## “Be a Science Teacher!” FAQs

### SALARY/JOB SECURITY/TENURE

| Q: How is salary determined in public schools? | A: Typically, the board of trustees of a school district negotiates the salary of teachers and other school-related personnel. Compensation packages may also include health benefits. Salary and compensation vary from district to district. |
| Q: Do bilingual teachers receive additional pay? | A: Bilingual teachers who demonstrate their bilingual proficiency through the BCLAD language test receive an additional yearly stipend in most districts. For example, a district in Riverside County pays an additional $450 yearly stipend; a district in Orange County pays as much as an additional $3,000 yearly stipend. The amount, determined by the district, is dependent upon the languages spoken by students in the district and whether the teacher is assigned Science-ELD (English Language Development) classes or regular science classes. |
| Q: Is there a salary difference for teaching extra classes during the regular school year? | A: Some schools make “extended day” assignments available. In this assignment, a teacher would teach one additional period and earn an additional 1/5 of their salary (approximately). |
| Q: Do science teachers earn more money if they teach in summer school? | A: Summer school pay is in addition to the regular salary. Summer school is paid at the daily rate and is based on the number of years taught in the district. The average daily pay is $300 for about 5.5 hours, totaling approximately $7,200 for a full summer school teaching assignment (which is equal to two semesters of one course). |
| Q: What are other ways to earn additional money as a teacher? | A: Teachers earn stipends for coaching, advising student organizations (e.g., Mock Trial, Decathalon, Envirothon, Debate, Associated Student Body, newspaper, choir director, and after school tutoring), and serving as department chairs. |
| Q: What is required to move up on the pay scale? Do you earn more money for a BS than a BA? | A: Teachers receive a pay step increase for the first 15 years and then additional steps based on their union agreement. They also jump to a different scale if they earn a graduate degree. Teachers do not earn more money for a BS than a BA. |
| Q: Is it beneficial for science teachers to earn their Masters or PhD? | A: Yes. Teachers with a Masters degree earn $4,000 - $5,500 more yearly. Earning a PhD brings more prestige, but it does not offer the same financial return. For example, teachers with a PhD usually earn about $2,000 more annually than a |
teacher with the same experience and only a MS. You are not overqualified if you have a PhD. Many high schools have at least one teacher with a PhD, and typically, that teacher is in science.

Q: What kind of job security do teachers receive?
A: Depending on the district, teachers are granted tenure at the beginning of their second or third year of teaching. Tenure means that the teacher is guaranteed employment in that district as long as the teacher maintains satisfactory evaluations unless student enrollment drops to a point where teachers are not needed.

Q: Do most teachers receive tenure? For what reasons do teachers NOT receive tenure?
A: Tenure is based on teaching performance. New teachers are formally observed and evaluated by the school principal at least twice annually. If these evaluations are poor, the teacher may be not be rehired the following year.

Q: How many years of teaching are required before you can have loans assumed up to $19,000 by the APLE Program?
A: The APLE Program requires four years of teaching in eligible schools in exchange for compensating the teacher the full $19,000. Check for school eligibility and application guidelines at http://aple.csusuccess.org/scholarship.

Q: Does government help with housing for teachers? How much cheaper is it for a teacher to buy a house?
A: The Good Neighbor Next Door Program (formerly the Teacher Next Door Program) offers HUD-acquired, single family homes to teachers at 50% off the purchase price. Single-family detached homes, condominiums and townhouses are all included. The teacher must purchase a home in the same school district/jurisdiction in which he/she is employed and must reside in the home as the sole residence for at least 3 years. After the 3-year period, the teacher may sell the property and keep any profits. See more information under Good Neighbor Next Door at http://www.hud.gov/offices/hsg/sfh/reo/goodn/gnndabot.cfm and http://www.neamb.com/loans/hmftnd.jsp

## EMPLOYMENT OPPORTUNITIES

Q: Are you more or less marketable as a teacher if you have a master’s degree?
A: You are equally as marketable with a master’s degree.

Q: Is it easy to get work in a certain geographical area? Is it easy to find a good teaching job? What is the demand for science teachers?
A: Science teachers are in high demand across the State of California as well as the nation. With patience and careful research, science teachers should have their pick of employment. However, in any given year, a district may have higher or lower need.

## MAKING CAREER DECISIONS

Q: What are the differences and similarities between teaching at the middle school, high school, community college, and university levels?

