

San Bernardino Community College District

Enrollment Management Report **Review, Analysis and Recommendations**

Prepared by CBT Consultants
Rocky Young and Pam Deegan
October 2014

INTRODUCTION

On June 6, 2014, the San Bernardino Community College District entered into an agreement with the Collaborative Brain Trust to develop an Enrollment Management assessment for the district.

Within the agreement, the primary purpose of the consultants' work was described as follows. "It is not the intention of the district to have the consultants develop a strategic enrollment plan but rather to focus on four specific issues:

- Develop a recommendation on FTES goal distribution between the two colleges over the next five years
- Evaluate the district's external data to be sure that FTES goal distribution recommendation is realistic
- Develop recommendations on how to increase instructional productivity (WSCH/FTEF) and
- Assess the processes and policies each college uses to manage their schedule and course offerings"

Furthermore, within the work plan submitted by the consultants a data request was made of the district as follows. "The following internal data must be collected by the district and its colleges and provided in a timely manner to the CBT consultants:

- college application yield rate
- current recruitment tools and related results data
- course and section enrollments for the last three years
- retention data
- persistence data,
- unused capacity analysis
- site utilization comparisons
- cost per FTES (at least instructional),
- WSCH/FTEF calculations and/or other productivity/efficiency measures used
- Faculty Contact Hour allocations (by semester)
- FTES/Faculty Contact Hour ratio
- Course and section fill rates
- examples of currently used enrollment management tools (High Enrollment/Low Enrollment Courses)

- courses with largest enrollments
- added and cancelled course sections, etc.

The following external data needs to be obtained:

- definition of service areas
- high school graduation projections within the service area
- net inflow and outflow from the service area to competitor institutions
- description of competitors in terms of their competitive advantages
- labor study that matches employment projections to college programs and shows gaps as well as surplus
- all relevant demographic projections for the service area
- economic development plans for the service area, etc.”

The consultants and district representatives worked together to develop a schedule for the project. However, due to mitigating circumstances, the data could not be delivered at the end of July and had to be postponed until the end of August. Accordingly, the schedule was adjusted by moving all of the dates later by one month.

On August 26, the following internal data was delivered to the consultants:

- CCFS 320 – FY13 P3 Annual
- CCFS 320 – P3 Certified Signed Report
- CCFS 320 – P2 Certified Report
- Enrollment Management VPs Project
- District Provided Basic Tools
- Additional Tools
- Custom Databases
- Custom Reports
- 320 Report
- 5 Year Cost Per FTES
- Data Collection
- Persistence
- Top Enrollment Courses By Year

Also, on August 26, the following external data was delivered:

- Competition
- Employment
- Net Inflow – Outflow
- CHC Enrollment Study
- Enrollment Projections – Madrid
- SBVC Enrollment Projections

CBT also had to make a change in its original proposal by substituting Pam Deegan for Randy Lawson. This change was necessitated by the untimely death of Randy Lawson on August 19, 2014.

The balance of this report is divided into two sections. The first section discusses the FTES goal distribution between the two colleges over the next five years and whether there is adequate student demand to support the recommended FTES goals. The second section discusses recommendations on how to increase instructional productivity and an assessment of processes and policies used to manage schedule and course offerings.

FTES GOAL DISTRIBUTION

Resource Allocation and Utilization Report

In January of this year, CBT provided a report on the Resource Allocation and Utilization for San Bernardino Community College District. More specifically, the purpose was to determine if there were inherent weaknesses in the allocation model that had an adverse impact and if there were ways the model could be made better. Further, the scope of the engagement included a review of how the resources were being utilized at the colleges, primarily Crafton Hills College, and to see if CBT might have recommendations to improve upon that.

To that end, as listed in Exhibit A “Scope of Work” in the contract approved by the Board of Trustees, the following questions were to be addressed:

- Is the allocation model reasonable or is there a disadvantage to one or the other college?
- Can the allocation model be adjusted to be fairer and what are the implications of doing so?

- Is the model causing the deficit spending being evidenced at Crafton Hills College?
- Is the college (CHC) inefficient in its spending?
- What operational changes might the colleges make to ensure a balanced budget?

It was the focus on Crafton Hills, and in particular the continuous operating deficits, that created the recommendation to examine the FTES allocation and to try to increase the funded FTES for Crafton Hills College (CHC). It was the belief that CHC was experiencing diseconomies of scale that could be cured by increasing its funded FTES base. While this observation is true, it is not the only solution to the operating deficits. The report also made a number of other recommendations for ways to improve the financial condition of CHC. There are also other objectives that need to be served. In particular, how will the district serve more students at both colleges to meet the current demand, and how will the district provide funded FTES that correlates with the new projected facility capacities at CHC.

Because of the complexities of these goals, the first step needs to be finding a way within the current FTES base to solve the annual operating deficit at CHC. That means implementing the other recommendations in the January CBT report. Furthermore, any change in the funded FTES will take time, so it is important to move on the other recommendations as quickly as possible. Finally, there will be less resistance to changes in the FTES allocation by San Bernardino Valley College if CHC has first implemented all of the other recommendations which do not affect SBVC. To that end, the CBT consultants involved in the preparation of the January report have reviewed the district's progress reports and provided the following assessment.

Follow Up to CBT Report on Resource Allocation and Utilization, January, 2014

In January 2014, CBT consultants Michael Hill and Michael Brandy delivered a report commissioned by the district on resource allocation and utilization. The consultants then made a presentation in February 2014 at a district-wide meeting which included a question and answer period.

The report contained a number of recommendations intended to accomplish several objectives. Some of the recommendations were financial in nature and others focused on operational issues. Some recommendations had an immediate financial impact while others would take some time to implement. Other recommendations were intended to bring stability to and "confidence in" the resource allocation process.

One of the most important areas addressed in the recommendations had to do with how FTES and related funding is managed within the resource allocation process.

In reviewing the subsequent actions taken by the district regarding the recommendations, the consultants have some observations to share.

The January report contained nine financial recommendations which could be implemented in a very short timeframe. Of those, the district has implemented one fully regarding the funding of the OPEB obligation and provided some further financial relief to the colleges by moving the subsidy for KVCR and EDCT to the district reserve. These actions do provide immediate budgetary benefits to both colleges; however the subsidies from the district reserve may become an issue as the fund balance declines.

