Business German classes at the university level have been very much in demand in recent years even though some German departments in universities have been forced to close. One reason for this is that these courses are at the cutting edge of trends toward more student-centered approaches in foreign language instruction and the move toward more content-based instruction. This paper describes two business German courses taught at Weber State University in Utah—one dealing with business topics, the other dealing with economic and international issues as they relate to German-speaking countries. The paper goes on to describe how students play a Web-based German language virtual investing game. They are forced to read and struggle to understand German-language financial records, company annual reports, and the business press in order to make informed decisions about which companies to "virtually" invest in. Class activities and Web site references are included. This activity made it easier for foreign language majors to understand difficult topics in banking and investing, provided insight into cultural patterns and standards, and stimulated reading and speaking outside the classroom. All this made these courses very positive experiences for the students and the instructors. (Contains 27 references and 3 graphs.) (KFT)
Virtual Investing in the German-for-Business Course:
Combining Language, Culture and Business

Erika Daines
Weber State University
edaines@weber.edu
Virtual Investing in the German-for-Business Course:

Combining Language, Culture and Business

Introduction

Much has been written about changes in the foreign language classroom (Hancock & Scebold). One of the major trends has been a change in methodology away from lecturing to emphasizing student-centered activities. In addition, the National Standards for Foreign Language Learning placed language instruction firmly into the realm of culture and the world (ACTFL 1999). A third factor is a growing movement away from the artificial divide of language acquisition in lower division and literature in upper division towards content-based instruction. All of these trends came together in the development of German-for-Business courses at a number of German departments across the United States. These departments have seen their enrollment grow in recent years, whereas departments without German-for-Business have seen numbers decline or faced closure (Cothram & Gramberg).

The Game

At Weber State University, we teach two semester courses of German-for-Business, one dealing with business topics, the other one with economic and international issues as they relate to the German-speaking countries. One of the topics in the latter course is banking and finance. To demonstrate the complexities and ramifications of this topic the instructor last semester included virtual investing as part of the course. She investigated three different investment games on German websites. The first one, “iBowl” organized by “Die Wirtschaftswoche”, is very complex and not suited to pedagogical purposes. The second one is organized by “double digit: das
boersenmagazin” at www.boersenspiel.de. The game is easy to set up and the main site, www.boersenmagazin.de, provides a great deal of information for the budding investor, including a very detailed dictionary on investing. Students can be set up as an individual group so that they compete only with each other. There are currently about 100,000 players worldwide.

The game chosen for this course is called “BrokerPoker” and is run by Comdirektbank AG, a branch of Commerzbank AG, and t-online AG, the Internet provider of Deutsche Telekom AG. It can be found at www.brokerpoker.de. Players register in one of three categories, novice, advanced or expert. The difference lies in the number of shares and options available to the investor. Games last several weeks and DM 500 000 worth of prizes are awarded, to be collected in Germany. For the first prize, an Alfa Romeo, students were prepared to take a quick trip. The rules are simple, no more than twenty percent of the portfolio may be spent on one item. All shares and options traded on German exchanges are available.

Comdirektbank provides a vast array of information for the players. The opening page shows a search window to find companies by name or ticker symbol. By typing in for instance “Deutsche Telekom” it will show a page of different types of shares, where they are traded and which funds contain this particular stock. It will also give the stock ID number (WKN), which is necessary to buy on any German exchange. Company profiles (Firmenprofile) show data such as sales, makeup of the supervisory board, product line etc. Newspaper articles about a company are available for several days at a time. A chart shows the stock price for a period from one week up to three years. The graph can be accompanied by a variety of indices such as the DAX, the NEMAX, the Dow-Jones or the Nasdaq. Trading volume coupled with rising and sinking stock prices are also shown. Watch lists and alerts or e-mail notifications are also available to players.
Graph 1: Chart for “Deutsche Telekom AG” with 38-Day average and DAX for one year, highs and lows for the day, 52 weeks and the year to date.
Buying and selling is carried out under "Inlandsorder". Investors enter the stock ID number, the number of shares and the exchange on which they wish to trade. They can choose between market price and limit orders as well as stop a loss at a certain price. All orders are registered in the "Orderbuch" until they are filled. While the markets are open, transactions at market price are carried out within seconds. All transactions for the period of the game are kept under the rubric "Umsätze".

