Fundamentals of Enrollment Management

ACCCA ADMIN 101

TUESDAY, JULY 25, 2023

Presenter

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Modesto Junior College

Program Description

In this collaborative and interactive session, our presenter will introduce the fundamentals of effective enrollment management and explore how the landscape is changing across the system post pandemic. The presenter will look at ways to maximize earnings under the Student Centered Funding Formula and discuss how to implement such changes under the "10+1" and participatory governance. Discussion will center around structural changes needed to promote equitable outcomes for students and an all-encompassing strategic enrollment management approach that changes the way the we recruit and serve students from application to completion.

Framing the Problem

FTES decline since 2018-19 – pandemic, economy, AB 705/1705, Vision for Success (unit reduction), Guided Pathways

Emergency Conditions Allowance (ECA) – ended June 30, 2022

SCFF Hold Harmless (HH) – Ending after 2024-25

Faculty Obligation Number – Tied to funded FTES, dropping as ECA/HH come to end

Increase in online offerings under pandemic – Growing demand for in-person offerings now

Guided Pathways – 90% implementation level

Under ECA and HH, SCFF points and FTES didn't matter – but now…!

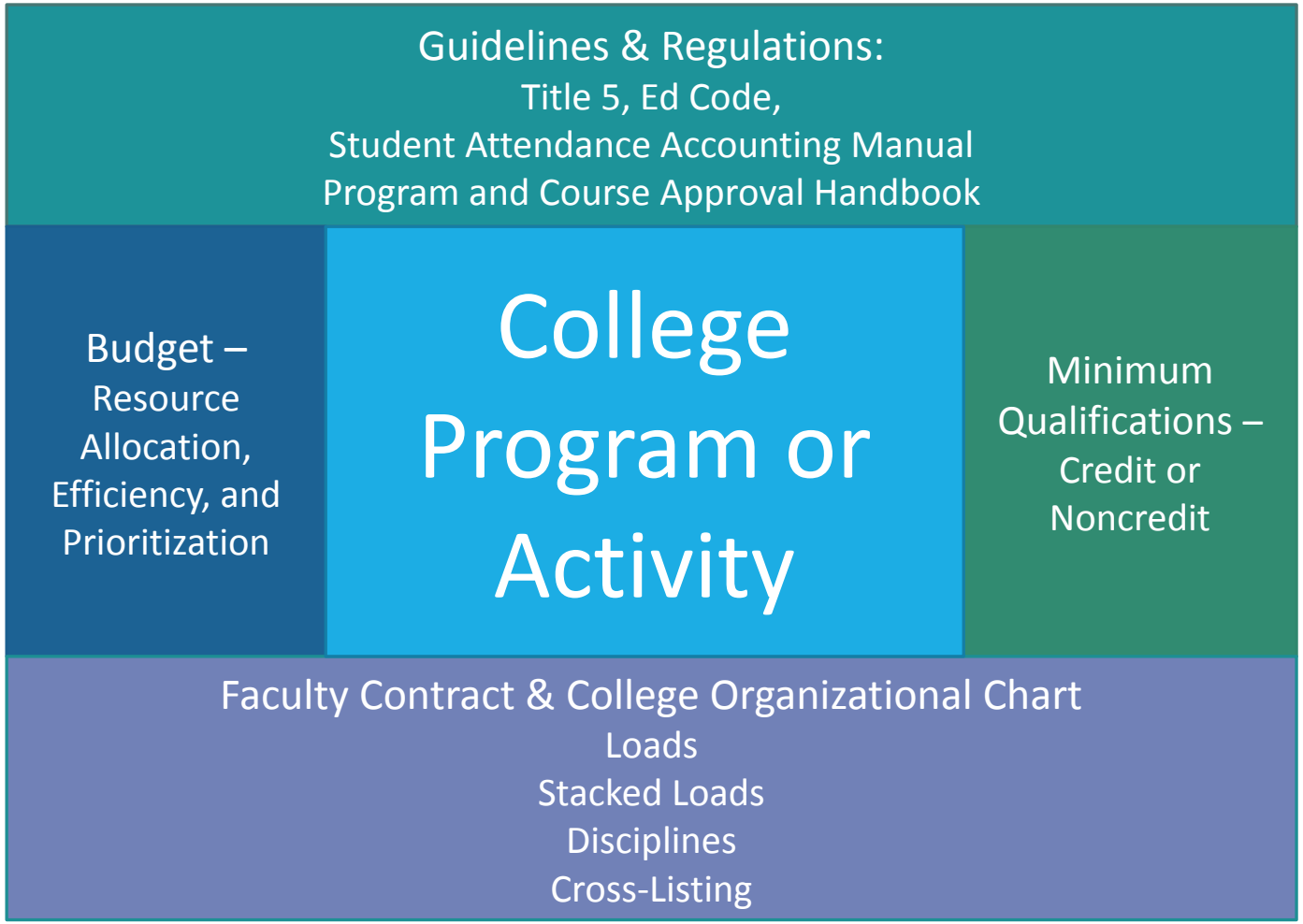
Session Overview

1. Top Drawer Tools
2. The Administrator's Box
3. Efficiency/Productivity & The Handy-Dandy Class Size Balancing Machine
4. Attendance Accounting & Scheduling
5. Budget 101: The SCFF, Exhibit C, and Breaking Even

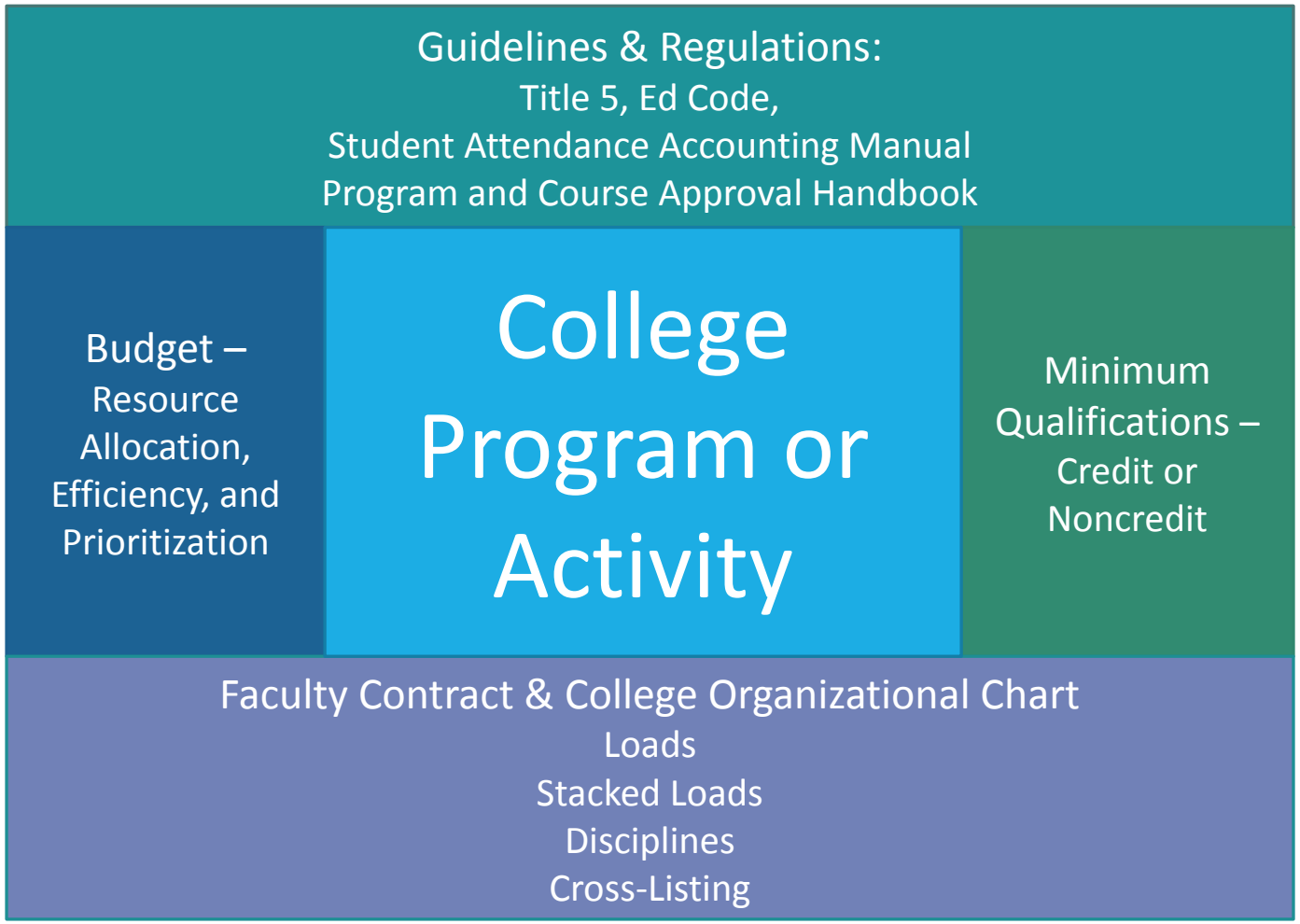
Administrator's Top Drawer Tools

1. Student Attendance Accounting Manual
2. Program and Course Approval Handbook
3. Minimum Qualifications for Faculty and Administrators in California Community Colleges
4. Westlaw's California Code of Regulations – Title 5
5. California Education Code
6. Chancellor's Office Curriculum and Instruction Unit
7. The Course Outline of Record: A Curriculum Reference Guide Revisited – ASCCC, Spring 2017
8. Data Element Dictionary in MIS area of CCCCO Website
9. Bill Search – legislative tracker for California bills past and present

