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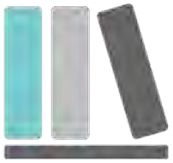

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Feature Article

Special Educator Self-Efficacy: The Impact of Training and Experience

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Abstract

In California, the longstanding insufficiency of special educators has compounded since the 2013-2014 academic year. Districts and state legislators have relied on the issuance of substandard permits (i.e., Provisional Intern Permits, Short-Term Staff Permits, and Intern Credentials) to counteract the shortage. However, the effectiveness of this approach has limited evaluation. This study evaluated differences between pre-service and in-service special educators' self-efficacy ratings. Special educators serving in California's Central Valley on substandard permits or valid teaching credentials (i.e., Preliminary and Clear Credentials) completed the Teachers' Sense of Efficacy Scale. Differences were assessed across several variables using independent t-tests and one-way ANOVAs. Significant differences emerged in special educators' self-reported levels of self-efficacy as a function of credential status, favoring those with valid credentials. The findings indicate a correlation between special educators' credential status (a proxy for training) and self-reported self-efficacy. The results of this study add to the research on special educators' self-efficacy by exploring the phenomenon among a newly emerged group of California-based special educators: substandard permit holders.

Keywords: *self-efficacy, special education, substandard authorization, pathways to teaching*

Across the United States, a teacher shortage plagues special education. The shortage dates from the end of the previous century (Fideler et al., 2000; Müller & Markowitz, 2003) and continues to the present (Sutcher et al., 2016). In 2010, the national attrition rate for special educators reached 13.5%, 9% of whom exited the profession within their first year of teaching (Fish & Stephens, 2010). In California, 13.4% of special educators left the profession or state between the 2015-2016 and 2016-2017 school years (Ondrasek et al., 2020).

Attempts to stem and reverse the shortage of special educators in California have manifested as providing extra support, increasing salaries, improving job satisfaction, fostering job commitment, enhancing educator motivation, outlining alternate certification pathways, and increasing self-efficacy of teachers (California Commission on Teacher Credentialing [CCTC], 2015; Canrinus et al., 2012; Fall, 2010; Thornton et al., 2007). Special educators' burnout and their resulting departure from the profession result from many factors, with stress representing a

dominant factor. Stress experienced by special educators leads to chronic burnout, which can include feelings of powerlessness, depersonalization, and exhaustion (Maslach, 1982). Additional sources of stress and teacher burnout for special educators include lack of advancement opportunities, excessive paperwork, unsuccessful administrative meetings (Roach, 2009), high workload and poor teaching conditions (Whitaker, 2001), and insufficient certification (Miller et al., 1999)—factors which contribute to lower self-efficacy. Teachers with lower self-efficacy reported commensurately low levels of job satisfaction (Klassen et al., 2009) and greater job-related stress (Betoret, 2006). Teachers with lower self-efficacy demonstrated a greater tendency to exit teaching compared to teachers with higher self-efficacy (Wasburn-Moses, 2005).

Teacher Shortages and Self-Efficacy

Teacher efficacy represents a motivational belief or confidence teachers hold about themselves and their capabilities to influence student learning (Klassen et al., 2011). Klassen and Durksen (2014) report that pre-service teachers with higher self-efficacy have a higher commitment to teaching at the end of their teacher preparation programs. Chestnut and Cullen (2014) found a significant and positive correlation with preservice teacher self-efficacy and commitment to the profession. Chestnut and Cullen (2014) also found that emotional intelligence and satisfaction with expectations of future work environment related to self-efficacy and that both factors accounted for 3.53% of the variance in educators' commitment to remain in the field.

Teacher self-efficacy relates to positive teacher behaviors such as enthusiasm, persistence, instructional behavior, and commitment, as well as teachers' willingness to try new instructional strategies (Berman et al., 1977). Teachers' self-efficacy relates to improvements in student motivation (Scherer et al., 2016; Tschannen-Moran & Hoy, 2001a), student self-efficacy, and student achievement (Tschannen-Moran & Hoy, 2001a). Additionally, teacher self-efficacy relates negatively to the frequency of student referrals for special education services (Coladarci, 1992; Meijer & Foster, 1988; Podell & Soodak, 1993).

