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# Subject-Matter Coursework vs. Subject-Matter Exams (A Situational Analysis)

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# Subject-Matter Coursework vs. Subject-Matter Exams

(A Situational Analysis)

# Introduction

# Background on Teacher Credentialing in California

The conversation initially focuses on addressing the teacher shortage in California and understanding its impact on student performance. According to Darling-Hammond et al. (2018), one of the reasons for underperformance among California students is the presence of long-term substitutes, teachers with inadequate credentials, and vacant positions. These factors undermine student achievement and academic success.

In relation to current legislation, it is worth noting that individuals with a bachelor's degree can become educators in secondary education in California without completing subject-matter coursework or a teacher preparation program. This information is based on the requirements for teaching credentialing outlined by California's Commission on Teacher Credentialing (2020). It is believed that the teacher shortage in California led to the implementation of subject-matter exams to fulfill the criteria for subject-matter competency.

To address this issue, the Commission on Teacher Credentialing introduced the California Subject Examinations for Teachers (CSET) on August 7, 2017. These exams were designed to assess subject-matter competency and provide authorizations in specific subject areas. The introduction of the CSET aimed to ensure that educators possess the necessary knowledge and expertise to teach their respective subjects effectively.

Research conducted by Monk et al. (2000) emphasizes the positive impact of subject-matter expertise and teacher preparation on student achievement. Similarly, Assembly Bill 2485, authored by California State Assembly Member Kalra (2020), highlights the potential positive influence of subject matter expertise and subject-specific preparation on student achievement. However, it is worth noting that some argue that subject-matter exam scores do not correlate with student performance. The California Association for Health, Physical Education, Recreation & Dance (2020), in support of AB 2485, asserts that subject matter competence should be acquired through the academic rigor of a teachers' degree, leading to authentic future teachers who are subject matter competent in their undergraduate majors.

Assembly Member Kalra (2020) introduced this bill in response to the impact of the COVID-19 pandemic on education. The discussion involves active participation from education professionals, policymakers, parents, teachers, news editors, and others affected by the pandemic's spread. These individuals contribute their views and perspectives to ensure that education continues to progress positively throughout society during an unprecedented time.

The educational challenges faced by the State of California can be attributed to a range of underlying issues. One significant problem revolves around the impact of teacher quality on student academic development and achievement. To conduct a comprehensive analysis of California's educational system, it is beneficial to employ the S.P.E.L.I.T. leadership tool, which offers valuable methods and applications. This tool enables a situational analysis of an organization within a specific timeframe and explores diverse perspectives that emerge both before and after implementing changes in the educational environment.

By scrutinizing the current driving forces within the educational landscape of California's educational system, attention can be directed towards identifying systemic flaws stemming from inexperienced teachers. The S.P.E.L.I.T. framework facilitates the development of leadership strategies aimed at initiating intervention and driving positive change from within the model.

Change is sweeping across schools in California, bringing about significant implications for the educational landscape. However, the state's educational system is currently facing numerous challenges that are hindering its ability to effectively serve students. It is crucial for education to take center stage, guiding and motivating students to enhance their academic performance and capabilities. By analyzing the demands placed on students to become pioneers in education, we can pave the way for a brighter future.

To support the implementation of change in California schools, it is essential to conduct a situational analysis that incorporates the insights provided by the S.P.E.L.I.T. leadership tool. This analysis will provide valuable data and information to garner support for policy proposals aimed at addressing the shortcomings of the state's educational system. One potential policy change is to revise teacher credentialing criteria, prioritizing educators who possess a solid foundation of career expertise and subject knowledge. By placing such qualified teachers at the forefront, we can speed up educating and guiding students, empowering them to assume pivotal roles as future leaders.

# Situational Analysis – S.P.E.L.I.T.

S.P.E.L.I.T. stands for various driving forces that need to be analyzed in an organization, including the social, political, economic, legal, intercultural, and technological aspects. Developed by Schmieder-Ramirez and Mallette in 2007, the S.P.E.L.I.T. leadership tool emphasizes the importance of assessing the environment comprehensively. "Its analysis methodology is particularly useful for practitioners involved in market analysis, diagnosing issues prior to implementing transitions, or benchmarking as part of intervention planning" (p. 163).

