INSTITUTIONAL EFFECTIVENESS PARTNERSHIP INITIATIVE

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Calculating and Understanding FTES & Productivity

IEPI SEM Academy

Note: Edited Heavily by Mario Rodriguez

CALCULATING FTES

Q: How is Apportionment Revenue allocated?

A: On the basis of Full-time Equivalent Students (FTES) in attendance, as reported to the Chancellor's Office on the CCFS-320 Report three times each year.

Full-Time Equivalent Student

1 FTES =

1 student

15 hours per week

2 semesters of 17.5 weeks

(3 quarters of 17.5 weeks)

= ***525 contact hours***

Sources of Authority

California Legislature

Education Code

Board of Governors of the California Community Colleges

Title 5 of the California Code of Regulations

FTES Calculation

- Clock Hour
- Class Hour
- Passing time/break
- Partial class hour
- Multiple hour class

Clock Hour

A 60-minute time frame that may begin at any time.

Examples: 0800 to 0900

0810 to 0910

0820 to 0920

Class Hour

- A period of not less than 50 minutes of scheduled instruction or examination
- There can be only one “class hour” in each “clock hour,” except as provided for multiple hour classes.

Class Hour

- A “class hour” is commonly called a “contact hour” or “Student Contact Hour.”

Passing Time/Break

- Each clock hour is composed of one class hour segment and a segment referred to as “passing time” or a “break.”
- No additional attendance may be claimed for the 10-minute segment, except for multiple-hour classes.

Multiple Hour Class

- A multiple hour class is defined as a class scheduled for more than one clock hour.
- The fractional part of a class hour at the end of a multiple hour class is called a ***partial class hour***.

Multiple Hour Class

- Each 50 minutes exclusive of breaks is a class hour.
- A partial class hour beyond the last full clock hour is counted from the 51st minute of the last full clock hour.

Multiple Hour Class

- No break is allowed in the last full clock hour or the partial class hour.
- The divisor for the partial class hour is 50.

Multiple Hour Class

- Example: 7:00 p.m. to 10:05 p.m.

  PCH: 9:51 – 10:05 = 15 min.

  15/50 = 0.3

  Total Contact Hours: 3.3

Calculate the contact hours:

Class meets from	Contact hours
• 0900 to 0950	1.0
• 0900 to 1000	1.0
• 0900 to 1005	1.3
• 0900 to 1050	2.0
• 0900 to 1100	2.0
• 0900 to 1105	2.3
• 0900 to 1130	2.8

Attendance Accounting Methods

- Weekly Student Contact Hour
- Daily Student Contact Hour
- Actual Hours of Attendance (Positive Attendance)
- Alternative Attendance Accounting Method (Independent Study/Work Experience)
- Noncredit Distance Education

Weekly Student Contact Hour

- Primary terms only
- Course coterminous with primary term
- Must meet regularly every week of the term
- Same number of contact hours each week including TBA hours
- No deductions for holidays

Census Week

- The week nearest to 20% of the number of weeks in the primary term
- Census date is Monday of census week
- If that Monday is a holiday, census date is the following day

Term Length Multiplier

- Number of weeks in primary term with at least three days of instruction and/or examination
- The term length multiplier for each college is set by the CCC Chancellor's Office based on the college's academic calendar
- Maximum TLM: 17.5 for semesters
  11.67 for quarters

FTES Calculation (WSCH)

- Multiply Census Week WSCH by the TLM and divide by 525

FTES = (CWSCH x TLM) / 525

Example: Class meets 3 hours/week
30 students enrolled on Census Day
TLM = 17.5

FTES = (3 x 30 x 17.5) / 525 = 3.00

Daily Student Contact Hour

- Course meets five or more days
- Meets the same number of hours on each scheduled day, including any TBA hours
- NOT coterminous with primary term
- No hours counted for holidays

Census Day

- The **day of the class meeting** that is nearest 20% of the number of days the course is scheduled to meet
- When the census day falls on the first day the class meets, census is taken on the second day.