The report also made recommendations to reduce classified and administrative positions at CHC. Those recommendations were not implemented; the reason given was growth in FTES. There is not a direct correlation between FTES and the number of classified and administrative positions as there is with teaching positions. There did not appear to be any analysis that supported such a decision. This set of recommendations is more important going forward in that the district's own multi-year modeling, even after anticipating significant growth at CHC, reflects operating deficits. The same could be said for the recommendations to require the foundations to be self-sustaining and the possible consolidation of college positions into centralized district-wide positions. These too were not addressed. Further, the consultants did not see any evidence of discussions around the topic of classroom productivity and its impact on operational results or efficiency in class schedule building.

The district had no formal documentation regarding the functioning of the resource allocation model. The consultants posed a long list of questions to be answered and suggested they be formally approved as a means to help address this concern. The district has developed responses but the consultants are not sure what formal action has been taken to make them part of the model. In those responses there is some confusion around the topic of FTES splits between the colleges.

Without question, the toughest issue facing the district is how to manage the distribution of funded FTES between the colleges in the resource allocation model. In responding to some of the questions mentioned above the answers were inconclusive and did not reflect a directed approach to this issue.

The reason CBT is currently working with the district is to find a resolution to reconcile the various positions on this issue. The consultants cannot comment on the validity or accuracy of the district's resource allocation modeling that projects revenues, costs and assessments through the year 2020. In the model there is an assumption of steadily funded growth that may or may not be realized. Once the 2011-12 lost system FTES is considered restored, normal growth allocations will resume. Those involve district-by-district calculations of FTES growth based on several factors. It is unclear what that will mean for San Bernardino; and even once those are known, this calculated value can be discounted based on actual state dollars appropriated.

The CBT report of January 2014 provided recommendations that yielded immediate financial benefit to the colleges and made good use of the sizable district-wide reserve. By providing this financial relief the district would have a better platform from which to make the harder decisions about the FTES distribution questions. By providing the financial relief, but not dealing with the important long term issue of FTES management, the district loses a valuable opportunity. It will only be harder later.

There is another key factor that is worth noting. The district, board and college at some point in the past determined that CHC should be built out to support a much larger student population. Bond funds were designated for this purpose and projects are either completed or in progress to accomplish this task. This was done without a real plan on how the additional FTES would be generated. The costs of the new facilities coming on-line are a big part of the reason for the anticipated operating deficits at CHC. The responsibility to address this rests with all of those parties. The status quo approach to FTES management is a passive approach to dealing with a real problem created by past actions of the organization.

Once the recommendations made by the prior CBT consultants have been fully implemented, it is time to turn to the FTES allocation. While the driver is instructional FTES, the allocation of district FTES to the two colleges is a financial decision. Let's start by recognizing a couple of principles of California community college finance. If possible, no district should ever leave any funded FTES "on the table". Growth funding is deemed to be the most valuable source of state revenue because the marginal revenue from the growth usually exceeds the marginal cost of providing the growth. That means that funds are created which can be used for other purposes or to improve the financial condition of the college and the district. Of course, colleges and districts cannot capture funded FTES if they do not have adequate student demand to grow. In a two-college district, if one college cannot use its growth allocation, while the other college can exceed its allocation, the FTES must be shifted so that the district can maximize revenue.

Therefore, before discussing possible reallocation of funded FTES, it must be determined that both colleges can grow to cap over the next five years.

External Data

When CBT wrote the work plan for this project, a set of external data was requested in an effort to validate that adequate student demand would exist over the next five years. However, CBT was unaware that SBCCD had just completed a comprehensive environmental scan. When the consultants started to read through the six external data documents sent by the district, the consultants realized that half of them were extracts from an environmental scan that they then discovered on the district website.

The consultants then discussed with representatives from the district and the colleges a revision in the project. Since the only purpose in looking at external data was to validate that the district had an adequate student demand to support growth at both colleges up to the district's restoration cap and future growth caps, and since the district had just completed an environmental scan, it seemed pointless for CBT to replicate any part of this effort. The representatives assured the consultants that the district thoroughly digested the data from the environmental scan and that CBT could be assured of the colleges having the necessary student demand and agreed that it would be a waste of district money for CBT to conduct that part of the project. Accordingly, CBT is operating on the assumption that there is adequate student demand at both colleges to capture any available funded FTES for which the district is eligible without any independent validation of that claim. That claim is further substantiated by the recognition that the current FTES targets for the colleges will generate nearly 400 unfunded FTES and without increasing the targets, both colleges generated fall enrollments that were 5% over target. If that 5% is sustained throughout the year, the district will generate over 1,000 unfunded FTES.

Nevertheless, there were two observations from the documents sent to the consultants that the district should continue to monitor. First, the environmental scan is predicting a 13% decline in high school graduates within the SBCCD service area. The district assured the consultants that there were mitigating circumstances that would offset the impact of this decline but it still deserves to be monitored. Second, the scan showed a net outflow of over 3,000 students to the Riverside CCD and over 1,000 students to the Chaffey CCD. Again, these may simply be a function of geography or an inability of SBCCD to offer enough classes to meet student demand, but they should also be monitored. Also, it is hoped that the recent decline in productivity (WSCH per FTEF) at both colleges is not being caused by reduced student demand for classes.

CHC Capital Outlay

If CHC implements the CBT recommendations contained in the January 2014 report except the recommendation for a change in the FTES distribution and is still running a deficit, the district faces a choice. Provide more funded FTES to CHC so that they can “grow into” their expenses by gaining economies of scale or plan for an on-going annual subsidy to CHC. However, even beyond the operating deficit problem, there is a bigger problem requiring a change in FTES allocations between the two schools or an on-going subsidy. According to the district’s five-year construction plan, CHC is in the midst of a building program that will add over 46,000 ASF of instructional space (9,206 ASF of lecture and 36,953 of laboratory), increase their instructional capacity by 50% (37% increase in lecture and 86% increase in laboratory) and cause the college to incur an estimated new annual operating cost of \$725,000 for maintenance and operations of the new buildings. The consultants are unaware of any plan to increase the funded FTES of CHC to correspond to the increase in instructional capacity created by the current building program. If there is no increase in the funded FTES for CHC, how will they pay the annual operating costs of the buildings? More importantly, without an increase in funded FTES, how will they pay to add classes in the new facilities? It would be unimaginable to build these building and have the buildings sit empty or to simply dilute the current instructional offering by spreading it across a 50% increase in instructional capacity. It does raise the question as to why this funded FTES plan was not developed prior to constructing the buildings. This could easily become an enormous problem in the community and a political nightmare if left unattended.