#### Social

The examination of the social driving force within the S.P.E.L.I.T. framework brings to light a significant issue prevalent in California classrooms—the presence of numerous untrained and inexperienced educators who lack adequate teacher preparation and content knowledge.

In an article, Alexander (1996) published in the Los Angeles Times, making a striking comparison, stating, "Allowing people to become teachers by virtue of having graduated from college, without any training in how to teach, is akin to allowing interns to perform brain surgery without having had surgical training" (p.1). This analogy vividly highlights the potential disastrous consequences of having untrained teachers, like medical school interns attempting brain surgery. The presence of undertrained teachers significantly contributes to a tragic decline in student performance and academic achievement.

In the State of California, the requirements for teacher credentialing currently only involve passing a subject-matter exam to establish subject-matter competence. This allows individuals to be placed in classrooms as teachers without demonstrating other essential teaching skills. Consequently, ineffective educational practices may prevail in classrooms, perpetuating the problem. Moreover, the negative socio-economic environment often found in many public schools exacerbates the systemic issues, creating a barren educational landscape lacking foresight or a sense of direction, both for students and educators alike.

# **Political**

The existing policy for teaching credentialing in California, which primarily relies on subject-matter examinations, falls short in addressing the critical need for high-quality teachers. This approach fails to prioritize the hiring of teachers who possess the necessary skills and expertise. Presently, individuals can secure teaching positions merely by completing a bachelor's degree, passing a basic skills assessment, and either taking a subject-matter examination or completing relevant coursework.

However, the success of a teacher depends not only on their knowledge and subject-matter competency but also on their experience and various other factors that contribute to positive outcomes in the classroom, such as student performance and academic achievements. Teacher quality is an attribute that certain educators attain through their specific actions and behaviors within their classrooms. In a review of The Coleman Report, Dan Goldhaber (2016) raises a pertinent question:

Have the last 50 years of education research led us to fundamentally different conclusions about the impact of teachers on the educational achievement of students? There is a bit more nuance to the answer than "not really," but "not really" comes awfully close to hitting the mark. If

anything, the half century of research on student achievement has strengthened arguments for a policy focusing on teacher quality. (p. 61) Despite unmistakable evidence of the dire dearth of quality teachers, the importance of teacher quality remains undervalued, which has led to an attempt by the California system to address the shortage of quality teachers by implementing the procedural metric of subject matter exams to allow for a greater quantity of teacher candidates entering the system.

As Lambert (2020), observes, "Credentialing programs are seeing a decline in enrollment, which only continues to increase the teacher shortage in our schools" (p. 1).

The issue at hand is further compounded by the COVID-19 outbreak, which has worsened the problem faced by school systems. These systems attempt to tackle the issue by accepting subject-matter examinations as substitutes for genuine subject-matter competency. However, policymakers fail to address the need to correct the "sheepskin effect" in education. If true quality were valued, subject-matter coursework should take precedence over subject-matter examinations. By eliminating subject-matter examinations and emphasizing subject-specific coursework, teacher credentialing could undergo a tangible intervention, leading to concrete policy changes that promote higher-quality teaching.

Another crucial driving factor pertains to the leadership policies employed to evaluate teacher success. French and Raven (2018) propose "expert" and "reward" power as the two primary types of political approaches used within public education systems. Currently, the dominant approach relies on "reward" power, wherein benefits are granted to teachers who have successfully completed subject-matter examinations. This approach equates a teaching credential with the exchange of a bachelor's degree and passing a subject-matter examination. However, a teaching position requires not only subject-matter competency but also professional development, classroom management skills, instructional design expertise, and curriculum development abilities. In contrast, "expert" power should take precedence over "reward" power in education. Expert power involves leveraging knowledge and expertise in a specific area, industry, or sector. Unfortunately, in the current educational landscape of California, the emphasis on reward power has overshadowed the utility of expert power, leading to numerous challenges in the field of education.

#### **Economic**

The S.P.E.L.I.T. leadership tool is currently analyzing California's educational system, with a specific focus on the economic aspect. The COVID-19 pandemic has resulted in a diversion of government funds away from education. However, Governor Newsom of California managed to provide financial support to education through deferrals. Despite this, the deferrals will create challenges

for day-to-day operations in California schools and worsen the teacher shortage issue, as the delayed payments will not be received by schools until later dates.

