



APRIL IN AMADOR

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04/11/25 04:35:04 PM

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Author's notes:

/1/ I would say had I any idea how difficult it would be to retrieve old SARC's (legally required annual documents more formally known as School Accountability Report Cards) I would have saved off ones from schools in at least Amador and Calaveras counties years ago. I don't mean to imply that the available data quality then or now is very good.

/2/ For those with finite time or a limited attention span it is possible to skim or skip forward to the Management Summary and The Bottom Line starting on page 43.

/3/ The images that look like spreadsheets were taken from real spreadsheets which are available by request

The Theory of Mathematical Games

The mathematician usually known as John von Neumann was born in Budapest in Hungary on December 28, 1903 as Neumann János Lajos (in Hungary the custom is to give the family name first).



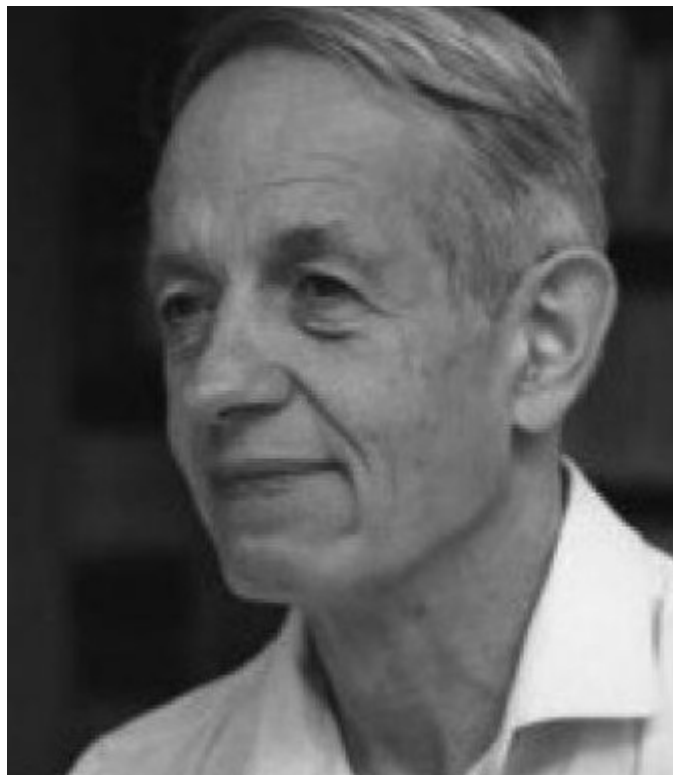
After a dazzling early career he was invited to Princeton University as a visiting lecturer in mathematical physics in 1929. Making very important contributions in a number of fields, he eventually became both a full professor and an American citizen. Of interest to readers here is that he formalized what was being called mathematical games. One type of game is called zero sum – an example would be the current women's world chess

championship being played by Ju Wenjun (as in Hungarian, family name first; below left: current champion) versus Tan Zhongyi (below right; former champion and now challenger).



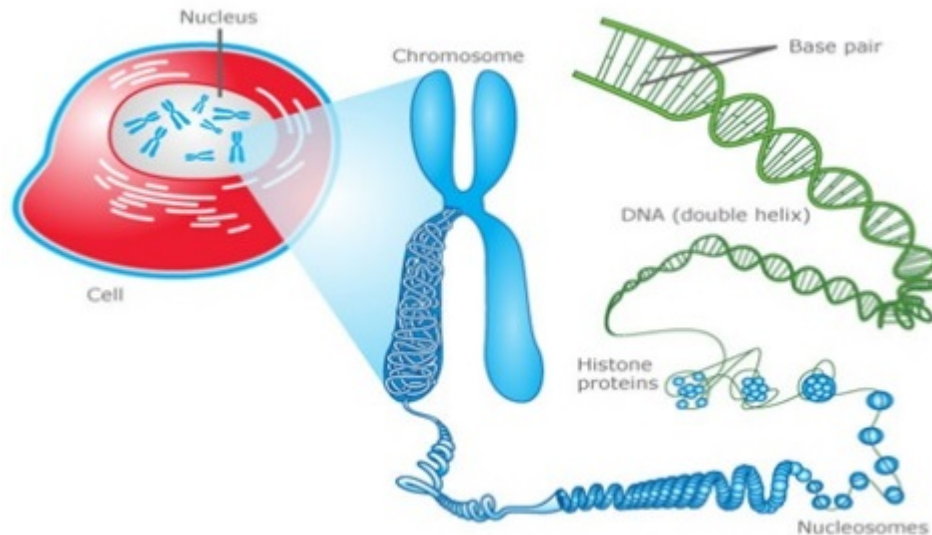
Zero sum means that any move that Ju makes that is good for her is equally bad for Tan and *vice versa*. In 1928 von Neumann proved that a strategy exists that minimizes the maximum loss for one player in the game. Despite being heavily involved in the Manhattan Project, he and Oskar Morgenstern co-authored a 1944 book titled *Theory of Games and Economic Behavior*. At around the same time von Neumann was working on minimax John Forbes Nash Jr. was born on June 13 in Bluefield in West Virginia. Had he been going to school today his Individual Education Plan probably would have specified that he could enroll in mathematics courses at nearby Bluefield College (now Bluefield University). Nash attended Carnegie Institute of Technology (now Carnegie Mellon University) with a George Westinghouse Scholarship, initially planning to major in chemical engineering. He switched to a chemistry major and later to a mathematics major. Despite those changes, he graduated in 1948 (age 20) with both a B.S. and M.S. in mathematics. Nash then accepted a fellowship to Princeton University. Nash earned a PhD in 1950 with a 28-page dissertation on non-cooperative games: the thesis contained the definition

and properties of the Nash equilibrium, and (very unusually) a version of his thesis was published a year later in the **Annals of Mathematics**. Of interest was that in cooperative games the larger a coalition of cooperating players was the greater chance it had of success. Note that players tend to give up obtaining maximum benefits for themselves (and probably as little as possible for other players) in return for a high likelihood of an acceptable benefits for both themselves and all other members of the coalition. For his work, Nash was one of the recipients of the Nobel Memorial Prize in Economic Sciences in 1994.



Russell Crowe played Nash in the 2001 movie **A Beautiful Mind** based on Sylvia Nasar's 1998 biography of Nash. Today, education in general, and special education in particular, are often described as not very cooperative games between school districts, teachers, parents and sometimes even students. It is past time to seek a Nash equilibrium.

Through a Glass, Darkly



A reference to the controversial verse 12 of chapter 13 of St. Paul's first epistle to the Corinthians. Nearly ten years ago I wrote a lengthy technical treatment titled "**A Matter of Gravity**" regarding the economic and social impact of teaching the venerable Chinese martial art of Chen family style Tai Chi Chuan to people with special needs. Like many of the hundreds of Chinese martial arts, in Chen family style there are sequences of canonical movements known as sets or forms. In Chen family style in particular there are six unarmed forms and ten forms with various traditional weapons. Among other things, it was proposed to use state of the art location sensors (simple computers roughly the size of a shirt button) embedded in clothing to provide automated daily scoring. Students would usually be able to see a constant video of a grandmaster, himself wearing sensors, and would be graded on how closely they imitated his movements. The underlying strategy was to provide statistical anchors so that decisions made in areas such as sleep, diet, medications and logistics could be quantitatively analyzed. If the Tai Chi Chuan scores increased whatever else was changed was probably a correct choice. With some diligence it is also possible to anonymously compare among students.

One challenge that was encountered early on was that the autism spectrum was very broad and, like many other diagnoses, rather subjective. Accordingly, it was strongly preferred that students get a whole exome DNA analysis so that comparisons could be made among students with purportedly similar genotypes. There were two physically similar students who had both been diagnosed as having Helmsmoortel - Van der Aa syndrome, which is a type of autism caused by shortcomings in the activity-dependent neuroprotector homeobox (ADNP) gene found in humans on chromosome 20 in the q13.13 region. As nearly as could be determined, both students had fairly similar lifestyles in terms of seizures, sleep, diet, medications and bus rides, but there was a distinct difference in what is known as the velocity of learning – how quickly and how well Tai Chi Chuan sets were being learned. After some new assay methods were used it was determined that the two students had significantly different mutations of their ADNP genes. Today there has evolved a whole notation scheme to describe detailed DNA differences from the reference standard.

For the most part, martial arts developed as warfare became an industry of importance to the state. World-wide, there are thousands of martial arts associated with countries or regions. Of the hundreds of existing Chinese martial arts more than half are named for or associated with either a province or a family. Within the vast spectrum of Chinese martial arts an art might range from 'soft' or 'internal' to 'hard' or 'external'. While I admire (and trained in) hard styles like Hung Gar and Shaolin they are a poor fit for most people in the special needs populations. Today, there are three dominant internal arts: Bagua Zhang, Xing Yi Chuan, and Tai Chi Chuan. All build from the inside out – the reverse of what hard styles tend to do. While I have considerable respect for both Bagua and Xing Yi none of their styles have enough formalized sequences of movements (known as poomse in Korean and kata in Japanese) yet for my purposes. I needed at least 16 sets in order to be able to offer performance-based collegiate

bachelor's and master's degrees. Within Tai Chi Chuan today there are six recognized major styles. Of those, Chen family style is almost certainly the oldest – it is usually agreed that the other styles have derived from it. More importantly, in Chen family style there were enough sets; and the grandmasters I had been and am in contact with have always been very supportive.

For most Chinese martial arts the Chinese government's Ministry of Sport manages standards for sets and weapons, ranking systems, competitions and recordings planet-wide. Accordingly, my request to award collegiate degrees had to be approved by the senior leaders of the Chen family and then by the Ministry of Sport. Since the bulk of my curriculum closely resembles today what a Chinese scholar-athlete at a sports university and what most Chinese Navy personnel would study there were no problems. However, it was stipulated that I would record a class every two or three weeks and send the video files off for review. For my students there would be no oral or written examinations, and judging of a performance might allow some accommodations, but otherwise my students would be held to the same standards as a neurotypical Chinese scholar-athlete. In addition, I should expect annual or even quarterly visits by one or more grandmasters.