Again, this underscores why it is important to correct the operating deficit as well as possible using the recommendations provided in the January CBT report and then look at a redistribution of FTES to handle the increased instructional capacity problem.

The January CBT report suggested as an example trying to increase the funded FTES for CHC to 5,000 in 5 years. That seems ambitious but yet only represents a 25% increase in FTES as compared to the 50% increase in instructional capacity.

Productivity

Simultaneously, this raises the question of productivity. CHC has recently shown exemplary productivity numbers for a small college. In the January report, CHC had a productivity of 527 WSCH per FTEF in 2012-13, while SBVC had a productivity of 490 WSCH per FTEF in 2012-13. As was stated in the January report, “It is interesting that CHC reports higher productivity numbers than SBVC (usually 30 points higher). We would normally expect the opposite trend,

as it is more difficult at smaller colleges to have enough course sections to attain higher productivity. This difference in productivity between the colleges may be due to course/program mix, or more experienced management of course offerings. We did not see how the productivity goals for the budget year were developed or built into the cost forecasts. Normally, FTES goals and productivity goals go hand-in-hand for budget development, so the costs of part time faculty can be accurately forecasted. We encourage SBCCD to set productivity goals along with FTES goals for each of the colleges.” Unfortunately, more recent data shows a decline in productivity at both colleges. CHC has declined to 471 WSCH per FTEF and SBVC has declined to 459 WSCH per FTEF. The margin of difference is small and both are below the standard of 525 WSCH per FTEF. The second half of the consultant report will deal with this issue in greater detail.

When the district makes FTES allocations to the two colleges, it should be accompanied by a productivity goal. Productivity is a critical element in funded FTES growth because it determines the marginal cost of the growth. If SBCCD only cared about net contribution, they would put the growth at the most productive college because that would produce the largest net revenue contribution. Obviously that is not the only factor in the decision but it is why it is important for SBVC to raise its productivity to match the rate at CHC and it is important that CHC resumes its productivity level of last year as it grows. That can only happen if the colleges are given productivity goals along with their FTES allocations and those goals are used as a basis for budgeting at the colleges.

The Funded FTES Goals

What should the funded FTES goal be over the next five years for CHC and SBVC? Let’s begin by once again stating the obvious. With the addition of the new facilities at CHC, either the district will provide more funded FTES for CHC or provide a subsidy or both. There is no magic solution and in a sense, either one will impact SBVC. If it is assumed that CHC fully implemented the other recommendations in the January report, what is a reasonable FTES goal to support the new facilities and any remaining operating deficit? Before there can be any reasonable discussion of this issue, all parties must accept the need for a disproportionate increase in the funded FTES at CHC. The new facilities increased instructional capacity by 50% so in order to fully utilize the new facilities, CHC funded FTES would need to be increased to 6,000 FTES. That is probably an unreasonable expectation. So, while somewhat arbitrary, let’s assume that the district will provide half of that number over 5 years. That means a growth of funded FTES by 1,000 to a total of 5,000 FTES. That number allows for 50% use of the new capacity and should provide adequate marginal net revenue to offset the new maintenance and

operating costs of the new buildings and any other remaining operating deficit. It is assumed that leaving the completed buildings unused and just providing a district subsidy to maintain them is not an acceptable solution. Even at 5,000 funded FTES there may be some political issue as to why the buildings are only operating at 50% capacity (although it is assumed that the unused capacity will be spread across the entire physical plant and mask the underutilization). Nevertheless, there needs to be a district commitment to find a way to increase CHC funded FTES to 5,000 by 2020 or this exercise is pointless.

Likewise, besides raising CHC funded FTES to 5,000, there is also a need for a district commitment to increase SBVC to a funded base of greater than 10,000 FTES. There are set thresholds for college size that determine base district and college funding. While that threshold has eroded during the recession and corresponding decrease in apportionments, it is presumed that the 2008-09 thresholds will be fully restored as the system loss of FTES is restored and accordingly, SBVC needs to achieve a size of greater than 10,000 FTES to maximize base funding.

Therefore, the minimum funded FTES goals for 2020 need to be over 10,000 FTES at SBVC and 5,000 FTES at CHC. If there is not a commitment to the funded FTES goals, the following discussion of the means serves no purpose.

In the January 2014 CBT report a series of operational questions were posed which are intended to make the allocation model operational. Some of those questions dealt with issues regarding setting FTES targets, missing targets and shifting of FTES based on actual college performance. The district responses to those questions are inconclusive and should be discussed further. It is important to establish clear guidelines so the colleges understand the expectations, rewards and consequences of meeting or missing FTES targets. The colleges can then make informed decisions about the proper course of action. Without clarity it is difficult for college administrators to do a proper “risk and reward” analysis

Over Cap Funds

The easiest way to raise the funded FTES at CHC with the least impact on SBVC is for the district to access and direct above cap growth and restoration funds to CHC. The conventional wisdom is that within the California Community College system there are many college districts that will be unable to fully use their allocated restoration funds during the 2014-15 year. Those unused restoration funds will be redistributed to over cap districts. Therefore, it is reasonable for SBCCD to anticipate receiving a portion of that redistribution provided that the district continues

to generate unfunded FTES. If those over cap FTES funds were directed to CHC, assuming CHC has generated sufficient actual FTES to capture the revenues, they are revenues that are not currently budgeted and would not require any reduction in budgeted growth funding to SBVC. The difficulty is that the magnitude of this redistribution is unknown. It would seem that the upper limit that CHC could absorb in one year is 400 FTES (half of the unfunded FTES in the current enrollment targets plus their current projection of being 5% over target). One solution for this year is that the first 400 FTES of the redistribution will go to CHC and anything over that amount will go to SBVC. Obviously, the district can create any cut point that it wishes or may mix the redistribution. For example, it might say the first 200 FTES goes to CHC and everything above 200 is split evenly between the colleges. This use of redistributed restoration funds appears to be the only viable option for the current year – especially given that the colleges have already completed a significant portion of the budget year.