California Special Education Teaching Credentials

In California, the Education Specialist (a.k.a. special education) Credential represents a two-tiered preparation and licensing process, beginning with the Preliminary and culminating in the Clear Credential (CCTC, 2016). However, the shortage of credentialed teachers prompted the state licensing agency—the CCTC—to create two alternate certifications (Short-Term Staff Permits and Provisional Intern Permits) to address anticipated and acute staffing needs for special education classrooms (CCTC, 2015). An overview of California special education credentials and authorizations appears in Table 1.

The alternate certifications allow individuals to work as teachers in the classroom prior to earning a valid teaching credential. The alternate credential pathways benefited the state in the 2015-2016 academic year, increasing the special education workforce by more than 4,000 educators (Carver-Thomas & Darling-Hammond, 2017). However, the issuance of Preliminary Credentials has not maintained pace with the number of substandard authorizations issued annually. In the 2011-2012 academic year, approximately 60% of special educators in California held a Preliminary Credential. In the 2017-2018 academic year, conversely, the number of special educators employed on substandard authorizations increased to 65% (Ondrasek et al., 2020). Table 2 illustrates that new, underprepared special educators in California vastly outnumber those individuals who are fully credentialed (CCTC, n.d.).

Darling-Hammond et al. (2016) noted that broadening the pathway to a teaching credential fills empty classrooms but fails to stabilize the supply of credentialed teachers. Teachers hired on substandard permits exit from the profession at rates two to three times higher than those who

Table 1: *Overview of Credential Types*

Credential Type	Description	Requirements
Clear	Valid credentials issued after two years of teaching with a preliminary credential	• Have successfully taught for two years with a Preliminary Credential; • Completed advanced professional development.
Preliminary	Valid credential issued after completion of a professional (usually post-baccalaureate) teacher preparation program	• Holds a baccalaureate or higher degree from a regionally-accredited university or college • Satisfied the basic skill requirement • Provided verification of subject matter competency • Passed the Reading Instruction Competence Assessment (RICA) • Passed an exam or completed a course from a regionally accredited university or college on the principles and provisions of the U.S. Constitution • Completed a commission-approved teacher preparation program in a specialty area (credential type) • Passed the California Subjects Examination Test (CSETs)
Intern	Substandard permit issued after sufficient (but not entire) study and preparation in a professional teacher preparation program	• Holds a baccalaureate or higher degree from a regionally-accredited university or college • Passed the California Basic Skills (CBEST) examination • Passed the subject matter competence (CSET) examination • Passed an examination or completed a course in the principles and provisions of the U.S. Constitution (from a regionally-accredited university or college)
Provisional Intern Permit (PIP) or Short-Term Staff Permit (STSP)	Substandard permit issued by a school district or local education agency, in the event of the unavailability of other qualified or eligible applicants	• Holds a baccalaureate degree or higher from a regionally-accredited university or college • Satisfied the CBEST requirement

Table 2: *New, Underprepared Special Education Teachers in California*

Year	n	Substandard Permits	Percentage	Preliminary Credentials	Percentage
2015-2016	6,406	3,535	55.2	2,871	44.8
2016-2017	7,469	4,156	55.6	3,313	44.4
2017-2018	7,849	4,624	58.9	3,225	41.1
2018-2019	8,463	5,238	61.9	3,225	38.1
2019-2020	8,828	5,336	60.4	3,492	39.6

have comprehensive preparation prior to entering the classroom (Sutcher et al., 2016). High turnover costs not only in fiscal terms and inconvenience but in student achievement as well (Sutcher et al., 2016). During the 2014–2015 academic year, the number of emergency credentials issued in lieu of the unavailability of a fully credentialed teacher nearly tripled, from approximately 850 to over 2,300 (Sutcher et al., 2016). Table 3 illustrates the increase of those employed in special education classrooms on PIPs and STSPs from 2015-2020 in California (CCTC, n.d.).

Table 3: *Increase of Special Education PIPs and STSPs Each Year from 2015-2020 in California*

Year	n	STSP	PIP
2015-2016	1,690	1,139	551
2016-2017	2,316	1,354	962
2017-2018	2,521	1,538	983
2018-2019	2,873	1,623	1,250
2019-2020	3,016	1,752	1,264

Self-Efficacy

Tschannen-Moran, et al. (1998) defined self-efficacy as teachers' beliefs in their ability to organize and execute courses of action necessary to bring about desired results. Teacher self-efficacy relates to positive characteristics such as more innovative adoptions and time spent teaching; organization and planning (Allinder, 1994); improved classroom management strategies, student motivation, and teacher competence; school climate; commitment to teaching; and deferred referrals of students to special education (Berman et al., 1977; Chestnut & Cullen, 2014; Klassen & Durksen, 2014; Klassen et al., 2011;). Zee and Koomen (2016), in a meta-analysis from 162 articles, found that teachers with high self-efficacy cope effectively with a range of problem behaviors, use student-centered classroom behavior strategies, use student-centered classroom practices, act proactively, and establish relationships that are less conflictual with students.