Course Length Multiplier

- Number of days the course is scheduled to meet (CLM)

FTES Calculation (DSCH)

- Multiply Census Day DSCH by the Course Length Multiplier and divide by 525

FTES = (CDSCH x CLM) / 525

Example: Course meets 2 hours per day
30 students enrolled on Census Day
Course meets on 24 days

FTES = (2 x 30 x 24) / 525 = 2.74

Positive Attendance

- Based on actual count of enrolled students ***present*** at each class meeting
- Courses meeting fewer than five days
- Courses irregularly scheduled with respect to the number of days per week or the number of hours on scheduled days
- All noncredit courses

FTES Calculation (PA)

- Divide total hours of ***actual*** attendance by 525

  FTES = PAH / 525

Maximizing FTES for Traditional (Face-to-Face) Classes

Best: Weekly Census

Second Best: Daily Census

Worst: Positive Attendance

Alternative Attendance Accounting Method
(Independent Study/Work Experience)

- WSCH method for courses coterminous with primary term
- DSCH method for all other courses

Alternative Attendance Accounting Method
(Independent Study/Work Experience)

- One weekly student contact hours is counted for each ***unit of credit*** for which the student is enrolled as of the census date or day.
- Lab hours, when appropriate, can be added to the contact hours derived from units of credit

FTES Calculation (ISWE)

- Until 2002, all distance education courses had to be assigned to the Independent Study/Work Experience attendance accounting method.
- Current regulations allow any ***appropriate*** accounting method to be used for distance education courses.

Distance Education (Credit)

- Multiply number of students enrolled as of census by the number of “weekly contact hours”; multiply by the Term Length Multiplier; divide by 525.

  FTES = (# Students x “WCH” x TLM) / 525

Full-Time Equivalent Student (FTES) Reporting Periods

First Period: July 1 – December 31
Second Period: January 1 – April 15
Third Period: April 16 – June 30

Reports due: January 15
April 20
July 15

When to Report a Section

- Attendance for weekly and daily census sections is reported in the period in which the census date falls.
- Attendance for positive attendance sections is reported in the period in which the last class meeting occurs.

When to Report a Section

- ***Summer Shift Exception:*** Attendance for daily census sections with census date before July 1 and ending date after July 1 may be reported in either fiscal year.

Frequently Observed Errors

- Courses inappropriately assigned to the Weekly Census or Daily Census method
- Daily Census courses with “weekly” lab hours
- Summer courses assigned to Weekly Census
- Summer courses reported in the wrong year, or reported in both years
- ***Catalog*** hours reported rather than ***Schedule*** hours
- TBA hours irregularities
- ***Tip:*** *Use CCCCO and external audit expertise*