Graph 2: "Inlandsorder" for buying and selling

Once a player has set up a portfolio, the current holdings are shown in the "Depotübersicht". The bank computer then analyzes the portfolio according to several factors, such as diversification, age, and profitability. Players are ranked weekly and for the period of the game with all other participants, usually tens of thousands, all over the world. The bank lists
the ten most popular stocks and options for the week as well as the ten most and least successful stocks of the day. Portfolios of the winners for the week are also available. Below is a portfolio set up for the class.

**Brokerpoker**

**Vizsla**

**Spieldaten**

Wochennr: 1851 (Vorwoche: 1)  Spieldauer: 4 Tage  Anzahl Transaktionen: 9  Depotwert: 101.445,47 EUR  Performance: +1,45% 

Klicken Sie auf die Spaltenköpfe, um die Positionen danach zu sortieren.
Wählen Sie den Menüpunkt Transaktionen, wenn Sie Werte kaufen wollen, die noch nicht im Depot sind.

**Poker-Depot**

<table>
<thead>
<tr>
<th>Name</th>
<th>WKN/Local ID</th>
<th>Anzahl</th>
<th>Anteil</th>
<th>akt. Wert</th>
<th>Performance</th>
<th>Signal</th>
<th>Kaufen</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFINEON TECHNOLOGIES AG</td>
<td>623100</td>
<td>100</td>
<td>5,56%</td>
<td>5.642,00</td>
<td>+0,41%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMGEN INC.</td>
<td>867900</td>
<td>100</td>
<td>7,59%</td>
<td>7.700,00</td>
<td>-0,39%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MERCURY INTERACTIVE CO...</td>
<td>890463</td>
<td>100</td>
<td>16,07%</td>
<td>16.300,00</td>
<td>+4,49%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISCO SYSTEMS INC.</td>
<td>878841</td>
<td>100</td>
<td>8,52%</td>
<td>8.610,00</td>
<td>+0,61%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>METRO AG</td>
<td>725750</td>
<td>100</td>
<td>4,80%</td>
<td>4.869,00</td>
<td>+2,35%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOKIA CORP.</td>
<td>870737</td>
<td>100</td>
<td>4,54%</td>
<td>4.606,00</td>
<td>+0,37%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.T. TELEKOM AG</td>
<td>555730</td>
<td>100</td>
<td>3,96%</td>
<td>4.016,00</td>
<td>+0,85%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUALCOMM INC.</td>
<td>883121</td>
<td>100</td>
<td>9,36%</td>
<td>9.500,00</td>
<td>+13,50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHERING AG</td>
<td>717200</td>
<td>100</td>
<td>7,03%</td>
<td>7.130,00</td>
<td>-4,49%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summe Aktien: 66.373,00  +2,61%

Summe Wertpapiere: 65,43%  66.373,00  +2,61%

Barbestand: 34,57%  35.072,47  2,61%

Summe Portfolio: 100,00%  101.445,47  +1,45%

**Strukturelle Zusammensetzung**

**Einzelwerte**

- MERCURY INTERACTIVE CO...
- QUALCOMM INC.
- AMGEN INC.
- SCHERING AG
- CISCO SYSTEMS INC.
- INFINEON TECHNOLOGIES AG
- METRO AG
- Rest

**Typen**

- Aktie

**Branchen**

- Unbekannt
- Nachrichtenübermittlung
- Gesundheitswesen
- Chemische Industrie
- Datenverarbeitung
- Herstellung elektronischer Bauelemente
- Beteiligungsgesellschaften/Immobilienfonds
- Rest

**Alter der Position**

- maximal 1 Tag
- 2-3 Tage
- maximal 1 Woche
- älter als 1 Woche
- älter als 2 Wochen
- älter als 1 Monat
- älter als 2 Monate

**Performance**

- mehr als -10%
- -5% bis -10%
- +5% bis -5%
- +5% bis +10%
- mehr als +10%

Graph 3: Portfolio set up by player “Vizsla”
While playing with someone else’s money is very entertaining, the value of this activity lies in its pedagogical benefits. It combines the acquisition of language skills with the study of culture and specific business knowledge all in one activity. We shall look at the three topics in turn.