It should be interjected here that the district needs to make a “full-court press” on the legislature and Board of Governors for prioritizing the redistribution of FTES so that districts with the economic and educational needs of places like SBCCD receive first call on those redistributed funded FTES. It appears that those efforts are already under way in developing a new funding formula for growth. That should help SBCCD get a greater growth allocation in the future and also a greater redistribution of future unused growth FTES. Nevertheless, because all of these factors are important to the district, it is important to be a political player right now and in the near future. The district has a great political argument for increased funded FTES so it is important to be persuasive during this formative period.

Beyond this year, the district also needs to adopt a policy on how future unused growth funds that are captured by the district will be distributed between the two colleges. There may need to be a policy on distribution until CHC reaches 5,000 funded FTES and afterwards. However, remember, this is the least painful way to raise the funded FTES at CHC so it should continue to be liberally disproportionate. However, these monies are very unpredictable. Therefore, it is prudent to capture as many as possible and to divert as much as possible to CHC whenever they are available.

Growth (or Restoration) Funds

The second policy decision has to do with the split in the annual growth (or restoration) funds awarded to the district. There is some hope that the new formula will benefit SBCCD and give the district higher rates than it would have received under the old formula. As can be seen in the January report, if the growth rates are in the neighborhood of 2% and CHC receives 30% of the

allocation and over cap funds have not been disproportionately given to CHC, it will take a very long time for CHC to get to 5,000 funded FTES. If the district adopts a policy which gives a significant amount of over cap funds to CHC, it is recommended that each year a determination is made of the necessary annual amortization of the gap and a growth award is made to equal that annual amount. For example, if this year, enough over cap funds are given to CHC to add 400 FTES to their funded base, it means there is still a need for another 600 FTES over the remaining five years. So, in 2015-16, they would receive 120 FTES of growth (1/5 of 600). If they also received another 100 over cap FTES in 2015-16, it means that the CHC funded base at the end of 2016 is at 4620 (4,000 + 400 + 150 +100). That would mean there is still the need for an additional 380 funded FTES over the next four years. The growth allocation for CHC in 2016-17 would be 95 FTES (1/4 of 380). This would repeat itself in this manner until CHC reached 5,000 FTES and then the growth allocation would return to a prorated distribution between the two colleges based on funded FTES bases. In this way, the greater the redirection of over cap funds in the short term to CHC, the lower the required growth distribution in future years. Simultaneously, SBVC will be receiving its annual growth allocation and possibly a portion of the over cap redistribution. Each year it must also be determined that SBVC will achieve its goal of 10,000 FTES, and growth FTES distributions must be adjusted to insure that the SBVC goal is achieved as well as the CHC goal. Because funded over cap FTES is an unpredictable amount, the growth distribution must be recalculated each year based on both colleges' capture of the over cap funding and their respective progress toward their FTES goal. Because the over cap funding is unpredictable and may be inadequate for CHC to achieve its goal, the district needs to be prepared in the event of inadequate over cap funds, to change the funded growth allocation from 31% to something between 35% and 40%.

As can be seen by the uncertain nature of over cap funds, the district needs to make annual corrections in their FTES allocation plans. If the overall concept of this plan is followed, by 2020 or sooner, the colleges will be at 10,000 FTES and 5,000 FTES and every year, both colleges will have received budgeted growth funds for movement toward their goals and movement to the goals has been aided by redistributed over cap funded FTES.

Summary.

The approach outlined herein accomplishes multiple objectives:

- It establishes a goal and timeline
- It lays out a reasonably clear path to accomplish the goal within the timeline (subject to external mitigating factors)

- It maintains awareness of the need to sustain SBVC size to achieve maximum base funding
- It creates performance incentives for CHC to earn its way into fiscal stability rather than establish a never-ending subsidy
- It places greater risk on CHC in that it will need to produce over cap FTES to accelerate its march toward 5,000 FTES with no guarantee it will be funded by the state but with the potential of financial reward.
- It addresses a real problem created by previous actions on expanding CHC instructional facilities without a plan to provide operating resources
- It takes into account a need to support SBVC's efforts while addressing a district level issue at CHC

Funded FTES Allocation Implementation

Step One

The district should be committed to always working to capture their growth allocation and the maximum amount of over cap FTES as long as the growth FTES is generated in a productive manner. This assumes that the district continues to experience excess student demand.

Step Two

The district needs to conduct an exclusive discussion about the two problems facing CHC and what goal(s) needs to be established to solve them. Do not let concerns about SBVC enter into this discussion. It is just about setting a goal for how to solve the problems at CHC.

The first order of business is to gain a commitment or decision by the Board of Trustees. This needs to begin by having the Chancellor provide an "education session" with the Board on the financial status of Crafton Hills College. As was pointed out by the CBT report in January, even after CHC and the district implement the recommended actions, it is probable that CHC is simply too small to support its operating expenses. Therefore, it is necessary to either increase their revenues by increasing their funded FTES so that they can capture economies of scale and balance their budget or the district should alter their allocation model to provide an on-going "subsidy" (or simply additional funding) to CHC.

Independently, the Board has authorized an extensive capital outlay program at CHC that will increase its instructional space by 50% without developing a plan as to how the district will pay for a corresponding increase in the college's FTES. Given that there is already an economy of scale financial issue and no plan for how to increase the funded FTES to pay for the additional classes in the new facilities, the Board must make an additional decision to increase the funded FTES of CHC or plan on an even larger subsidy. It would be politically unacceptable to not put additional classes in the new facilities to absorb a portion of the excess student demand. The point here is to get all parties to fully understand the problem and to commit to a goal before talking about how to accomplish it. To help them understand the problem, the consultants recommend the following two parts as part of the presentation:

1. Using the January CBT report and the data from the 2013-14 fiscal year, assume a reasonable level of implementation of the CBT recommendations and describe the remaining structural deficit at CHC (under the current allocation model).
2. Describe in concrete terms the impact of the building program at CHC so that everyone understands the 50% increase in instructional capacity. Then, describe the dollars necessary to add the classes to use half of the added capacity (it seems reasonable to assume that the other half of the added capacity will be saved for future growth). This is approximately the equivalent of 1,000 FTES. In making the cost calculation, assume that CHC makes maximum use of hourly faculty while maintaining their fair share of the district FON.