Working Inside the Administrator's Box

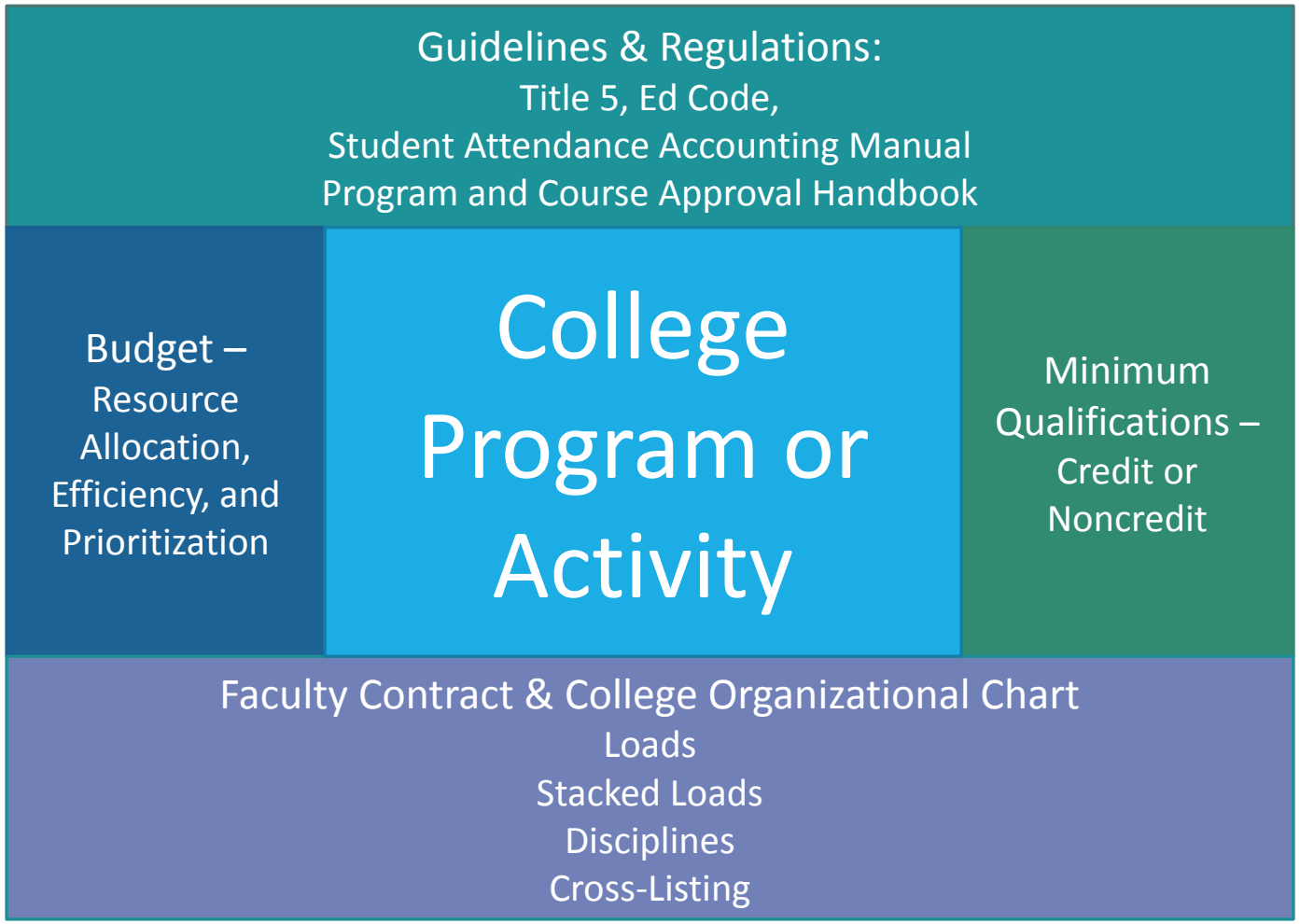


“Thinking Outside the Box”



- Our Task:
  - Know the constraints
  - Know where to find the fine print
  - *Work creatively within the box!*
  - Remain compliant
  - Promote efficiency
  - Promote students-first planning
- Consequences of being outside the box:
  - Regulatory or legal violations
  - Unqualified instructors – repay, lost credits
  - SAAM – repay, “fraud”
  - Contract – grievance, past practice, lawsuits, PERB
  - Budgets & Efficiency
- Noncompliant, illegal, inefficient, ineffective
  → Unemployment

Moving the Boundaries of the Box



- As Administrators, we have the …
  - Positional status
  - Expertise
  - Experience
  - Voice at the table
- To promote and achieve change and improvement
  - Identify areas for change
  - Educate about consequences of *current* situation
  - Develop proposed solutions
  - Work with other constituent groups to secure support (e.g. ACCCA, ASCCC, CBOs, CEOs)
  - Shepherd new ideas to fruition

Administrators as Change Agents

ASCERTAIN THE LOCUS OF CONTROL

- Local practice – College or District
- Local policy – College or District
- Accreditation expectations
- Accreditation requirements
- State guidelines for practice
- State regulations
- State laws
- Federal regulations and/or laws

EFFECTIVE CHANGE AGENTS …

- Convincingly explain the “Why”
- Act collectively
- Maintain “sled dog” determination
- Remain patient and trust the process

Three Goals for Today

1

Student-centered flexible scheduling

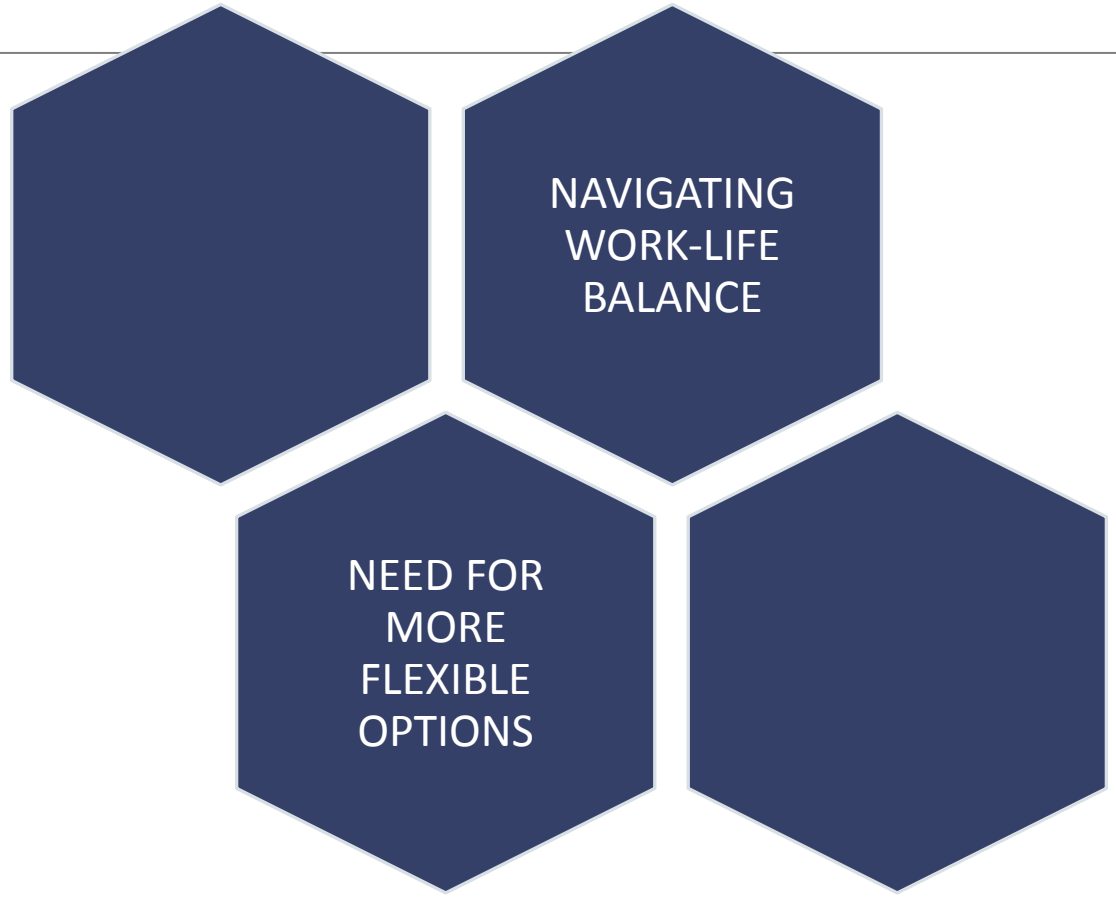
2

Setting targets for FTES and Average Class Size

3

Redesigning programs to maximize SCFF earnings

WHAT KEEPS STUDENTS FROM ENROLLING?