Language acquisition

Most of the students in this course have little or no business knowledge, neither in German nor in English. They need therefore extensive background reading before they set up their portfolio. This practices their reading skills by skimming and scanning some texts, while reading others in more detail to acquire specific vocabulary. The texts range from the very academic to the polemical and satirical, thereby teaching students about different levels of language. This is one of the difficulties in second-language learning, as students, particularly those who have lived in country for a while, tend to mix the ephemeral with the vulgar without being aware of it.

For example, to look at the effect that a recent tax reform had on the German stock market students started out by reading an article in the Wall Street Journal called “New Tax Law Will Transform Germany Inc.” that is factual and easy to read, using many quotations. At the same time, they read an article in “The Economist” on the same topic. The second article gives more commentary, is somewhat critical and uses puns and innuendoes. The next reading assignment was from the “Frankfurter Allgemeine Zeitung” which gives a conservative, very detailed, pro-business account in very academic language. This text is paired with an article from “Der Spiegel”, which is left-of-center and very polemical. Even though the subject in all four texts is tax reform, the lexical items and language levels are worlds apart. Students had to summarize all four articles in German at the appropriate language level. Reading both English
and German texts side by side helps with the new vocabulary and saves the student time. The newly acquired vocabulary made it easier to read daily business news in an online version of a newspaper of their choice, which was one of the tasks for the course.

To practice listening skills, the instructor taped “Made in Germany” produced by “Deutsche Welle tv”. This is a weekly half-hour business program on TV which always features a section on the stock market. The language level is very sophisticated and usually just above the students’ listening proficiency. This helps in pushing them up the proficiency scale as defined by the American Council on the Teaching of Foreign Languages (ACTFL 1986). After having struggled with the video in class, students can read transcripts and listen to audio versions of the program at the Deutsche Welle website (www.dwelle.de) at their leisure. In addition to having to listen to speakers with many different dialects, students also see that the vocabulary and the knowledge they acquired in their reading assignments are indeed very topical and are used by native speakers in programs designed for other native speakers and not for a text book.

Once the portfolios were set up, students needed to explain to the class why they bought, sold or held items in their portfolio. One class period every other week was reserved for that purpose. Most students dislike standing in front of a group of their peers speaking without a script. Oral presentations are always a time of great stress, but to the great surprise of the instructor, students were anxious to explain their decisions and talk about their disasters and successes in front of the class. Their German became more animated and fluent as the semester progressed. They used the new vocabulary appropriately and sentences grew longer. By the end of the semester, several students were speaking in paragraphs with great animation but without scripts. Even normally shy students were anxious to speak in front of the group when they could talk about their portfolios. Conversations in German carried on into the hallway after class and
into office hours. It seemed that all other topics of conversation other than “BrokerPoker” had been eclipsed. This comfort level extended to other presentations required for this course, such as company profiles and summaries of articles and news broadcasts.

This course uses an electronic bulletin board for classroom assessment or general feedback on the course. Students post items to the board anonymously. Previously, these postings had been brief and sometimes shallow. In this course, postings became lengthy as students talked about obscure articles or new web pages they had found. They wrote lengthy e-mails to the instructor wanting to share information and asking for opinions on a variety of investment questions and vocabulary items. These activities were in addition to assigned writing tasks, totally voluntary and carried no credit.

Virtual investing made students read, speak, and listen to German outside the classroom to an extent not seen in other classes or other projects. This was an unexpected by-product in a course whose primary objective is teaching German business language and practices and to give insight into cultural patterns.

Cultural Understanding

According to the National Standards on Foreign Language Teaching, cultural knowledge is an integral part of the curriculum at every level of instruction. The research necessary for virtual investing provides invaluable insight into German cultural patterns concerning money and wealth, not through reading someone else’s ideas about them in a textbook but through the analysis of texts written by Germans for Germans.

Students soon found out that investing in the stock market is a very new phenomenon for most Germans. Hardly anyone talked about the stock market until Deutsche Telekom issued its
first set of shares for the revolutionary price of DM 5.00 in 1996 to issue a "Volksaktie" in line with a "Volkswagen". Even with the NEMAX and the DAX at giddy heights, in 2000 only 8% of all German households owned shares, mostly among the higher income group. About 90% of the population looks to the state for its old-age pension rather than personal savings and investments. Students understood this to be a general trait of risk aversion and desire to maintain the status quo underlying many German habits. They discovered how difficult it is to set up a new company in Germany. A bright idea and a garage are not enough. They encountered daunting government regulations and labor restrictions when investigating new technology start-ups. They discovered "Mitbestimmung", a law stipulating that representatives of the employees are involved in management decisions.