The reopening of schools during the pandemic necessitates an increased need for instructional aides and personal protective equipment (P.P.E.) to ensure academic support and student safety. These additional costs will strain school budgets and lead to a significant rise in education expenses across California. Tzul (2020), explains the economic environment for education, highlighting K-12 funding in the state has been mostly spared, there will be late payments, known as deferrals. Money intended for the 2020-21 fiscal year will be spread out over multiple years. Although no budget cuts have been identified, the deferral payments spread over several years will pose difficulties in various areas, such as funding competitive salaries for experienced and qualified educators.

Eliminating subject-matter examinations could have a substantial impact on reducing the number of temporary educators and increasing the number of career teachers, providing a long-term economic advantage for those in the field. Richwine and Biggs (2011) mention the 'sheepskin effect' in their statement, highlighting how employers value applicants who have completed challenging academic work, even if it is not directly related to the job. This 'sheepskin effect', "indicates that holding a degree signifies skills and attributes beyond the specific field of study" (p. 7). By considering the 'sheepskin effect,' individuals filling teaching positions would be perceived as having academic rigor and expertise. The absence of subject-matter coursework would disadvantage those lacking it, leading to lower compensation and potential turnover. Teachers with subject-matter coursework in their background tend to receive slightly higher salaries, while those without it require more time, resources, and patience to develop necessary teaching skills. These factors contribute to the frequent departure of teachers from the profession within three years.

Furthermore, the distinction between objective and subjective qualities of teachers and their experience can lead to issues. When subjective aspects, such as reward power, overshadow the objective nature of the job, inequalities in areas like pay rates can emerge. For example, an individual who obtained their credential through subject-matter examination may start a teaching position at \$55,418 per year, while an educator who completed subject-matter coursework would be paid \$66,411 per year, reflecting their knowledge and experience (Salary.com, 2020). The Center for Education Statistics (1996) recognizes that factors such as certification requirements influence the mobility of teachers between sectors, potentially reducing salary discrepancies. In this case, eliminating subject-matter examinations would be a crucial step toward achieving subject-matter competency and earning appropriate salaries.

# Legal

The State of California and the Commission on Teaching Credentialing are contemplating changes to two policies: the CBEST and CSET examinations. These policies may be revoked as criteria for teacher credentialing to demonstrate subject-matter competency. The ongoing coronavirus pandemic, which has resulted in the closure of testing centers, has prompted the consideration of these changes. Lambert (2020) states, "The legislation is needed to help teacher candidates complete their credentials during the coronavirus pandemic, as most testing centers are closed, and to ensure a steady stream of new teachers into California classrooms" (p. 1). Lambert correctly acknowledges the far-reaching impact of the coronavirus on educational communities. These proposed legislative acts could have significant positive effects by attracting knowledgeable and qualified professionals back to the classroom.

Lambert further explains that Assembly Bill 1982 would exempt teacher candidates from the basic skills test if they earn a grade of B or better in approved coursework and tests from a university teacher preparation program. Assembly Bill 2485 would allow candidates for single- or multiple-subject credentials to demonstrate subject-matter competency by completing college courses related to the credential they are seeking, rather than taking the California Subject Examinations for Teachers. These bills represent the first positive step in rectifying the issues plaguing schools throughout California, addressing ineffective methods and strategies employed in classrooms.

#### **Intercultural**

Analysis of the intercultural environment in education in the State of California reveals promising prospects regarding family involvement and community partnerships. The increased engagement of families and communities in education has a positive impact on student development and academic achievement. Building on the strengths of these two entities, the educational institution can undergo gradual transformation. However, it is crucial to push the boundaries and bring about changes in educational policies, starting with the recruitment of high-quality educators.

Both Ratcliff and Hunt (2009) concur that quality partnerships between teachers and families are strongly supported by evidence. However, "many teachers enter the profession without possessing the necessary dispositions, skills, and knowledge to foster these partnerships and support students in realizing their educational potential" (p. 495). The elimination or revocation of subject-matter examinations would empower the teaching staff, enabling family and community members to surpass the current expectations placed on our students. When teachers take on the responsibility of effectively developing and educating a child,

the support from the community becomes an invaluable asset, fostering motivation and support for our young learners.