At this point, hopefully everyone understands the dollar magnitude of the problem. The stage has been set to talk about solutions. It seems that the logic of the situation leads one to admit that they must eventually raise the funded FTES from 4,000 to at least 5,000 so that both the economy of scale problem and the added instructional capacity problem can be solved. It is better in the long run to force CHC to earn its revenue rather than to just give them money. If everyone agrees about the definition of the problem, the solutions can look at the options.

Step Three

If everyone agrees that the goal is to get CHC to 5,000 funded FTES in the foreseeable future, the question is how fast and by what mechanism. The district has three variables at their disposal. The annual growth allocation, the acquisition of over cap funds and district reserves. Any mixture of the three is possible. This should not be a combative situation. If all parties agree on the definition of the problem, it is just a matter of deciding on the method of solution. The district will need to use its political acumen to determine what will sell the best. Here are some examples:

1. The most conservative (and will take the greatest amount of time) is to continue to provide the same split in annual growth, the same percent split in over cap growth and fill the gap by providing district funds. This is effectively a status quo decision which uses only current mechanisms. While SBVC may like this the best, they may be asked to backfill the district reserves because CHC cannot be a contributor and at some point those reserves will need to be replenished.
2. A middle position would be to provide the same split in annual growth, split the over cap equally between the two colleges and fill the gap with district reserves (should be a smaller amount of district reserves than option 1).
3. Another middle position is to move to a 40/60 split on all growth FTES (annual and over cap) with district reserves filling any gap.
4. Besides the decision on the annual growth allocation (status quo, 40/60, 50/50, etc.), the district could also create a different type of policy on over cap which gives the first 200 FTES (or 300 FTES) to CHC, the next corresponding amount to SBVC (200 or 300) and split the rest evenly.
5. The most aggressive, that is still doable by CHC, is the one outlined in the report.
6. Clearly, the mixture of possibilities among the three variables is endless and should be decided based on what is the most politically palatable.
7. Verify that whatever plan is adopted will also result in SBVC reaching its desired goal of a funded FTES of greater than 10,000 within 5 years.

Step Four

Commit that each year you will review the situation and determine what changes need to be made in the policy. Since the allocation of funded FTES between the two colleges is always a district internal decision, it is always possible to make any changes deemed necessary.

RECOMMENDATIONS ON HOW TO INCREASE INSTRUCTIONAL PRODUCTIVITY AND ASSESSING THE PROCESSES AND POLICIES EACH COLLEGE USES TO MANAGE ITS SCHEDULE

The second section discusses recommendations on how to increase instructional productivity and an assessment of processes and policies used to manage schedule and course offerings.

Recommendations on How to Increase Instructional Productivity

For each of the two colleges in the district, a table was created to reflect that college's specific census information. The information contained in these tables is the following: the name of the division; the capacity for that particular division (how many seats are available); the actual enrollments for that division; the fill rate (how many seats are filled when compared to how many seats are available); the Full-time Equivalent Students (FTES) generated by that division; the Weekly Student Contact Hours (WSCH or hours times the number of students) generated by that division; the Full-time Equivalent Faculty (FTEF) it takes to conduct the scheduled courses; the actual WSCH/FTEF (a measure of productivity); and finally, different scenarios as to what a hypothetical WSCH/FTEF could be achieved if a certain fill rate is maintained. At the bottom of each table is a grand total for the entire college for each of the elements discussed above.

It is important to bear in mind throughout this discussion that creating a schedule of classes is a very complex task—one that demands daily scrutiny and data that is above reproach in its accuracy. The amount of work and analysis performed by each of the two CIOs is impressive. They do their very best to assure that college and district goals are being addressed all the while focusing on the needs of the students in their care. For this discussion, each college will initially be discussed separately.

San Bernardino Valley College

Table A - Census Information for San Bernardino Valley College
 Fall 2014

Division	Capacity	Actual Enroll	Fill Rate	FTES	WSCH	FTEF	WSCH/FTEF Actual	If 100% Fill	If 95% Fill
VCMJ	680	387	57%	118.25	3,547	3.88	914.28	1606.49	1526.16
VHUM	10,095	8,893	88%	1,192.09	35,763	82.02	435.97	494.90	470.15
VLRS	510	414	81%	19.12	573	1.361	421.37	519.08	493.13
VSCI	4,954	4,144	84%	764.00	22,920	60.53	378.61	452.61	429.98
VSOC	15,535	11,598	75%	1,212.06	36,362	64.71	561.87	752.60	714.97
VTEC	2,814	2,327	83%	385.90	11,577	34.25	338.01	408.76	388.32
VSTU	485	544	112%	36.98	1,109	2.44	455.64	406.22	385.91
VMTH	7,845	7,572	97%	923.05	27,692	54.97	503.78	521.94	495.85
Grand Total	42,918	35,879	84%	4,651.45	139,543	304.161	458.76	548.76	521.32

indicates less than 80% fill

indicates less than 525 WSCH/FTEF

indicates what WSCH/FTEF would be if classes filled to 100%

indicates what WSCH/FTEF would be if classes filled to 95%

The first discussion involves the census data for San Bernardino Valley College (Valley College). By examining the information contained in Table A, it can be seen that two divisions are below an 80 percent fill rate. The fill rates for these divisions are 57 percent and 75 percent. Often, a fill rate below 80 percent indicates an area of concern, one worthy of initiating a more

in-depth examination. A low fill rate can indicate many scheduling concerns. Examples include whether too many classes are being offered thus diluting an existing population; whether the classes are offered at the appropriate times; whether best practice standards are being followed; whether the program is offering every course every semester or whether the program is following a two-year plan; and whether the program is still meeting the needs of students or the industry it is serving.

It is understood that the information may contain errors as has been reiterated by all parties at the colleges and the district, but the college-wide fill rate at Valley College is only just at the acceptable level with an 84 percent fill rate. Again, this number signifies a red flag that demands investigation as to whether the courses offered at the college represent an appropriate balance in terms of program and courses offerings.