Background and Drivers

UNDERSTANDING CCC BUDGET AND REPORTING: STUDENT ATTENDANCE

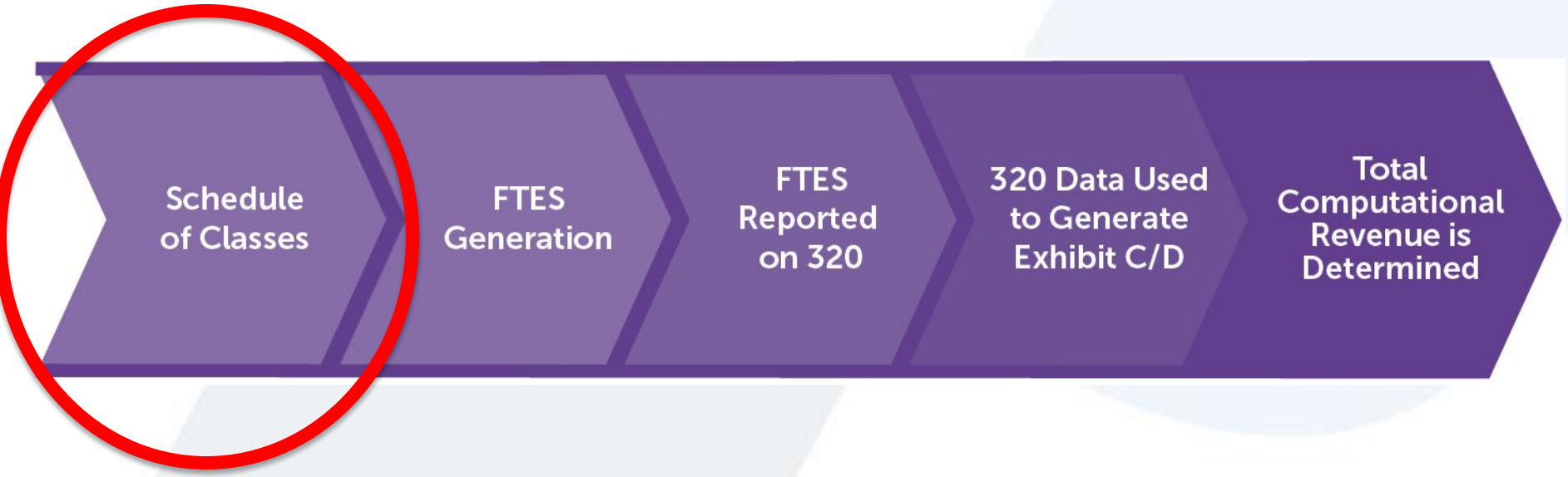
SCFF Model

- SCFF Breakdown
  - 70% FTES (Base Allocation)
  - 20% Student Financial Need (Supplemental Allocation)
  - 10% Student Outcomes (Student Success Incentive Allocation)

SCFF Model

- FTES Workload Drivers
  - Credit Full Time Equivalent Students (FTES)
  - Non-Credit FTES
  - Enhanced Non-Credit (Career Development and College Preparation – CDCP) FTES
  - Special Admit and Incarcerated FTES
- 1 FTES = Equivalent of 525 hours of student instruction