# **Technology**

There are two primary methods for evaluating a person's knowledge and skills in a specific subject area: technology and subject matter exams, and subject matter competency assessments.

Technology and subject matter exams measure an individual's understanding of both the subject matter and the relevant technologies or tools associated with it. These exams assess the ability to apply knowledge using specific methodologies or technologies. For instance, in the field of computer science, an exam may test an individual's comprehension of programming concepts and algorithms, as well as their proficiency in utilizing a particular programming language or framework. These exams are commonly used in technical fields where specific tools or technologies are integral to the subject, evaluating both theoretical knowledge and practical skills.

Subject matter competency assessments, on the other hand, focus primarily on evaluating an individual's expertise, comprehension, and depth of understanding in a specific subject area. They prioritize comprehensive knowledge and understanding of the subject matter itself, rather than proficiency with associated technologies. These assessments can take various forms, such as written exams, oral examinations, research projects, or practical demonstrations. The objective is to evaluate an individual's ability to comprehend and apply concepts, theories, and principles within the subject area. For example, in the field of history, a subject matter competency assessment might require writing an essay analyzing historical events, showcasing a thorough understanding of the subject matter without specific emphasis on technology or tools.

Subject matter competency assessments are commonly utilized in academic settings, professional certifications, and licensing programs, aiming to evaluate the foundational knowledge and expertise required in a particular discipline.

In summary, technology and subject matter exams assess both subject matter knowledge and proficiency in relevant technologies or tools, while subject matter competency assessments primarily focus on evaluating the depth of understanding and expertise in a specific subject area without specific emphasis on associated technologies. The choice between these approaches depends on the goals and requirements of the evaluation or assessment process.

#### The Problem

# **Problem Description**

Now, let's address the core issue at hand. The foundation of excellence for our youth lies in the selection of our educators, emphasizing the importance of identifying the best-fit educators who possess both content knowledge and teaching skills in their subject areas. The process of educating our youth begins with how we choose these educators. However, educators who are credentialed for a single subject are only tested on a narrow skill set that may not adequately demonstrate their competency to meet the broader needs of students in terms of content knowledge.

Draper (1998) suggests that being a good teacher, particularly one capable of effectively instructing a diverse range of learners, requires expertise in both teaching methodologies and the specific subject matter, encompassing both knowledge of the subject itself and experience in teaching and learning it. It is crucial to recognize that inadequate or outdated policies can lead the educational institution down a dead-end road. When such mistakes are realized, it becomes essential to retrace our steps, identify the errors, and correct them.

At this point, it is imperative to revoke or eliminate the approval of subject-matter examinations as an option for acquiring a teaching credential to prove subject-matter competency. Without the knowledge and skills acquired through a comprehensive teacher preparation program, educators are only equipped with half of the necessary tools to effectively manage a classroom. Acting in this regard is counterproductive towards the success of our students, who we expect will become the leaders of tomorrow. Currently, our students face inadequate instruction, learning gaps, and a decline in academic performance across the nation. How do we fix this ongoing issue in education?

To address this issue, we can consider the driving factors mentioned earlier as the basis for identifying appropriate solutions or responses that will enhance academic success and performance among the youth. Additionally, we can utilize a decision-making model known as the Eightfold Path as a decision-making tool developed by Bardach and Patashnik (2016) to guide the development of effective solutions to rectify the mistake made in California's education system, where subject-matter exams were relied upon as the sole criteria for granting teaching credentials. The aim is to ensure that our youth are empowered to strive towards academic excellence through performance.

# Eightfold Path as a Decision-Making Tool Step One: Define the Problem

Upon careful analysis and consideration, this policy proposal addresses the issue of teachers lacking sufficient knowledge and experience to be effective educators in the State of California in attempts to increase student academic

achievement and performance. Many of these untrained and undedicated individuals who lack teaching skills are doing a disservice to our students and hindering their academic success.