The www.silverwolfwushu.com web site is a bit sprawling, but one can get a sense of the curriculum and of a typical class. One can also search for Grandmaster Chen Zhenglei on YouTube – Lao Jia (= Old Frame) is the signature form. One might wish to compare recordings by fellow Grandmasters Chen Xiaowang, Zhu Tiancai and Wang Xian, among others. Chen Zhenglei's niece, Chen Huixian, teaches in Kansas. Here's a link to her doing the bottle-cap challenge – in sandals.
<https://www.facebook.com/watch/?v=427009718025127>

Chen family style can be described as weapons heavy: there are six unarmed forms; five forms with short weapons and five forms with long weapons. This is a factor in the overall space requirements and in planning the teaching area. Needless to say, walking among 50 students most with communications challenges waving two dull swords (each; see below left) around takes some grit. Chen Family style also has a set for the halberd known as General Kwan's blade – a heavy 30" blade on a 72" shaft (see below right). With some training students line up single file to salute honored guests in the manner of the Imperial Bodyguard of the Emperor of All China long ago. It is by all accounts a very vivid experience.



Some years ago I had optimized the flow for 15 or 16 students (or eight in wheelchairs) taught for 150 minutes with optional snacks (the famed Thirteen Treasures rice porridge below) before and after class as well as near the mid-point. Tai Chi Chuan is thirsty work, so there were planned tea and water breaks every thirty minutes.



Given the formidable number of food and beverage allergies frequently afflicting people in the autism spectrum students would either have to bring beverages from home or choose between herbal teas and water. Thirteen Treasures probably has hundreds of variations. Some commonly encountered ingredients are

- /1/ sweet white rice
- /2/ black or red rice
- /3/ sliced lily buds
- /4/ lotus seeds
- /5/ quartered pitted Chinese red dates
- /6/ mung beans
- /7/ azuki red beans
- /8/ Chinese green raisins
- /9/ sliced dried Chinese yams
- /10/ pearl barley
- /11/ peanuts
- /12/ goji berries
- /13/ pine nuts

We would expect to customize individual combinations of ingredients

The State of California and Finances

Then about 16 months ago the State of California's Legislative Analysts had estimated that the state's budget was going to have 30% more (= almost \$70 billion dollars) expenses than revenues. With some reluctance, the relevant portion of the Governor's staff eventually agreed. California, by law, must have a balanced budget, and future revenues must be justified. To solve this challenge, last year almost all of the state's reserves were spent; some large programs were delayed a year or two; and over one thousand school districts containing almost ten thousand schools as well as all 58 counties were informed that state funding might be reduced. Exact percentages vary a little but California school districts on average get 13% of their funding (\$15 billion statewide per year) from the Federal government; 35% (\$40 billion per year) from local taxes and 52% (\$60 billion per year) from the state. Panic ensued and several districts near me (and likely hundreds state-wide) started looking at closing schools and firing teachers.

At one time, if a school district was not going to remain financially solvent the State of California would fire the school district board, fire the superintendent, insert their own leadership, make an assessment and provide a loan. This process has not worked well - school districts like Oakland have remained under state control for 20 years, academic ratings, despite widespread and flagrant cheating, have declined (they were already quite low for Oakland), real estate values have dipped and families have fled. Today, it is not obvious that there is a deep talent pool of experienced and competent education administrators to draw from – and it is also far from obvious how the state could stand surety for loans to districts.

So I offered to teach two three-hour classes per day of 16 special needs

students each. This would have saved the Calaveras Unified School District about \$1,000,000 per year – the understanding was, if successful, the West Point and Mokelumne Elementary schools would remain open. My expectation was that the two nearby schools, both threatened with closure, would send their worst students and their most costly students to me. If things went well the first year or so I would either ask for qualified Tai Chi teachers from China or train several local people.

I worked my way through all 58 California counties. Here are some figures for purposes of illustration.

County	Amador	Calaveras	Sacramento
Population	42,000	46,000	1,585,000
Students	4,091	5,218	245,571
Disabled	750	924	35,081
Percentage	18.33%	17.71%	14.29%
Teachers	216	272	10,680
Federal funds	\$3,818,000	\$5,250,000	\$555,133,000
State funds	\$19,648,000	\$27,739,000	\$2,551,071,000
Local funds	\$32,692,000	\$57,801,000	\$1,146,825,000

Note the high percentage of disabled students.

Sacramento is currently the California county with the sixth highest number of K-12 children enrolled. Of course, Los Angeles has more than five times as many students enrolled as Sacramento, but it has been my experience that whenever Los Angeles schools in particular and Los Angeles in general are used in comparisons everyone's eyes roll.

Californians age 4 to 22 who received special education services in 2022–23 were tallied as follows:

Condition	
Autism	149,925
Deaf and blind	87
Deaf or hard of hearing	12,268
Blind or visually impaired	2,581
Emotional disturbed	21,593
Intellectually disabled	40,401
Orthopedically impaired	6,905
Specific learning disability	279,200
Traumatic brain injury	1,312
Speech or language impairment	172,422
Multiple disabilities	8,147
Other health impairment	118,687

The total from above is 813,528 or 14.02% (about one in seven) of California's 5,803,280 K-12 students. Neither the classification scheme nor the tallies should be regarded as anything except imprecise understated estimates. It does not matter what condition someone is alleged to have nor what school or district they are affiliated with – 800,000 is a large number. Worse, one should expect that between five and six million Californians (all ages); sixty to seventy million Americans; and over one billion human beings on our Planet Earth would likely be classified as disabled. Several colleagues who self-describe as world-class epidemiologists suggest that the high percentages in Amador and Calaveras (among others) may be from long-gone mining and timbering.

Looking Forward

Neither the venerable Tai Chi Chuan in particular nor martial arts in general will prove useful to everyone. Or even most people. However, I am persuaded that the engineering that underlies Tai Chi Chuan will be transformative for some people. It is also something of a mantelpiece moment when a lineage holding grandmaster poses with a student and family to attest that the student has learned some of the art the grandmaster's extended family has taught for 19 generations (almost 400 years).

Given the unpredictability of Federal funding and the challenges of state funding both this year and in the near future, clearly 32 students won't be enough. With some adjustments due to COVID I had figured out (I thought) the logistics for food, drinks, weapons, tools, clothing and tooth brushing – but no showering. There's a very strong preference to retain as many teachers as possible while providing a very good education. In order to have a clear idea of a working class size I officially asked the senior grandmasters of the Chen family (they have taught world-wide for decades) and the Ministry of Sport and a collection of my friends. Everyone was aware that

/1/ students might have an aide or a fraction of an aide

/2/ at first I probably would be the only teacher

/3/ getting expert Chen Family style Tai Chi Chuan teachers from China looks to be fraught with political challenges from both sides of the Pacific.

/4/ Seizures are a significant consideration

/5/ It is not clear that the assistive technology using embedded sensors can scale from 15 students to 50.

/6/ I will need a raised stage, a microphone and 4 to 6 very large monitors

/7/ Two classes – three hours each

/8/ A large room will be required – easiest is a gym or an auditorium,

/9/ I can choose the students. I can also interview parents. Of course, it is well-known that I am not very good at saying 'no'.

I dragged a neighbor who is a licensed contractor with considerable local experience along to look at about a dozen nearby buildings. It was a pretty dismal experience.

As far as anyone can tell, no one has ever attempted teaching a moderate number (say 40 to 50) special needs persons at one time. Grandmaster Chen Zhenglei commented that I might have taken leave of my senses – but that I should continue full speed ahead. The consensus is that a room of 5,000 to 6,000 square feet will be needed for 40 to 50 students plus tables to hold their tools, weapons and so on. There would need to be a secure area to contain weapons and tools as well as cooking and cleaning supplies. There is considerable disagreement about whether five rows of students is too many. Likewise, there are staunch defenders of ten being the maximum number of rows. Some suggested configurations

40 students – 4 rows and 10 columns or 5 rows and 8 columns

44 students – 4 rows and 11 columns

45 students – 5 rows and 9 columns

48 students – 4 rows and 12 columns

50 students – 5 rows and 10 columns

The prevailing advice was to fit the number of students to the dimensions of the room and to lean toward a smaller class size at least at first. Students who are desperate to join a class where there is no physical space left could follow using the internet either from home or from a convenient common location.

Instead, as some have urged, were I to open a martial arts school virtually nothing of California Education Code would apply. The economic consequences for nearby public school districts would be profound, but generally not very positive.

Replying to the question (in this case from some high-ranking people in China to me) "Why do you persist in recommending Calaveras County?" takes considerable charm. I did suggest that someone visit. Unknown to me at the time, at least one person did come from China. They spent some time in Angels Camp, Arnold, Copperopolis, Mokelumne Hill, Mountain Ranch, Murphys, Rail Road Flat, Rancho Calaveras, San Andreas (including watching a Superior Court trial), Vallecito, Valley Springs, and West Point. They even read several issues of the **Calaveras Enterprise**. The report concluded that the strategy would likely succeed despite considerable challenges, and that virtually all of the tactical details could apply in American urban environments as well as throughout China. The author was well aware that China probably has more than 150,000,000 people with various disabilities. After considerable electronic correspondence it was suggested that the other three hours each when not in class be allocated to six thirty minute activities including