*Based on student survey conducted by the CCCCO and the RP Group

At its simplest, the FTES formula is:

$$\text{FTES} = \frac{\left(\begin{array}{c}\text{Total}\\ \text{Student}\\ \text{Contact}\\ \text{Hours}\end{array}\right) \times \left(\begin{array}{c}\text{Census}\\ \text{Enrollment}\end{array}\right)}{525}$$

Or even simpler:

$$\text{FTES} = \frac{TSCH \times N}{525}$$

Interactive Moment

A class has 52.5 total student contact hours.
Complete the table starting with Enrollment=40.

List 10 items that the remainder will support at the college.

$$\text{FTES} = \frac{\left(\begin{matrix}\text{Total}\\ \text{Student}\\ \text{Contact}\\ \text{Hours}\end{matrix}\right) \times \left(\begin{matrix}\text{Census}\\ \text{Enrollment}\end{matrix}\right)}{525}$$

	Census Enrollment = 40	Census Enrollment = 10
FTES generated		
Earnings at $4840/FTES		
Instructor's salary & benefits @ $150/hour		
Remainder		

Contact Hours are the Problem

Highly variable

Depend on

- Length of the semester
- Length of the course
- Start and end times
- Holidays
- Scheduling pattern
- Modality – online versus in-person or variations thereof

$$\text{FTES} = \frac{\left(\begin{array}{c}\text{Total}\\ \text{Student}\\ \text{Contact}\\ \text{Hours}\end{array}\right) \times \left(\begin{array}{c}\text{Census}\\ \text{Enrollment}\end{array}\right)}{525}$$

But … they only vary *relative* to a fixed value for each course, not all over the map

Course-level variations

Description	Traditional 17.5-week term	Compressed 16.4-week term

Cumulative Effects of Creative Scheduling on 1000 Sections (using TSCH in previous table)

	Traditional Calendar	Compressed Calendar

Initial Principles & Priorities for Flexible Scheduling

Accountable – responsible use of taxpayer dollars and students' time.

Modality agnostic – supports the flexibility students' are seeking.

Reduces excess units to degree

Fiscally responsible – includes checks and balances

Builds incentives for short-term, sequenced and pathways aligned courses

Considers innovation in competency-based education and reforms needed to further implementation.

Others?

Efficiency/Productivity and the Handy-Dandy Class Size Balancing Machine

AN OBJECT LESSON IN THE LOCUS OF CONTROL AND
THE IMPACT OF 1000 SMALL DECISIONS

The Typical Charge to Deans, CIO, and CEO

Improve Productivity, a.k.a. Improve Instructional Efficiency

- Productivity or Efficiency is basic economics – a revenue to expense ratio
- Revenue comes from classes via apportionment (FTES)
- Expense comes most directly from paying the instructor
- Three options

1. The original $\frac{\text{WSCH}}{\text{FTEF}}$
2. The teenager $\frac{\text{FTES}}{\text{FTEF}}$
3. The newcomer $\frac{\text{FTES}}{\text{aFTEF}}$ where aFTEF is annual class load, e.g. 3-unit lec is 10% of annual load.

Interactive Moment – Record these formulas and data on your worksheet

Improve Productivity/Improve Instructional Efficiency

- They are mathematically equivalent – constant multiples of each other – but they *feel* different.

1. The original $\frac{\text{WSCH}}{\text{FTEF}}$ Prototypical value for an "efficient" college ≈ 525
2. The teenager $\frac{\text{FTES}}{\text{FTEF}}$ Prototypical value for an "efficient" college ≈ 17.5
3. The newcomer $\frac{\text{FTES}}{\text{aFTEF}}$ Prototypical value for an "efficient" college ≈ 35
4. $\frac{\text{WSCH}}{\text{FTEF}} = 30 \times \frac{\text{FTES}}{\text{FTEF}} = 15 \times \frac{\text{FTES}}{\text{aFTEF}}$
5. The newcomer $\frac{\text{FTES}}{\text{aFTEF}}$ represents "weighted average class size" – which *everyone* can *feel*.

PRODUCTIVITY TARGETS

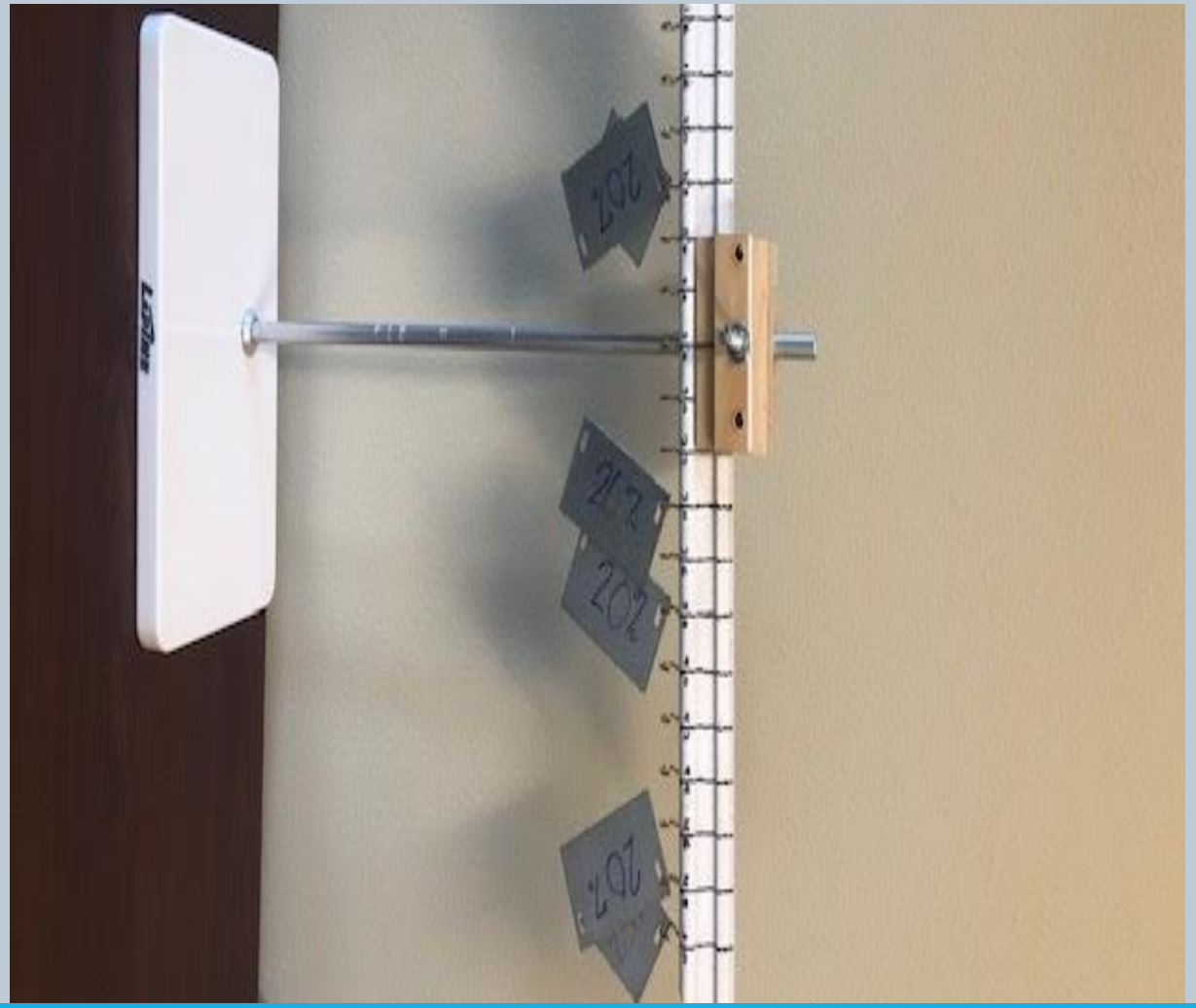
Locus of Control & Points of Maximal Impact

