

## Division VIII of Title 5 of the California Code of Regulations

### Proposed Amendments and Addition to Title 5 of the California Code of Regulations Pertaining to the Supplementary Authorization in Computer Science

#### Final Statement of Reasons

##### Public Problem

There is no change to the public problem information since the original submission of the Initial Statement of Reasons.

##### Purpose of Proposed Action

There is no change from the original purpose of the proposed action in the Initial Statement of Reasons.

Proposed amendments to sections 80057.5(b)(1)-(4) and 80089.2(a)(1)-(4) were withdrawn to resolve issues with necessity that were identified by the Office of Administrative Law during its review of this action.

##### Consideration of Alternatives

The Commission has determined that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

##### Mandated Costs

These proposed regulations will not impose a mandate on local agencies or school districts.

##### Updated Tally of Responses

The Commission received the following written responses to the public announcement during the 45-day comment period:

##### *Support*

6 organizational opinions  
10 personal opinions

##### *Opposition*

0 organizational opinions  
2 personal opinions

##### **Written Responses Representing Organizations in Support: 6**

1. Lissa Clayborn, Deputy Executive Director/Chief Operating Officer, Computer Science Teachers Association (CSTA)
2. Alliance for California Computing Education for Students and Schools (ACCESS)
3. Children Now

4. Code.org
5. California STEM Learning Network
6. UC Riverside Extension

***Written Responses Representing Individuals in Support: 10***

1. Aimée Dorr, Provost, Executive Vice President for Academic Affairs, University of California
2. Julia Brush, Faculty Advisor, CalStateTEACH
3. Marsha Moroh, Dean of College of Science, CSU Monterey Bay
4. Alice Flores, Regional Director CalStateTEACH
5. Daniel W. Lewis, Associate Professor, Santa Clara University
6. Miguel Lara, Assistant Professor, CSU Monterey Bay
7. Angelo Collins, Associate Dean, Santa Clara University
8. Harry H. Chang, UC Davis C-STEM Center Director and Professor
9. Dr. Ignatios Vakalis, Chair, Department of Computer Science, CalPoly, San Luis Obispo
10. Diana Franklin, Director of Computer Science Education, University of Chicago

***Written Responses Representing Organizations in Opposition: None***

***Written Responses Representing Individuals in Opposition: 2***

1. Sharie Ortega, Credentials Supervisor, Imperial County Office of Education

Comment: “The proposed regulations include an effective date of April 1, 2016 in order to provide transition time for teachers currently pursuing a Supplementary Authorization in CCA.” I do not agree that this is an adequate amount of time for the transition.

Although the proposed changes to upgrade the computer authorizations are well warranted, I feel the proposed transition time for teachers currently pursuing a Supplementary Authorization in CCA is not long enough. I just submitted an application last week for a CCA supplementary authorization. It has been taking CTC 2-3 weeks just to post receipt of applications and then another 9-10 weeks to process them. If any additional documentation is required, it can extend this process another 4 weeks. That could mean my recent CCA supplementary authorization application is not finalized for up to 17 weeks, putting us at mid-December.

If the application is denied for an additional course, I'm not sure the applicant could find an applicable course, complete it, obtain official transcripts, and have the application to CTC by April 1, 2016. We are in a remote location with limited IHE resources and I would not want this teacher to be disenfranchised, especially when she is currently assigned to teach computer applications. I would appreciate the Commission's consideration in extending the transition deadline up to a year later-and preferably at the end of the school year, i.e., July 1, 2017.

This extended time will allow those individuals currently serving on an initial limited assignment authorization for a computer applications assignment to be notified of the changes and allow

them adequate time to take additional coursework to qualify for the current CCA supplementary authorization.

*Response: With the initial proposal of this change to the Supplementary Authorization in CCA which the Commission approved moving forward with in June 2015, it was felt that 10 months was sufficient time for those who had already begun pursuing the authorization to be aware of the upcoming changes and complete whatever coursework would be needed. In reality, a number of educators who pursue this supplementary authorization use a series of coursework that has been developed by a specific institution of higher education which only requires the completion of 4 upper division courses and can be completed online.*

*Education Week recently noted that participation in computer science advanced placement exams increased 25% from 2014-2015 (“More Students Taking AP Physics, Computer Science Exams,” Education Week, September 3, 2015). In consideration of the rapid movement of middle and secondary schools toward increasing their emphasis on computer science courses, as well as the recent sharp rise in student participation in advanced placement examinations in computer science, the need for educators to have stronger preparation in these areas has become urgent. Thus, it was felt that the time allowed should only be for those who were well along toward meeting the current requirements for the Supplementary Authorization and any who had not yet begun the coursework or who had just started should be encouraged to seek the new requirements as this would be to the best benefit of California’s students who need educators who can help them meet the challenges ahead.*

2. Pierre Bierre, President 2013-2015, Silicon Valley Computer Science Teachers Association

*Comment: Making teachers go back to college for coursework is **more burdensome** than allowing them to pass a Proficiency Test. (See October 2015 Commission Meeting, Agenda Item 11-Insert, Attachment A)*

*Response: Current statute (EC §44256) makes no provision for examinations to be used to obtain any type of Supplementary Authorization. All Supplementary Authorizations require the completion of a minimum number of semester units of coursework in the desired content area. Therefore, the Commission at this time has no authority to make provision for a proficiency test to obtain this type of authorization.*

*Under the current process, to obtain the Supplementary Authorization in Computer Concepts and Applications, or any Supplementary Authorization for that matter, it is necessary for the educator to complete at least 20 lower division semester units of coursework (or at least 10 upper division semester units of coursework) in the specific content area. In moving to the revised Supplementary Authorization in Computer Science, the educator will be required to complete the same number of semester units of coursework. It is just that the coursework to be completed would be different, targeting the specific courses that would allow the educator to truly meet the challenge of being prepared to teach meaningful computer science content.*

***Oral Comments Received During the Public Hearing in Support: 2***

1. Debra J. Richardson, Alliance for California Computing Education for Students and Schools (ACCESS)
2. Stephen Blake, Children Now

***Oral Comments Received During the Public Hearing in Opposition: 0***

***Total: 18 responses in support***

***Total: 2 responses in opposition***

**Grand Total of Responses: 20**