calligraphy

laundry and weapons, tools and clothing repairs and maintenance

occupational therapy

personal food and beverage preparation

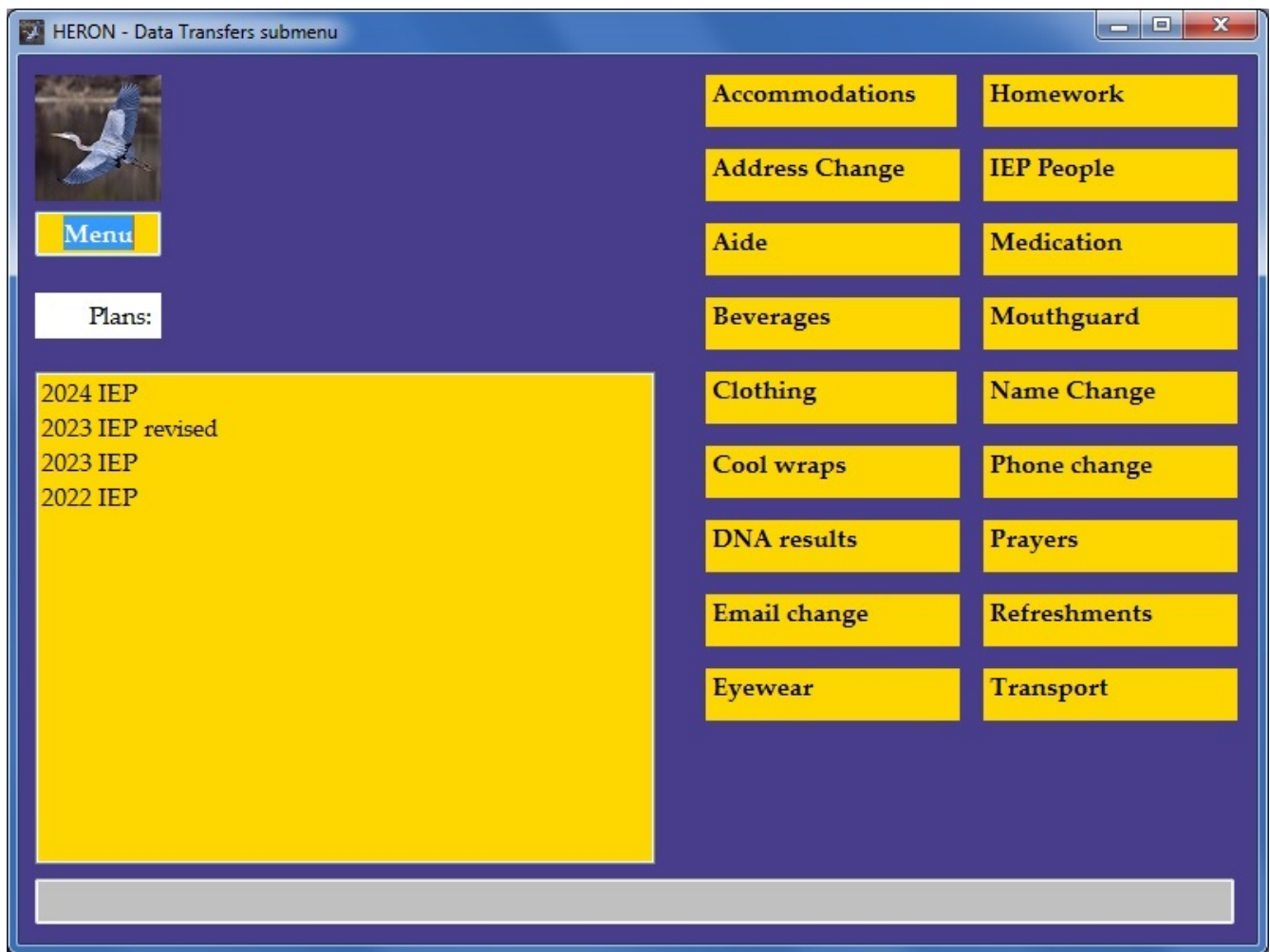
personal grooming – haircuts, fingernails, checking feet (very important in martial arts), tooth brushing and flossing

speech therapy

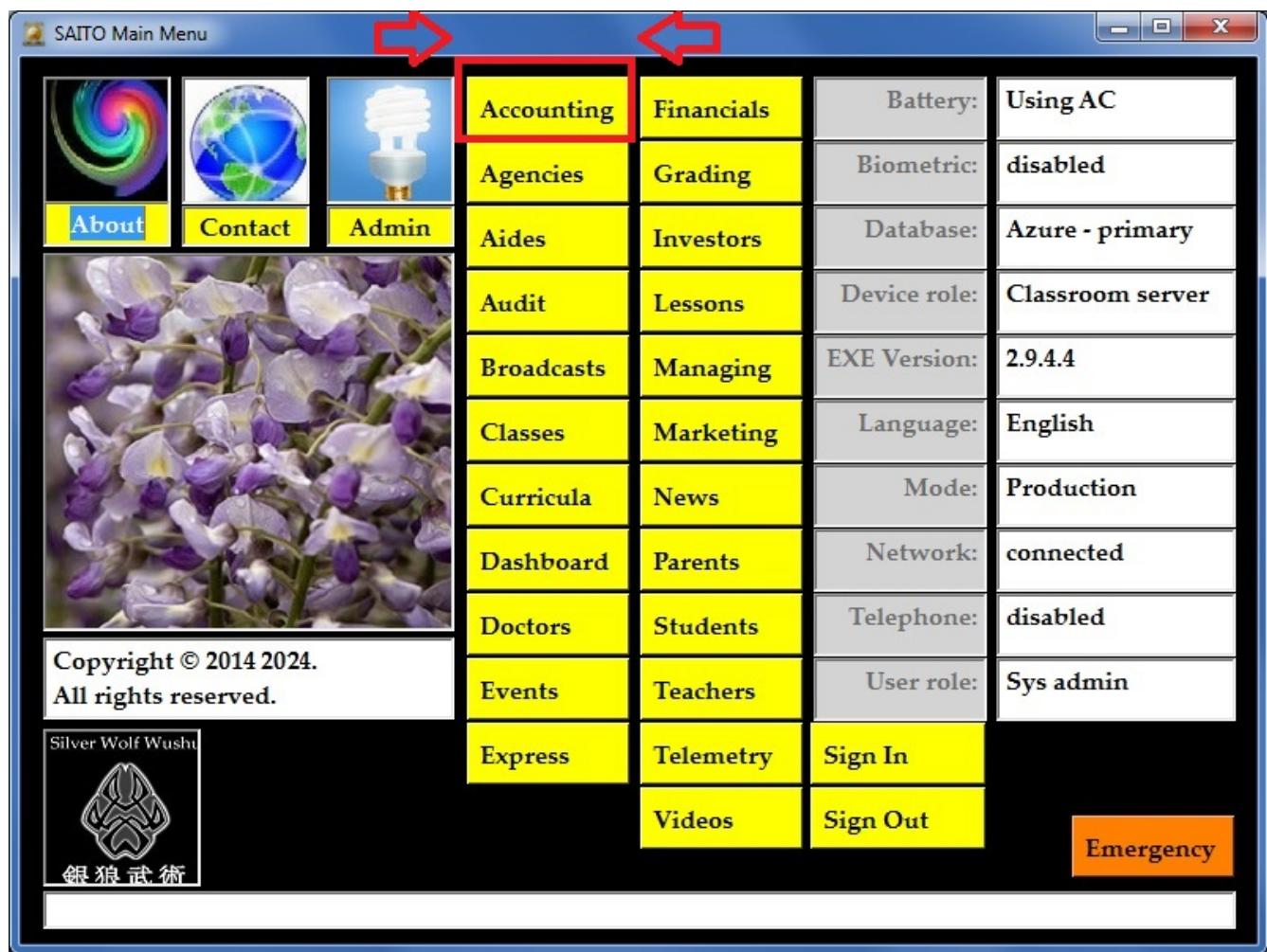
The Supporting Software

There is a software application named HERON that can be used for the 16 to 18 hours per day a student is not in class or being transported. It currently runs on Windows. I expect it will be migrated to Apple and Android depending on what technologies students, parents and teachers are using. **Its use is entirely voluntary.**