Locus of Control on Productivity

- Local practice – College or District
- Local policy – College or District
- Accreditation expectations
- Accreditation requirements
- State guidelines for practice
- State regulations
- State laws
- Federal regulations and/or laws

Points of Maximal Impact on Productivity

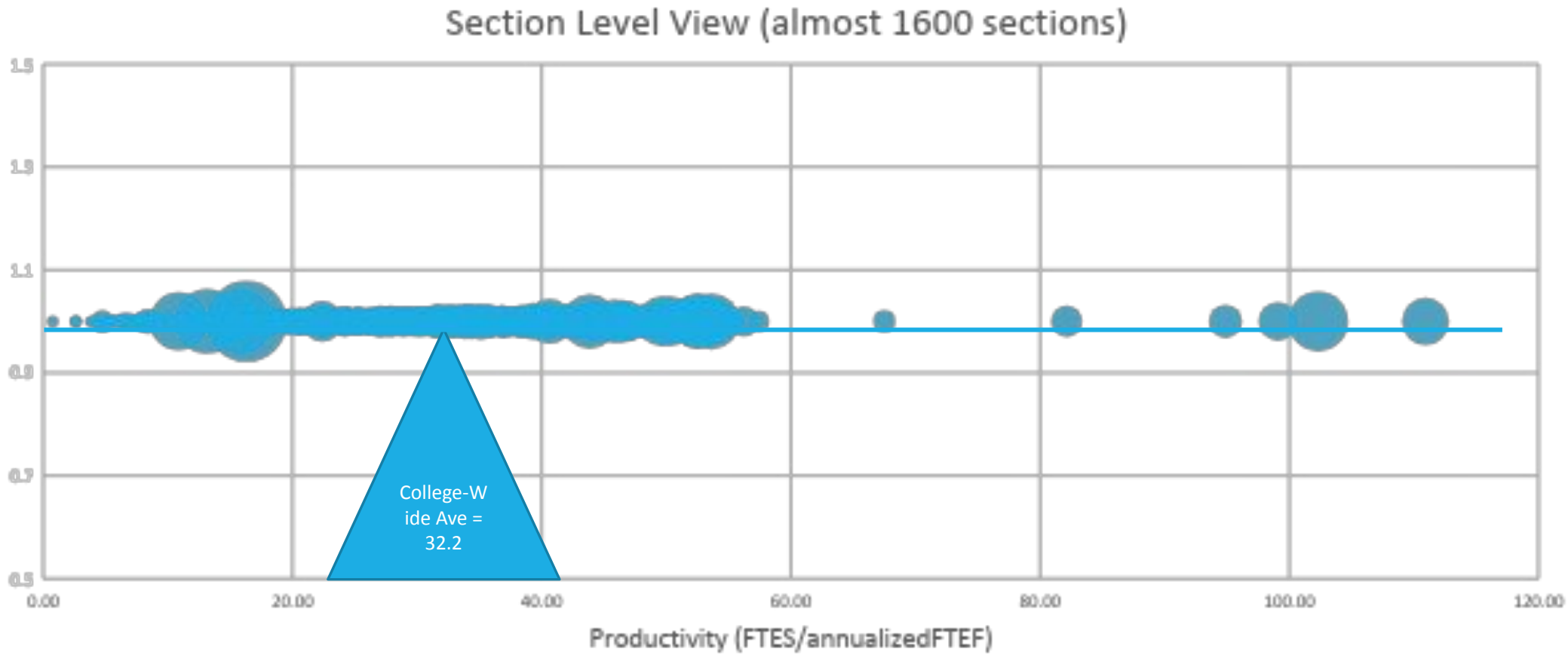
- Schedule Planning with Deans
- Productivity Targets
- Low Enrollment/Cancellation Guidelines
- Deans & Faculty
  - Schedule development/publishing
- Actual Student Demand
- Class Cancellations



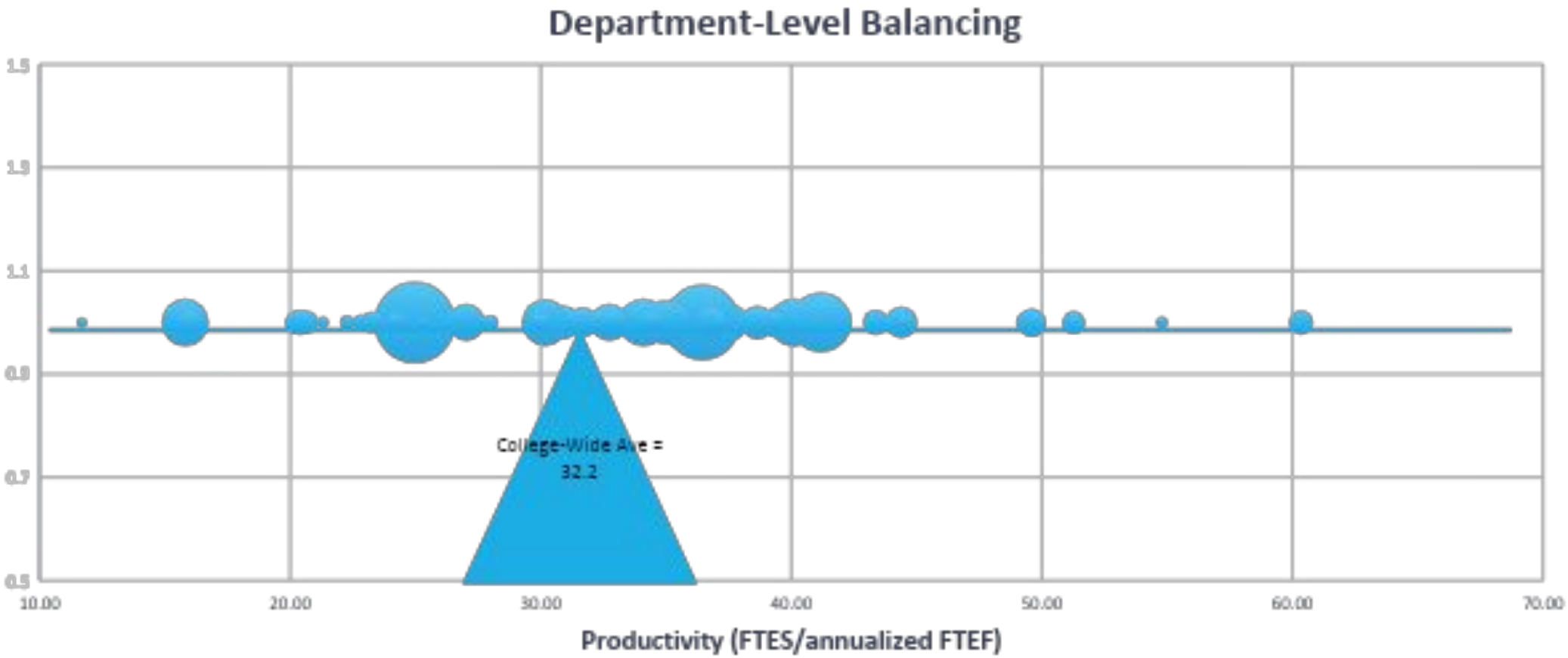
The Handy-Dandy Class Size Balancing Machine

