciating my need to explore today to better navigate tomorrow. To my children, for showing me my potential through their abilities. To my grandchildren, for compelling me to show them the way to go get the degree!

All of you inspire me, to be the best possible me. With all my love and appreciation – Kelly.

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## ABSTRACT

A qualified teacher workforce is an essential component for improving educational outcomes. Yet, school districts throughout California report having a shortage of qualified teachers. To try to deal with this situation, California school districts often hire underprepared teachers and emergency-credential substitutes. In addition, they may staff their classrooms with teachers out of their subject area, eliminate courses, or over-enroll class rosters. A teacher shortage is especially acute in the Stockton Unified School District (USD). The Stockton district is located in an urban community, and it serves 40,000 students with a \$585 million budget. The purpose of this study is to identify a possible solution to the teacher shortage in the Stockton USD through the development of paraprofessional educators. The district has teacher pathway programs at three comprehensive high schools, access to a bountiful supply of paraprofessionals, and its own teacher induction program. This study suggests that the addition of a Teacher Supply Chain Coordinator to bridge the gaps between these assets, along with implementation of teacher retention strategies, will maximize the district's potential to produce and maintain a fully prepared teacher workforce.

## INTRODUCTION

The teacher shortage has been a personal concern for me since the late 1990s. I worked as a support staff member at a local high school that was impacted by a teacher shortage. During my tenure, teachers were recruited from as far away as Montana and the Philippines to staff classrooms. The recruited teachers experienced a sense of culture shock. They had not been exposed to the vast responsibilities of working in a Stockton, California public education system or to youth that had been raised in poverty and exposed to the types of challenges that are cultivated in impoverished environments. They did not understand the community or the children that it grows. There was also a shortage of day-to-day substitute teachers. When a classroom did not have a substitute teacher, Campus Security Monitors supervised the students. When there was not a substitute teacher for multiple classrooms, the students were led to the school's auditorium by Campus Security Monitors who supervised them for the class period. The students did not receive educational instruction. Sometimes students were gathered with other students that were in opposing gangs and violence occurred. The classrooms that did not have substitute teachers were ones in which students, more often than not, achieved low achievement scores. The International Baccalaureate classrooms (an international education program for high achieving students) always had a substitute when one was needed.

The negative consequences of teacher shortages are far reaching, both socially and academically. This research paper explores current statistics, policy decisions,

and the resources available to Stockton USD to address and help solve its current teacher shortage. In addressing this teacher shortage, the paper examines and provides a suggested solution to weaknesses in current teacher development practices within Stockton USD.

## TEACHER SHORTAGE

### **Nationwide**

Teacher shortages are in evidence in parts of almost every state in the country. However, not all schools or districts within states experience these shortages. Teacher shortages are more likely to occur in schools with specific socio-economic conditions. The most challenging teaching positions to fill are in the subject areas of Math, Science, and Special Education. The “National Center for Education Statistics” reports high-poverty, high-minority and low-achieving schools, both urban and rural, struggle the most to fill teaching vacancies and difficult-to-staff teaching positions (Aragon, 2016a).

Nationwide teacher production began to decrease in 2010-2011 due to the Great Recession. In weak economic periods, students choose to pursue careers with higher salaries. Despite this decrease, the National Center for Analysis of Longitudinal Data in Education Research (CALDER) reports there is an adequate supply of teachers available to teach, nationwide. According to Aragon (2016a), about half of the teachers that complete teacher preparation programs are hired to teach in classrooms; meaning as a nation, we continually produce more teachers than the national market demands. It is the distribution of these resources that results in shortages in areas like the Stockton district.

## **California**

In a survey conducted by California's School Boards Association's Delegate Assembly, 75% of the districts surveyed reported a shortage of qualified teachers for the 2016-17 school year and more than 80% of the surveyed districts reported the teacher shortage has worsened since the 2013-14 school year. At least one district administrator predicted that the worst is still to come (Podolsky, 2016).

### **At-Risk Communities**

School districts with the largest high-need student enrollments experience teacher shortages more often than other school districts. According to Podolsky (2016), 83% of school districts that serve the largest concentrations of low-income and English learner students report teacher shortages, compared to 55% of the districts with the fewest concentrations of the same.

High-poverty districts report the “shrinking supply of new teachers” as a reason their districts are facing shortages at twice the rate as low-poverty districts (Podolsky, 2016). In response, many high-poverty districts are filling their vacancies with teachers who have substandard credentials. According to Podolsky (2016), the following actions have occurred: (1) High poverty districts report teacher vacancies are filled with substitutes 29% of the time, compared to 13% in low-poverty districts. (2) Seventy-five percent of California school districts hired teachers late into the summer or after the school year began. (3) Sixty percent reported that they could not find enough qualified teachers. (4) Research suggests that teachers hired after the start

of the school year are generally less effective and more likely to leave the teaching workforce than other newly-hired teachers.

## THE CONSEQUENCES

### **Current Solution**

The majority of districts having difficulty filling teacher vacancies are staffing positions with teachers whose credentials are not in the appropriate subject area or grade level. Over half of the districts with shortages report hiring teachers with substandard credentials. According to Podolsky (2016), 24% of the districts are filling vacancies with substitutes, 22% are assigning teachers to positions outside of their credential field, 17% are leaving the positions vacant, 9% are increasing class size, and 8% are canceling courses.

### **Subject Area and Grade Level**

The shortage of fully-prepared teachers is more prominent in specific subject areas and grade levels. Of the surveyed districts, subject area shortages are most profound in special education, math, and science. An astounding 88% of the surveyed districts reported shortages in special education. Math teacher shortages were reported by 58% of districts and a shortage of science teachers was reported by 57% of districts. A shortage of high school teachers was reported by 62% of districts, a 60% shortage of teachers in middle school, a 37% shortage in elementary school, and early childhood by 15% of the districts. Fourteen percent of the districts reported bilingual teacher shortages. However, this number is expected to increase as an outcome of the passage of Proposition 58, which implements the California Multilingual Education Act of 2016 (Podolsky, 2017).

## CURRENT SUPPLY

### **Nationwide**

The staffing of teachers nationwide has been relatively stable over the past several years. According to Aragon, (2016a), as a nation, teacher turnover has been stable since 2004-05. Recent federal data indicates that the 5-year teacher attrition rate is 17%. Among the 17% who left teaching, approximately half are expected to return because they left for reasons such as changing residences, pregnancy and child-rearing, and involuntary transfers.

State licensure requirements and the criteria for license and credential transfers between states has an impact on recruiting and retaining teachers (Aragon, 2016a). Again, as described by Aragon (2016a), the National Center for Analysis of Longitudinal Data in Education Research (CALDER) has identified long-term trends that indicate two major points about teacher preparation: (1) career choices in education are cyclic in response to the economy, and (2) weak economies drive students away from teaching to careers that are more lucrative.