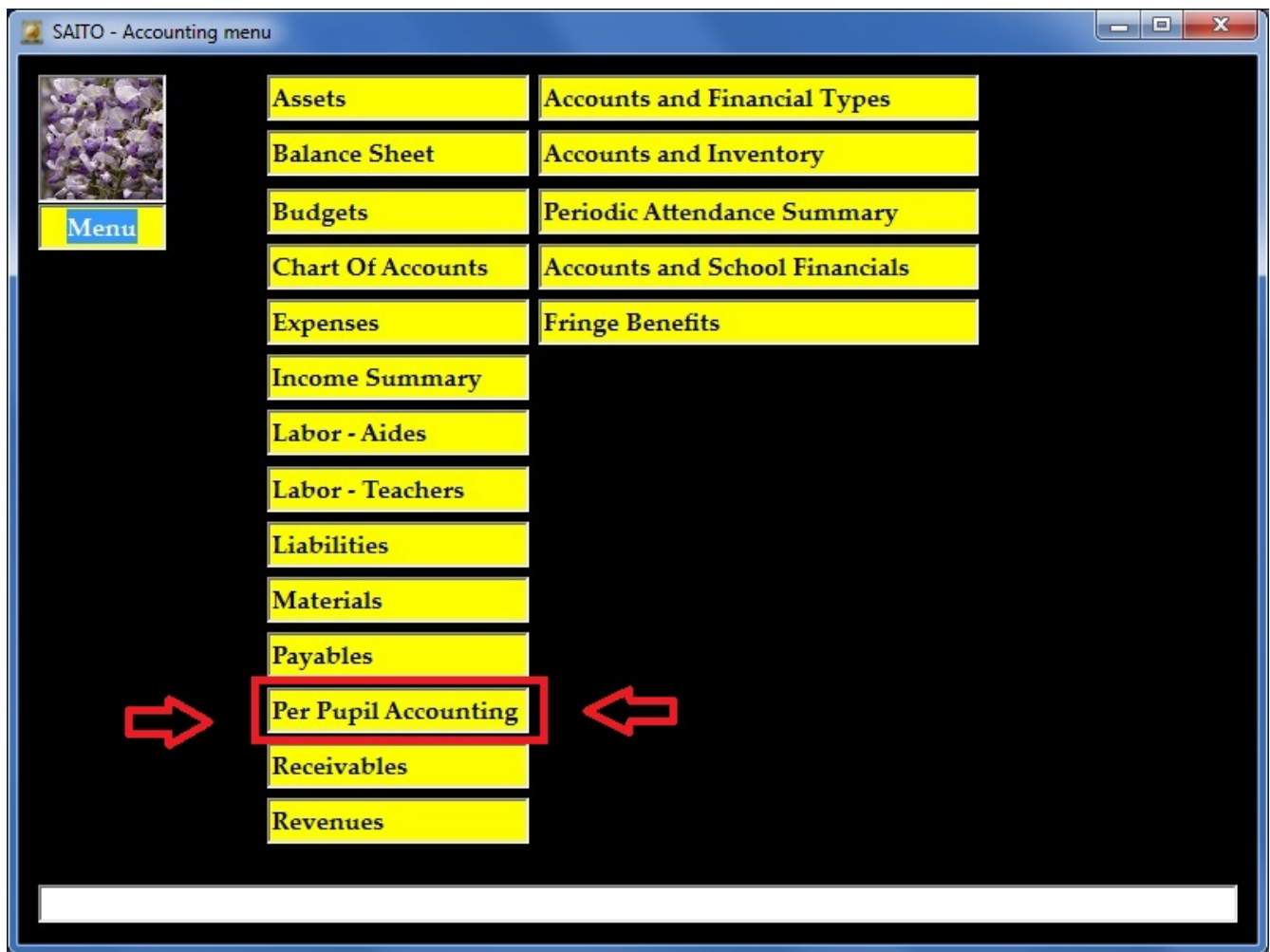




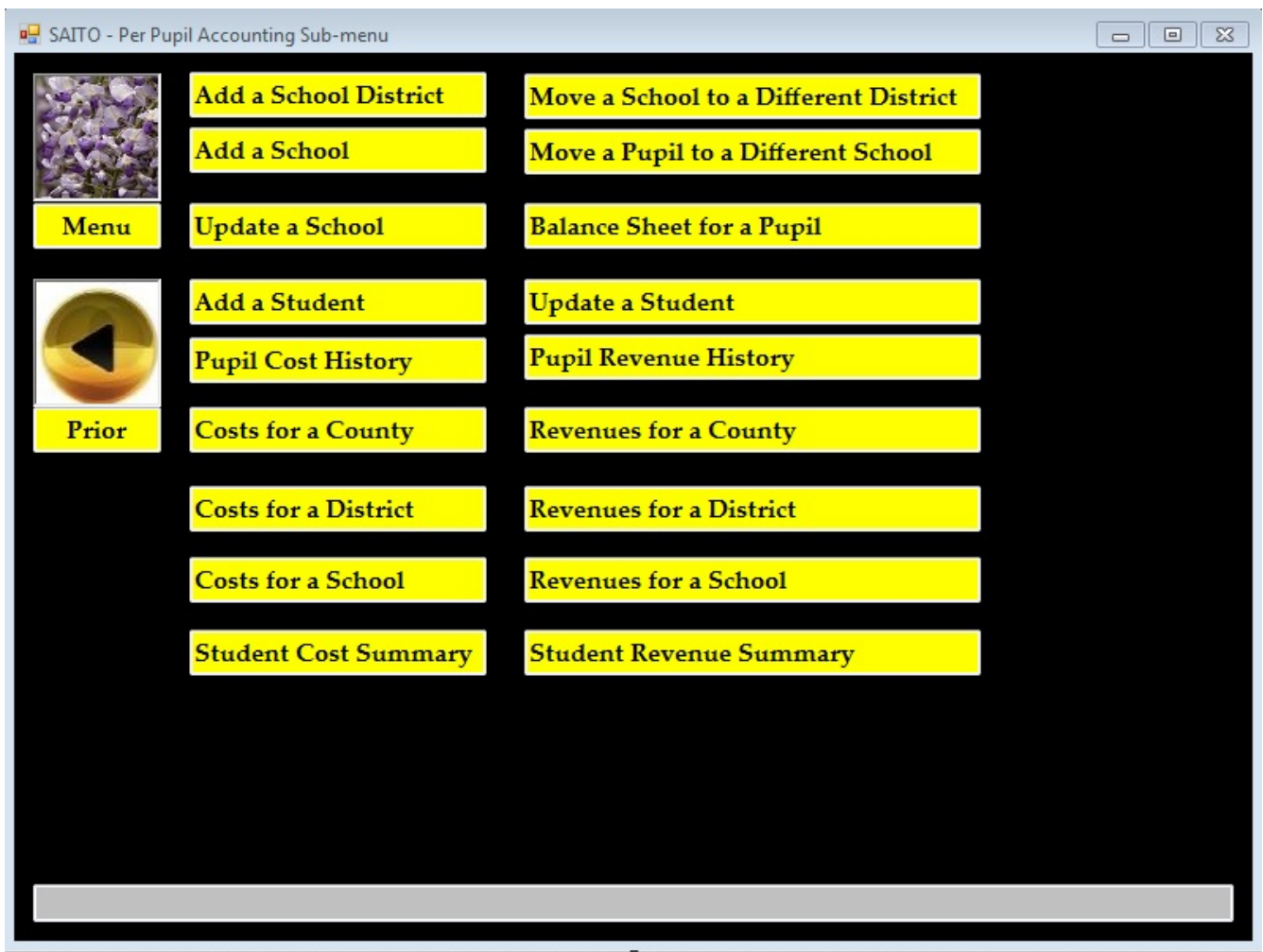
HERON can be used to electronically communicate between parents (or even the student) and the teacher regarding not only events at home but also at class. It is a source of considerable internal debate whether HERON should support uploading expenses paid by parents or students. As using HERON at all is voluntary and one need not use all of HERON, the issue is complex. Also under continuing internal debate is whether HERON should be able to import costs and revenues. While probably not of much concern to a school or school district these historical figures might be useful when determining a budget after the pupil leaves the education system at age 22.



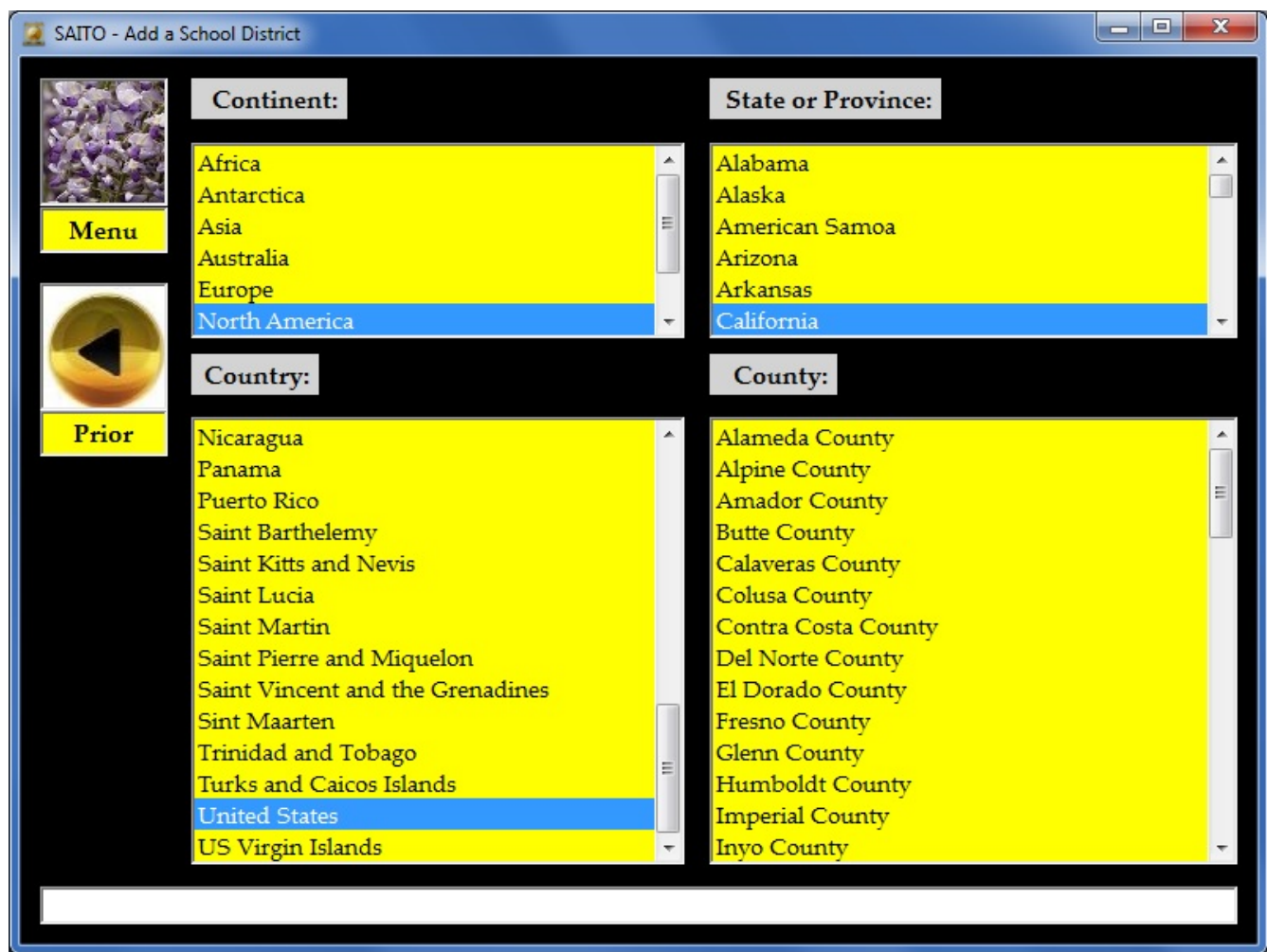
The SAITO (Japanese for wisteria) software manages the back office functions for one or more classes in a martial arts school. It currently uses a database that has over 200 tables and that is almost 650 megabytes in size. There are almost 660 Windows forms and over 265,000 lines of code. The resulting executable file (an .exe that does the work) is about 22 megabytes in size. Of particular interest in this discussion are some of SAITO's accounting functions which would be accessed by clicking the text box labeled Accounting (yellow background at the top near the middle – the red rectangle and red arrows would not be present). Note that the colors for the background (black), active controls (yellow and even one orange one), inactive controls (white) and labels (gray) can all be changed by a user.