An object lesson and discussion

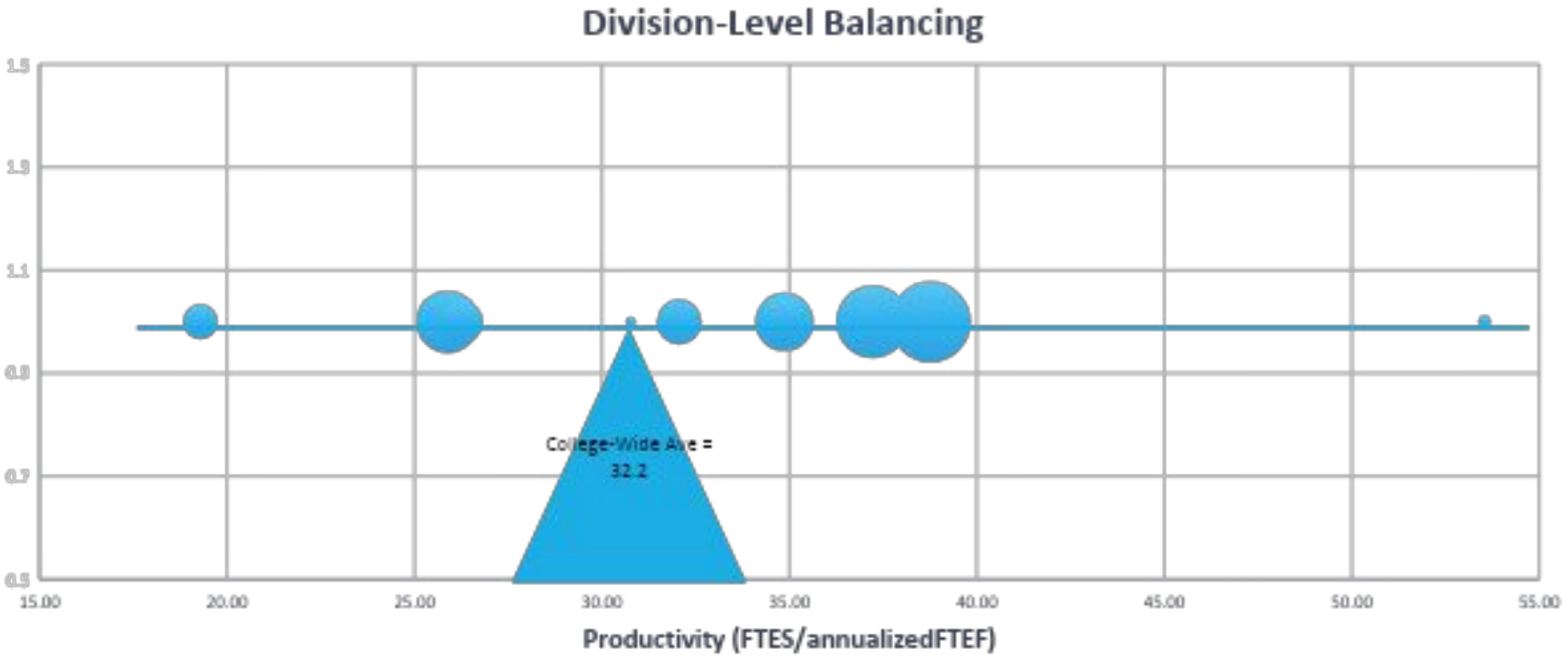
Goal is to move the overall college value



Goal is to move the overall college value

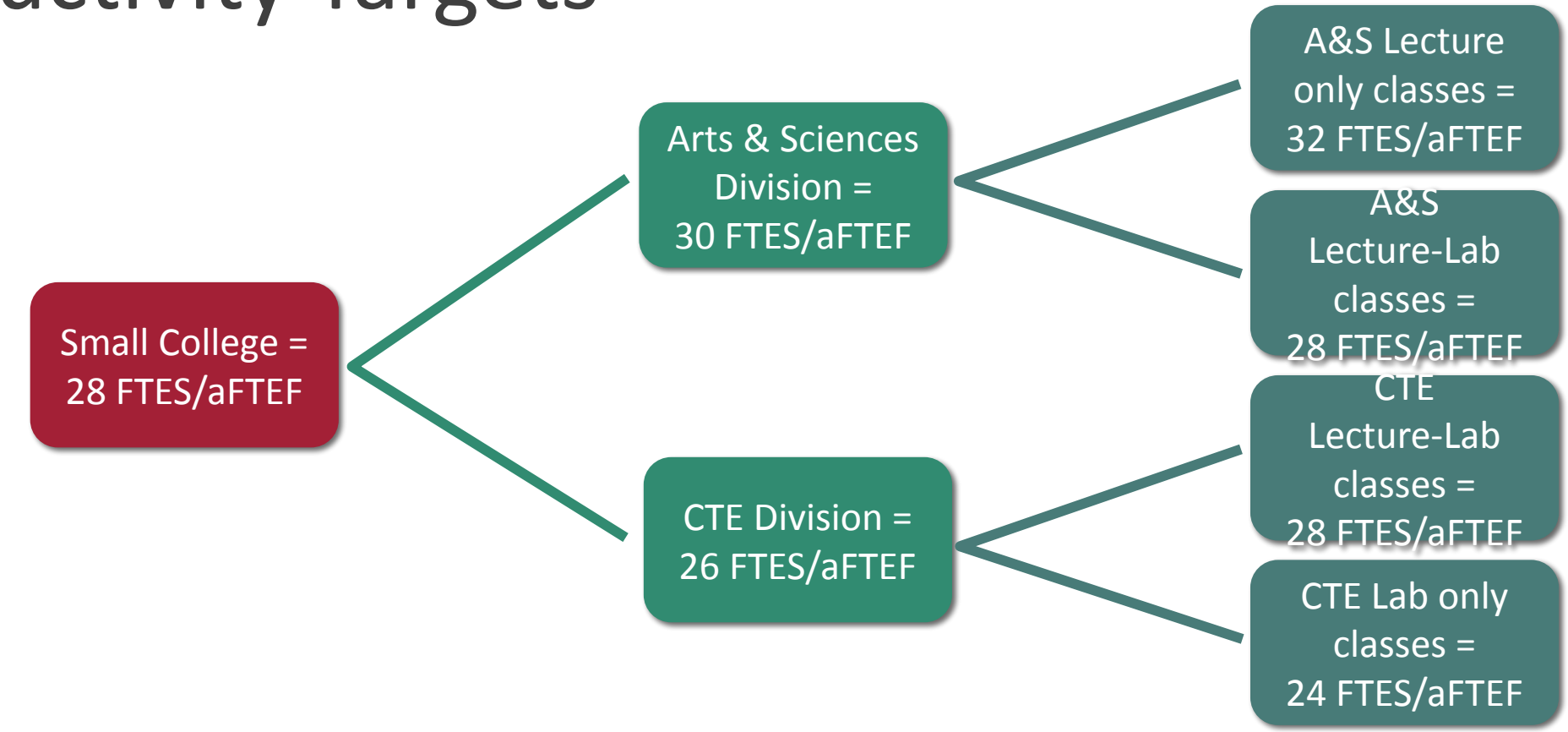


Goal is to move the overall college value



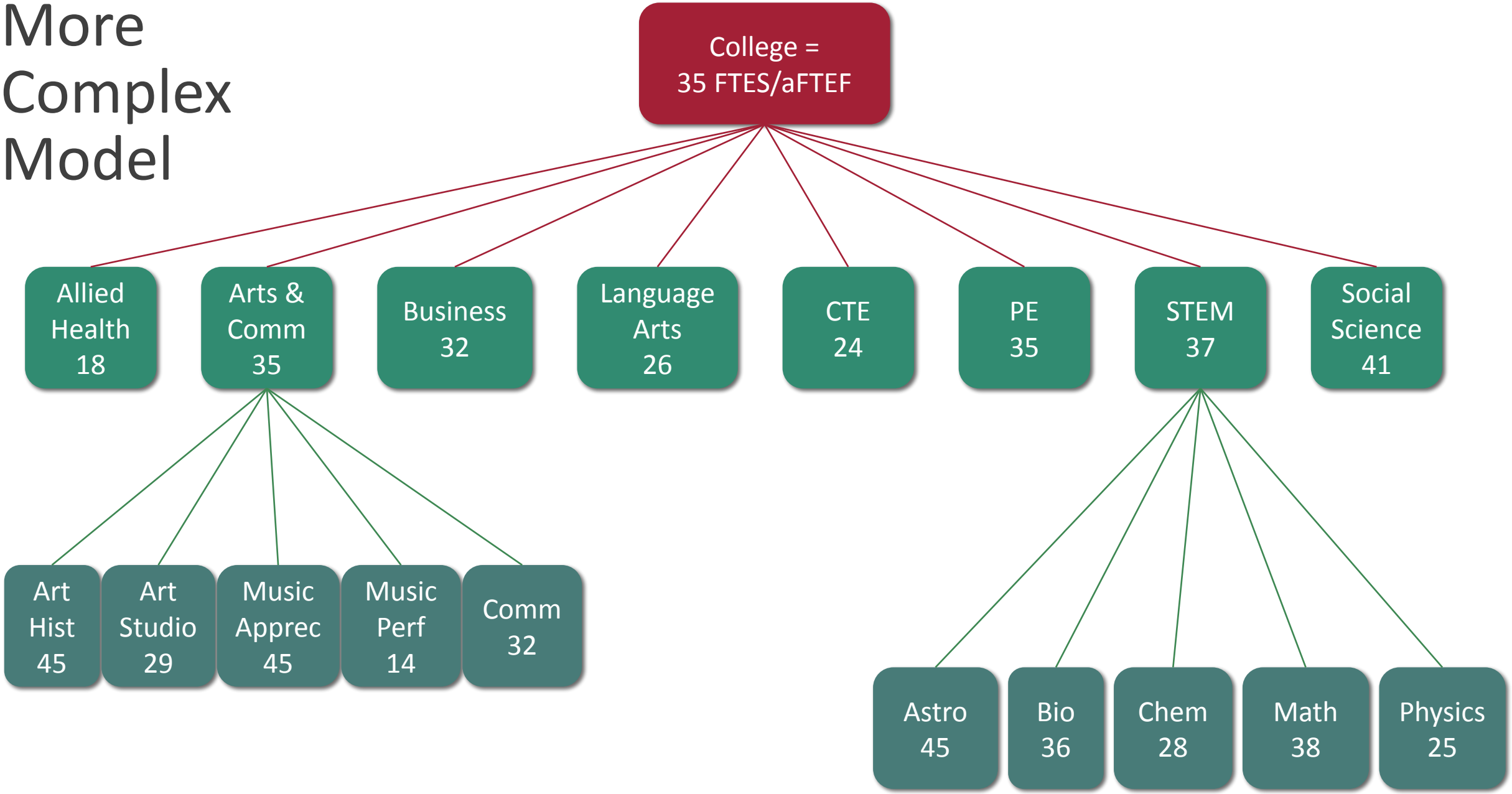
aFTEF = annualized FTEF = % of annual load.
E.g. 3-unit lec = 10% of annual faculty load.