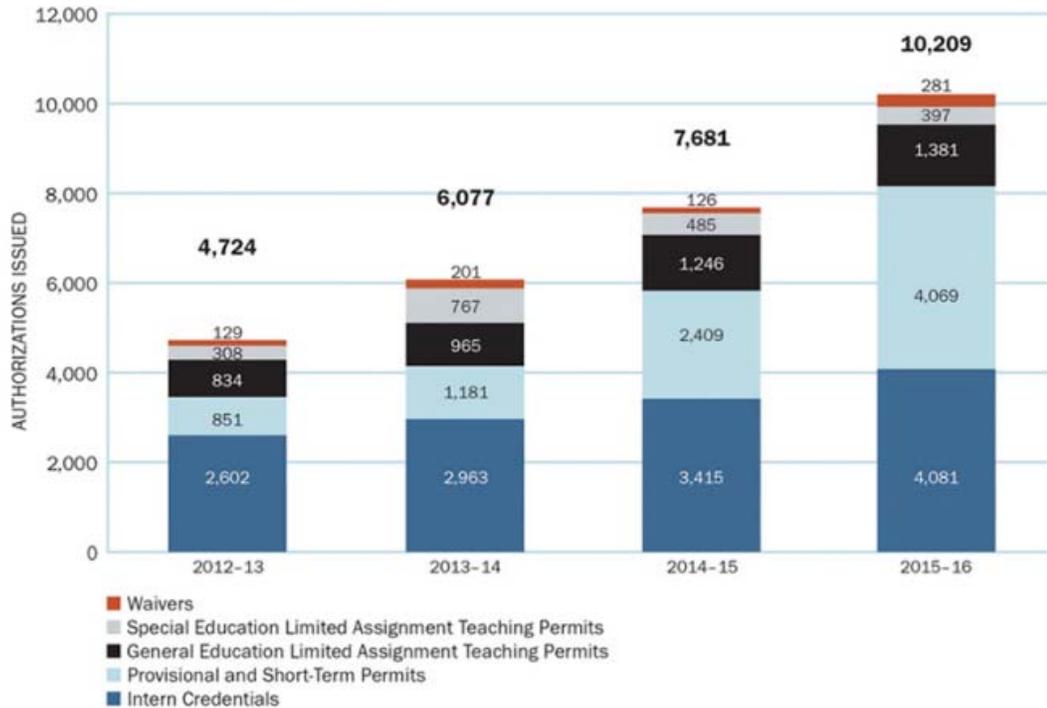
### **California**

According to Podolsky (2017), the California teacher labor market overall is shrinking. California's education leaders are expressing urgent concern about the forecast of the California teacher labor market. Seventy-nine percent of California school districts report the shrinking supply of newly-credentialed teachers is the cause of their teacher shortage.

ACT, an organization for college and career readiness, and the Department of Education report fewer high school graduates are interested in pursuing education majors and fewer college students are pursuing teaching careers (Aragon, 2016a). The January 2017 California Teacher Shortages Legislative Briefing reported enrollment in teacher preparation programs decreased 76% from 2001-02 to 2013-14. An additional source to support these findings, the U.S. Department of Education, Office of Postsecondary Education report revealed teacher preparation program enrollment decreased by 64% between 2009-10 and 2013-14. California school districts hired 22,000 teachers in 2016, but the state issued only 12,000 new teaching credentials in 2015.

The California Commission on Teacher Credentialing reported a 63% increase in issuing intern credentials, permits, and waivers from the 2012-13 to 2014-15 school years. Fifty percent of entering special education teachers are not fully credentialed. The demand for teachers in California is expected to increase 29% by 2022. The extreme increase is a result of growing enrollment and class size reduction goals (Podolsky, 2017).

The Learning Policy Institute reported the growth of emergency-style permits; provisional intern and short-term staff in California doubled from 2012-13 to 2015-16 (Leal, 2017). Figure 1, below displays the growth in substandard credentials and permits.



Note: Number of substandard credentials and permits issued between July 1 of each year and June 30 of the following year.  
 Source: Data provided by the California Commission on Teacher Credentialing by request.

*Figure 1.* 2012-13 through 2015-16 Substandard Credentials and Permits.  
 Source: (Leal, 2017).

The supply is further impacted by the negative experiences of new teachers. According to Podolsky (2016b), many who enter the profession report overall job dissatisfaction, a loss of autonomy, and limited amounts of feedback, recognition, advancement, and reward. Although these outcome responses vary in frequency, they are conditions that must be considered, because they do contribute to teacher turnover.

### **Stockton Unified School District**

In the 2012-2013 school year the district employed 1,835 FTE Teachers; 98.3% were fully credentialed. Thirty-two worked with intern credentials, five

worked with permits, and 1,803 were fully credentialed. By the 2016-2017 school year, the fully credentialed teacher ratio dropped to 88.3%. The district employed 1,595 FTE teachers. Sixty-six worked with intern credentials, 143 worked on permits and waivers, and 1,408 were fully credentialed. The district's fully-credentialed teaching staff has decreased 10% from the 2012-2013 to 2016-2017 school years.

Table 1 shows staffing statistics for teacher preparedness for Stockton Unified School District (SUSD).

Table 1

*Teacher Workforce Preparedness*

	<u>Intern Credentials</u>	<u>Permits</u>	<u>Waivers</u>	<u>Total</u>	<u>FTE Teachers</u>	<u>Fully Credentialed</u>
2012-13	27	5	0	32/1.74%	1835	1803 / 98.3%
2013-14	31	4	0	35/2.2%	1605	1570 / 97.8%
2014-15	28	29	0	57 / 3.4%	1,688	1,631 / 96.6%
2015-16	51	80	0	131 / 8.2%	1,597	1,466 / 91.8%
2016-17	66	140	3	209 / 11.7%	1,595	1,408 / 88.3%
2017-18	N/A	N/A	N/A	N/A	N/A	N/A

Source: Teacher Supply in California: A Report to the Legislature Annual Reports (2012-2013, 2014; 2013-2014, 2015; 2014-2015, 2016; 2015-2016, 2017; 2016-2017, 2018)

The district is also struggling to recruit fully-prepared teachers in the areas of math, science, and special education. The district employed twice as many underprepared math teachers from the 2012-2013 to the 2016-2017 school years. In science, the district employed five times as many underprepared teachers from the 2012-2013 to 2016-2017 school years. And in special education, it employed 3.65 times as many underprepared teachers for the 2012-2013 to the 2016-2017 school years. Table 2 shows subject areas where underprepared teachers were assigned to staff classrooms for Stockton Unified School District.