High teacher efficacy is directly related to numerous positive educational outcomes for both the student and teacher. Teachers' self-efficacy has been heavily researched. Teacher self-efficacy shapes the teacher, subject matter, and student attitudes (Zee & Koomen, 2016). Woolfolk and Hoy (1990) found that students reported greater interest in school and rated content as more important when the teacher had higher general teacher efficacy.

Self-Efficacy and Commitment to the Field

Teachers' self-efficacy relates positively to teachers' psychological well-being (Skaalvik & Skaalvik, 2016; Zee & Koomen, 2016), job satisfaction and commitment to the field (Zee & Koomen, 2016)—factors which contribute to or contend against teacher burnout. Additionally, teachers with high self-efficacy are less likely to experience emotional exhaustion and burnout. Conversely, teachers with high self-efficacy demonstrate greater commitment to the profession (Coladarci, 1992; Zee & Koomen, 2016). High self-efficacy similarly associates with greater commitment among pre-service teachers (Bruinsma & Jansen, 2010).

However, self-efficacy itself demonstrates malleability in response to the conditions of teaching. For example, Skaalvik and Skaalvik (2016) found that a lack of shared values between the teacher and school negatively associated with teacher self-efficacy. On the other hand, engagement and teacher self-efficacy related negatively to leaving the teaching profession. To this list of influences, Coladarci (1992) added that school climate and teacher-to-student ratios associated inversely with self-efficacy and teaching commitments.

Canrinus et al. (2012) found that high levels of relationship satisfaction, teacher motivation, and occupational commitment associated with high levels of teacher self-efficacy. A more complex relationship emerged among self-efficacy, benefits and salary, and positive relationships, indicating that the higher a teachers' self-efficacy, the less satisfied they are with fringe benefits and salary than with positive relationships that reduce pressures to remain in the field (Canrinus et al., 2012).

Pre-Service Teachers

Pre-services teachers' self-efficacy points to several indications about their commitment to their future careers. Klassen et al. (2014) reported that pre-service teachers with higher self-efficacy have a greater commitment to teaching at the end of

their teacher preparation programs. Other researchers have found a positive association between pre-service teachers' efficacy and their commitment to the teaching profession (Chestnut & Cullen, 2014; Wasburn-Moses, 2005). Hoy and Spero (2005) found more optimism and less stress mediated the relationship between self-efficacy and the commitment to the first year of teaching. Thus, self-efficacy provides indications about future teacher supply.

Comparing Pre- and In-Service Teachers

Putman (2012) compared pre- and in-service teachers to explore how self-efficacy differed as a function of expertise by analyzing responses from 484 participants drawn from a convenience sample of graduate and undergraduate candidates enrolled in teacher preparation programs in the Midwest of the United States. The sample consisted of four groups: preservice teachers prior, post and in-service teachers, novice teachers, and experienced teachers. Self-reports from pre-service and novice teachers demonstrated significantly lower efficacy than the group of experienced teachers, suggesting that teachers with more experience and time in the field have higher self-efficacy ratings (Putman, 2012). Bet and Erg (2015) found similar results in the differences of teacher self-efficacy beliefs between pre- and in-service preschool teachers. Pre-service preschool teachers scored lower on self-reports of self-efficacy than in-service preschool teachers.

Purpose

The CCTC's effort to stem the teacher shortage included broadening the pathway to teacher credentialing. However, the benefit of that decision has not yet been fully realized as many of the candidates following the new pathway leave the field at higher rates than seen among credentialed special educators. The researchers suggest that identifying and bolstering key traits of substandard authorization holders might expedite the effort to reverse the teacher shortage by optimizing the efficiency of the alternative credential pathway.

Teacher self-efficacy represents an industry standard for gauging the potential of educators and represents an unexplored facet of those who hold substandard credentials. This inquiry collected and analyzed self-reported ratings to determine variance in teacher self-efficacy as a function of certification status. The researchers hypothesized the following:

- Intern special educators will describe higher self-efficacy ratings than those teaching on other substandard permits (i.e. PIPs, STSPs).
- Credentialed (Preliminary or Clear) special educators will describe higher self-efficacy ratings than those teaching on substandard permits, including Intern Credentials.