<table>
<thead>
<tr>
<th>Level</th>
<th>Minimum</th>
<th>Credential</th>
<th>Teaching Load</th>
<th>Research</th>
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</table>

Return to TOP
<table>
<thead>
<tr>
<th>Education</th>
<th>Load</th>
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<tbody>
<tr>
<td>Elementary BA/BS</td>
<td>Multiple Subject</td>
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<tr>
<td>Middle School BA/BS</td>
<td>Single Subject</td>
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<tr>
<td>High School BA/BS</td>
<td>Single Subject</td>
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<tr>
<td>Community College MA/MS/PhD</td>
<td>None</td>
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<tr>
<td>University (R-2) PhD/EdD</td>
<td>None</td>
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<tr>
<td>University (R-1) PhD</td>
<td>None</td>
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**Q: What are some of the differences between working in industry and teaching at a high school?**

<table>
<thead>
<tr>
<th>TEACHING MIDDLE/HIGH SCHOOL</th>
<th>WORKING IN INDUSTRY</th>
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<tbody>
<tr>
<td>● Work with students</td>
<td>● Work with adults</td>
</tr>
<tr>
<td>● No research required</td>
<td>● Conduct research</td>
</tr>
<tr>
<td>● Regular assignment is 185 days (M-F) yearly, with no paid vacation</td>
<td>● Regular assignment is 250 days (M-F) yearly, with two weeks paid vacation</td>
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**Q: Does a high school teacher do research?**
A: Conducting research is not a part of a public school teacher’s job, but many science teachers work for industry during the summer or are part of research conducted by University professors of science education.

**Q: What about teaching at a private school?**
A: Private schools are not held to state requirements for credentialed teachers, but many private schools require that their teachers be fully credentialed. The pay for teachers at private schools is often significantly less. The more prestigious the private school, the more likely it is to pay teachers well and to require that teachers be credentialed in the appropriate content area. In addition, health, dental, and vision benefits may be limited.

**Q: What are the requirements to be an elementary school teacher?**
A: Elementary teachers must demonstrate general knowledge through a California Subject Examinations for Teachers (CSET) for elementary teachers, demonstrate pedagogy through the Teaching Performance Assessment (TPA), and they must complete a Multiple Subject Credential Program where they student teach in K-8th grade settings. Additional information on the Cal State Fullerton Multiple Subject Credential Program is found at [http://fullerton.edu/cct/Mult_Subj/msindex.htm](http://fullerton.edu/cct/Mult_Subj/msindex.htm) and also [http://ed.fullerton.edu/ElEd/mscp.html](http://ed.fullerton.edu/ElEd/mscp.html).

**Q: If you earn your credential in California, is it easy to get a teaching job in another state?**
A: Many states have “reciprocity” with California, which means that the credential automatically transfers. Other states may require some additional coursework, but offer temporary teaching permits while you satisfy requirements.
Q: Would a minor in natural science be enough to teach in middle school?
A: A minor in natural science would prepare you well to teach in a middle school. However, you would still need to pass the CSET examinations for a content area to demonstrate subject matter competence.

Q. Once you have your clear credential, can you go work in industry and then come back to teaching in five years?
A: Yes, there are many examples of career changers in both directions. Teachers are responsible for renewing their teaching credentials.

Return to TOP

TEACHING AS A CAREER AND WORK ENVIRONMENT

Q: What are some negative aspects of the education field? Is it true that teaching is the hardest job?
A: Like all professions, those new to the field of teaching will have a series of challenges. In teaching, these challenges include classroom management issues, unmotivated students and parents, and working conditions. Some teachers must “travel” because they are not allocated their own classroom; some administrators provide poor leadership; and some districts do not have the financial resources to provide the optimal science equipment and supplies.

Q: How do you get middle school students to be interested in science and chemistry?
A: Many have been successful by using teaching strategies and techniques that involve hands-on activities, cooperative learning, and involvement of the community and parents.

Q: How much time outside of school work hours do you think most successful teachers approximately work?
A: A typical work day for a teacher is 7.5 hours. New teachers work more outside hours than veteran teachers, because they are learning the profession. Teacher work outside the school day includes learning content, developing instructional materials, and assessing student work. The amount of “outside work” varies from teacher to teacher, but likely ranges from 5-20 hours weekly.