Table 2

*Subject Area Taught by Intern Credential, Permit, and Waiver Teachers*

	Multiple & General Subject Waiver	Single Subject Credential	Math	Science	Education Specialist Instructional Credential (Special Ed)
2012-2013	3	5	5	2	17
2013-2014	3	11	3	4	14
2014-2015	8	16	3	10	20
2015-2016	23	58	7	12	31
2016-2017	89	38	10	10	62
2017-2018	N/A	N/A	N/A	N/A	N/A

Source: Teacher Supply in California: A Report to the Legislature Annual Reports (2012-2013, 2014; 2013-2014, 2015; 2014-2015, 2016; 2015-2016, 2017; 2016-2017, 2018)

### **Increasing Need**

California's 2016 State Plan to Ensure Equitable Access to Excellent Educators found teachers working in high-minority schools are almost three times more likely to be working with one of the various types of emergency credentials, compared to teachers working at low-minority schools (Carver-Thomas, 2017). An emergency credential allows a substitute to teach for a maximum of 30 days in an assignment and no more than 3 assignments per school year.

According to Hopkinson (2017), the California Multilingual Education Act will give California public schools more control over dual language acquisition programs. Proposition 58 effectively repeals the English-only requirement of Proposition 227 — the initiative approved by voters in 1998 that requires English learners to be taught in English immersion classrooms. Under the new law, students can learn English through multiple programs outside of English immersion classes.

The old law required parents to sign waivers to enroll their children in bilingual or dual immersion programs; the new law does not (Hopkinson, 2017).

California, overall, is not prepared to meet the demand for bilingual teachers. In 1998, Proposition 227 limited the amount of bilingual education a school could offer. This decreased the need to prepare bilingual teachers. As a result, bilingual teacher training is offered at 30 institutions, compared to almost 90 institutions offering elementary teacher training (Carver-Thomas, 2017).

## POLICY RESPONSE

### **State Level**

California is responsible for analyzing its own teacher shortage, not the U.S Department of Education. Task forces representing the state legislature, legislative research offices, and the Department of Education are assembled to examine data and provide policy recommendations. California's task force identified teacher shortages in special education, science, math, and inner-city and low-income schools (Aragon, 2016a).

The California task force policy recommendations focus on continuously improving fully prepared, teacher-deficient subject areas. The task force recommended that districts: (1) provide quality teacher induction programs, (2) issue a bonus for teachers who teach in ongoing shortage subject areas, (3) implement a tuition grant program for teachers to work in subject areas that have continuous teacher shortages, (4) provide outreach to former teachers, (5) recruit out-of-state teachers, and (6) (for state agencies) to share teacher data through a common data base system (Aragon, 2016a).

### **Alternative Routes**

According to Woods, (2016a), the task force has also addressed the idea of providing alternative routes to teacher certification as a viable approach to recruit and retain teachers, the goal being to provide a quicker path into the teaching profession than traditional programs, while still providing more preparation than might be

required for an emergency credential. Alternative certification policies have the potential to reduce financial barriers for prospective teachers with stipends, reduced tuition, or other financial assistance. Candidates would have to meet minimum GPA requirements, be successful in admissions testing and other academic indicators. Alternative programs would provide options for candidates to test out of coursework requirements where they possess existing competency. The alternative certification coursework would prepare teachers to meet immediate teaching needs and limit the volume of coursework during the first year of teaching. Additional support could be provided through induction, observations, and mentorship. These alternative certification programs would then help ensure that teachers of all grades and subject areas, especially shortage areas, could obtain certification (Woods, 2016a).

To fast-track new teachers into the classroom, alternative certification programs are currently being offered in many districts (Woods, 2016a). The focus of these programs is more toward on-the-job training rather than theory. Participants usually begin working in the classroom while completing their coursework. To make alternative certification programs more appealing to a mid-career professional than a traditional path, some programs provide candidates a teacher's salary or stipend while they are participating in the program.

About 20% of new teachers are entering the profession through alternative certification programs. The alternative certification programs attract mid-career professionals changing career tracks. Alternative certification programs increase the supply of teachers and the diversity of the teacher pool.

Alternative certification programs attract “subject content” experts to transition into teaching relevant courses. According to Woods, (2016a), teachers with an education or professional background relevant to the subjects they teach bring new ideas and relevance to students’ classwork and may even have more subject area content knowledge than traditionally certified teachers. Alternative certification programs can attract professionals with a background in hard-to-staff subjects, such as science, who already have a degree and seek a low-cost career change (Woods, 2016a).

The credential certification route has not been reported to have had a significant negative impact on teaching quality (Woods, 2016a). Teacher effectiveness has similarities across the various program types. Of note is the fact that alternatively certified teachers are more likely to score higher on licensure exams than traditionally-certified teachers. The focus for policymakers is reducing financial barriers and providing quality induction and mentoring programs for alternatively certified teachers (Woods, 2016a).

### **Financial Incentives**

California policy includes recommendations to provide financial incentives for prospective teachers by establishing salary requirements, diversified pay, and pay-for-performance. Minimum salary requirements attract quality teachers to the profession and include equalized pay between districts to support teacher retention. Diversified pay attracts teachers to shortage subject areas and high-need schools. Pay-for-performance provides recognition and retains excellent teachers.

According to Aragon (2016b), the consequences of insufficient pay, and pay that fails to reward the best and brightest, play a role in the challenge to recruit and retain high quality teachers. Competitive salaries are necessary; teacher salaries do not compete with the average salary of similarly educated workers. Senate Bill 807, if it had passed, would have provided tax credits for money spent to earn a full teaching credential. It also offered an exemption for teachers, who teach five years or more, from paying state taxes on teaching income (Galgiani, 2018).

### **Leadership Opportunities**

Policy recommendations include offering teacher leadership opportunities to highly effective teachers as a strategy for retaining teachers. According to Woods (2016b), teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of school communities to improve teaching and learning practices, with the aim of increased student learning and achievement.

### **District Level**

District response to state policy recommendations varies. Three percent of California school districts report offering loan forgiveness and service scholarship programs. Forty percent have increased salaries. Thirty percent have revised district salary schedules to attract experienced teachers. Twenty-one percent have increased salaries or added stipends for teachers in high-need fields. Sixteen percent offer signing bonuses to new teachers entering the district. Fifty-three percent of California school districts report they provide additional compensation for increased teaching,

leadership, and mentorship opportunities to retain teachers (Podolsky, 2016a). He goes on to state that districts are focused on developing policy and practice strategies that affect teachers' preparation and pathway into the profession. Seventy-two percent of districts report they are working with teacher preparation programs to coordinate student teaching placements and 62% are working with teacher preparation programs to communicate hiring needs. Over half of the districts have developed differentiated roles for teacher leadership opportunities, and they offer additional compensation for this responsibility (Podolsky, 2017).

## SUPPLY MANAGEMENT

### **Strategy Advice**

According to Woods (2016a), teacher shortages can be addressed in two ways: (1) by recruiting more teachers (in the first place) and, (2) by keeping more of the teachers who are already in the classroom. Podolsky (2017) adds that an investment in evidence-based teacher recruitment and retention strategies is necessary for California to increase the overall supply of qualified teachers, especially in subjects and schools with persistent shortages. He believes that at the district level, local contexts should be analyzed to evaluate and determine the most effective policies to recruit and retain competent, committed teachers (Podolsky, 2017).