Methods

In order to explore the self-efficacy ratings of those following alternate pathways to special educator credentialing, researchers collected and analyzed self-reported self-efficacy ratings, attending to variations that resulted from different credential statuses.

Design and Methodology

This study used a quantitative non-experimental correlational survey design. An institutional review board and the administration of two school districts reviewed and approved the parameters of the study before the collection of data. Individuals' rights were diligently protected during and after the study.

Teacher Sense of Efficacy Scale (TSES)

The TSES, "the predominant measure of teacher efficacy throughout the world" (Duffin, French, & Patrick, 2012, p. 827), has strong validity and reliability (Duffin et al., 2012; Klassen et al., 2011; Tschannen-Moran & Woolfolk Hoy, 2001b). Participants report their ability to effect outcomes on a Likert scale, with scores ranging from 1 (nothing) to 9 (a great deal) (Fives & Buehl, 2009). Tschannen-Moran and Hoy (2001b) found evidence of the internal consistency of the TSES as

both a three-factor and a one-factor measure, ranging from 0.91 for the Instructional Strategies subscale, 0.87 for the Student Engagement subscale, and 0.90 for the Classroom Management subscale. On the 24-item TSES version (the long form), Cronbach's alpha measured 0.94 (Tschannen-Moran & Hoy, 2001b). The TSES measures a larger range of self-efficacy of teaching tasks compared to other measures of the same construct. The TSES also provides specificity of tasks for comparison of teachers across contexts, subjects, and levels (Hoy & Spero, 2005). The TSES collects self-reported efficacy and has been used among in-service and pre-service teachers. The long form version of the TSES is recommended for use with pre-service teachers (Tschannen-Moran & Woolfolk Hoy, 2001b).

Sample

The researchers used convenience sampling by capitalizing on existing partnerships within the Central Valley of California in order to recruit participants employed as special educators on substandard authorizations or Preliminary and Clear Credentials. Participants were employed in one of two large school districts, Central Valley A or Central Valley B. These two districts were selected because they serve a large geographical area of the Central Valley.

Procedure

An invitation to complete the TSES was emailed to all special educators employed in the two participating school districts. The survey was emailed to 103 special education teachers in Central Valley A and 108 special education teachers in Central Valley B. Additional questions were added to the end of the TSES to capture demographic information such as credential status, gender, age, prior experience, and years taught. The survey also gauged if respondents had previous experience as a special education para-educator or substitute teacher.

The survey was administered electronically through SurveyMonkey. The electronic administration of the TSES was in alignment with current research that supports the reliability and validity of the TSES (Duffin et al., 2012; Klassen et al., 2011; Tschannen-Moran & Hoy, 2001b). Data were analyzed using the Statistical Packages for Social Sciences (SPSS). The analysis included procedures for descriptive and inferential statistics.

Data Analysis

Data were analyzed with independent t-tests and one-way analyses of variance (ANOVAs) to determine if a difference of mean manifested in the dependent variable (i.e. self-efficacy) as a function of varying credential statuses. An initial data review included an analysis for homogeneity of variances (Leard Statistics, 2015). After confirmation that the data did not meet the assumptions for running a standard multiple regression, one-way ANOVAs were conducted. Researchers investigated differences across the three subscales of the TSES—Student Engagement, Instructional Strategies, and Classroom Management.

Results

The researchers received 107 responses (51% response rate), of which seven were significantly incomplete and, therefore, excluded from the subsequent analysis. Among the 100 remaining responses, one set represented an outlier. This constituted a threat to the integrity of the data analysis as it was an outlier on all scale scores; its inclusion would unnecessarily skew the data. Therefore, it was also excluded. Of the 99 responses, three respondents scored slightly lower but were kept for analytical purposes. Overall, the study analyzed data from 99 respondents.

Participant Demographics

Table 4 provides an overview of participants' self-reported credential statuses. Most respondents held a Clear Credential (59.6%).

Table 4: *Credential Statuses (N = 99)*

Demographics	Frequency	Percent
PIP or STSP	11	11.1
Intern Credential	12	12.1
Preliminary Credential	17	17.2
Clear Credential	59	59.6

Self-Efficacy Ratings as a Function of Credential Status

Results from the one-way ANOVA appear in Table 5. The homogeneity of the Levene results indicated that the distribution in the groupings' variances are comparable to the distribution in the general population.