Even more illuminating is the Weekly Student Contact Hours/Full-time Equivalent Faculty (WSCH/FTEF) figure that SBVC has which is at 458.76—a figure that is down from the previous year. This figure is illustrated in yellow under the college grand total section in Table A. Statewide, a 525 WSCH/FTEF is the accepted standard for colleges that operate with standard term semesters. When a college/district is generating 525 WSCH/FTEF, generally a college is generating enough money to cover the cost of offering classes, as well as the cost of operating the other important aspects of the institution.

In table A, each division at San Bernardino Valley College (Valley College) that is below this standard of 525 WSCH/FTEF, is highlighted in yellow. In addition to the total WSCH/FTEF being below the state standard, six of the eight college divisions are below this standard.

Not all divisions in a college can be at the state standard of 525 WSCH/FTEF, as a college is a compilation of divergent disciplines that meet student and community needs. What is important, however, is to maintain adequate balance between divisions, as well as departments within divisions, so that the college as a collective produces its prescribed FTES at an economical rate. That is, the compilation of WSCH/FTES for each division in the college should be balanced so that the result is a total WSCH/FTEF of 525 or higher. If this does not happen either the college does not meet its FTES target or it spends more money to generate this FTES target. The goal of each college in the state is to offer courses that are efficient in terms of costs, thus allowing for more money to be spent in other areas of the college.

A scenario has been illustrated in blue in Table A that indicates what the college WSCH/FTEF would look like if each seat in every class offered at Valley College was filled by a student. The

darker blue indicates that four of the eight divisions would still be below the 525 WSCH/FTEF standard. The total WSCH/FTEF, however, would be at 548, which is above the standard. It is, however, difficult to offer a schedule of classes with the expectation that every seat will be filled.

Due to this unrealistic phenomenon of filling each seat that is offered at the college, a pink section of Table A was created which indicates that San Bernardino Valley College would have to maintain a 95% fill rate in order to be close to a 525 WSCH/FTEF figure with the same mix of classes that is offered for the Fall 2014 semester. By maintaining a 95% fill rate, an approximate WSCH/FTEF of 521 would be produced by Valley College. To make it easier for college constituents to understand the concept of 525 WSCH/FTEF, a figure of 35 students in a class can be used to communicate to college constituents the same information in a less complicated and less formulaic manner.

Another analysis performed examined the actual class capacity for each of the classes offered by Valley College. There is a difference between the course capacity, that in the case of Valley College is a number agreed to by all college constituents, and the section cap that is limited by the size of the room each class is offered in. If a college does not have an adequate number of rooms to accommodate the curricular cap for a class, these facilities act as a barrier to FTES production since the number of students in each course is now limited.

Again, the information regarding section caps for each of the classes offered by Valley College was questioned in terms of accuracy. As is the case with other information provided, stacked courses and honors courses that are attached to regular courses have not been removed. Stacked courses are ones that are offered together, usually due to limited enrollments in each section. An example of this is beginning, intermediate, and advanced tennis classes offered together at the same time with only one instructor being paid for all three classes. The same is true of many of the SBCCD honors classes that contain a very limited number of students. The honors students are placed in a regular class and receive additional assignments. When both stacked classes and honors addendum courses are reported in section cap reports, as well as other reports, they appear to be separate classes rather than one class. This inaccuracy needs to be remedied in all reports to assure precision and correct data provided to the colleges.

Given this inaccuracy, the section cap report was examined class by class and an attempt was made to remove stacked classes, as well as honors courses in which students attend regular classes. It must be noted, however, that inaccuracies still may exist. In the case of Valley College, 573 sections of the 1331 offered (after stacked and honors courses were removed) or 43 percent of the classes offered during the Fall 2014 semester had section caps of 35 or greater.

Functionally, this makes it difficult for Valley College to achieve a WSCH/FTEF of 525 or above. It is recommended that Valley College examine its room use policy to assure that larger capacity rooms are being used by those classes having higher curricular caps.

Crafton Hills College

Table B - Census Information for Crafton Hills College
 Fall 2014

Division	Capacity	Actual Enroll	Fill Rate	FTES	WSCH	FTEF	WSCH/FTEF Actual	If 100% Fill	If 95% Fill	If 90% Fill	If 87% Fill
CAH	837	589	70%	116.04	3,481	8.326	418.07	594.10	564.39	534.69	516.87
CBEIT	1,454	1,135	78%	127.37	3,821	8.718	438.3	561.49	533.41	505.34	488.49
CCMMS	1,503	1,203	80%	158.11	4,743	11.465	413.73	516.90	491.06	465.21	449.71
CENRG	2,769	2,610	94%	342.52	10,276	27.498	373.67	396.43	376.61	356.79	344.90
CFIN	1,665	958	58%	118.28	3,548	8.624	411.46	715.12	679.36	643.60	622.15
CHMDV	1,235	928	75%	95.41	2,862	6.001	476.95	634.73	603.00	571.26	552.22
CKINE	1,850	1,343	73%	156.9	4,707	7.433	633.25	872.31	828.69	785.08	758.91
CMATH	3,075	2,751	89%	353.08	10,592	20.760	510.21	570.30	541.79	513.27	496.16
CPHBI	2,355	1,895	80%	382.9	11,487	19.704	582.98	724.49	688.27	652.05	630.31
CPSS	1,596	963	60%	146.81	4,404	11.886	370.55	614.12	583.41	552.71	534.28
CSOCS	2,771	2,140	77%	221.45	6,643	10.6	626.74	811.54	770.96	730.39	706.04
CTTRC	699	395	57%	24.47	734	1.76	417.02	737.97	701.07	664.17	642.03
Grand Total	21,809	16,910	78%	2,243.34	67,300	142.778	471.36	607.92	577.52	547.13	528.89

indicates less than 80% fill
indicates less than 525 WSCH/FTEF
indicates what WSCH/FTEF would be if classes filled to 100%
indicates what WSCH/FTEF would be if classes filled to 95%
indicates what WSCH/FTEF would be if classes filled to 90%
indicates what WSCH/FTEF would be if classes filled to 87%

Crafton Hills College’s census information is contained in Table B above. As can be seen by viewing the green portion of the table, eight of the 12 divisions are below an 80 percent fill rate which would lead to the conclusion that perhaps too many classes were added at one time to accomplish growth at the college. The total fill rate for Crafton Hills is 78%, slightly below what many consider a minimum fill rate of 80 percent. It generally is an indication that too many low enrolled courses are being offered at the college. Many signs indicate that Crafton Hills can and needs to grow, but this growth needs to be managed. Too many classes added at one time, particularly when colleges statewide are experiencing a decrease in student enrollments, may be too extreme. It is important for the CIO and the deans to use this information as a point of departure to “drill down” and investigate each department within the divisions.