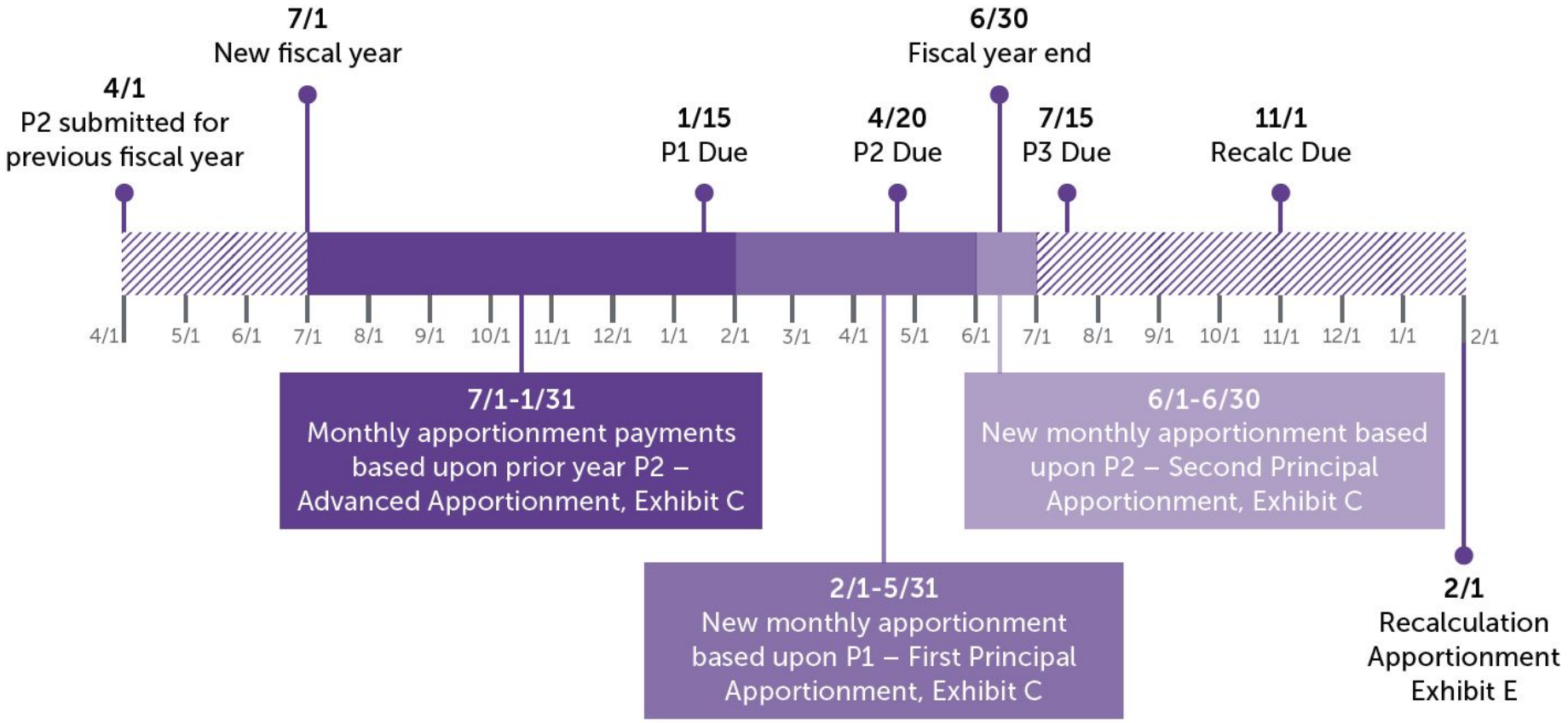
Using Funding Model to Derive Budget



Understanding the 320 Report

- 8 Sections that summarize the enrollment (FTES) over the academic/fiscal year
- Reflection of students served but also how the schedule of classes are development
- 4 submissions
  - Period 1 (January 15th)
  - Period 2 (April 20th)
  - Period 3 (July 15th)
  - Recalculation (November 1st)
- District/colleges required to follow Student Attendance Accounting Manual
- Reporting is “annualized” to project/ estimate the annual enrollments for the academic/fiscal year.

Alignment of Funding Model with 320 Report and Budget



FTES Exercise

Course	Load	Hours per week	Approx. Cost	Class Max	FTES Max	Max Product (FTES/FTEF)
Hum 12	0.20	3	$6000	31	?	?
Bio 9	0.37	6	$11,100	36	?	?
Psyc 1	0.20	3	$6000	45	?	?

“Hours per week” X “Class Max” = “FTES Max”

“FTES Max” ÷ “ Load” = “Max Productivity”

“Approx. Cost” is based on average faculty cost

FTES Exercise (Cont.)

Course	Load	Hours per week	Approx. Cost	Class Max	FTES Max	Max Product (FTES/FTEF)
Hum 12	0.20	3	$6000	31	3.1	15.5
Bio 9	0.37	6	$11,100	36	7.2	19.5
Psyc 1	0.20	3	$6000	45	4.5	22.5

Summer Shift, Stability & Restoration

Summer - For summer intersession daily census courses that cross fiscal years, associated FTES are to be reported in the fiscal year in which the census date falls or when the course ends. Districts have an ability to "shift" FTES between fiscal years. Provides an ability to smooth revenue reductions and provide time to develop strategies to either restore enrollment or make budgetary reductions.

Stability - "Guaranteed" funding for 1 year. By end of the subsequent year, college must achieve original FTES goal or lose funding (cash).

Restoration - Entitled to restore base funded FTES during three years following year of initial decrease.

Emergency Conditions – Generally used for natural disasters as a way to provide a soft landing in FTES, but has been used by most districts during the pandemic. Similar to an extended restoration period.

Summer Shift Exercise

Hypothetical Community College:

- Enrollment year 1: 10,000 FTES comprised of:
  - summer 1,000 FTES (600 of which can be shifted),
  - fall 4,500 FTES,
  - and spring 4,500 FTES

- Enrollment year 2: 9,400 FTES comprised of:
  - summer 1,000 FTES (600 of which can be shifted),
  - fall 4,200 FTES,
  - and spring 4,200 FTES

Summer Shift Exercise (Cont.)

Hypothetical Community College:

No Shifting	With Shifting
• **9,400 FTES comprised of:** ○ **summer 1000 FTES,** ○ **fall 4,200 FTES,** ○ **and spring 4,200 FTES,**	• 10,000 FTES comprised of: ○ summer 1000 FTES, ○ fall 4,200 FTES, ○ spring 4,200 FTES, ○ and summer 600 FTES

EFFICIENCY AND PRODUCTIVITY

Productivity and Efficiency Metrics

Resources Needed to "Produce" FTES:

I. Facilities (Classrooms)

A. FTES Capacity (Potential FTES)

B. FTES Per Room/Section/Faculty

C. Fill Rates Per Room/Section/Faculty

II. Faculty

A. FTES Per FTEF

B. WSCH Per FTEF

Exercises

(1) ***Dollars and Enrollments:*** Demonstration About Revenues Generated In a Section or Classroom

(2) ***If my classroom only holds 25 students, how can I be expected to teach 35?:*** Demonstration How Target ***Average*** Enrollment of 35 per Section (or 3.5 FTES per Section) Is Actually Achieved.