# **Step Two: Assemble the Evidence**

Assembling evidence is a critical step in the problem-solving process, as emphasized by Bardach and Patashnik (2016). This step involves converting information into evidence by collecting data that either corroborates or challenges a claim. Although the search for evidence can pose initial challenges, it is indispensable for constructing an informed and effective solution. To commence this process, a comprehensive examination of background literature pertaining to subject-matter exams, coursework, and competency is necessary. This endeavor will establish a robust and credible basis for comprehending the terminology and principles associated with the issue, ultimately facilitating the identification of pertinent and valuable evidence.

Bardach and Patashnik (2016) emphasize that making educated guesses and conserving time and energy for areas where good evidence is crucial is a reasonable approach. This strategy has guided the search for data in this proposal. The data and evidence gathered are based on the following constructs:

- 1. Untrained teachers struggle to achieve success in the classroom.
- 2. Students' performance and achievement scores frequently decline when taught by teachers lacking professional teaching skills and abilities.
- 3. Many teachers with bachelor's degrees enter the teaching profession under the "sheepskin effect," taking positions unrelated to their degree of study.
- 4. The comparison between subject-matter coursework and subject-matter examinations.
- 5. International rankings of education systems.
- 6. The positive and negative effects of the S.P.E.L.I.T. leadership tool.

Filtering through available resources to identify current and relevant data requires careful attention to the value of evidence in policy formation. It is essential to follow an effective problem-solving strategy, as recommended by Bardach and Patashnik (2016). Relying solely on subject-matter exams to demonstrate subject-matter competence is as ineffective as seeking treatment for a new virus like COVID-19 at a general hospital.

# **Policy Alternatives**

# **Step Three: Construct the Alternatives**

Bardach and Patashnik's third step involves constructing alternatives. Before approaching a political leader of state of government formulation of

potential solutions or policy alternatives become critical to the decision-making process provided within the Eightfold Path decision making tool. According to Bardach and Patashnik (2016), it is advisable to develop multiple options and avoid fixating on the initial policy option. Having two or three principal alternatives provides more room for exploration, and as the process progresses, additional variations of policy options can emerge. Additionally, Bardach and Patashnik (2016) suggest modeling the system in which the problem exists. By carefully analyzing the problem's context and considering student performance and academic excellence in relation to California Code Section 44280-44298 -Article 5 (2019), the adequacy of subject matter preparation can be identified. The committee should also consider adopting subject matter competence through examination and explore alternative options to fulfill teaching credentialing requirements. Furthermore, a comparison with another state's education code, such as Texas H.B. No. 2318 (2013), which does not permit subject-matter examinations as an option, can offer various alternatives to be considered. Analyzing this document will provide potential options for addressing the issue in the State of California and potentially implementing more suitable certification evaluations like coursework to prove subject matter competence.

Regarding the process model, applying a system-oriented approach to examine alternatives is effective in policy option formulation. In this case, the Dynamic Systems Model of Role Identity is used to assess the connection between educators' knowledge, experience, and their impact on students. This process model guides the development of a plan for selecting policy alternatives. The Cascade Strategic Planning Model assists in providing a structured framework and governance direction. Combining both models narrows down the policy alternatives to three possibilities that address the real problem in this proposal. The constructed alternatives are as follows:

- 1. Eliminate subject-matter examinations as a criterion for becoming a teacher.
- 2. Allow subject-matter examinations as criteria for becoming an online or remote teacher.
- 3. Consider subject-matter examinations if the applicant is enrolled in a teacher preparation program or has completed a relevant program of study related to the subject matter studied to obtain a credential.

When selecting policy options, it is crucial to engage in conceptualization and simplification of the alternatives. Choosing the right words for the policy alternatives becomes essential for effectively projecting interventions, ensuring their applicability according to Bardach and Patashnik (2016).

# Step Four: Selecting the Criteria

Approaching the selection of criteria, the fourth step outlined by Bardach and Patashnik (2016) offers a range of choices to guide the selection of criteria for the policy alternative options. Some of the criteria relevant to the policy alternatives include equity, efficiency (cost-effectiveness framework), political acceptability, and administrative robustness and improvability. These criteria serve as logical constructs, as described by Bardach and Patashnik (2016), such as efficiency, equity, and political acceptability. They can be distinguished based on values that need to be maximized, those that must be minimally satisfied, and those of lesser priority where "more is better."