An examination of the yellow column in Table B, entitled WSCH/FTEF, shows that Crafton Hills has produced a WSCH/FTEF of 471.36, well below the state accepted standard for 18-week semesters of 525 WSCH/FTEF and below its WSCH/FTEF of Fall 2013. Nine of the 12 divisions at the college are functioning at a WSCH/FTEF below this norm. Again, not all divisions can or will be at or above this 525 standard--most often due to external or internal limitations on enrollment. But, there needs to be a balance at the college so that there is equilibrium between those departments with higher WSCH/FTEF figures and those that are below this number.

In order to assist the college, additional columns have been added to Table B. These columns indicate what the WSCH/FTEF would be if 100 percent, 95 percent, 90 percent, and 87 percent fill rates were attained with the same mix of classes. The light blue column shows the WSCH/FTEF attained with a 100 percent fill rate. Almost every division (ten of twelve), as well as the college as a whole, would be above the 525 WSCH/FTEF figure each college ideally attempts to set as a minimum standard. The college total would be well above this number at almost 608 WSCH/FTEF. As has been pointed out in the discussion with Valley College, this is more of a theoretical number than one that is attainable.

The second hypothetical column is in pink and represents what the WSCH/FTEF would be if a fill rate of 95 percent were attained for all classes. As can be seen in the table, those divisions below 525 are highlighted in dark pink and are actually the same two divisions below 525 that were apparent in the 100 percent fill rate scenario. The remaining ten divisions are above the target number of 525 and the college-wide WSCH/FTEF would be 577—an admirable number.

The third column in purple decreases the fill rate to 90 percent—a much more realistic number for the college. In this scenario, eight of the twelve divisions (as indicated by the light purple) are above the 525 WSCH/FTEF figure with a total college figure of 547.13.

The final column in gold, most closely approximates the 525 WSCH/FTEF figure. Crafton Hills College can attain a number close to the suggested statewide norm at 528.89 with an 87 percent fill rate. Here—as indicated by the lighter golden rod—seven of the twelve divisions are above the 525 WSCH/FTEF figure. The goal of the college is to affect balance within each division to achieve a minimum of this 87 percent fill rate or to re-examine the mix of classes being offered within the context of student demand. It is important to point out when viewing the scenarios, that Crafton Hills only has to maintain a fill rate of 87 percent to achieve a WSCH/FTEF of approximately 525, while its sister college has to maintain a fill rate of 95 percent to achieve approximately the same WSCH/FTEF.

As was the case with Valley College, the actual class capacity for each of the classes offered by Crafton Hills College was scrutinized. The initial course capacity falls under the purview of the Academic Senate as an academic and professional matter, while the section cap is limited by the size of the room each class is offered in.

Again, the information regarding section caps for each of the classes offered by Crafton Hills College was questioned in terms of accuracy. As is the case with other information provided, stacked courses and honors courses that are attached to regular courses have not been removed as separate and distinct college courses.

In an analysis of section caps for the classes offered at Crafton Hills College, an attempt was made to remediate errors in the report by removing classes that should be subsumed under parent or primary courses. By removing these courses, it was found that approximately half (320) of the approximately 640 classes offered at Crafton Hills are capped at 35 or above. That translates to the reality that half of the classes offered at this college can produce a WSCH/FTEF of 525 or above while the other half will be below that figure if the caps are observed.

Assessing the Processes and Policies Each College Uses to Manage its Schedule

In order to determine the efficiency of scheduling practices, a number of phone conferences occurred with the CIOs from both Valley College and Crafton Hills College. Many practices--all of which impact the production of FTES—were examined. These included the distribution of FTES targets to each college, the distribution of FTES within each college, and the scheduling practices at each of the colleges. Finally, the support systems that are in place college-wide and district-wide were examined as these are essential by providing the necessary and timely information CIOs, deans, and department chairs need to make scheduling decisions.

FTES Targets

The distribution of FTES targets is a district process that does not include input from the CIOs at each of the two colleges. The two colleges receive funding and FTES targets based upon the newly assigned 68/32 percent distribution model, but there is not clarity as to how the targets are selected in terms of the amount of FTES above cap the district will attempt to produce.

There appears to be a lack of direction given to the colleges in concert with these FTES targets. Again, district discussions determine changes that need to be made during the year to address statewide adjustments. In the past, this has resulted in the need for dramatic and almost instantaneous changes via additions or cuts to the schedule of classes. Although they have learned to be poised for this type of change and the CIOs are aware of the volatile nature of the community college system, it is suggested that the college vice presidents be involved in some manner or at the very least, are made aware of probable scenarios they may face. In this way, the CIOs can do a better job for students by providing proactive plans in advance for the various scenarios they may face. The CIOs would be able to organize their efforts in an efficient and strategic manner.

A very effective, but informal practice assists the college CIOs as they attempt to determine where they are throughout the year in terms of meeting their FTES goals. The Interim Vice Chancellor of Fiscal Services meets with each college after P1, P2, and before the 320 reports are submitted to the state. They meet to discuss the FTES status of each of the colleges. These discussions are very helpful to the colleges.

At the present time, the two colleges have slightly different systems to distribute both dollars and FTES targets to each of their divisions and departments. At Valley College, the college established a funding model based on historical data including a fill rate of 91 percent or above. This represents a base for distribution of dollars for scheduling purposes.

To add classes beyond the base, Valley has developed guiding principles that all deans and department chairs utilize. These principles include criteria such as waitlist information, fill rates, IGETC course lists, graduation requirements, major requirements, and transfer requirements.

Based upon these criteria, deans bring their suggested additions to the CIO where additions to the schedule of classes are approved. This process occurs prior to the development of the schedule of classes and is done in a timely manner that allows full faculty participation in the process.