Q: What are the chances of lawsuits against teachers?
A: Like any profession, you need to be protected by insurance. Your professional organization offers excellent insurance and advice.

Q: What is the work environment like?
A: Most high school science teachers have their own classroom, which usually includes a separate area for laboratory. In addition, science teachers usually have access to a stockroom and storage area. Department budgets allow for the purchase of experiment materials and supplies. Most departments develop collegial teams who work together to develop effective instruction strategies and assessment practices for their students.

Return to TOP

REQUIRED EXAMINATIONS

Q: Are there sample exams for the California Subject Examination Tests (CSET)?
A: The testing sites have great examples of examination questions. If you feel you need more review, we highly suggest the Orange County Department of Education resources and workshops. They may be accessed at their web site.
Q: How long are your CBEST, CSET, and other test scores valid?
A: The CBEST score is good for life. The CSET is valid for five years. To keep it active for life, you must put it on a credential and the first five years and keep the credential active.

Q: Can you retake just the parts of the CSET that you fail?
A: Yes, you can retake parts you need to retake and have the same time limits.

Q: How often is the CSET offered?
A: It depends on the subject test. Those with higher demand are offered more often. You need to view the CSET testing site for availability.

Q: Does it matter where you earn your BA/MA or where you earn your credential?
A: Yes, it matters. Some universities, including Cal State Fullerton, have an excellent reputation for undergraduate preparation in the scientific discipline. In addition, Cal State Fullerton has an excellent reputation for its teacher preparation programs. Cal State Fullerton holds national accreditation. Employing districts prefer to hire Cal State Fullerton graduates.

Q: What could I do to see if teaching is the right path before I commit to a credential program?
A: We recommend that you enroll in EDSC 310, The Teaching Experience: Participation. This course requires a field experience which allows you to observe in high school and middle school classrooms. In addition, class activities require that you consider whether teaching is the right profession for you.

Q: How do I choose what level to teach?
A: Throughout the credential program, we provide opportunities for you to explore both middle and high school settings. EDSC 310, The Teaching Experience, allows you to observe at either (or both) a middle or high school. You may complete your student teaching at either the middle or high school. Teachers are hired to work for a district. When you seek a position, you will let potential employers know which level you prefer.

Q: How early could I start the credential program?
A: All prerequisite and some credential classes may be taken at any time. These include EDSC 304 (or CSETs 133 and 134), 310, 320, 330, and 340. If you plan to intern during your first semester, you will also need to complete EDSC 400 and EDSC 410. The student teaching coursework and accompanying seminars must be taken no earlier than the final semester of your undergraduate degree.

Q: What is the total number of units required for a credential program,?
A: The number of units required is 12 for prerequisite coursework, 18 for the first semester, and 18 for the second semester, or 48 units total.

Q: Once you have earned your undergraduate degree, how many additional years does it take to become a teacher?
A: The credential program, including prerequisites, may be completed in one year.

Q: How long does a credential last?
A: A preliminary credential is good for five years. A professional clear credential is good forever, but must be periodically updated online with valid fingerprints.