It was obvious that newspapers and investors did not pay as much attention to quarterly earnings reports but instead looked towards the medium and longer-term financial soundness and market share of a company. Shareholder value is a new concept and not firmly entrenched yet. Analysts and whisper numbers do not affect prices as much as they do in the USA. German investors also are more concerned about investing in environmentally and socially conscious companies.

Students were surprised by articles like "Es regiert die Gier" ("Greed Rules") in "Der Spiegel" which wrote negatively about the phenomenon of a few young entrepreneurs in Germany who earned large amounts of money through IPO’s or stock options but did not "work" in the traditional sense. It represented the commonly held view that large gains are if not illegal at least immoral because they must have been won at the expense of someone else. If a company is very profitable it obviously charged excessively for its products. In an interview on "Made in Germany", a well-known businessman worried about what this greed and sudden wealth was
going to do to the social fabric of Germany's society that has traditionally been based on consensus. The system of "Soziale Marktökonomie" brought about a leveling of wealth and poverty after the Second World War. This equilibrium, according to him, was now endangered.

Students were also surprised to learn that personalities like Bill Gates were not at all respected, but for different reasons than in the USA. His wealth was deemed immoral, but more important was the circumstance that he had not finished university. Money is not the key to be a respected member of society, education is. An unemployed professor has a higher social standing than a successful businessperson without a degree.

During the semester, there were a number of mergers and acquisitions across national borders. None caused as large a furor in Germany as the bid by the British company Vodafone for German Mannesmann AG. As long as German companies were doing the buying overseas, there had not been a great deal of concern in the population. Now there were articles like "Die britische Wirtschaft befürchtet eine "Germanisierung" (British economy fears Germanization) in "Die Presse", which showed concerns about national security being endangered, foreigners running Germany, and plain xenophobia. It was a wonderful study in deeply rooted cultural attitudes in Germany and its neighbors. To provide comparison, there were articles like "Die wachsende Angst der Amerikaner vor den Deutschen" (America's growing fear of the Germans) (Spiegel-Online). Students had to decide: Was this a good time to buy Mannesmann, was Bertelsmann perhaps the subject of a takeover?

At the end of the semester, students matched their cultural insights with excerpts from several books about cultural differences in general and Germany in specific, such as "Culture Matters", "When Cultures Collide", "Riding the Waves of Culture", and "Studienhalber in Deutschland". Students found some of the judgments too generalized and others very profound.
They were able to quote evidence from their readings and listening texts to back up their opinions.

Business-Specific Knowledge

None of the twenty students in the class had ever bought an individual stock and all needed background reading in basic investing terminology and principles. By popular vote, the favorite sight for this was the Motley Fools’ German site www.fool.de where students read the “Eleven Steps to Foolish Investing”. It is written for novices and explains such concepts as compound interest, risk, yield, index funds etc. in a very humorous manner. It uses fictional characters such as Professor Boemmel from “Die Feuerzangenbowle”, an older popular film, as well as Oma Krause and her canary. Students loved it, read through it in two rather than seven days and learned in the process. Some even checked the film out of the library to watch this character who speaks in a heavy dialect, all without subtitles. Students who struggled with the language had the option of reading a similar text at www.fool.co.uk. before tackling the German text.

The other popular web site for general background reading was “Börse für Einsteiger” at www.wiwo.de. Explanations are shorter and a little more technical. To acquire financial terminology in English, students did well with the “university” part of www.nasdaq.com, investing 101. Both sites also deal with bonds and mutual funds.

In addition to the information available at “BrokerPoker” students used other web sites to research companies. Students found three sites particularly useful. The first one was the section “Firmenprofile” at “Die Wirtschaftswoche” at www.wiwo.de. It provides detailed information on companies including items such as the composition of the management and the supervisory
boards. This information is particularly interesting in view of the large holdings companies have in each other.

The second web site with information that foreign-language students can manage is “Das Handelsblatt” at www.handelsblatt.com. Here again the section “Firmenprofile” is useful, but even more insightful are the “Branchenvergleiche” und “Unternehmensvergleiche”. Businesses are divided into sixteen branches, such as IT or automobile production. These can be sorted according to area (Germany, Europe or the world) and by parameters, such as sales, earnings before interest and tax etc.