Productivity

FTES = OUTPUT=WORKLOAD=REVENUE

- **Potential FTES**: Amount of FTES if all classrooms scheduled at their capacity
- **Target FTES**: Amount of FTES the college needs to reach to achieve base plus growth
- **Actual FTES**: Amount of FTES Attained by a college in a term

I. FTES Productivity & Capacity

Potential FTES: Online and Classrooms.

- Online **Capacity**: Limited By Availability of LMS-proficient Faculty. Online Important But Is Not the Focus of Today's Discussion.
- Lecture and Laboratory Classroom **Capacity**: Determined By Seats/stations In Laboratory and Lecture Classrooms and How Efficiently They Are Used.

Target FTES

- Should Be ***Data-based*** and Established in Advance
- Statewide Norm Used for Budgeting: 35 students per 3-hour section or **3.5 FTES** per 3-hour section, **4.7 FTES** per 4-hour section, etc.
- 35 Is An **Average** for a College, **NOT** a Universal Section Cap
- Sections Enrolling “Under-35” Need the “Over-35” Seat Classrooms To Offset Their Smaller Size
- Courses needing smaller class sizes due to pedagogical, safety, contractual, or other reasons should be assigned to classrooms of the same size whenever possible

Actual FTES & Fill Rates

- ***Room Fill Rate:*** Actual Enrollment ÷ Room Capacity
- ***Section Fill Rate:*** Actual Enrollment ÷ Section Cap or Limit
- ***Optimal Efficiency:*** Assigning Sections To Rooms That Have Capacities **Equal** to the Section Caps

Exercise (1): Dollars and Enrollments

Efficiency

- Efficiency is attained when resources (classrooms & faculty assignments) ***are*** allocated to their most productive uses.
- Examples:
  - Block Scheduling Practices are followed
  - Section caps match classroom capacities
  - Quality and Pedagogical Goals Are Considered
  - Sections offered (supply) matches sections needed (demand by students)
  - Over-scheduling and Under-scheduling Are Minimized

Inefficiency

- Inefficiency occurs when resources are ***not*** being used to their full potential
- Examples:
  - Section caps have been set **lower** than classroom capacities
  - Too many course sections offered relative to number needed (**over-scheduling**)
  - Too few course sections offered relative to number needed (**under-scheduling**)
  - Scheduling too many courses that fulfill the same General Education requirement or in the same time block

Why Inefficiency Is Undesirable

- Costs-per-section Are Pushed Upward, thus denying other programs budget support
- Student Access Suffers When Too Few Needed Course Sections Are Being Offered
- Student Completion and Success Suffer When Needed Sections Not Available Or Offered

Exercise (2): If my classroom only holds 25 students, how can I be expected to teach 35?

Enrollment Target At 35/Section

What's Needed To Reach An Enrollment Target of 35 Students Per Section

- A Sufficient Number of Classrooms Larger Than 35 to Pull Up the "Under-35s"
- Sufficient Student Demand
- A Sufficient Number (Supply) of Sections That Students Demand
- Section Caps That Match Room Capacities and Pedagogical Needs

The Average of 35 Will Fall If….

- More Under-35 sections Get Scheduled relative to Over-35s
- Over-35s Cannot Fill Sections (student demand shifts)
- Number of Over-35s Scheduled Declines
- Sections are not filling at rates of 90%+ generally (overscheduling)

II. Utilizing Faculty Resources

Two ratios are used to Track Faculty Productivity

- **FTES/FTEF**
- **WSCH/FTEF**

FTES = (WCH x N x TLM)/525

WSCH = WCH x N

FTEF = 15 WCH **1 CLASS = 0.20 FTEF**

Faculty Cannot Generate More FTES Than Their Room's Capacity—Set Targets Accordingly

FTES, WSCH CROSSWALK

N = No. Enrolled	WSCH*	FTES**	FTES ÷ FTEF***	WSCH ÷ FTEF***
20	60	2.0	10.0	300
25	75	2.5	12.5	375
30	90	3.0	15.0	450
35	105	3.5	17.5	525
40	120	4.0	20.0	600
45	135	4.5	22.5	675

*WSCH = WCH x N = 3 x 20 = 60 for 20 students enrolled.