### **Retention**

Retention of teachers is another vexing problem. Podolsky (2017) claims that when districts make progress recruiting teachers, they are often unable to retain them. According to her, there are not enough qualified teachers to fill vacancies in the first place, and on top of that districts compete with each other to staff their classrooms for the teachers that are available.

Teachers leave schools or the teaching profession entirely for many reasons. Some research indicates that job dissatisfaction, lack of influence or autonomy in their school, and few opportunities for professional advancement could be significant sources of teacher attrition. In other words, some teachers leave a seemingly “flat profession” because they feel they have no voice in their school (Wixom, 2016). On

the other hand, teachers who participate in teacher communities (that is, schools in which teachers are encouraged to interact and provide mutual advice and support particularly to new teachers) feel successful and supported. Such opportunities to work with other educators in professional learning communities make it more likely that new teachers stay (Cochran-Smith, 2004).

### **Teacher Turnover**

An interesting finding – from “a longitudinal study of a nationally representative cohort” – was that teacher turnover, as measured annually by the combined percentage of “movers” and “leavers,” was 46% after five years with a breakdown of 29% of teachers moving schools or districts and 17% who stopped teaching (Aragon, 2016a). In a separate study, additional reasons contributing to teacher shortage were teacher retirement (54%), teachers leaving the district (34%), class size reduction (32%), and the high cost of living (29%) (Podolsky, 2016a).

### **Preparation Counts**

Research indicates, “New teachers who are not properly supported or underprepared are more likely to leave the profession within the first five years” (Woods, 2016b, p. 2). Teacher induction and mentoring programs are one strategy that addresses teacher attrition in the first five years of entering the profession.

Comprehensive induction and mentoring programs provide contact time between the mentor and mentee, guaranteed time release from other work duties, and a reduced workload for both the mentor and mentee teacher. The terms induction and mentoring are often used interchangeably, but induction programs incorporate

mentorship by an experienced teacher. Comprehensive induction is a multiyear mentorship and professional development program that utilizes trained mentors to provide constructive feedback to the mentees (Woods, 2016b).

According to Ingersoll, Merrill, and May (2015),

Pedagogical methods and skills preparation, the ‘how of teaching,’ is the strongest factor in decreasing first year teacher attrition. There are four types of pedagogical preparation: (1) how to select and adapt instructional materials, (2) coursework in learning theory or child psychology, (3) observation of others’ classroom teaching, and (4) formal feedback on their own teaching. First-year teachers whose preparation included observation of others’ classroom teaching were 65% less likely to leave than those who had not participated in such preparation. Teachers in suburban schools were 50% less likely to leave than those teaching in urban schools. First year secondary level teachers were more likely to leave than elementary and K-12 combined schools (p. 30).

Induction and mentoring program policy requires that teachers are provided with the appropriate time and support to “ensure that induction and mentoring programs are not an additional burden for teachers. New teachers participate in comprehensive induction and mentoring for at least a full year” (Woods, 2016b, p. 3).

According to Woods (2016b), mentoring and induction programs may need to provide multiple years of new teacher support to maximize their effect on student achievement. Research has found that a positive impact on student achievement was

not evident until the teacher's third year of teaching. Teacher retention has improved for teachers who participated in induction programs and were assigned a mentor during their first year of teaching. These teachers were more likely than teachers without the program support to teach for at least five years.

Woods (2016b) goes on to state that early induction and mentoring programs are extremely successful in urban districts. Attrition for urban districts in Ohio and New York was reduced by nearly 70%. These types of outcomes are dependent upon the type and quality of program provided. Influential program elements such as "having a mentor from the same field, having common planning time with other teachers in the same subject, and having regularly scheduled collaboration with other teachers" are strong contributors to increased retention. Schools with "strong school leadership, collegial professional relationships, adequate supplies and equipment, and a positive and supportive climate among all adults" (Woods, 2016b, p. 3), are more successful at retaining teachers.

Despite the benefits of teacher leader programs, sustaining them can be a challenge. School districts initially receive grant funding for teacher leader program start-ups, but struggle to find sustainable funding when the grant timeline ends. It is important to identify an appropriate funding source during the initial teacher leader program planning to maintain the initiative long term. Some districts redirect existing staffing and professional development funds to support the teacher leader program after the grant award period. Providing new teachers with induction and mentoring can be an effective retention strategy (Wixom, 2016).

### **Campus Culture Counts**

The school system's environment factors into the sustainability of teacher leadership programs. The culture, governance structures, and the roles and relationships of teachers and administrators combine to determine the long-term health of the initiative. School systems with cultures where administrators and teacher leaders work together and have open communication with staff are more likely to have successful teacher leader initiatives. Shared leadership governance structures for site-based decision making are more likely to be successful. Supportive relationships between administrators, teacher leaders, and their colleagues foster successful teacher leader programs. Wixom (2016) believes that teacher leadership programs are more likely to succeed if they are not leadership programs in name only but are structured within in a school system culture that includes administrators who actively seek to support and sustain the programs and the teacher leaders themselves.

Employee retention research suggests professional employees are more satisfied and more likely to remain in their roles when they feel valued and have a sense that their employer is investing in their professional growth and development (Workman, 2016). School leaders can provide this type of support with regular evaluations of teaching, positive and constructive feedback, and providence of professional development opportunities that support the individual's needs and goals. As Workman (2016) states: "The goal of the teacher evaluation process should be to develop and improve every teacher" (p. 2).

## TEACHER ASSETS

### **The Value of a Fully-Prepared Teacher**

It is difficult to find any evidence suggesting student performance does not improve in a classroom, when under the guise of a fully-prepared, full-time teacher. According to Darling-Hammond (2004), student achievement gains are more strongly influenced by a student's assigned teacher, than class size and composition. Also, teacher certification status is the strongest predictor of school-level student achievement in mathematics and reading, followed by teacher experience. And finally, the teacher's level of education also has a smaller significant effect on student achievement.

He goes on to report that a study of 17 hard-to-staff California schools revealed, school and district officials consider credentialed teachers to be a "valued commodity" and that they seek for and hire the best qualified credentialed teachers that they can find, the main reason being that credentialed teachers know what to do and require less assistance. Also, they are better prepared, have had mentored student teaching and methodology classes, and have fewer problems with classroom management and teaching strategies (Darling-Hammond, 2004).

### **Cost of Replacing Teachers**

Investing in induction and mentoring programs to increase the number of teachers who stay in the profession is a wise decision. The costs involved in replacing a teacher are substantial. Replacing a teacher consumes significant resources and

costly personnel time. The Learning Policy Institute identifies separation, recruiting and hiring new teachers, and training replacements as standard costs incurred in replacing a teacher. Table 3 itemizes the process involved in the teacher replacement process.