At Crafton Hills, the CIO has developed a system where the budget for the schedule of classes also begins from a historical base. Each department is assigned a budget, a fill rate of 80 percent or above, and an FTES target on an annual basis. Recently, growth dollars have been linked to student demand with approximately 65% of growth dollars given to high demand transfer courses, approximately 25% to basic skills courses, and approximately 10% to CTE courses.

Both colleges communicate their respective distribution of budgets and targets to deans and chairs, although each college has had to develop its own system to establish and track this information. In the case of Crafton Hills, the district Datatel system provides an informer report that is used by the CIO to project enrollment management information. At San Bernardino, a customized database with enrollment information has been developed for use by the college.

Both college CIOs do an admirable job of staying on top of assessing student need and FTES production. They and their deans continuously engage in conversations and make alterations to their classes throughout the semester. They are both to be congratulated for their systems thinking and for the development of tracking systems that assist all of their college constituents in the understanding of scheduling processes. Additionally, they work together to share information and meet on a regular basis.

Crafton Hills builds the schedule of classes based upon student need. The determination of student need is based upon data such as waitlist information. At Valley College, the waitlist is also used as an indicator of student need and therefore drives the addition of classes in specified disciplines. At the present time, student education plans are not used to assist in the effort to plan the schedule of classes, but it is expected this will occur soon since electronic education

plans are presently being developed. It is important to use this newly developed system in order to assure that courses offered in the schedule of classes are those that students need to fulfill their educational goals.

Class caps for the colleges are established by management or are considered academic issues that are discussed with the faculty as part of the academic and professional matters (ten plus one) relegated to the Academic Senate.

At both colleges, chairs and/or deans meet to discuss the timing of offerings for prerequisite courses that are needed for target courses in other disciplines. At Valley College, chairs also congregate to assure that enough prerequisite courses are being offered for the college's STEM courses.

Class cancellation policies are different at each of the two colleges. At Valley College, a cancellation policy guide is followed based upon many factors such as whether or not the class has a prerequisite or not; whether the course is taught online, whether the course is a capstone course for a major, etc. Exceptions are made, however, on a case-by-case basis.

Crafton Hills does not impose a strict cancellation policy. Instead, deans at this college are allowed to keep low enrolled classes as long as the department continues to maintain its minimum 80 percent fill rate and generate the mandated target FTES.

Both colleges make a concerted effort to contact the students in cancelled classes to not only notify them of the cancellation, but to hopefully redirect them to other classes as well. Valley does so by phone calls and utilizing websites, while Crafton Hills uses phone calls and social media to contact these students.

Both colleges intend to develop two-year course offering plans for each department. It is very important for both college to do this as this type of information will help assure efficiency in planning for these disciplines, will help organize each college's efforts, and will serve as a guide for students to follow.

Information Provided to the Colleges

First, it is important to note that the two college CIOs have done an admirable job of using data to assist them in making decisions. Additionally, they are to be congratulated for instituting

meaningful and clear systems to inform the class scheduling and FTES generating processes at their respective colleges. The CIOs have also accomplished this without always having organized district support systems in place to rely upon.

Everyone in the district graciously attempted to retrieve the information and data requested by those performing analyses. Almost all of those involved acknowledged that the data contains inaccuracies, which brings into question the correctness of the analyses being described and discussed here. Questionable data also creates a great deal of extra work, as well as confusion in the SBCCD college community, and creates a reactive rather than a proactive environment for district functions. Additionally, it creates an atmosphere where different people are using the same information with various and different understandings of what the information means. It is very strongly suggested that the district work with the colleges to ensure accuracy of data and to assist the colleges in the development of more meaningful reports.

The district provides each college with comparative enrollment information that is updated on a daily basis. In addition to basic class enrollment information is data that indicates enrollments, FTES, FTEF, and WSCH/ FTEF if all seats are filled in each class. Additionally, the same data is provided for each class but with actual enrollment numbers. Special reports are also provided to the colleges. The CIOs, deans, and department chairs at each college have access to all reports for both colleges

Although the district enrollment information is fairly comprehensive, the district does not provide any type of system that assists the colleges as they attempt to track dollars spent for each the classes offered. Each of the CIOs has had to invent separate systems to track this information. Again, it is important to note that everyone in the district was helpful in attempting to provide the information requested of them for this analysis. However, the district was not able to easily provide data that is generally considered fairly common in the California community college system. In one case, it was an attempt to examine the loads of faculty at both colleges that proved to be difficult. The question was:

- how much FTEF was taught by full-time faculty members within their contracts each semester and what did that translate to in dollars;
- how much FTEF was taught as overload and what was an average hourly rate for this work;
- and how much FTEF was taught by part-time faculty and what was an average hourly rate for this work.

The district did not have this information readily available, but rather had to devote a great deal of effort to gathering the material. It is suggested that this type of budgetary information be made available to both the colleges and the district in the form of easily accessible spreadsheets. The semester-based spreadsheets should include the loads of full-time faculty for each college, base salaries, and the amount of overload taught by each full-time faculty member with the overload rate for that faculty member. The teaching load for all part-time faculty, with individual hourly rates, also needs to be recorded. A discussion of additional components included in this type of spreadsheet should be facilitated with appropriate district and college personnel to assure that everyone's needs are being met to calculate college costs. At this point, it appears that the district relies on the colleges to keep track of these basic elements. Both the district and the colleges need to know this information and steps need to be taken to have it available to both.

Each of the two colleges maintains its own research department although Crafton Hills has a reduced staff and Valley's research team does not appear to be much larger than its sister college's staff. Both college CIOs expressed a need for the section reports produced by their research teams to be modified to eliminate inaccuracies due to stacked and honors classes.

Although it has been stated throughout the discussion, a summary of the scheduling processes in the district would not be complete without reiterating the need for district organization and vision in the support systems provided to the colleges. The college CIOs are doing an admirable job of analyzing and planning, but they need district systems in place to make their work easier and more systematic. There is a need for systems thinking and the placement of structures at the colleges that are transparent to all involved, are accurate, and provide the information that is necessary to make sound decisions. There are enrollment management systems at many colleges that are either developed in-house or are developed by consultants. It is suggested that the district investigate the best way to provide information to all. This will help the colleges make wise decisions, achieve the desired FTES targets, and will make it easier to determine the cost of generating that FTES.