As one might expect of a modern business application SAITO provides support for contemporary general ledger accounting. There is NOT any Securities and Exchange Commission (SEC) and shareholder accounting yet. In many businesses today in addition to general ledger there would be cost accounting where the material, labor and overhead associated with products or services are assessed in detail. SAITO does support the equivalent of this where the resources necessary to provide kitchen services, transportation and teaching are captured. While the accounting functions of SAITO are often modestly described as both magnificent and fascinating, for our present purposes the Per Pupil Accounting functions (red rectangle and red arrows) would be clicked.



Per Pupil Accounting is NOT focused on the internal costs associated with educating a person at a SAITO-managed school, but rather what that person costs an external school, district and county to educate. This functionality could help a school or district to decide which special needs students, if any, should be re-assigned to the SAITO-managed martial arts school. It is of no importance to the SAITO software and a martial arts school that it manages how much a person costs (or profits) an external school. But that consideration is very likely to become critical for a school or district special education coordinator as budgets shrink and inflation expands.



The image shows a software window titled "SAITO - Add a School District". On the left side, there is a vertical menu with two items: "Menu" (represented by a purple flower icon) and "Prior" (represented by a yellow circle with a black triangle). The main area of the window is divided into four sections for selecting geographical locations:

- Continent:** A list box containing Africa, Antarctica, Asia, Australia, Europe, and North America. "North America" is selected and highlighted in blue.
- State or Province:** A list box containing Alabama, Alaska, American Samoa, Arizona, Arkansas, and California. "California" is selected and highlighted in blue.
- Country:** A list box containing Nicaragua, Panama, Puerto Rico, Saint Barthelemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Pierre and Miquelon, Saint Vincent and the Grenadines, Sint Maarten, Trinidad and Tobago, Turks and Caicos Islands, United States, and US Virgin Islands. "United States" is selected and highlighted in blue.
- County:** A list box containing Alameda County, Alpine County, Amador County, Butte County, Calaveras County, Colusa County, Contra Costa County, Del Norte County, El Dorado County, Fresno County, Glenn County, Humboldt County, Imperial County, and Inyo County. No county is currently selected.

At the bottom of the window, there is a large, empty white rectangular field.

SAITO currently has records for over 1100 school districts in California. In the unlikely event one wished to add a new district one first selects a country and a sub-country (state or province) and a sub-sub-country (in most of the United States a county). There is development being done to support consolidation of districts – this would be moving schools from one district to another. Being assessed is whether moving a pupil from one county to another or even one district to another should have security functions that allow a target district or county to decline a transfer.

SAITO - School Districts for a County

State or Province: California

County: Alameda County

Districts:

- Eden Area Regional Occupation Program
- Emery Unified
- Fremont Unified
- Hayward Unified
- Livermore Valley Joint Unified
- Mission Valley Regional Occupation Program
- Mountain House Elementary
- New Haven Unified
- Newark Unified
- Oakland Unified
- Piedmont City Unified
- Pleasanton Unified
- San Leandro Unified
- San Lorenzo Unified
- State Board of Education - Latitude 37.8 High
- Sunol Glen Unified
- Tri-Valley Regional Occupation Program

District:

Import Filename: C:\SAITO\Misc\Alameda_County_Districts.txt

8B97-57 14 records loaded

Had one selected (clicked) Alameda County (third line bottom right box) on the previous form one would next see the form above. To add a new district one need only enter a unique (within the county) name in the yellow text box with the label **District:** to its left and click the Add philleme to the left. That is, one can click either the picture of the white arrow on a blue sphere or the yellow text-box that says **Add** below it. Generally, it is too much work to type in district names so SAITO can read a file of such names (given in the yellow text-box with a label of **Import Filename:** to the left). The rather verbose online user manual defines the format of the file so that one could add whole counties or even whole states worth of districts by clicking the Import philleme at the lower left. Normally, users would not have to manage school districts.

SAITO - Add a School

District: Amador Unified

Schools:

Types:

School	City	Type
Amador Adult Education	Sutter Creek	Adult
Amador County Community S...	Sutter Creek	9 to 12
Amador High School	Sutter Creek	9 to 12
Amador Special Education	Sutter Creek	Special E...
Argonaut High School	Jackson	9 to 12
Independence High School	Sutter Creek	10 to 12
Ione Junior High School	Ione	6 to 8
Jackson Elementary School	Jackson	K to 5
Jackson Junior High School	Jackson	6 to 8
North Star Academy 10-12	Sutter Creek	10 to 12
North Star Academy 1- 8	Sutter Creek	K to 8
Pine Grove Elementary School	Pine Grove	K to 5
Pioneer Elementary School	Pioneer	K to 5

10 to 12
6 to 8
9 to 12
Adult
Court
K to 5
K to 6
K to 8
Other
Special Education

School:

City:

Import Filename:

Menu

Prior

Add

Import

In a similar manner one can add schools within a district. Had one selected Amador County as the county and then Amador Unified as the district on a previous form one would see the information above. The city and type associated with a particular school are primarily for user convenience. The SAITO database already contains thousands of California schools (note that the California Department of Education database is not always current) – one can add a new school by entering a unique name (within the district) and a city and then selecting a type from the list on the far right. This allows clicking of the Add philleme. As with districts one can import schools using a formatted file. Managing schools would not normally be done by users, but a user might want to analyze the effect of closing a school, of adding a charter or of consolidating schools.

SAITO - Add a Student to a School and District

District: Amador Unified

Schools:

Types:

School	City	Type
Amador Adult Education	Sutter Creek	Adult
Amador County Community S...	Sutter Creek	9 to 12
Amador High School	Sutter Creek	9 to 12
Amador Special Education	Sutter Creek	Special E...
Argonaut High School	Jackson	9 to 12
Independence High School	Sutter Creek	10 to 12
Ione Junior High School	Ione	6 to 8
Jackson Elementary School	Jackson	K to 5
Jackson Junior High School	Jackson	6 to 8
North Star Academy 10-12	Sutter Creek	10 to 12
North Star Academy 1- 8	Sutter Creek	K to 8
Pine Grove Elementary School	Pine Grove	K to 5
Pioneer Elementary School	Pioneer	K to 5

Accommodation

- Aide
- Beverage preparatio
- Food preparation
- Nurse
- Occupational therap
- Other
- Overhead
- Physical Education
- Speech pathology
- Teaching
- Transportation

Pupil name: Riverboat Sam

Type: Aide Cost: 28800

Import Import Filename: C:\SAITO\Misc\Amador County_Pupils.txt

After assigning a district to a county and assigning a school to a district (the bulk of which should be already done so little or no work needed by the user) a user can then associate a student (just a name – we prefer that real names NOT be used, hence the entry of Riverboat Sam for the pupil name) and costs. In the example above, an aide or aides for Riverboat Sam is believed to cost \$28,800 per year. As with other functions, it is possible to import a formatted file of students and their costs. Note that cost types (far right) are what SAITO calls common codes - users can usually modify these so if a user wanted to add, for example, costs for emergency medical treatment (perhaps for what used to be called a grand mal seizure) beyond what a nurse would provide it is just a few keystrokes.

SAITO - Pupil Costs for a Cost Type and a School

District: Amador Unified

School: Amador Special Education

Menu **Types:** **Pupils:**

Prior

Export

Cost	Name
19760	Bret Harte
19760	Huck Phinn
19760	Tom Sawyer
59280	TOTAL

File Name: C:\SAITO\Exports\Export_Amador_Unified.txt

8B9E-39 Export processing complete

Here at a school level one could compare the expenses associated with a particular type of cost across pupils. While the school and district would prefer to spend only as much as is needed, parents and teachers would both be aware that running is a great deal more complicated than it appears and would want sufficient funds and time spent on teachers so that, in this case, the pupils know how to walk, how to breathe, how to take of their feet, how to warm-up and stretch (and how to cool down afterwards), when and how to hydrate, the influence of diet and food consumption, how to be aware of stride length and foot placement and so on before running. We have noticed that many students along the autism spectrum have measurable pain in the heels and soles of their feet. So-called toe-walking is a symptom, but one can measure the pain directly with temperature sensors inside the shoes.

SAITO - Pupil Costs for a Cost Type and a District

County: Amador County

District: Amador Unified

Menu

Types:

Pupils:

Prior

Export

Cost	Name	School
25760	Huck Phinn	Amador Special Education
25760	Sam Clemens	Amador Special Education
51520	TOTAL	

File Name: C:\SAITO\Exports\Export_Amador_Unified.txt

Depending on what kinds of schools are in a district, it MIGHT be illuminating to compare similar expenses by cost type across schools. Some care has to be taken to fairly compare the cost of an aide for a pupil in kindergarten to the cost of an aide for a 22 year old nominally in high school. There's a similar effect for food and beverage preparation – older and larger students consume more BUT they might assist in the preparation.

SAITO - Costs for a County

State or Province: California

County: Amador County

Menu

Types:

Pupils:

Accommodation

Aide

Beverage preparation

Food preparation

Nurse

Occupational therapy

Other

Overhead

Physical Education

Speech pathology

Teaching

Transportation

Cost	Name	School	District
28800	Penrod	Amador County ...	Amador Unified
28800	Riverboat Sam	Amador Special ...	Amador Unified
12880	Huck Phinn	Amador Special ...	Amador Unified
12880	Mark Twain	Amador Special ...	Amador Unified
83360	TOTAL		

File Name: C:\SAITO\Exports\Export_Amador_County.txt

As far as districts go, Amador County has an arrangement similar to several other smallish counties in California and in other states: there is a county office of education and one unified school district. In the above example Huck and Mark might be younger and share an aide while Penrod and Sam might need a 1:1 aide. Comparing Amador Unified costs with Amador County Office of Education costs should be done carefully. In contrast, Calaveras County has multiple school districts with multiple types of schools.

We are working on being able to compare similar types of schools across counties with similar numbers of students – high schools in Glenn County versus high schools in Calaveras County, for example.