In considering equity as the primary objective, the other constructs serve as supplementary to the selection process. The level of equity becomes significant as the elimination of subject-matter exams aims to ensure that a higher number of knowledgeable and experienced teachers are credentialed for single-subject matter courses in CDE schools.

When discussing the construct of efficiency within a cost-effectiveness framework, the objective is to meet the salary requirements for educators who are credentialed based on subject-matter competence through coursework. While cost-effectiveness may appear unrealistic in the short term, it is the long-term effectiveness that will yield results, leading to high-achieving students.

Considering the political acceptability of the problem in the context of policymaking, it is crucial to adopt policies that generate net benefits for society, as mentioned by Bardach and Patashnik (2016). However, it is important to recognize that such changes may impose concentrated costs on interest groups that benefit from the current arrangements. It is common for opposition and lobbying to occur against such proposals. Nevertheless, the criteria of robustness in administration and improvability can accommodate direct or indirect transitional assistance, increasing the chances of policy adoption.

By considering these criteria in the selection process, a more comprehensive evaluation can be achieved, leading to a well-informed policy decision.

# **Step Five: Project the Outcomes**

Approaching the fifth step outlined by Bardach and Patashnik (2016), we move on to projecting the outcomes of the policy alternatives. For each alternative policy, it is important to consider both the positive and negative aspects associated with them. Even though projecting outcomes involves looking into the future, it is necessary to undertake this exercise to make informed decisions. This is an opportunity for the policy writer to be realistic about the potential outcomes, whether positive or negative. The outcome matrix, presented in Table 1 below,

serves as an effective tool for weighing the pros and cons when selecting a policy alternative.

**Table 1** *Policy Alternatives Outcome Matrix.* 

Policy Alternatives Outco	Outcome Matrix				
Policy Alternatives	Negative Impacts	Positive Impacts			
	State would have to allocate financial resources to cover cost of teacher expertise and knowledge when subject-matter coursework supplements the teaching credentialing application.	Experienced and best qualified teachers for staffing classrooms who capture the significance of their job resulting in high student performance and academic excellence.			
1. Eliminate subject matter examinations from the list of criteria for becoming a teacher.	Does not allow for bachelor's degree holders to earn teaching credential if major is not in education.	Low teacher turnover rate, higher teacher retention.			
	Takes away from closing the teacher shortage with qualified and well-trained professionals.	Higher enrollment in teacher preparation programs.			
	Teacher credentialing testing agencies lose money from elimination of subject-matter examinations.	Saves the education professional money from unnecessary fees and costs.			
2. Allow for subject matter examinations to be criteria for becoming an online or virtual teacher.	Cannot enter a face-2-face classroom setting to teach.	A strategic approach for entering teaching in education without the subject-matter coursework.			
	Fosters a lack of motivation and engagement for the students and teachers.	Enables the opportunity for those in teaching preparation enter the learning environment to work with students.			
	Salaries may not compare to face-2-face environment.	Gradually introduces various educators to becoming an effective educator in all learning environments.			
	Being employed as an educator as soon as all criteria has been met.	Can teach in a classroom or virtually.			
3. Consider subject matter examinations if the applicant is enrolled in a teacher preparation program or has enrolled in a program of study that relates to the subject matter, he/she intends on becoming credentialed.	Salaries not comparable.	Can adjust one's career to meet the needs through the criterion satisfied. To get around the "sheepskin effect".			
	May not have an option of preferred teaching and learning environment to initiate career.	Gives time to develop professionally while determining if teaching is still a career interest.			

According to Bardach and Patashnik (2016), the outcome matrix serves to help understand what information is available and what still needs to be learned. It also prepares us to confront the trade-offs involved in the decision-making process. The case base, as defined by Bardach and Patashnik (2016), allows for considering the existing condition and comparing it to what is expected in the future, enabling a thorough analysis of the positive and negative impacts of each policy alternative.

By utilizing the outcome matrix, policymakers can gain a clear understanding of the potential outcomes associated with each policy alternative, facilitating effective decision-making.