Small College Productivity Targets



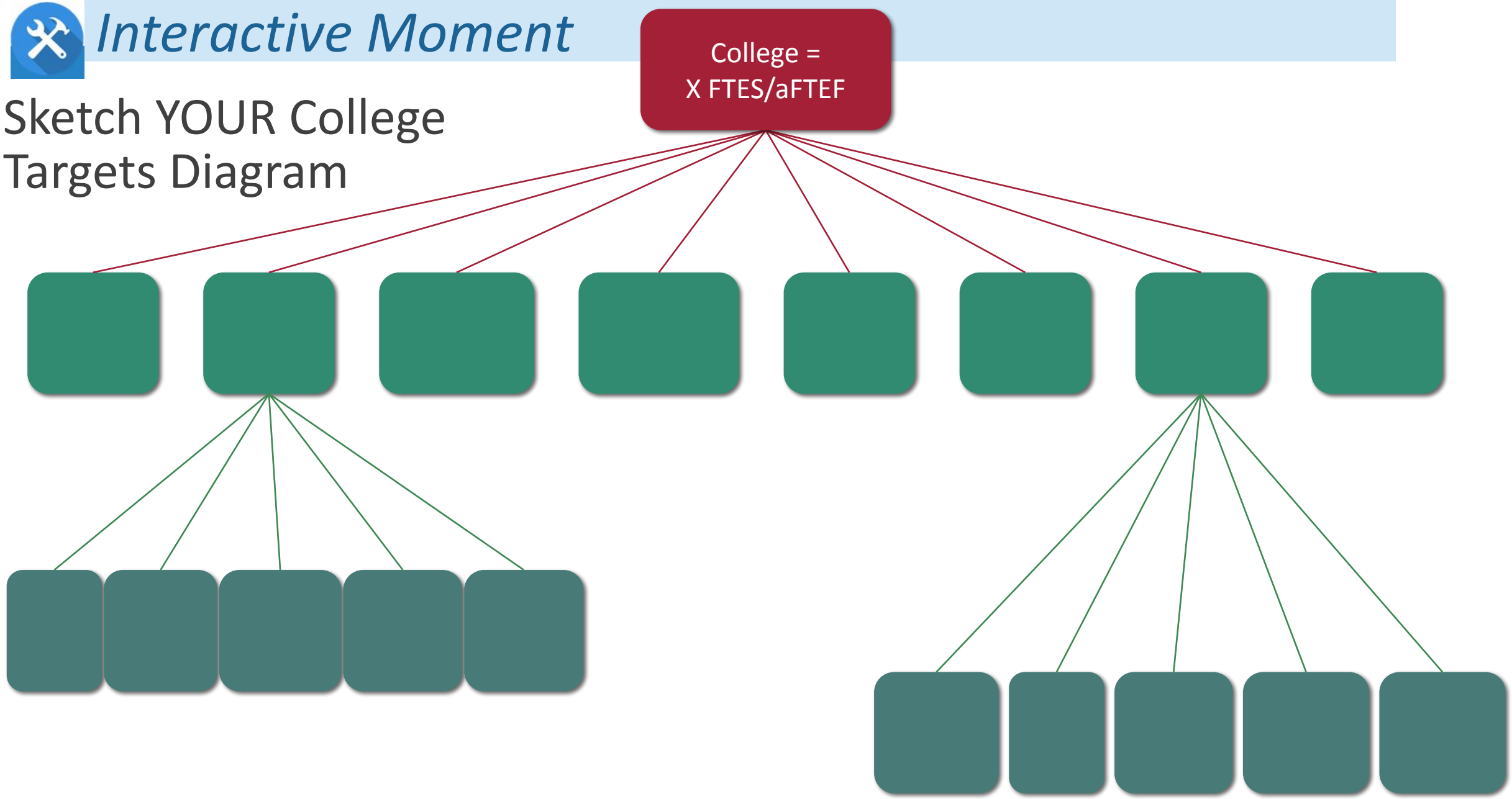
College-wide and Division-level targets are expected of the Deans. Class-level targets shown are for illustration only in this diagram. Divisions are asked to set and pursue department-level targets in support of division- and college-level targets.

More Complex Model



Interactive Moment

Sketch YOUR College Targets Diagram



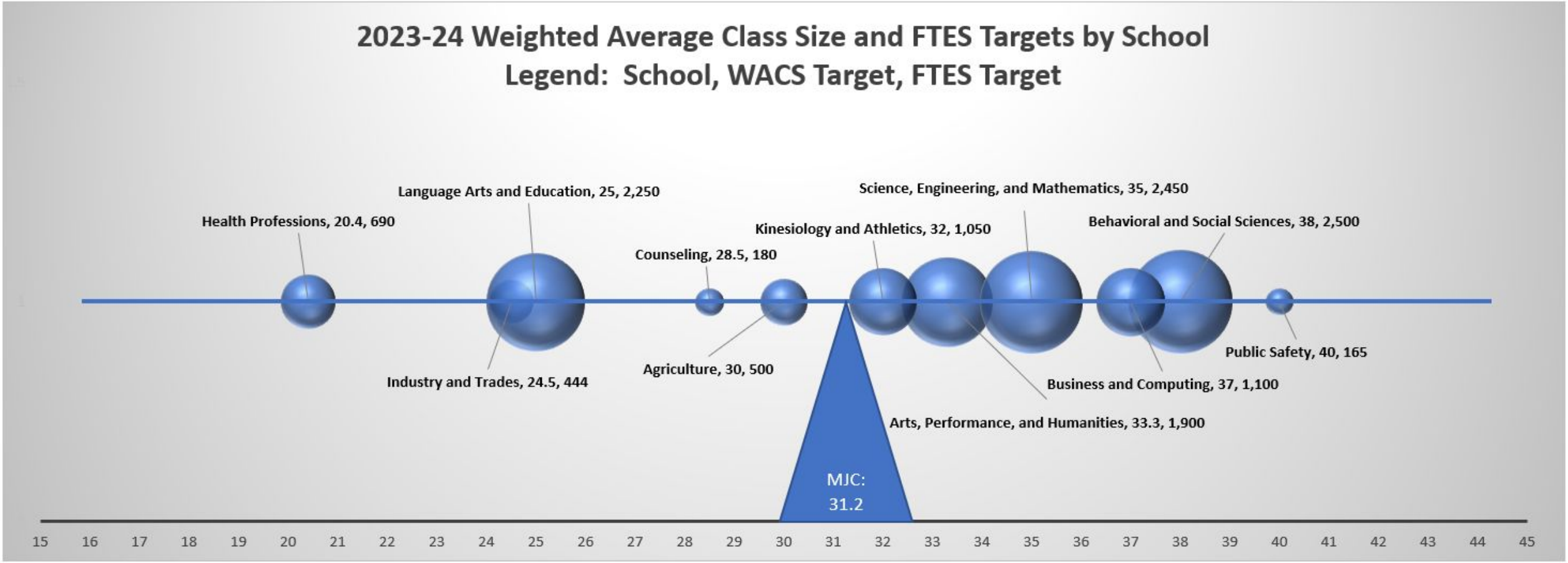
Putting it into practice

2023-24 Targets by School		FTES Goal	WACS Goal	FTEF Allocation
MJC Overall		**13,249**	**31.2**	**849.2**
Agriculture	MAGEN	500	30	33.3
Arts, Performance, and Humanities	MAHCO	1,900	33.3	114.1
Behavioral and Social Sciences	MALHE	2,500	38	131.6
Business and Computing	MBSS	1,100	37	59.5
Counseling	MBUSI	180	28.5	12.6
Health Professions	MCOUN	690	20.4	67.6
Industry and Trades	MFACO	444	24.5	36.2
Kinesiology and Athletics	MLIBR	1,050	32	65.6
Language Arts and Education	MLLA	2,250	25	180.0
Library	MPEHE	18	180.4	0.2
Public Safety	MPUBS	165	40	8.3
Science, Engineering, and Mathematics	MSME	2,450	35	140.0
Workforce Training	MTECH	2	25	0.2

WACS = Weighted Average Class Size = FTES/aFTEF

FTEF Allocation = annual total loads, with 100%=1.0=full semester faculty load

2023-24 Weighted Average Class Size and FTES Targets by School
Legend: School, WACS Target, FTES Target



School	Weighted Average Class Size Target	Annual FTES Target	FTEF Allocation	PTOL FTEF Allocation
Agriculture	30	500	33.3	7.3

Interactive Moment

Use the Target Setting tab on the spreadsheet provided to "ballpark" FTES and WACS goals for each division and see the resulting college-wide impact.