Table 3

*The Costs of Teacher Turnover*

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SEPARATION COSTS	Standard practice <ul style="list-style-type: none"> <li>• Removing teachers from payroll and health plans and processing eligible refunds of retirement contributions</li> <li>• Paying substitutes to cover for mid-year departures</li> <li>• Conducting exit surveys*</li> </ul>
RECRUITMENT AND HIRING COSTS	Standard practice <ul style="list-style-type: none"> <li>• Advertising open positions</li> <li>• Traveling to job fairs and interview sites</li> <li>• Responding to inquiries from prospective candidates, corresponding with applicants, and drafting offer/rejection letters</li> <li>• Scheduling site visits and conducting interviews*</li> <li>• Conducting criminal background checks, health record checks, credentialing checks, and reference checks</li> <li>• Adding new teachers to payroll and benefit programs</li> </ul> Additional activities <ul style="list-style-type: none"> <li>• Designing and developing advertisements and recruitment web pages</li> <li>• Working with teacher preparation programs to identify strong candidates*</li> <li>• Coordinating recruitment activities with state programs</li> <li>• Traveling overseas for recruitment</li> <li>• Offering new hires signing or relocation bonuses, housing and moving allowances, and rent or day care subsidies</li> <li>• Meeting with candidates and members of search committees</li> <li>• Completing affirmative action paperwork</li> <li>• Purchasing equipment for digital fingerprinting</li> <li>• Archiving teacher records</li> </ul>
TRAINING	Standard practice

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## COSTS

- Introducing new hires and teacher transfers to school goals and governance procedures
- Coordinating and staffing mentoring programs and related forms of structured induction, including stipends for mentors and payments to substitutes who replace mentors with reduced teaching loads\*
- Onboarding workshops and professional development activities\*

## Additional activities

- Holding welcome events to integrate new hires into the school community
- Providing new-employee orientation
- Traveling to training sessions and professional meetings
- Instructing new hires on the goals and specific elements of the state's testing programs
- Training mentor teachers
- Paying substitutes while teachers attend training activities
- Reducing teaching loads for beginning teachers
- Reimbursing tuition and fees for additional induction or professional development

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Source: Learning Policy Institute: About Teacher Turnover Calculations, 2018.

\*Denotes a high-leverage recruitment and retention strategy.

### **SUSD Teacher Turnover Cost**

The cost of replacing teachers is particularly alarming for Stockton USD.

Stockton Unified School District employed 1,595 teachers in the 2016-17 school year. The national average rate for teacher turnover is 11% and the average cost for replacing a teacher in an urban area is \$21,000 per teacher. For the Stockton Unified School District, using the national turnover average and replacement cost, the estimated cost for replacing teachers for the 2017-18 school year was approximately \$3,675,000 (Learning Policy Institute, 2017).

## STOCKTON USD – TEACHER SUPPLY CHAIN

### **Aspiring Teachers - CTE**

California is committed to providing \$1 billion for districts to develop instructional pathways to locally relevant, high-growth, high-demand careers (Lundy-Wagner, 2016). The California Department of Education website describes the instructional pathways as: “Career Technical Education is a program of study that involves a multiyear sequence of courses that integrates core academic knowledge with technical and occupational knowledge to provide students with a pathway to postsecondary education and careers” (CDE, 2018).

Stockton USD’s California Technical Education (CTE) program is currently in the process of implementing teacher pathway programs. The teacher pathway programs will be offered at three major comprehensive high schools beginning with the 2018-2019 school year. The programs are a response to the declining teacher labor force and are intended to spark interest in a teaching career in response to the “ACT and the Department of Education report that found fewer high school graduates are interested in pursuing education majors and fewer college students are pursuing teaching careers” (Aragon, 2016a, p. 2). Stockton USD plans to graduate 150 teacher pathway program students each year.

### **Paraprofessionals**

A paraprofessional is someone who is directed by a certified teacher or other school professional to provide instructional support and supervision for students in

grade levels ranging from preschool to grade 12+. (More will be said about paraprofessionals later in the paper.) Since Stockton USD faces instructional assistant shortages, for the 2018-19 school year a paraprofessional certification pathway will be in place. It will consist of the educational support necessary to be successful in the Cooperative Organization for the Development of Employee Selection Procedures (CODESP) competency examination, training for leading groups of students, support with behavior management techniques, and activity planning.

The district has after-school programs operating on 48 campuses. There are over 250 paraprofessionals leading groups of students in enrichment, active recreation, and social awareness activities after school, every school day. The group activity leaders meet the same education level equivalency as a paraprofessional.

Stockton USD employs more than 650 paraprofessionals. These employees have earned at least 48 college units or have demonstrated competency through successful completion of the CODESP exam. The paraprofessionals work as assistants to special education and specialized instruction teachers. They receive staff development and work with small groups or one-to-one. Most observe and participate in delivering instruction presented by a fully prepared teacher every day (Stockton Unified, 2018).

An analysis of Stockton Unified School District's paraprofessionals' education level and assignment longevity identified 116 paraprofessional employees assigned to the Special Education instruction setting have more than 81 college semester units and three or more years of experience (Appendix A.) This includes

three paraprofessional employees with more than 90 college semester units and three or more years of experience working in the general education or support services instructional setting (Appendix B).

### **Induction and Mentoring Program**

Stockton USD also has a teacher induction and mentoring program. The program supports teachers with Preliminary California credentials to earn a California Clear Credential as mandated by SB 2042. The two-year program is designed to increase the participants' pedagogical knowledge and abilities. The program provides the participants with a mentor. The participants agree to meet with their mentor, attend school meetings, participate in staff development activities, and provide their mentor access to their classroom. The participants receive staff development designed to meet their needs. They receive an opportunity to earn extended education units toward a master's degree program through CSU Sacramento or Brandman University. They are provided structured, individualized support integrated with job-embedded professional development through an inquiry-based system. Upon completion of the program requirements, participants receive a recommendation for a California Clear Teaching Credential (SUSD, 2018).

The Teacher Induction Program supported 125 participants in the 2017-18 school year, an increase of 90% from the 2016-2017 school year. Fifty-eight participants completed their second year of induction and were recommended for the California Clear Teaching Credential, an increase of 115% from the 2016-2017 school year. The program does not have a maximum capacity. Table 4 displays

participation and outcome information for SUSD's Teacher Induction and Mentoring program.