	A	B	C	D
1	County	Teachers	Students	% of CA
2	Santa Cruz	1,822	38,461	0.6627%
3	Imperial	1,676	36,249	0.6246%
4	El Dorado	1,505	33,406	0.5756%
5	San Luis Obispo	1,591	32,615	0.5620%
6	Madera	1,532	32,140	0.5538%
7	Marin	1,551	30,480	0.5252%
8	Yolo	1,411	29,503	0.5084%
9	Kings	1,375	28,990	0.4995%
10	Shasta	1,324	26,519	0.4570%
11	Napa	829	18,620	0.3209%
12	Humboldt	969	17,573	0.3028%
13	Butte	890	17,104	0.2947%
14	Yuba	734	15,472	0.2666%
15	Nevada	725	14,645	0.2524%
16	Mendocino	718	12,844	0.2213%
17	San Benito	502	11,901	0.2051%
18	Sutter	473	10,530	0.1814%
19	Lake	480	9,901	0.1706%
20	Tehama	466	9,541	0.1644%
21	Siskiyou	365	5,964	0.1028%
22	Tuolumne	303	5,836	0.1006%
23	Glenn	268	5,341	0.0920%
24	Calaveras	251	5,340	0.0920%
25	Colusa	242	4,881	0.0841%
26	Del Norte	204	4,157	0.0716%
27	Amador	206	4,131	0.0712%
28	Lassen	201	3,770	0.0650%
29	Inyo	162	2,593	0.0447%
30	Plumas	121	2,110	0.0364%
31	Mariposa	95	1,868	0.0322%
32	Mono	99	1,712	0.0295%
33	Trinity	97	1,512	0.0261%
34	Modoc	60	928	0.0160%
35	Sierra	26	400	0.0069%
36	Alpine	8	68	0.0012%
37				
38	California Totals	266,299	5,803,280	8.2213%

It would reasonable, for example if Del Norte and Amador (or Glenn and Calaveras) with similar numbers of students compared their figures.

	A	B	C	D	E	F	G	H
1	County	Teachers	Students	% of CA	Federal	State	Local	TOTAL
2	Santa Cruz	1,822	38,461	0.6627%	94,587,000	328,488,000	330,693,000	753,768,000
3	Imperial	1,676	36,249	0.6246%	148,246,000	125,309,000	523,444,000	796,999,000
4	El Dorado	1,505	33,406	0.5756%	86,818,000	206,309,000	419,609,000	712,736,000
5	San Luis Obispo	1,591	32,615	0.5620%	65,629,000	378,129,000	169,379,000	613,137,000
6	Madera	1,532	32,140	0.5538%	89,784,000	136,291,000	389,145,000	615,220,000
7	Marin	1,551	30,480	0.5252%	48,285,000	510,483,000	165,402,000	724,170,000
8	Yolo	1,411	29,503	0.5084%	67,609,000	195,529,000	268,796,000	531,934,000
9	Kings	1,375	28,990	0.4995%	80,425,000	84,052,000	386,775,000	551,252,000
10	Shasta	1,324	26,519	0.4570%	74,109,000	162,711,000	256,999,000	493,819,000
11	Napa	829	18,620	0.3209%	46,166,000	242,673,000	130,123,000	418,962,000
12	Humboldt	969	17,573	0.3028%	53,793,000	112,340,000	188,416,000	354,549,000
13	Butte	890	17,104	0.2947%	79,263,000	111,104,000	243,485,000	433,852,000
14	Yuba	734	15,472	0.2666%	24,325,000	59,306,000	159,173,000	242,804,000
15	Nevada	725	14,645	0.2524%	27,435,000	185,138,000	90,509,000	303,082,000
16	Mendocino	718	12,844	0.2213%	24,749,000	92,995,000	132,817,000	250,561,000
17	San Benito	502	11,901	0.2051%	11,717,000	88,976,000	82,431,000	183,124,000
18	Sutter	473	10,530	0.1814%	12,656,000	34,903,000	104,636,000	152,195,000
19	Lake	480	9,901	0.1706%	15,995,000	51,307,000	93,389,000	160,691,000
20	Tehama	466	9,541	0.1644%	15,582,000	44,724,000	107,150,000	167,456,000
21	Siskiyou	365	5,964	0.1028%	13,322,000	38,041,000	67,665,000	119,028,000
22	Tuolumne	303	5,836	0.1006%	6,606,000	52,302,000	41,953,000	100,861,000
23	Glenn	268	5,341	0.0920%	11,922,000	29,184,000	64,103,000	105,209,000
24	Calaveras	251	5,340	0.0920%	5,250,000	57,801,000	27,739,000	90,790,000
25	Colusa	242	4,881	0.0841%	7,220,000	26,392,000	39,023,000	72,635,000
26	Del Norte	204	4,157	0.0716%	8,431,000	15,682,000	43,608,000	67,721,000
27	Amador	206	4,131	0.0712%	3,818,000	32,692,000	19,648,000	56,158,000
28	Lassen	201	3,770	0.0650%	5,678,000	16,899,000	40,226,000	62,803,000
29	Inyo	162	2,593	0.0447%	6,968,000	32,936,000	19,041,000	58,945,000
30	Plumas	121	2,110	0.0364%	4,805,000	30,929,000	8,786,000	44,520,000

It should be of some concern that Calaveras County (red rectangle) gets nearly \$15 million less total funding than Glenn County (one line above; with essentially equal numbers of students). Likewise, Amador County (green rectangle) gets less total funding than the counties of Del Norte, Lassen and Inyo. Note that the counties of Lassen and Inyo have substantially fewer students than Amador County.

SAITO - Savings

School: Amador Special Education

Costs:

Name	Cost
Bret Harte	19760
Huck Phinn	101440
Mark Twain	12880
Riverboat Sam	28800
Sam Clemens	25760
Tom Sawyer	19760
TOTAL	208400

File Name: C:\SAITO\Misc\Export_Amador_Special_Education.txt

Here's a profile of total costs for students. It may well be that more should be spent on Mark Twain (third line down – much less than anyone else). It may also be worthwhile analyzing why Huck's costs are so high compared to everyone else. Clicking on Huck's line in the listview gets one

SAITO - Individual Pupil Costs

School: Amador Special Education

Pupil: Huck Phinn

Costs:

Type	Cost
Accommodation	1200
Aide	12880
Beverage preparation	9600
Food preparation	7200
Nurse	1800
Occupational therapy	6440
Physical Education	19760
Speech pathology	4800
Teaching	25760
Transportation	12000
TOTAL	101440

File Name: C:\SAITO\Exports\Export_Costs_Huck_Phinn.txt

From the perspective of costs for a whole year nothing looks especially alarming. This might cause one to invert the original question and ask, instead, why does everyone else have such low costs?

SAITO - Pupil Costs History

School: Amador Special Education

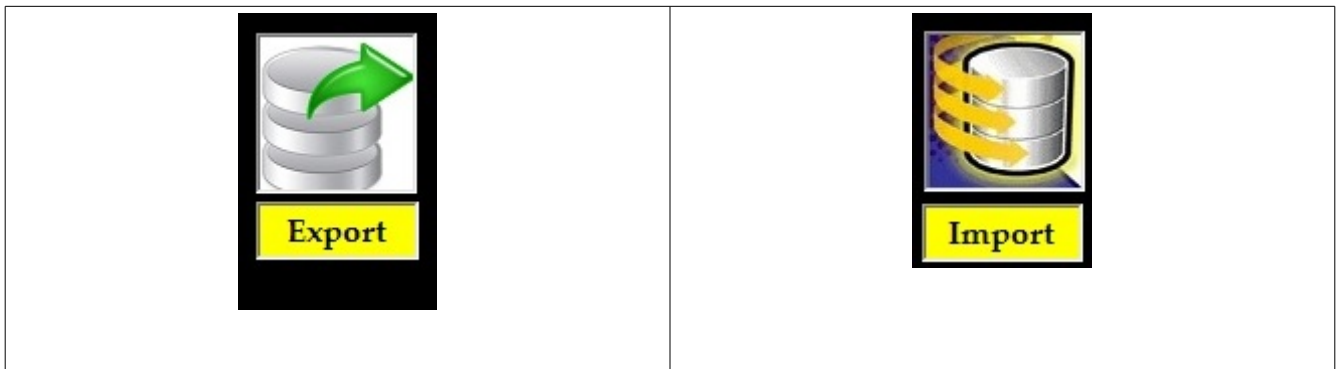
Pupil: Huck Phinn

Menu Prior

Cost Type	Planned Cost	Actual Cost	Date Type	Start Date	End Date
Accommodation	1200	1220	IEP or IBP dates	4/4/2025	4/4/2026
Aide	12880	13000	School year	4/4/2025	4/4/2026
Beverage preparati...	9600	9500	Summer session	4/4/2025	4/4/2026
Occupational thera...	6440	6440	IEP or IBP dates	4/4/2025	4/4/2026

As the next to last step in cost tracking one will want to record when the costs occurred (and what sort of calendar the dates represent) as well as what the actual versus planned costs were. Note that the sample data does not mind that IEP or IBP years need not coincide with school years and that a school year might be broken into regular and summer sessions.

With some diligence users can estimate or calculate past costs and build a history of past costs for someone like Huck. The planned versus actual figures are a nod to John Lennon's 1980 song "Beautiful Boy" which has the lyrics: ""Before you cross the street, take my hand. Life is what happens to you while you're busy making other plans."



The presence of the export philleme on a form indicates that a file of the contents of the relevant form can, once the user clicks the image or the yellow textbox, be written to the file named to the right of the philleme. The file can then be loaded to a spreadsheet program such as Microsoft's Excel to produce

	A	B	C	D	E	F	G
1	COST DATA		EXPORT FOR	COUNTY	Amador County	STATE	California
2	COST TYPE		Aide				
3	Cost		Pupil Name	School	District		
4	\$28,800.00		Penrod	Amador County Community School	Amador Unified		
5	\$28,800.00		Riverboat Sam	Amador Special Education	Amador Unified		
6	\$12,880.00		Huck Phinn	Amador Special Education	Amador Unified		
7	\$12,880.00		Mark Twain	Amador Special Education	Amador Unified		
8							
9	\$83,360.00		TOTAL				
10							
11							
12							

In a similar manner a user can take data captured in a spreadsheet (or even via Notepad) and send it to the SAITO software to be loaded into SAITO's database. Reasonable candidates for this might be individual pupils, their costs and revenues. The formats are comma separated files (.csv format) with details about specific field order in the users' manual. Note that programs like Microsoft's Excel and Open Office's Calc support .csv files as both inputs and outputs.