Q: What is the cost of the credential program? What financial aid is available?
<table>
<thead>
<tr>
<th>Q: Since different ages of students have different psychological profiles, would you need to complete psychology courses as part of the credential program?</th>
<th>A: EDSC 320, Adolescence and Education, is a prerequisite to the credential program. This course addresses the psychological, cognitive, biological, and sociocultural aspects of adolescence.</th>
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<tbody>
<tr>
<td>Q: What is the hardest part about completing a credential program?</td>
<td>A: Many candidates report that the hardest part about completing a credential program is making the transition from student to teacher. This requires a shift from the “back of the classroom” to the “front of the classroom,” and some candidates find it hard to manage their time to be prompt, attend to detail, and maintain excellent attendance. The credential program is a “rite of passage” from student to professional.</td>
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<td>Q: What kind of safety courses do science teachers need to take?</td>
<td>A: All students are required to be CPR-certified prior to admission to the credential program. During the methods and student teaching seminars, science teacher candidates review safety precautions for classroom, demonstrations and student laboratory work. No additional coursework is required. Once a teacher, districts provide professional development to update CPR certification and to review science safety issues.</td>
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<td>Q: Which is better – to earn a regular science credential or a specialized science credential?</td>
<td>A: A regular science credential makes the science teacher more marketable than a specialized science credential.</td>
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<td>Q: If you are a chemistry/biochemistry graduate and want to teach mathematics, what does it take?</td>
<td>A: To teach mathematics, you would need to establish subject matter competency by having the appropriate coursework completed or pass the appropriate CSET examinations in mathematics. There are three subtests – algebra, geometry, and calculus. If you pass the first two tests, you are qualified to be a Foundational Level Mathematics teacher. See more information on this program under <strong>FLM Credential Program</strong> at <a href="http://ed.fullerton.edu/SecEd/Credential_Prog/FLM.htm">http://ed.fullerton.edu/SecEd/Credential_Prog/FLM.htm</a>. If you pass all three tests, you are qualified to be a Mathematics teacher. See more information on this program under <strong>Mathematics Credential Program</strong> at <a href="http://ed.fullerton.edu/SecEd/Credential_Prog/Mathematics.html">http://ed.fullerton.edu/SecEd/Credential_Prog/Mathematics.html</a>.</td>
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<tr>
<td>Q: Can we teach without a teaching credential?</td>
<td>A: Some private schools will employ non-credentialed teachers at a much lower salary.</td>
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Q: Are there refresher courses or tests that teachers are required to take throughout their careers?
A: The credential you earn at the university is a Preliminary Credential. You must “clear” this credential within five years and earn a Professional Credential. This is done in one of two ways – university coursework or BTSA. First and second year teachers are part of BTSA – Beginning Teacher Support and Assessment – program offered by their districts which provides professional development and support for beginning teachers. Participation in BTSA is required and teachers who participate for the full two years earn their Professional Credential.

Teachers are life-long learners and are required to participate in professional development activities. Many of these are offered free through the employing district. In addition, many teachers attend local, state, and national conferences and workshops, many of which are also funded by their employing districts.

Q: Is it possible to be credentialed in more than one science area? If you are a chemistry major, how do you qualify to teach other content areas? Would a degree in biochemistry make any difference?
A: Many science teachers are credentialed in more than one science area. To become credentialed in more than one area, all you have to do is pass the examinations for that content area or take the required coursework. You do NOT have to repeat any part of the credential program. A degree in biochemistry may give you a more breadth in biology and thus make it easier to pass the Biological Science CSET.

SPECIAL ISSUES FOR BILINGUAL AND INTERNATIONAL STUDENTS AND TEACHING OUTSIDE OF THE UNITED STATES

Q: Do bilingual teachers receive additional pay?
A: Bilingual teachers who demonstrate their bilingual proficiency through the BCLAD language test receive an additional yearly stipend in most districts. For example, a district in Riverside County pays a $450 yearly stipend; a district in Orange County pays as much as $3,000 yearly. The amount is dependent upon the languages spoken by students in the district and whether the teacher is assigned Science-ELD (English Language Development) classes.

Q: If I am not an American citizen, can I become a teacher?
A: Technically, students who do not have U.S. citizenship will be granted the preliminary teaching credential upon successful completion of the credential program. However, public school districts may or may not be able to hire them if they are not U.S. citizens. As long as the person is legally eligible to work in the US, s/he can teach in California. See also Steps to Becoming a Teacher for the Foreign Degree Holder http://www.teachincal.org/Pathway_ForeignDegree.shtml.

Q: Would a non-native English speaker be able to find a job teaching science?
A: Yes! School administrators want to employ the best science teachers possible.

Q: Is there a special program if you want to teach overseas?
A: We do not provide advisement on teaching overseas, but information is available under Teaching Overseas at http://www.state.gov/www/about_state/schools/oteaching.html.

OTHER QUESTIONS

Q: How do you become involved in organizations like the American Chemical
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</table>
| **Society or the National Science Teachers Association?**               | **A:** Many organizations have a student membership, which is much less expensive than the regular membership. Look for student membership information for these organizations:  
  - *American Chemical Society* at [www.acs.org](http://www.acs.org)  
| **Q: What is the Year of Science (2009) all about, and how can I get involved?** | **A:** For information on the Year of Science (2009) go to the *Coalition on the Public Understanding of Science (COPUS)* homepage at [http://www.copusproject.org/yearofscience2009/](http://www.copusproject.org/yearofscience2009/).  |
| **Q: Where can I view this presentation?**                             | **A:** This presentation is posted at [http://ed.fullerton.edu/SecEd/MAST/Index.htm](http://ed.fullerton.edu/SecEd/MAST/Index.htm). |