Table 4

*Teacher Induction Program Participation and Outcomes*

	Maximum Program Capacity	# Induction Program Participants Served	# Earned CA Clear Credential Working for Stockton USD
*2012-2013	No Maximum	97	49
**2013-2014	No Maximum	140	48
***2014-2015	No Maximum	80	52
2015-2016	No Maximum	47	24
2016-2017	No Maximum	66	27
2017-2018	No Maximum	125	58

\*Total includes Lodi USD Participating Teachers

\*\*Total includes Lodi USD Participating Teachers and one St. Mary's Participating Teacher

\*\*\*Total includes one St. Mary's Participating Teacher (Goldstein, 2018)

## WHY IT MATTERS

### **Educational Outcomes**

It is safe to assert that having a competent, qualified full-time teacher staff, in any school, produces positive learning outcomes in the great majority of classrooms. According to Podolsky (2016a), a highly competent teacher workforce is a necessary foundation for improving childrens' educational outcomes, especially for those who rely most on schools for their success. So the goal for any school district is pretty clear when it comes to staffing, yet especially challenging for districts with a high proportion of minority and English-learning students.

### **Stockton Unified School District**

Stockton Unified School District's student enrollment characteristics mirror the research identifying attributes of students that are the most reliant upon a fully-prepared teacher for their success. The student demographic characteristics are 63% Hispanic, 14% Asian, and 11% Black/African American. Twenty-nine percent of the students are English learners and 8.5% qualify for Special Education services. Eighty-two percent of the students live in high poverty. The graduation rate is 85.5% with only 35% of graduates meeting A-G University of California and California State University admission requirements (SUSD Fast Facts, 2018).

## **Human Right**

The National Economic and Social Rights Initiative website states, “The right to education ensures access to quality schools and to an education that is directed towards the full development of the human personality” (Human Rights, 2018).

The human rights to quality education principles (Human Rights, 2018) are:

- **Individual Rights:** Every individual child must have equal access to a quality education adapted to meet his or her needs.
- **Aims of Education:** The aims of education must be directed toward the development of each child’s personality and full potential, preparing children to participate in society and to do work that is rewarding and reasonably remunerative, and to continue learning throughout life.
- **Dignity:** Schools must respect the inherent dignity of every child creating an environment of respect and tolerance in the classroom, preventing practices and disciplinary policies that cause harm or humiliation to children, and promoting self-confidence and self-expression.
- **Equity:** There must be equitable distribution of resources in education across communities according to need.
- **Non-Discrimination:** The government must ensure that the human right to education “will be exercised without discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.”

- Participation: Students, parents and communities have the right to participate in decisions that affect their schools and the right to education.

Access to a fully-prepared teacher is a child's human right to educational equity. Staffing a classroom with an underprepared teacher creates educational inequity.

## THE SOLUTION

### **Grow Your Own**

Given the teacher shortage in many parts of the country and, in particular, in the Stockton USD, one practical way to address this situation is for each school district to “grow their own” full-time teachers. The idea here is for districts to create pathways to full-time credentialing, with programs that recruit and develop aspiring teachers, apart from recruiting teachers from standard educational outlets. According to Podolsky (2016a), a small number of districts are creating pathways into the teaching profession for high school students, paraprofessionals, and district volunteers. These programs, sometimes referred to as *Grow Your Own* teacher preparation models, recruit talented individuals from the community into a career in education and help them along the pathway into the profession.

### **The Teacher Pathway**

An ideal pathway, from the Stockton USD’s perspective, would be to recruit more classroom paraprofessionals and then create the training and support systems necessary to help them develop them into fully-credentialed teachers.

## WHAT IS A PARAPROFESSIONAL

### **Position Description**

“Paraprofessional” is a term for someone who is directed by a certified teacher or other school professional to provide additional instructional support and supervision for students in all grade levels from preschool to grade 12.

“Paraprofessionals who provide instructional support” includes those who 1) provide one-on-one tutoring if such tutoring is scheduled at a time when a student would not otherwise receive instruction from a teacher; 2) assist with classroom management, such as by organizing instructional materials; 3) provide instructional assistance in a computer laboratory; 4) conduct parental involvement activities; 5) provide instructional support in a library or media center; 6) act as a translator; or 7) provide instructional support services under the direct supervision of a highly-qualified teacher (California Department of Education [CDE], 2018). Because paraprofessionals provide instructional support, they should not be providing planned direct instruction, or introducing students to new skills, concepts, or academic content (CDE, 2018).

### **Certification Requirements**

Title I paraprofessionals whose duties include instructional support must have

1. A high school diploma or the equivalent, **and**
2. Two years of college (48 units), **or**
3. An A. A. degree (or higher), **or**

4. Passed a local assessment of knowledge and skills in assisting in instruction.

*This is a locally-approved assessment. Local education agencies may develop their own assessment or use an existing assessment so long as it measures the knowledge and skills in assisting in instruction. Many districts use the California Basic Educational Skills Test [CBEST] for this purpose (CDE, 2018).*

### **Typical Job Duties**

Paraprofessionals are teaching assistants. They lead instructional activities for students in various instructional settings. Their job duties include filling teaching positions, providing enrichment activities for students, and reinforcing classroom curriculum. Position titles include Band Assistants, Preschool Assistants, Bilingual Assistants, Group Activity Leaders, and Special Education Assistants.

Paraprofessional educators may provide direct instruction, assist students with reading assignments, provide tutorial and mentoring support, and provide specialized support for students with special needs.

Many paraprofessionals are assigned to supervise students during snacks, lunch, recess, and during class outings. They also support teachers with grading assignments, posting attendance, setting up activities, and preparing lesson plans.

Most paraprofessionals are assigned to work exclusively with students who have special education needs. They may provide physical care for students who are unable to care for themselves (feeding, lifting, moving, or hygiene), behavior management, or medical assistance.

They also provide support for special education students who are participating in the general education classroom to reduce the amount of time students with special needs are pulled out of the general education learning environment. Specialized training is provided to paraprofessionals in behavior management techniques and management of assaultive behavior. Over time, the role of the paraprofessional has evolved to the point where many teach lessons in the classroom, provide instruction for high-need students in small groups, and lead active recreational group activities.

## GROW YOUR OWN: A TEACHER PATHWAY MODEL FOR STOCKTON USD

### **Career Technical Education Student to Paraprofessional**

Stockton USD has the necessary assets to develop a fully-prepared teacher workforce, following the “grow your own” model. One possible solution would entail the development and support of the following pathway: Career technical education student (CTE) to paraprofessional to full-time teacher. The district has direct access to in excess of both 150 CTE Teacher Pathway students and 900 paraprofessionals. CTE makes an ideal starting place for some prospective teachers.

To benefit the most from the CTE Teacher Pathway programs, the district will need to invest in follow-up communication, social connection activities, and developmental milestone support for career pathway graduates to assure students do not disconnect when they graduate from high school.