Table 5: *Test of Homogeneity of Variances for TSES Scales x Certification Status*

TSES Factors	Levene Statistic	df1	df2	p
Student Engagement	1.77	3	95	0.157
Instructional Strategies	1.04	3	95	0.375
Classroom Management	1.30	3	95	0.276

Subscale Comparisons by Credential Status. Special educators' self-efficacy ratings by certification status are illustrated in Table 6. Those employed on substandard permits—PIP or STSP and Intern Credentials—scored lowest across the three subscales of the TSES, although those with Intern Credentials had a higher mean score on the three subscales. Highest mean scores belonged to those with Clear Credentials on the Instructional Strategies (M = 59.72) and Classroom Management (M = 58.69) subscales, and to those with Preliminary Credentials on the Student Engagement subscale (M = 56.64).

Table 7 illustrates the results of the one-way ANOVA analysis of special educators' self-efficacy ratings by credential status. Among those on substandard authorizations, including those on PIP/STSP authorizations, Intern Credentials, as well as those with Intern and Preliminary Credentials no significant differences emerged distinguishing special educators' self-efficacy ratings on the subscale of Student Engagement (p=0.0001). Differences emerged among special educators' self-efficacy ratings as a function of certification status on the Student Engagement subscale between those with PIP/STSP authorizations and those with Preliminary Credentials. Differences also emerged between the groups of PIP/STSP authorization and Clear Credential holders.

On the Instructional Strategies subscale, differences emerged between those with PIP/STSP authorizations and Preliminary Credential holders (as well as between those with PIP/STSP authorizations and Clear Credential holders. Additionally, a significant difference emerged between the groups of Clear Credential holders and Interns. No differences characterized special educators' self-efficacy ratings as a function of certification status on the Classroom Management subscale (p=0.0006).

Table 8 demonstrates the post-hoc results from the Games-Howell analysis, including significant differences for special educators' self-efficacy ratings as a function of credential status. Significant differences emerged in comparisons of the PIP/STSP authorization and Preliminary Credential groups (p = 0.014), PIP/STSP authorization and Clear Credential groups (p = 0.036), and Intern and Preliminary Credential groups (p = 0.027).

Discussion

The research reported herein addresses a lack of research regarding efficacy among a new subset of teachers: those with PIPs and STSPs. The results supported the hypotheses that Intern Credential holders would demonstrate greater self-efficacy than those employed on substandard

Table 6: *Descriptive Statistics for TSES Scales x PIP/STSP, Intern, Preliminary or Clear*

		N	*M*	*SD*	*SE*	95% Confidence	
						Lower	Upper
Student Engagement							
	PIP/STSP	11	44.81	9.99	3.01	38.10	51.53
	Intern	12	48.33	7.93	2.29	43.29	53.37
	Preliminary	17	56.64	5.62	1.36	53.75	59.53
	Clear	59	54.89	9.17	1.19	52.50	57.28
Instructional Strategies							
	PIP/STSP	11	47.45	11.12	3.35	39.97	54.93
	Intern	12	49.91	7.19	2.07	45.34	54.48
	Preliminary	17	57.58	5.95	1.44	54.52	60.65
	Clear	59	59.72	8.96	1.16	57.39	62.06
Classroom Management							
	PIP/STSP	11	50.09	12.34	3.72	41.80	58.38
	Intern	12	51.16	9.41	2.71	45.18	57.15
	Preliminary	17	58.35	6.20	1.50	55.16	61.54
	Clear	59	58.69	9.28	1.20	56.27	61.11

Table 7: *ANOVA Results for TSES Scales x Credential Status*

		SS	*df*	*MS*	*F*	*p**
Student Engagement						
	Between Groups	1428.50	3	476.16	6.39	0.0001
	Within Groups	7075.57	95	74.48		
	Total	8504.08	98			
Instructional Strategies						
	Between Groups	2045.93	3	681.97	9.20	0.000
	Within Groups	6039.42	95	74.09		
	Total	9085.35	98			
Classroom Management						
	Between Groups	1128.69	3	376.23	4.40	0.0006
	Within Groups	8116.96	95	85.44		
	Total	9425.65	98			