# **Conclusion and Recommendations**

# **Step Six: Confront the Trade-offs**

Step six focuses on confronting the trade-offs associated with the outcomes established in the previous step. To stay focused and maintain direction, it is important to remember the guidance provided by Bardach and Patashnik (2016), who suggest thinking and speaking of trade-offs as being across alternatives rather than across projected outcomes. By concentrating on the alternatives and their associated outcomes, one can avoid wasting time and effort. The selection of outcomes significantly influences each of the policy alternatives, as depicted in Chart 1, 2, and 3. Each chart examines a different alternative policy option and can be found below.

The task at hand involves recognizing which outcomes will lead to better overall results among all the options. When contemplating the value of the outcomes, there is a high likelihood that they will stand to compete in a trade-off. The next step is to confront these trade-offs and select the dominant outcomes. In this process, it is beneficial to consider the negative and positive effects presented in the current environment, using tools such as the S.P.E.L.I.T. leadership tool. By carefully weighing the same driving factors across the outcome matrix, one can make informed decisions when selecting the most appropriate policy alternative.

**Chart 1** *Policy Alternative 1*Eliminate subject-matter examinations from the list of criteria used for teacher credentialing.

Social	Political	Economic	Legal	Intercultural	Technology
Experienced & knowledgeable , credentialed, and well-trained educators.	Expert power vs. reward power.	Allocate funding to initiate program.	Change in current legislation.	Family and partnership involvement.	Testing and accountability
Increase in student performance and academic achievement.	Response to COVID-19 and reopening of schools.	Meet salary needs for those who demonstrate competency	Legal hurdles facing elimination of subject-matt er exams.	Specialized Programs.	Student data analysis.
	Best qualified individual (NCLB).			Title III.	Instructional aide and resources.

**Chart 2** *Policy Alternative 2*Allow subject-matter examinations to be criteria for becoming an online or virtual educator.

Social	Political	Economic	Legal	Intercultural	Technology
Allow for subject-matter examinations to remain for other educational endeavors.	Reward power.	No need for allocation of funds.	Change in current legislation.	Development of online community.	Testing and accountability
An active method for demonstrating competency.	Can be used to staff virtual schools.	A different salary schedule.			Primary source for instruction.
	Amend current legislation.				

**Chart 3** *Policy Alternative 3*Consider subject-matter examinations if the applicant is enrolled in a teacher preparation program or has enrolled in a program of study that relates to the discipline, he or she will be credentialed in.

Social	Political	Economic	Legal	Intercultural	Technology
Allow for subject-matter examinations to remain for other educational endeavors.	Can be used for virtual or F2F instruction.	Need for allocation of funds.	Change in current legislation.	Development of an online community.	Testing and accountability
Still can be an active tool for progression.	Reward power.	A different salary schedule.		Cross training between virtual and F2F learning environments.	Maybe primary source for instruction.
Assist those who change career interests.	Amend current legislation.	A comparable pay salary schedule.			Available for virtual and f2f instructional aides.

# Step Seven: STOP, FOCUS, NARROW, DEEPEN, DECIDE

One comes upon step seven of the Eightfold Path, and we now have a decision to make. Out of the three policy alternatives, one must be ready to select the policy to pursue. After allowing time for analyzing each of the alternatives and their outcomes, one must keep what is in the best interest of society before making the decision. Given the policy alternative, the factors of declining student performance and low academic proficiency evolve from the untrained educators who do not seem to understand why proficiency levels are so low. The outcomes that stood against policy option number one would allow for subject-matter exams to stay on the requirements list for teaching credentials. However, it would only apply to online credential educators or those who had a career change into education. Also, look at the projection of the United States of America's current ranking in education while comparing the rankings to other nations in Table 2, provided by U.S. News (2020).

In Table 2, education is ranked by a cumulative score which includes a reading score, a math score, and a science score. Each country that participated has an overall score which provides that country with their current rank internationally. The results come across as embarrassing. China outranked many

countries with a score of 1731, the United States of America came in 26th place with an overall score of 1489, and the Czech Republic in 29<sup>th</sup> with a score of 1471. Looking at the ranking of these countries demonstrates a need for the education system to revamp its system, why not start with practical methods for reforming teacher credentialing?