Before graduation, Teacher Pathway students should be given information about the Cooperative Organization for the Development of Employee Selection Procedures (CODESP) exam, the goal being to encourage transition from CTE to paraprofessional. Examination preparation opportunity dates and examination registration information should be provided to the Teacher Pathway program students to help them transition to the paraprofessional opportunities available with the district’s community partners. Connections can be made through site visits and marketing materials that promote employment opportunities in the paraprofessional assignments. A suggested connection is to offer summer tutor training and behavior

support strategies training to familiarize an aspiring teacher with the role and responsibilities of an instructional assistant. Successful completion of the CODESP exam will qualify the aspiring teacher for the position of Group Activity Leader with a community partner in an afterschool program. This experience will provide exposure to instruction and behavior management techniques and, most of all, provide an opportunity for an aspiring teacher to practice leading groups of students. The positions are 3.25 to 4.75 hours per day. The workday begins as early as, 1:15 p.m., depending upon dismissal time at the school site, and ends at 6:00 p.m., Monday through Friday. It is an ideal work schedule for a full-time college student.

The next step occurs when the aspiring teacher has six months experience working with students and has met the qualification requirements for employment opportunities in the position of After School Site Program Facilitator or Special Education Assistant. The After School Site Program Facilitator's workday begins at 12:00 p.m. and ends at 6:30 p.m. This is an ideal schedule for a full-time college student, as it allows for morning and evening coursework. The Special Education Assistants work six hours per day, aligning with the school's regular school day bell schedule, Monday through Friday. It too is an ideal schedule for a college student, as it allows for evening coursework. The aspiring teacher would maintain the paraprofessional assignment throughout the duration of their undergrad course work, and subsequently become certified as a paraprofessional.

### **Paraprofessional to Fully Credentialed Teacher**

The next challenge in the “grow your own” program is to convince paraprofessionals to continue with their training to become fully-certified teachers. Such training consists of both formal college classroom education and further in-class teaching experience. Currently, there are 116 paraprofessionals with more than 81 semester units and three or more years of classroom experience in the district’s paraprofessional workforce (see Appendices A and B). A marketing effort to encourage these employees to continue their education, along with the support to make the necessary connections with educational institutions, could incentivize them to pick up where they left off in their pursuit of an education, and thereby help solve the district’s special education teacher shortage.

The district employed 209 teachers with intern credentials, permits, or waivers to staff its classrooms in the 2016-2017 school year. Sixty-two of the teachers were assigned to special education classrooms, an increase of 265% from the 2012-2013 school year (Table 2).

The district would benefit from offering the paraprofessionals pedagogy training outside of their assigned instructional assignment to expose them to a variety of teaching experiences. The paraprofessionals are a part of the Stockton USD community and they are familiar with the culture that “grows” the students.

The paraprofessional with more than 81 units could enroll in courses at California State University, Stanislaus’s Stockton Center. The University’s Extended Education program offers 16-month bachelor’s degree programs that will prepare the

paraprofessional to begin a teacher program and intern work. One very significant benefit of having paraprofessionals advance to full certification is that paraprofessionals have real-life experience in the classroom and are more prepared to face the first-year teaching challenges, than traditional college-to-classroom teaching candidates.

### **Teacher Retention**

A report published by the Learning Policy Institute 2016 *Solving the teacher shortage: How to attract and retain excellent educators*, Podolsky, Kini, Bishop and Darling-Hammond made the following teacher retention recommendations:

- Districts invest in high-quality principal development that teaches principals how to include teachers in decision-making and foster positive school culture and create learning communities that can have a significant positive impact on teacher retention. The Balanced Leadership Professional Development program (BLPD) focuses on
  - Shaping a vision of academic success for all students;
  - Creating a climate hospitable to education;
  - Cultivating leadership in others;
  - Improving instruction; and
  - Managing people, data, and processes to foster school improvement.
- Teacher surveys to assess the indicators of the teaching and learning environment and that can be used as a guide to improvement. Surveys on teaching and learning conditions may be considered as one measure in a

multiple-measures school accountability system. ESSA Title II funds can be used to develop “feedback mechanisms to improve school working conditions, including through periodically and publicly reporting results of educator support and working conditions feedback” (p. 49).

- Incentivize professional development strategies and the redesign of schools to provide for greater collaboration.
- Provide teacher collaboration time for teachers of the same subject or who share groups of students to plan curricula together.

## STRATEGY

### **Supply Chain Coordinator**

Many policy recommendations have been implemented by Stockton USD, however, the district's teacher shortage is increasing. An analysis of the district's supply chain assets exposes a transition gap between developmental milestone assets. The CTE Teacher Pathway Program does not have transition support to guide students to paraprofessional opportunities. The district does not currently provide transition support for paraprofessionals to the Teacher Induction Program. Therefore, the existing supply chain assets could benefit greatly from the addition of a Teacher Supply Chain Coordinator

The addition of a Teacher Supply Chain Coordinator position to support transition through the supply chain has the potential to increase the production of fully prepared teachers. The Teacher Supply Chain Coordinator would be responsible for filling the transition from: (1) the CTE Teacher Pathway program student to paraprofessional, and (2) Paraprofessional to fully prepared and certified teacher. The TSC Coordinator would also focus on teacher retention analysis and retention strategy monitoring.

### **Support for CTE Teacher Pathway Students**

There is a risk of losing contact with students once they graduate from high school. It will be necessary to visit the CTE Teacher Pathway programs 8-10 times per school year to build relationships with the students and become a connection

between them and the district beyond graduation. The graduates should be offered various training opportunities throughout the summer months to prepare them to work with students. The graduates should be offered test preparation sessions to prepare them for success with the CODESP test. Connections to community partners that provide staff for after school programs will be accommodated by the Teacher Supply Chain Coordinator. After six months of working with students in the afterschool programs, the graduates should be encouraged to apply for paraprofessional classroom assistant positions within Stockton USD. Quarterly communication will be necessary post-graduation to provide updates regarding opportunities and the steps of the pathway from high school graduate to fully prepared teacher. The communication should be ongoing for six years post high school graduation.

### **Support for Paraprofessionals**

Bimonthly communication regarding opportunities to reengage in educational activities and goals should be offered to existing paraprofessionals. The communication should include contacts at local colleges and universities. The goal for supporting the paraprofessional is mentorship to clear all hurdles in the paraprofessional's pathway to earning a bachelor's degree, pass the CBEST examination, and secure enrollment in a teacher training program. The Supply Chain Coordinator should request approval to attend CSEA 318 Chapter meetings biannually to establish rapport with the union's leadership and membership.

### **Fully-Prepared Teacher**

The benefits of the mentorship provided to the CTE Teacher Pathway graduate, followed by the minimum 81 semester units and 3 years of experience as paraprofessional, will prepare candidates for the district intern credentials approval process.

This alternative route to earning a teaching credential includes:

1. Paraprofessionals who earn a bachelor's degree or higher, pass the CBEST, complete a course (two semester units or three quarter units) in the provisions and principles of the U.S. Constitution, and have a commitment from the district to provide an assisted and guided training period by a certificated employee are eligible to apply for District Intern Credentials.
2. Grade 6-12 specific subject authorization requiring the completion of a Commission-approved subject-matter preparation program and successful completion of subject matter examination(s) to verify subject matter competence.
3. Grade K-8 self-contained classroom and core setting authorization, which requires a passing score to verify competence for a multiple subject teaching credential.
4. Bilingual Authorization which requires verification of the listening, speaking, reading, and writing on the appropriate California Subject Examination for Teachers (CSET).