*Notes.** Significance $p = 0.5$

Table 8: *Games-Howell for TSES Scales x Credential Status*

		Comparison	Md	*SE*	*p*	95% Confidence	
						Lower	Upper
Student Engagement							
	PIP/STSP	Intern	-3.51	3.78	0.790	-14.15	7.12
	PIP/STSP	Preliminary	-11.82	3.30	0.014	-21.43	-2.22
	PIP/STSP	Clear	-10.08	3.24	0.036	-19.56	-0.59
	Intern	Preliminary	-8.31	2.66	0.027	-15.82	-0.80
	Intern	Clear	-6.56	2.58	0.088	-13.88	0.75
	Preliminary	Clear	1.74	1.81	0.770	-3.09	6.59
Instructional Strategies							
	PIP/STSP	Intern	-2.46	3.94	0.0923	-13.68	8.76
	PIP/STSP	Preliminary	-10.13	3.65	0.064	-20.77	0.50
	PIP/STSP	Clear	-12.27	3.55	0.020	-22.77	-1.79
	Intern	Preliminary	-7.67	2.52	0.030	-14.72	-0.61
	Intern	Clear	-9.81	2.38	0.003	-16.51	-3.10
	Preliminary	Clear	-2.14	1.85	0.660	-7.12	2.84

authorizations, but that those with valid credentials (Preliminary or Clear) would report the highest self-efficacy ratings.

The differences in self-efficacy as a function of credential status was not surprising as comparable differences emerged in studies comparing pre- and in-service teachers (Bet & Erg, 2015; Sak, 2015), a pattern which suggests that training and experience inform improvements in self-efficacy. However, the disparity uncovered in this analysis proved troubling because those reporting lower self-efficacy were already serve as teachers, pointing to poor outcomes (Chestnut & Cullen, 2014; Coladarci, 1992; Hoy & Spero, 2005; Klassen & Durksen, 2014; Meijer & Foster, 1988; Podell & Soodak, 1993) involving those employed with substandard authorizations.

Limitations

This research study had notable limitations including the low representation of those working under substandard authorizations. A smaller group of substandard authorization holders may fail to demonstrate the range and degree of characteristics of the larger group. The recent emergence and overwhelming reliance of substandard authorization holders accentuates the need to include more of those teachers and to remain attentive to longitudinal changes in characteristics. The small sample size limits generalization to teachers across the region or state but may still inform future and larger research.

Future Research

Besides devising future research endeavors to address the limitations listed above, a number of additional questions present themselves, two of which follow. Previous research suggests a malleability in teacher self-efficacy in the context of professional preparation programs, but a dearth of evidence limits understanding of the prospects of those who may not be engaged in a professional preparation program. While it stands

to reason that substandard authorization holders may demonstrate improved self-efficacy comparable to pre-service teachers and subsequent to training, the need to appraise the extent and conditions of that improvement remains.

Another research need related to this topic includes demonstrating the impact of training on the self-efficacy of substandard authorization holders. The pursuit of this inquiry reflects the understanding that desirable outcomes such as improved student learning and teacher retention also result from efficacy enhancements. Future research that explores short- and long-term outcomes of self-efficacy improvements will serve to validate the attention to efficacy among substandard authorization holders and advance research on that topic.

Conclusion

An intention of pursuing this inquiry included the aspiration to identify a means of improving the efficacy of the broadened pathway to a teaching credential, namely enhancing the abilities of those participating in the pathway to persist to success. The results of this study suggested that, as a group, those employed on substandard authorizations reported lower self-efficacy. Fortunately, teacher self-efficacy can improve, especially among those nascent to the field (Bandura, 1997; Swan, 2015; Winters, 2012). The use of the TSES in approaching this inquiry proved helpful by identifying three particular domains in which interventions might initiate: student learning, classroom environment, and instructional strategies. It follows that improving self-efficacy of those on substandard authorizations might improve their retention in teaching careers (Swan, 2015).

Broadening the pathway to a teaching career potentially serves schools, aspiring teachers, and students. However, a pathway that only collects more individuals to staff classrooms will exacerbate rather than remediate issues in education. This inquiry intended to demonstrate ways in which the broader pathway to a teaching credential can be optimized. While teacher preparation programs face no onus to provide support to individuals employed on PIPs or STSPs and districts face relatively little external pressure to do so (Sandy, 2016), all stakeholders—teacher preparation program administrators, school administrators, district administrators, and the teacher who holds a substandard authorization—benefit form collaboratively addressing the low efficacy reported among teachers employed on substandard authorizations.

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