Division	Annual FTES Goal	WACS Goal	aFTEF	FTEF Allocation (Full semester load = 1.0 = 100%)
College-Wide				
Div 1				
Div 2				
Div 3				
Div 4				
Div 5				

Attendance Accounting & Scheduling

FUNDAMENTALS, EXAMPLES, CASE STUDIES, AND CALCULATIONS FOR YOUR OWN DISTRICT

Section Overview

Full-Time Equivalent Student (FTES)

Factors in FTES calculation

- Clock Hour vs Class Hour
- Passing Time and Break Time
- Partial Class Hour
- Multiple Hour Class

Attendance Accounting Methods

- Weekly Student Contact Hour
- Daily Student Contact Hour
- Actual Hours of Attendance (positive attendance)
- Independent Study and Work Experience
- Noncredit Distance Education

Use your Tools – Student Attendance Accounting Manual

What is a Full Time Student? What is an FTES? WHY?

- Full Time Student for purposes of Financial Aid
  - 12 or more units
  - What's the fatal flaw in this logic?
- 1 FTES = 525 contact hours
- Open Student Attendance Accounting Manual.
  Search for "525". Answer the "Why?"
- 525 = 15 x 35

Full-time equivalent student (FTES)

1 FTES =

1 student

15 hours per week

2 semesters of 17.5 weeks

= 525 student contact hours

“A full-time student is in class 15 hours a week (full load) for 1 full year (35 weeks).”

Interactive Moment

Determine FTES for a single student's unit load

- Determine two different configurations of classes that add up to your assigned total units using the table provided.
- Determine total contact hours in a traditional calendar district (17.5 hrs/lec unit)
- Calculate the amount of FTES for each option
- Ex:
  14 unit load
- Does this make sense?

How much of an FTES is a FT student?

Class	Units	Lec Units	Lab Units	Lec Units x 17.5 = Lec Hours	Lab Units x 52.5 = Lab Hours	Total Hours	Total Hours ÷ 525 = FTES
Psych	3	3	0	52.5	0	52.5	0.1
Bio	4	3	1	52.5	52.5	105	0.2
Art	2	1	1	17.5	52.5	70	0.1333
PE	1	0	1	0	52.5	52.5	0.1
Math	4	4	0	70	0	70	0.1333
Total	**14**	11	3	192.5	157.5	350	0.6667

Factors in FTES calculation

Clock hour vs Class Hour

Clock Hour

- A 60-minute time frame

Class Hour

- A period of not less than 50 minutes of scheduled instruction
- There can be only one class hour in each clock hour, except as provided for multiple hour classes
- A class hour is commonly called a “student contact hour”

Factors in FTES calculation

Passing Time and Break Time

- Each clock hour is composed of one class hour segment and a segment referred to as “passing time” or “break time”
  - Think: “Bio break!”
- No additional attendance may be claimed for the 10-minute segment, except for multiple hour classes
- The 10-minute break time permitted in each clock hour may not be accumulated during a multi-hour block scheduled class to be taken all at once at the end of class and be counted for FTES purposes.

Factors in FTES calculation

Partial Class Hour

A "partial class hour" is that fractional part of a class hour in a class scheduled for more than one clock hour

A partial class hour is always taken in conjunction with a full class hour, becoming a Multiple Hour Class

Factors in FTES calculation

Multiple Hour Class

- Any period of instruction scheduled continuously for more than one clock hour
- Each 50 minutes exclusive of breaks is a class/contact hour
- A fractional part of a class hour beyond the last full clock hour is counted from the 51st minute of the last full clock hour
- No class break is allowed in the last full clock hour or the partial class hour
- The divisor for this fractional part of a class hour is 50.

Factors in FTES calculation

Multiple Hour Class Calculation – example 1

8:00 am to 9:25 am

1 full contact hour 8-8:50

Partial Class Hour 8:51 – 9:25 = 35 min

35/50 = 0.7

Total Contact Hour = 1.7

Because single session is less than 95 minutes, there is no “break” time

Factors in FTES calculation

Multiple Hour Class Calculation – example 2

7:00 pm to 10:05 pm

Two full contact hours 7:00-9:00

Includes 20 min “break” time

- 10 min in first hour 7:50-8:00
- 10 min in second hour 8:50-9:00

Last Class Block (incl partial class hour) 9:00 – 10:05 = 65 min

- 65/50 = **1.3**
- No break from 9:00-10:05 because less than 95 min

Total Contact Hours = **3.3**

Factors in FTES calculation

Calculate Contact Hours

Class meets from	Contact Hours	Breaks
0800 to 0850	1.0	None
0800 to 0900	1.0	None
0800 to 0905	1.3	None
0800 to 0950	2.0	One 10-min
0800 to 1000	2.0	One 10-min
0800 to 1005	2.3	One 10-min
0800 to 1030	2.8	One 10-min
0800 to 1225	4.7	Three 10-min

Key to Hours Calculations

50 min + 10-min break +
50 min + 10-min break …
+ final session up to 95 minutes without a break

Example:

190 min = 3.4 apportionment hours is calculated this way:

50 min class + 10 min break = 1st 60-min hr = 1.0 appt hr

50 min class + 10 min break = 2nd 60-min hr = 1.0 appt hr

Final 70-min session with no breaks = 1.4 appt hrs

Total = 3.4 appt hrs

Hrs	Min	# Bk	Bk Min		Hrs	Min	# Bk	Bk Min
1.0	50	0	0		3.0	175	2	20
1.0	55	0	0		3.0	180	2	20
1.0	60	0	0		3.3	185	2	20
1.3	65	0	0		3.4	190	2	20
1.4	70	0	0		3.5	195	2	20
1.5	75	0	0		3.6	200	2	20
1.6	80	0	0		3.7	205	2	20
1.7	85	0	0		3.8	210	2	20
1.8	90	0	0		3.9	215	2	20
1.9	95	0	0		3.9	220	3	30
1.9	100	1	10		3.9	225	3	30
1.9	105	1	10		4.0	230	3	30
2.0	110	1	10		4.0	235	3	30
2.0	115	1	10		4.0	240	3	30
2.0	120	1	10		4.3	245	3	30
2.3	125	1	10		4.4	250	3	30
2.4	130	1	10		4.5	255	3	30
2.5	135	1	10		4.6	260	3	30
2.6	140	1	10		4.7	265	3	30
2.7	145	1	10		4.8	270	3	30
2.8	150	1	10		4.9	275	3	30
2.9	155	1	10		4.9	280	4	40
2.9	160	2	20		4.9	285	4	40
2.9	165	2	20		5.0	290	4	40
3.0	170	2	20		etc.			

Contact Hours Computation Table

Interactive Moment

Determine contact hours. Class meets…

1. Tuesdays from 6:00 pm to 8:50 pm
2. Tuesdays from 6:00 pm to 9:00 pm
3. Tuesdays from 6:00 pm to 9:05 pm
4. Monday & Wednesday from 8:00 am to 10:30 am
5. Monday from 12:00-1:05 pm for lecture and Wednesday from 3:00-6:05 pm for lab
6. Monday & Wednesday from 9:00 to 10:00 am for lecture then from 10:00 am – 1:00 pm for lab.
7. Thursday morning from 8:00-8:30 am for lecture then from 8:30 am to 2:30 pm for lab.