5. Education Specialist authorization which requires satisfying the requirements for number 1, and 2 or 3 described above (Commission on Teacher Credentialing, 2018).

Stockton Unified School District will benefit from an experienced intern teacher supply that is more prepared than interns who have not worked in after school programs or assisted in classrooms.

### **Teacher Retention**

Retention efforts will benefit from mentor collaboration opportunities, principal and colleague team building projects, Stockton USD's attractive teacher pay scale, and opportunities for future leadership experiences. These four factors are expected to result in higher overall teacher satisfaction for interns.

To measure first and second year intern teacher satisfaction, surveys should be conducted monthly to, assess the indicators of the teaching and learning environment that can be used to improve new teacher retention (Podolsky, 2016b). Greater success will be achieved if the district's directors become trainers of the McREL's Balanced Leadership Framework: Developing the Science of Educational Leadership and assure that all school site administrators participate in quarterly training opportunities. The directors would benefit from coaching the site administrators how to lead the implementation of the district's educational goals and initiatives through collaboration with their school site staff. Exit interviews or surveys should be conducted for all teachers who leave the district to identify areas of needed improvement.

## IN SUMMARY

The Stockton USD teacher shortage has been a persistent problem for many years. The plan outlined in this document envisions one possible solution, provided the District is willing to be more expansive and creative in its approach to teacher development. The solution consists of increased training and development of both CTE pathway student and paraprofessionals within the district. CTE pathway students and paraprofessionals offer a ready source of prospective teachers. Training and development of these categories of educators can be one answer to the SUSD's teacher shortage problem.

In order for this proposal to be successful, the following resources need to be given serious consideration. The district has recently added an Executive Director of Human Capital position to complement its human resources leadership team. The addition of a Teacher Supply Chain Coordinator (TSC Coordinator) to the Human Capital management team, to support the development and transition of CTE Teacher Pathway students and paraprofessionals through the teacher preparation process, will provide the district with the vital connections to bridge the supply chain gaps. The TSC Coordinator will collaborate with the CTE program director and with teachers to gather post-graduation student communication information. The TSC Coordinator will actively promote the district's Teacher Induction and Mentoring program with the paraprofessionals' leadership team to increase opportunity awareness for its membership. The TSC Coordinator will pursue the development and coordinate

pedagogical training opportunities with the Director of Teacher Induction and Mentoring for paraprofessionals. The TSC Coordinator will support the district's CODESP testing director to provide test prep and schedule testing opportunities at optimal points in the transition phases for CTE Teacher Pathway students. The TSC Coordinator will implement transition connections to maintain and develop existing valuable human capital assets. And finally, the TSC Coordinator will collaborate with the Director of Research and Evaluation to develop teacher job satisfaction surveys and Exit Interviews to assess the indicators of the teaching and learning environment that can be used as a guide to improve job satisfaction and increase retention.

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## APPENDICES

## APPENDIX A

## PARAPROFESSIONALS – SPECIAL EDUCATION SETTING

TITLE	RANGE	A	B	C	D	E
Special Education Assistant/Braille Transcriber	33					
	34					
	35					
	36					1
	37		1			
Special Education Assistant/Hearing Impaired	33					
	34					
	35					1
	36				1	
	37				1	2
Special Education Assistant/Learning & Communicatively Handicapped	33	4	2	2		23
	34					5
	35	1	4	1		11
	36	3		1		15
	37	4	14	5	2	39
Special Education Assistant/Learning & Communicatively Handicapped (One-on-One)	33					
	34					
	35					
	36					
	37					1
Special Education Assistant/Physically Handicapped	33		1			4
	34					
	35			1		
	36		1			
	37					6
Special Education Assistant/Severely Mentally Handicapped	33	12	6	7	1	26
	34			2	2	13
	35	2	4	1	2	9
	36	3	2	4	2	15
	37	10	13	17	2	55
Special Education Assistant/Severely Mentally Handicapped (One-on-One)	33	2	2	1	2	1
	34	2				
	35					
	36					
	37		1	1		5

Special Education Aquatic Assistant	33					1
	34					
	35					
	36					
	37					
Special Education Development Assistant	33					5
	34					1
	35					2
	36					3
	37	1	1			5

\*Shaded cells represents the number of employees with more than 81 college semester units and three or more years of service with Stockton USD in respective assignment.

## APPENDIX B

PARAPROFESSIONALS – GENERAL EDUCATION AND PRE-K SUPPORT  
SERVICES SETTING

TITLE	RANGE	A	B	C	D	E
After School Site Program Facilitator	26	1			3	1
	28					1
	29					
	30	1		1	1	2
	32	1	2	2	1	3
	34	2	4	1	2	8
	36					
	38					
	40					
Community Assistant	26		1			
	28					
	29					
	30		1			1
	32	2				
	34		1			1
	36					
	38					
	40					
Bilingual Assistant	26	3		1		11
	28			1		2
	29					
	30	2	1	1		2
	32	2				2
	34	3		2		9
	36					
	38					
	40					

Instructional Assistant	26	1				1
	28					
	29					
	30	1				
	32		1			
	34	1				
	36					1
	38					
	40					1
Bilingual Evaluation Assistant	26					1
	28					
	29					
	30					
	32					
	34					4
	36					
	38					
	40					
Montessori Assistant	26					
	28					
	29					
	30					
	32					
	34					
	36					
	38					
	40					
Child Assistant	26					
	28					
	29					
	30		1			1
	32					
	34					
	36					
	38					
	40					

Preschool Assistant	26	4	5	2	1	5
	28	2			1	
	29					
	30	2	1	2		3
	32	6	9	4		5
	34	16	17	9	3	17
	36					1
	38					
	40					3
Native American Cultural Center Assistant	26					
	28					
	29					
	30					
	32					
	34		2			1
	36					
	38					
	40					
Infant Center Assistant	26					
	28					
	29					
	30					
	32					
	34					
	36					
	38					
	40					

## APPENDIX C

PARAPROFESSIONALS - SPECIALIZED & ENRICHMENT ACTIVITY  
SETTING

TITLE	RANGE	A	B	C	D	E
CAI Assistant	26					
	27					
	30		1			1
	40					
	54					
Dance Assistant	26					
	27					
	30			1		
	40					
	54					
Band Assistant	26					
	27					
	30					
	40		1			
	54					
Concert Music Assistant	26					
	27					
	30					
	40			2		
	54					
Mariachi Music Assistant	26					
	27					
	30					
	40			1		
	54					
Educational Sign Language Interpreter	26					
	27					
	30					
	40					5
	54					

Speech Language Path Assistant	26					
	27					
	30					
	40					
	54	1			1	1

\*\*Non-incremental schedule, experience and educational analysis not possible with information format requested.