“Money isn't everything as long as you have enough” - Malcolm Stevenson Forbes (August 19, 1919 – February 24, 1990).

Keen-eyed readers might have briefly wondered why the percentages (repeated below) for students in smallish counties relative to the State of California were displayed having four decimal places.

	A	B	C	D
1	County	Teachers	Students	% of CA
20	Tehama	466	9,541	0.1644%
21	Siskiyou	365	5,964	0.1028%
22	Tuolumne	303	5,836	0.1006%
23	Glenn	268	5,341	0.0920%
24	Calaveras	251	5,340	0.0920%
25	Colusa	242	4,881	0.0841%
26	Del Norte	204	4,157	0.0716%
27	Amador	206	4,131	0.0712%
28	Lassen	201	3,770	0.0650%
29	Inyo	162	2,593	0.0447%
30	Plumas	121	2,110	0.0364%
31	Mariposa	95	1,868	0.0322%
32	Mono	99	1,712	0.0295%
33	Trinity	97	1,512	0.0261%
34	Modoc	60	928	0.0160%
35	Sierra	26	400	0.0069%
36	Alpine	8	68	0.0012%
37				
38	California Totals	266,299	5,803,280	8.2213%



The Yin-Yang symbol is often associated with Tai Chi Chuan. For our purposes we can note that while there are costs there are also revenues.

SAITO - Update a Student Revenues in a School and District

School: Amador Special Education

Pupil: Oscar Wild

Types:

Type	Revenue
Attendance	9900
Federal Title 1	1100
Federal Title 5	1350
Local taxes	2100
State Tax	700
TOTAL	15150

Attendance
Federal Title 1
Federal Title 2
Federal Title 3
Federal Title 4
Federal Title 5
Local taxes
State Tax

Menu

Prior

Add

Next

Type: Federal Title 1

Revenue: 700

Just as there are SAITO forms that deal with associating costs with individual pupils and then rolling those costs up to a school, a district and a county, there are also sister-forms that deal with associating revenues. With reference to the listbox on the right, for state and local taxes it is, for better or for worse, very unusual to see the tax rate or the money allocated vary with the number of students or with the number of special needs students. That said, if California's money were allocated per pupil

	A	B	C	D
1		2023	2024	2025
2	California	18,335,315,420	19,151,621,870	19,936,789,209
3	Amador	13,054,744.58	13,635,954.77	14,194,993.92
4	Calaveras	16,868,490.19	17,619,492.12	18,341,846.07
5				

Some brief explanations of the some of the Federal funds of interest

Title 1 funds grant school districts federal sponsorship, which covers the provision of clothing, support personnel, and classroom materials. These center on economically disadvantaged students.

Title II, Part A, the Supporting Effective Instruction State Grant Program, is the most significant source of federal funding supporting professional learning for educators and leaders at the school, district and state levels.

Title III is a federal funding program that provides resources for students. There are different versions of Title III, including one that benefits immigrant and Limited English Proficiency (LEP) students in public and private schools, and another that helps ensure that English learners (ELs) attain English language proficiency and meet state academic standards.

The Title IV, Part A Student Support and Academic Enrichment Program (SSAE) is intended to improve students' academic achievement by providing all students with access to a well-rounded education; improving school conditions for student learning, and improving the use of technology in order to improve the academic achievement and digital literacy of all students

Title V of the Elementary and Secondary Education Act (ESEA) (ESSA), allows local educational agencies (LEAs) to transfer federal funds¹. It includes the Rural Education Initiative (Part B) to help states and districts meet the unique needs of rural school districts.

Work is underway to record the amounts by tax and title for revenues by at least county, preferably by district and school. The ultimate goal would be to allocate revenues by pupil.

An individual pupil balance sheet might look like

SAITO - Individual Pupil Balance Sheet

School: Amador Special Education

Pupil: Huck Phinn

Menu

Costs and Revenues:

Type	Amount
COSTS	
Accommodation	1200
Aide	12880
Beverage preparation	9600
Food preparation	7200
Nurse	1800
Occupational therapy	6440
Physical Education	19760
Speech pathology	4800
Teaching	25760
Transportation	12000
TOTAL COSTS	101440

Prior

Export

SAITO - Individual Pupil Balance Sheet

School: Amador Special Education

Pupil: Huck Phinn

Menu

Costs and Revenues:

Type	Amount
REVENUES	
Federal Title 1	4255
Federal Title 3	2127
Federal Title 5	1163
Local taxes	60101
State Tax	30221
TOTAL REVENUES	97867
BALANCE	-3573

Prior

Export

File Name: C:\SAITO\Exports\Export_BalanceSheet_Huck_Phinn.txt

It is fairly straightforward to calculate what can be called a school ledger in this same format: the costs and revenues would be summed across all students in the school. In a similar manner what can be called a district ledger can be summed across all schools in the district.

	A	B	C	D	E	F	G	H	I	J
1	School	Location	Students	Teachers	Grades			Expenditures Per Pupil (Restricted)	Expenditures Per Pupil (Unrestricted)	
2	Amador High School	Sutter Creek	627	33	9 – 12			\$3,582.06	\$6,506.10	
3	Argonaut High School	Jackson	536	29	9 – 12			\$6,999.30	\$4,986.45	
4	Independence High School	Sutter Creek	57	4	11 – 12			\$3,237.72	\$13,462.09	
5	North Star Academy 10-12	Sutter Creek	49	5	10 – 12			\$305.68	\$4,432.20	
6	North Star Academy 1- 8	Sutter Creek	19	2	1 – 8			\$305.68	\$4,432.20	
7	Amador County Community School	Sutter Creek	15	1	9 – 12			\$929.83	\$13,530.48	
8	Ione Junior High School	Ione	411	18	6 – 8			\$2,088.52	\$5,253.96	
9	Jackson Junior High School	Jackson	346	23	6 – 8			\$1,860.76	\$6,126.68	
10	Ione Elementary School	Ione	524	26	K – 5			\$1,889.78	\$5,407.23	
11	Jackson Elementary School	Jackson	500	23	K – 5			\$1,133.14	\$4,985.95	
12	Pine Grove Elementary School	Pine Grove	255	12	K – 5			\$1,930.28	\$7,259.32	
13	Pioneer Elementary School	Pioneer	153	11	K – 5			\$1,469.98	\$7,087.20	
14	Plymouth Elementary School	Plymouth	186	9	K – 6			\$2,047.63	\$5,729.92	
15	Sutter Creek Elementary School	Sutter Creek	380	20	K – 6			\$1,352.96	\$5,861.63	
16										

Here it is probably fair to compare Amador High School and Argonaut High School as they serve similar grades and have similar numbers of students. However there is a \$2000 per pupil difference. Similarly, it is probably fair to compare Jackson Junior High School and Ione Junior High School as they also serve similar grades and have similar numbers of students. While there is quite a range for sizes of elementary schools, were I a parent of a child or children attending Jackson Elementary I would be at the very least concerned that it was spending barely \$6100 per pupil while Pioneer Elementary was spending over \$8500 per pupil and Pine Grove Elementary was spending almost \$9200 per pupil. Perhaps many Jackson Elementary School students can walk to school while virtually all students upcountry must take a bus.

	A	B	C	D	E	F	G	H	I	J
1	District	School	Location	Students	Teachers	Grades			Expenditures Per Pupil (Restricted)	Expenditures Per Pupil (Unrestricted)
2	Bret Harte Union High	Bret Harte High	Angels Camp	566	35	9 – 12			\$6,365.00	\$13,039.00
3		Vallecito Continuation High	Angels Camp	56	2	10 – 12			\$4,119.00	\$3,234.00
4	Calaveras County Office of Education	SELPA	Angels Camp	14	4	11 – 12			N/A	N/A
5		Mountain Oaks	San Andreas	402	18	K – 12			\$2,794.15	\$6,678.00
6		Oakendell Community	San Andreas	11	1	9 – 12			\$3,952.99	\$13,518.25
7		River Academy	San Andreas	15	5	8 – 12			\$14,304.23	\$47,579.87
8	Calaveras Unified	Calaveras / Gold Strike High School	San Andreas	749	38	9 – 12			\$1,901.00	\$4,681.00
9	no TK included	Jenny Lind Elementary	Valley Springs	450	19	K – 5			\$1,004.00	\$4,278.00
10		Toyon Middle School	Valley Springs	506	24	6 – 8			\$1,424.00	\$4,869.00
11		Valley Springs Elementary	Valley Springs	397	21	K – 5			\$735.00	\$3,619.00
12	no TK included	Mokelumne Hill Elementary	Mokelumne Hill	155	8	K – 6			\$1,453.00	\$5,718.00
13		San Andreas Elementary	San Andreas	326	15	K – 6			\$2,165.00	\$3,812.00
14	no TK included	West Point Elementary	West Point	115	6	K – 6			\$1,093.00	\$5,501.00
15		Sierra Hills Education Center	San Andreas	108	4	K – 12			\$15.00	\$3,975.00
16	Mark Twain Union Elementary	Mark Twain Elementary	Angels Camp	552	25	K – 8			\$4,006.00	\$6,245.00
17		Copperopolis Elementary	Copperopolis	203	14	K – 6			\$3,458.48	\$7,563.10
18		Learners, Empowered Academic Progress (LEAP)	Angels Camp	13	1	4 – 8			N/A	N/A
19	Vallecito Union	Avery Middle	Avery	190	11	6 – 8			\$5,405.00	\$13,899.00
20		Hazel Fischer Elementary	Arnold	180	9	K – 5			\$5,405.00	\$13,899.00
21		Albert A. Michelson Elementary	Murphys	210	12	K – 5			\$5,405.00	\$13,899.00
22	from SARCs									

Consolidating the Calaveras schools as above it would be reasonable to compare Bret Harte Union and Calaveras high schools. Note the very high figures for the River Academy. It is also reasonable to compare Toyon Middle School with Avery Middle School. Lastly, Jenny Lind, Valley Springs, Mokelumne Hill, West Point and San Andreas Elementary can also be compared with some care. The figures for the three schools in Vallecito Union (including Avery Middle mentioned earlier) should be approached with caution. Mark Twain and Copperopolis Elementary look financially distinct from other elementary schools.