**Table 2** *Education Rankings by Country by Population (U.S. News*, 2020).

ucation Rankings By Co	ountry 2020 by Populat	ion 2020		
				± CSV ± JSO
Country	Total Score ▼	Reading Score	Math Score	Science Score
China	1731	556	600	575
Hong Kong	1637	533	555	549
Finland	1631	536	541	554
Singapore	1630	526	562	542
South Korea	1623	539	546	538
Japan	1588	520	529	539
Canada	1580	524	527	529
New Zealand	1572	521	519	532
Taiwan	1558	495	543	520
Netherlands	1556	508	526	522
Australia	1556	515	514	527
Liechtenstein	1555	499	536	520
Switzerland	1552	501	534	517
Estonia	1541	501	512	528
Germany	1530	497	513	520
Belgium	1528	506	515	507
Macau	1523	487	525	511
Iceland	1503	500	507	496
Poland	1503	500	495	508
Norway	1501	503	498	500
United Kingdom	1500	494	492	514
Denmark	1497	495	503	499
Slovenia	1496	483	501	512
Ireland	1491	496	487	508
France	1491	496	497	498
United States	1489	500	487	502
Hungary	1487	494	490	503
Sweden	1486	497	494	495
Czech Republic	1471	478	493	500

Note: The Education Rankings by Country by Population (2020) provide an overview of countries' rankings based on an international education assessment. The scores for math, reading, and

science were aggregated to determine the overall ranking of each country. The information source for these rankings is U.S. News (2020).

Lastly, looking over the three trade-off models for each policy alternative, it has been concluded that policy alternative number one will be proposed to render a solution for why our youths are not making the grade. The trade-offs identified for deliberation constructed according to the S.P.E.L.I.T. leadership tool applied to the three policy alternatives. Applying the Eightfold Path decision-making tool by Bardach and Patashnik (2016) implements the seventh step calls to deliver a decision. The decision is new legislation that will push to eliminate subject matter examinations from the list of criteria to express subject-matter competency. This is in response to the initial problems of less knowledgeable and experienced teachers credentialed for single subject matter courses in California Department of Education schools. A better-prepared pool of teachers will hopefully result in better student performance and academic proficiency. Finally, the eighth step is to tell the story.

# **Step Eight: Tell the Story**

Now is the opportune moment to engage in public discourse and utilize your civic knowledge. As Bardach and Patashnik assert, civic participation plays a vital role in ensuring that your policy proposal is heard by legislators. Securing their support, along with that of students, teachers, administrators, parents, and the community, becomes crucial for the adoption of the policy. Moreover, the narrative surrounding the comparison between Subject Matter Exams and Subject Matter Coursework as prerequisites for obtaining a teaching credential in California is already being discussed, as you are currently reading about it. It is simply coincidental that I have chosen to write on this topic.

# Conclusion

After conducting a comprehensive situational analysis on teacher credentialing and comparing the requirements of subject matter exams with subject matter competency, we have concluded that eliminating subject matter exams would be more beneficial for students when it comes to staffing classrooms. Our analysis considered the S.P.E.L.I.T. Power Matrix Leadership Tool (2007), which proved to be an invaluable tool in untangling the complex issues prevalent in California's education system, including the teacher shortage, recruiting high-quality teachers, and improving student achievement and performance. These issues were particularly highlighted during the 2020 COVID pandemic.

However, it is important to note that our analysis did not align with the decisions made by the State of California in response to the challenges of teacher credentialing requirements, teacher recruitment, and the teacher shortage.

Assemblymember Kalra addressed these issues by drafting Assembly Bill 2485 (2020), which incorporated some of the policy alternatives we considered, while also implementing others. Furthermore, Assemblymember Cunningham's policy option, mentioned in Kalra's AB 2485 (2020), provides an exemption for teacher candidates from the basic skills proficiency test requirement if they earn at least a letter grade of B in qualifying coursework (Cook & Kelley, 2020, p. 7). These legislative efforts demonstrate effective decision-making, reflecting the principles of the Bardach and Patashnik (2016) Eightfold Path decision-making tool.

Despite our differing perspectives, I must commend the effectiveness of the S.P.E.L.I.T. Power Matrix Leadership tool developed by Schmieder-Ramirez and Mallette (2007) in identifying potential solutions to rectify the mistakes made in California's approach to addressing the challenges posed by employing untrained and inexperienced teachers in our classrooms. This tool proves particularly useful when subject matter competency was previously assessed solely through the successful completion of a subject matter exam.

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