**FTES = (WCH x N x TLM) ÷ 525 = (3 x 20 x 17.5) ÷ 525 = 1,050 ÷ 525 = 2.0 FTES.

***FTEF (full-time equivalent faculty) for one 3-hour class is 0.20 (one-fifth) of a faculty's semester load. Dividing by one-fifth is the same as multiplying by 5.

WSCH and FTES Targets

- ***ENGL 1A*** CAP = **25**
  - WSCH/FTEF Target = **375**
- ***COMMSTUD 1*** CAP = **30**
  - WSCH/FTEF Target = **450**
- ***ECON 1*** CAP = **45**
  - WSCH/FTEF Target = **675**

Note: WSCH/FTEF Target Values are higher in Compressed Calendars to compensate for a smaller TLM (Term Length Multiplier).

- ***ENGL 1A*** CAP = **25**
  - FTES/FTEF Target = **2.5**
- ***COMMSTUD 1 CAP*** = **30**
  - FTES/FTEF Target = **3.0**
- ***ECON 1*** CAP = **45**
  - FTES/FTEF Target = **4.5**

Note: FTES/FTEF Targets require no adjustments for Compressed Calendars – they are the same for all calendar types.

Keeping Productivity High

- Productivity approaches its capacity whenever section caps match room capacity.
- Block Scheduling Structure (e.g. MW 8-9:15 a.m., 7:30-9:20 a.m., 9:30-10:45 a.m., etc.) Enhances Student Access (FTES Productivity)
- Reallocation of Classrooms to Reflect Student Demand Enhances Student Access.
- Allocating Classrooms by Term and by Time Blocks/Modules Enhances Productivity

Wrapping Up

- Creating a Culture of ***Quality <u>with</u> Efficiency*** promotes sustainable financial health.
- FTES Targets are affected by classroom capacity and pedagogical needs.
- WSCH/FTEF and FTES/FTEF Targets are affected by classroom capacity and pedagogical needs.
- Over-35 Classrooms are needed to hit a college's Target 3.5 FTES per section average.

Guiding Questions For Discussion

Guiding Questions

- Does your institution disseminate its 320 report? If so, is it presented and discussed within the context of evaluating how the district is performing enrollment management and/or fiscal monitoring?

- What types of tracking tools are used at your institution for tracking FTES, FTEF, productivity, etc.? How often are those tracking documents updated? Are those tracking tools used in your budget planning?

- What types of tracking tools are used for the Supplemental and Success parts of the SCFF? How often are those tracking documents updated? Are those tracking tools used in your budget planning?

Guiding Questions

- How are the conversations around the SCFF “Fiscal Cliff” and the loss of FTES from the pandemic? Does your college/district expect to fully recover before the hold harmless and/or emergency conditions periods end?

- How are you tracking local demographics (K12 enrollment, HS graduation rates, growth in population, emerging parts of your service area, etc.) and economic indicators (local unemployment rates, building permits, local housing developments, etc.) as a function of capacity to grow?

- How does your planning, institutional effectiveness, and research office interact with you fiscal office around reports? Do you have to wait until year end to get updates on key indicators? Do they support visuals related to trends in factors that impact SCFF?

Guiding Questions

- How are you planning your enrollment reporting and projections around your FON? Have you considered the lag in FON that will occur if you are on hold harmless and/or using emergency conditions FTES?

- The SCFF incentivizes certain activities, along with FTES generation. Have you started to discuss how to take advantage of those funding opportunities?
  - Incarcerate education, dual enrollment, and enhanced noncredit are funded at the “old” credit rate
  - Adjustments in financial aid policy and supporting students with the financial aid application
  - Guided pathways implementation and auto-awarding of degrees/certificates

- Are you re-considering ISAs for fully employed professions (public safety, apprenticeship, etc.) due to the funding imbalances

Guiding Questions

- How are you utilizing stimulus and other one-time funding to improve revenue and access to your community?

- Have you considered what the next year's funding floor on the SCFF might be for you and could it change how you report FTES?

- Have you considered what the Cal-GETC and the elimination of Area E (lifelong learning and self-development) would have on your campus/district?

Questions

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