One could also compare the high schools, middle schools and elementary schools in Calaveras County to corresponding schools in Amador County. Of course, one could analyze similar sized schools for the usual grades (K-5; 6-8; 9-12) from any county, presumably a county characterized as disadvantaged and rural.

	A	B	C	D	E	F	G	H	I
1	County	Name	Schools	Students	Teachers	Federal	Local	State	TOTAL
2	Amador	Amador Unified	12	4,107	203	2,132,000	29,150,000	14,685,000	45,967,000
3	Amador	Amador County Office of Education	2	24	3	1,686,000	3,542,000	4,963,000	10,191,000
4									
5	Totals		2	14	4,131	3,818,000	32,692,000	19648000	56,158,000
6									

In Amador County the bulk of schools are in one district, so it is not obvious how much use a county ledger summed across all (both) districts in the county would be. However, Calaveras County has multiple school districts.

	A	B	C	D	E	F	G	H	I
1	County	Name	Schools	Students	Teachers	Federal	Local	State	TOTAL
2	Calaveras	Bret Hart Union High	2	636	36	269,000	12,459,000	1,097,000	13,825,000
3	Calaveras	Calaveras County Office of Education	4	449	15	1,769,000	4,792,000	11,208,000	17,769,000
4	Calaveras	Calaveras Unified	9	2,900	134	2,214,000	26,950,000	10,526,000	39,690,000
5	Calaveras	Mark Twain Union Elementary	3	765	35	512,000	5,560,000	3,582,000	9,654,000
6	Calaveras	Vallecito Union	4	590	31	486,000	8,040,000	1,326,000	9,852,000
7									
8	TOTALS		5	22	5,340	5,250,000	57,801,000	27,739,000	90,790,000
9									

The question would remain how useful a county ledger would be to compare districts that are not very similar in terms of the ages and grades enrolled.

In terms of strictly Federal funding here is how the United States Department of Education provides funds to the State of California (column B) below as well as the amounts Amador County and Calaveras County might expect to receive were such funds distributed on a pro-rated student population basis (columns C and D).

	A	B	C	D
1	Program	2025 Estimate California	Amador	Calaveras
2	Grants to Local Educational Agencies	2,290,991,495	1,631,186	2,107,712
3	State Agency Program--Migrant	119,895,509	85,366	110,304
4	State Agency Program--Neglected and Delinquent	881,144	627	811
5	Subtotal, Education for the Disadvantaged	2,411,768,148	1,717,179	2,218,827
6	Impact Aid Basic Support Payments	77,952,279	55,502	71,716
7	Impact Aid Payments for Children with Disabilities	4,251,646	3,027	3,912
8	Impact Aid Construction	0	0	0
9	Subtotal, Impact Aid	82,203,925	58,529	75,628
10	Supporting Effective Instruction State Grants	232,396,311	165,466	213,805
11	21st Century Community Learning Centers	158,006,496	112,501	145,366
12	State Assessments	27,583,745	19,640	25,377
13	Rural and Low-income Schools Program	6,035,403	4,297	5,553
14	Small, Rural School Achievement Program	7,888,431	5,617	7,257
15	Student Support and Academic Enrichment State Grants	164,909,373	117,415	151,717
16	Indian Education--Grants to Local Educational Agencies	4,631,611	3,298	4,261
17	English Language Acquisition	166,338,359	118,433	153,031
18	Homeless Children and Youth Education	15,591,601	11,101	14,344
19	Subtotal	3,277,353,403	4,109,184	5,309,619
20	Special Education--Grants to States	1,488,195,407	1,059,595	1,369,140
21	Special Education--Preschool Grants	42,627,013	30,350	39,217
22	Grants for Infants and Families	57,757,914	41,124	53,137
23	Subtotal, Special Education	1,588,580,334	1,131,069	1,461,494
24	Career and Technical Education State Grants	145,497,573	103,594	133,858
25	Subtotal, Vocational and Adult Education	145,497,573	103,594	133,858
26	Subtotal, All Elementary/Secondary Level Programs	5,011,431,310	5,343,847	6,904,971
31	Vocational Rehabilitation State Grants	326,594,271	232,535	300,467
32	Client Assistance State Grants	1,268,838	903	1,167
33	Protection and Advocacy of Individual Rights	1,943,853	1,384	1,788
34	Supported Employment State Grants	1,938,252	1,380	1,783
35	Independent Living Services for Older Blind Individuals	3,271,162	2,329	3,009
36	Adult Basic and Literacy Education State Grants	100,802,144	71,771	92,738
37	English Literacy and Civics Education State Grants	16,198,728	11,533	14,903
38	Subtotal, All Other	452,017,248	321,836	415,856
39	Total	10,920,047,556	5,665,683	7,320,827
40	Actual		3,818,000	5,250,000
41	Under-allocated (money the county might collect pro-rated)		1,847,683	2,070,827
42				

While 1.8 million dollars and 2 million dollars (highlighted in yellow, previous page) are comparatively small numbers in the nearly 11 billion dollars that the US Department of Education awards California (out of a grand total of 183 Billion dollars the United States Department of Education disburses nation-wide), both amounts would go a long way to increasing financial stability of the education systems in the two counties.

Management Summary

Faced with uncertain opportunities and rising responsibilities it is a very difficult time to be an administrator, a teacher, a student, a member of school support staff or a parent. Historically, the most difficult tasks are assigned to the strongest warriors. In the cases of our Calaveras and Amador counties, and probably dozens more counties in our California and hundreds more counties across our United States of America, readers may wish to recall a passage from J. R. R. Tolkien's **The Lord of the Rings** where the author, who had somehow survived being a front line British infantry officer in France in World War I, and was writing during the darkest days of World War II when it was very unclear if England would survive. At the end of the chapter narrating the Council of Elrond, Frodo the hobbit, who is well-known not to have any power, wisdom or much else, has volunteered to carry The Ring. Elrond says to him, "This is the hour of the Shire-folk, when they arise from their quiet fields to shake the towers and counsels of the Great." Militarily, to send Frodo and three other hobbits (essentially non-combatants) and five fighters against the forces of an empire seems beyond absurd. Nevertheless, five towers are shaken and the three towers of evil are taken or destroyed. In the real world Napoleon Bonaparte, who knew something of the subject, said, "Courage isn't having the strength to go on - it is going on when you don't have strength." Here and now a chance looms to see who has courage of the heart.

Obviously, some courses of action are close to required:

/1/ decrease costs

/2/ increase revenues

/3/ be very careful about firing teachers – they are not easy to replace

/4/ be even more careful about closing schools – how much money it actually saves is very hard to determine and it is a very difficult action to reverse or recover from.

/5/ of particular concern is that a slightly larger, better funded and more militant group of parents than Rail Road Flat contained might try to start one or more charter schools. That almost always means less revenues for remaining public schools and a strongly tendency for achievement scores to decline significantly. There is, alas, very little evidence to suggest that students who either move to the charter or students who remain in the now-smaller public school benefit.

/6/ Critics of the idea of starting a local two-year or even four-year college will certainly complain that there is no reason to believe that if schools for grades kindergarten to 12 could not be managed then there is little reason to think expanding the education could be done. Perhaps they have a point. But Pell grant money would stay in the county.

/7/ As noted, my own internal economic models clearly indicate that even if there were some increases in revenue, teaching two classes of 15 or 16 special needs students each would not be sufficient. My question about what must be done to teach two classes of Tai Chi Chuan and other subjects to 40 or 50 special needs students has found its way across two oceans. Initially, those who pointed out that neither Tai Chi Chuan nor any of the less queenly martial arts, nor much else had ever been taught that way, could not find an alternative. A very old friend suggested everyone watch a video of the United States Marines Corps Silent Drill Platoon. So now the replies are “Since you have to do it, here's some ideas about how to do it.”

The Bottom Line

/1/ I have no objection to renting space. An existing gymnasium or auditorium might be simpler. The size of the main room depends on, and, at the same time, determines the number of students.

/2/ There needs to be reasonable access especially in terms of winter snow. That said, proximity to a major road is not very desirable because of the air and noise. Further, there is no use for drop-ins or visitors without specific appointments so a parking lot and other forms of common area maintenance costs are not desirable either.

/3/ I imagine some suitably knowledgeable member of a county building department or planning department will be able to provide a required number of bathrooms. There would have to be a decision about whether a shower is needed or should be present. That implies electricity and water and sewage. It would help for planning purposes to have temporary access to some old bills. Internet connectivity is a necessity. If not already present, carbon monoxide detectors, fire extinguishers and fire alarms.

/4/ Probably NOT able to teach students in wheelchairs at this time.

/5/ Space needed for clothing and weapons storage

/6/ Space needed for a food preparation area: microwaves; water heaters for tea and a refrigerator.

/7/ storage for cleaning supplies and a pantry for food supplies

/8/ I will supply the security cameras. Whether my existing video cameras are good enough for a large class will have to be determined.

/9/ some folding chairs, folding tables and large video monitors.

/10/ depending on location, a backup generator

/11/ an ability to manage temperature and air quality so something like central heating and air conditioning. There is usually a fair amount of sensitivity to light so fluorescent and some incandescent lights may need to be replaced.

/12/ Initially, it would likely be simplest to carry forward accommodations from existing IEPs and reluctantly add whatever new accommodations parents, students or others feel are necessary. Depending somewhat on the inclinations of Valley Mountain Regional Center families could either move to a self-determined program or use a more typical IEP.

/13/ Biometric (fingertip swipe) in and out for attendance – probably using between five and ten devices.

/14/ The SAITO software usually reports daily scores to parents or guardians and optionally reports weekly via email to authorized medical personnel and social services workers (probably the Regional Center).

/15/ We would need to discuss how many therapists would be needed for speech and occupational sessions. It is anticipated that aides would help with calligraphy, food preparation, clothing, hygiene and other support tasks. Note that aides might include teachers detached from the school district.

/16/ To be determined how many students (and families) and teachers as well as how much the district needs to save. A model is coming.

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