The advanced-level speakers in the course used a new web site at www.aktiencheck.de, which is a financial information service dedicated to transparency in investing. It reprints information from many sources like brokerage houses, financial magazines and research institutions. It is very detailed and requires more sophisticated language skills and basic knowledge of the stock market. During the final weeks of the semester, about half the students were comfortable with the language and information level and used it regularly.

Students evaluated the on-line dictionaries at all the sites mentioned so far. The most elaborate was at www.boersenmagazin.de. It contains acronyms and specialized terms. The site “aktiencheck” has a feature the instructor found useful: if a term is not in the dictionary, you can e-mail the web master and receive an answer within 24 hours. If appropriate, the term will be added to the on-line dictionary.

The knowledge students gained through hands-on investing was invaluable. It was not restricted to stocks, options, futures etc. that textbooks talk about. This was a time when IPOs would quadruple their initial share prices only to fall below offering price within a few days. Students were shocked when Gigabell AG, which had risen to giddy heights after its initial
public offering, lost half of its value within a very short time. How could a company like Siemens spin off part of its holdings, Infineon AG, and see its stock price fall into the basement? Suddenly, the strategies and historical background they had read early in the semester about long-term investing, risk management and diversification all made sense. Reading about other people's philosophy did not have that impact.

Reading about shareholder meetings, earnings reports, profit warnings etc. gave students an understanding what a stock company really is, where the power lies and how these companies interact in a German context. This knowledge helped in understanding other topics in this course not directly related to investing such as mergers and acquisitions, EU regulations, globalization etc. It was invaluable in understanding the ramifications of Germany's recent tax reform on "Deutschland AG".

This term is so familiar to Germans that most newspaper articles do not bother to explain it. It refers to the interconnections between large companies and banks. Large companies like Deutsche Bank or Allianz hold a significant parcel of shares in other large companies or banks. As a result, they sit on each other's advisory boards. This cozy arrangement came about after the Second World War and greatly contributed to Germany's economic success thereafter. Now these holdings have increased vastly in value and are subject to a 50% capital gains tax upon sale. Over the last few years, there were several instances of spectacular crashes in Germany, such as Holzmann AG and Schneider Construction, where supervisory boards did not supervise. Consequently the economic climate has changed and public opinion now considers this conjugal relationship to be unhealthy to the free market. The recent tax reform allows these cross-holdings to be sold, without any capital gains tax whatsoever. This will allow companies like Deutsche Bank, Siemens, and others to liquidate their holdings and accumulate large amounts of cash that
can be used for acquisitions abroad. "Deutschland AG" will either see a demise or at least be very different in years to come.

Conclusion

Virtual investing made it easier for foreign-language majors and minors to understand difficult topics in banking and investing in a foreign language. It provided insight into cultural patterns and standards. It stimulated reading and speaking outside the classroom, every instructor's dream, and honed all four language skills. While students benefited the most, all these factors made this course a joy to teach for the instructor.
References

AktienCheck: at http://www.aktiencheck.de


BrokerPoker, at http://www.brokerpoker.de


Das Börsenspiel, at http://www.boersenspiel.de.

Das Handelsblatt, at http://www.handelsblatt.de.


Motley Fools at [http://www.fool.de](http://www.fool.de)

------ at [http://www.fool.co.uk](http://www.fool.co.uk)


I. DOCUMENT IDENTIFICATION:
Title: Virtual Inventing in the German for Business Court: Combining Language, Culture and Business
Author(s): ERIKA DAINES
Corporate Source:
Publication Date:

II. REPRODUCTION RELEASE:
In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
______________________________
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY
______________________________
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
______________________________
Sample
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in
**III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):**

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS).

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price Per Copy:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Price:</td>
<td></td>
</tr>
</tbody>
</table>

**IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:**

If the right to grant a reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
<th>SDSU CIBER Press</th>
</tr>
</thead>
</table>
| Address: | 5500 Campanile Drive, BAM 428  
San Diego, CA 92182-7732 |

**V. WHERE TO SEND THIS FORM:**

You can send this form and your document to the ERIC Clearinghouse on Languages and Linguistics, which will forward your materials to the appropriate ERIC Clearinghouse.

Acquisitions Coordinator  
ERIC Clearinghouse on Languages and Linguistics  
4646 40th Street NW  
Washington, DC 20016-1859  
(800) 276-9834/ (202) 362-0700  
e-mail: eric@cal.org