Attendance Accounting Methods

Only options in Student Attendance Accounting Manual

1. Weekly Student Contact Hour Procedure (Weekly Census)
2. Daily Student Contact Hour Procedure (Daily Census)
3. Actual Hours of Attendance Procedure (Positive Attendance)
4. Alternative Attendance Accounting Procedure
    1. Includes most DE plus independent study and work experience
5. Alternative Attendance Accounting Procedure – Noncredit

Attendance Accounting Methods

Weekly Student Contact Hour Procedure

- Primary terms only (fall/spring)
- Class is coterminous with primary term
- Meets **regularly** every week
- Same number of hours each week including TBA hours
- No deduction for holidays (i.e. holidays are “forgiven”)

Attendance Accounting Methods

Census Week - WSCH

- The week nearest to 20% of the number of weeks in the term
- Census date is on Monday of census week
  Except if Monday is a holiday, then census date is the following day

Attendance Accounting Methods

Term Length Multiplier (TLM)

- TLM is the number of weeks in a primary terms with at least three days of instruction
- The TLM for each college is set by the Chancellor's Office based on the college's academic calendar
- Maximum TLM: 17.5 for semesters
- TLMs for 2022-2023 (CCCCO.edu: search for "term length multiplier")

Interactive moment:
Find your TLM!
Find the TLMs of your neighbors.

Attendance Accounting Methods

Over-Arching FTES Formula (census-based)

N = Number of students enrolled at census

TSCH = Total Student Contact Hours (aka Term Student Contact Hours)
= Number of hours each student spends in class for the term

$$FTES = \frac{TSCH \times N}{525}$$

Ex: 40 students in a class with 52.5 total contact hours with each student

$$FTES = \frac{52.5 \times 40}{525} = 4.00$$

Attendance Accounting Methods

FTES Calculation for Weekly Census

TSCH = **W**eekly **S**tudent **C**ontact **H**ours x TLM. N=Census enrollment

$$FTES = \frac{TSCH \times N}{525} = \frac{(WSCH \times TLM) \times N}{525}$$

Ex 1: 40 students in a class meeting 3 hours/week and TLM=17.5

$$FTES = \frac{(3 \times 17.5) \times 40}{525} = 4.00$$

Ex 2: 25 students in a class meeting 6 hours/week and TLM = 16.4

$$FTES = \frac{(6 \times 16.4) \times 25}{525} = 4.69$$

Interactive Moment

Determine Total Student Contact Hours (Weekly Method)

1. Class meets Tuesdays from 6:00 pm to 8:50 pm (TLM = 17.5).

2. Class meets Tuesdays from 6:00 pm to 9:05 pm (TLM = 16.4).

3. Class meets Monday & Wednesday from 8:00 am to 10:30 am (TLM = 16.8).

Working backwards from Course Outline of Record

Determine Course Hours to Schedule

	Example 3-unit lec in 16.4-week term meeting twice per week
1. Get the expected hours from the Course Outline of Record	54
2. Divide by the TLM to get hours per week	3.2927
3. Divide by the number of meetings per week to get hours per session	1.6463
4. Round UP to the nearest tenth of an hour	1.7
5. *Watch out for gray areas!*	clear
6. Check your math. Hrs/session x # sessions/wk x TLM.	1.7 x 2 x 16.4 =
1. How many hours did you end up with?	55.76
2. What is that as a percent of your COR hours? (% of Target = scheduled hrs / COR hrs)	55.76/54 = 1.033 = 103%

7. Good practice:
   1. Exceed the hours on the COR by the least amount possible.
   2. Aim for 100-105% of COR hours
   3. You *can* schedule below the target but must meet or exceed minimums in Title 5 §55002.5

1. 16 hours of lecture + 32 hours outside class per unit
2. 32 hours of activity + 16 hours outside class per unit
3. 48 hours of laboratory per unit

Interactive Moment

Determine Class Length and % of Target

1. Class needs 52.5 contact hours with two meetings per week (TLM=17.5)
   How long is each session?
   What is your percent of target hours?

2. Class needs 90 contact hours with two meetings per week (TLM=16.8)
   How long is each session?
   What is your percent of target hours?

3. Class needs 72 contact hours with four meetings per week (TLM=16.4)
   How long is each session?
   What is your percent of target hours?

Attendance Accounting Methods

Daily Student Contact Hour (DSCH)

- Class meets five or more days
- Meets **regularly**: the same number of hour on each scheduled day, including any TBA hours
- NOT coterminous with primary term
- Always used in summer, winter, and partial terms
  - (e.g. first 8 weeks, last 8 weeks, late-start 12-week classes)
- No hours counted for holidays (i.e. holidays *not "forgiven"*)
  - Option A: College *loses* those contact hours. *Beware T5 min hrs!*
  - Option B: Extend class hours to cover missing holidays.

Attendance Accounting Methods

Census Day - DSCH

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

Attendance Accounting Methods

Course Length Multiplier (CLM)

CLM is the number of days the course is scheduled to meet

That is, the number of class meetings.

Attendance Accounting Methods

FTES Calculation for Daily Census

TSCH = DSCH x CLM. N = Census Enrollment

$$FTES = \frac{TSCH \times N}{525} = \frac{(DSCH \times CLM) \times N}{525}$$

Ex 1: 40 students in a class meeting 2 hours/day for 20 days

$$FTES = \frac{(2 \times 20) \times 40}{525} = 3.05$$

Ex 2: 30 students in a class meeting 8:00-12:30 M-F for four weeks, with one holiday

$$FTES = \frac{(4.8 \times 19) \times 30}{525} = 5.21$$

Interactive Moment

Determine Total Student Contact Hours (Daily Method)

1. Class meets M-Th for 5 wks minus 1 holiday from 8:00 am to 10:30 am. Find term hrs.
2. Class meets 8 Monday nights from 6:00 pm to 9:35 pm. Find term hrs.
3. Monday from 12:00-1:05 pm for lecture and Wednesday from 3:00-6:05 p for lab for 6 weeks. No holidays.

Trick question!

4. Class needs 52.5 contact hours with two meetings per week over 6 weeks. No holidays. How long is each session? What is your percent of target hours?
5. Class needs 90 contact hours with four meetings per week for 10 weeks with one holiday. How long is each session? What is your percent of target hours?
6. Class needs 36 hours of lecture and 108 hours of lab with 19 class meeting sessions, when holidays are removed. How do you schedule it?

Attendance Accounting Methods

Actual Hours of Attendance (Positive Attendance)

- Based on actual count of enrolled students present at each class meeting
- Courses meeting fewer than five days
- Courses **irregularly** scheduled for the number of days per week (full term) or number of hours on scheduled days (short term)
- All face-to-face noncredit courses
- Open entry/open exit courses
- Can be *chosen* for use for *any* credit course. E.g. CCAP
- **Calculation**: divide the total hours of actual attendance by 525

Attendance Accounting Methods

Alternative Attendance Accounting

- One student contact hour shall be counted for each unit of credit for which the student is enrolled as of the census date or day using a *standardized 17.5 TLM*
- TSCH = Units x 17.5. N = Census enrollment.

$$\text{FTES} = \frac{\text{TSCH} \times \text{N}}{525} = \frac{(\text{Units} \times 17.5) \times \text{N}}{525}$$

- Ex: 3-unit online Psych 101 with 40 students

$$\text{FTES} = \frac{\text{TSCH} \times \text{N}}{525} = \frac{(3 \times 17.5) \times 40}{525}$$

Interactive Moment

What's wrong with this example?

- 4-unit Biology with lab for nonmajors, 28 students enrolled
- TSCH = Units x 17.5. N = Census enrollment.

$$\text{FTES} = \frac{\text{TSCH} \times \text{N}}{525} = \frac{(\text{Units} \times 17.5) \times \text{N}}{525}$$

$$\text{FTES} = \frac{\text{TSCH} \times \text{N}}{525} = \frac{(4 \times 17.5) \times 28}{525} = 3.73$$

Attendance Accounting Methods

"Alternative to the Alternative Attendance Accounting"

- Revised T5 58009

  If the online class includes *laboratory* then districts should claim the equivalent number of hours that *would be generated* in a face-to-face laboratory course that corresponds to *traditional length (non-compressed)* primary terms, using the standardized 17.5 TLM.

Attendance Accounting Methods

"Alternative to the Alternative Attendance Accounting"

- In practice, *unless your district allows "extra" hours on the COR*, this becomes the simple formula:

- $\text{FTES} = \frac{\text{TSCH} \times \text{N}}{525} = \frac{[(\text{Lec Units} \times 17.5) + (\text{Lab Units} \times 52.5)] \times \text{N}}{525}$

- Ex: 4-unit Bio, with 3 units lec and 1 unit lab, 28 students

- $\text{FTES} = \frac{[(3 \times 17.5) + (1 \times 52.5)] \times 28}{525} = \frac{[52.5 + 52.5] \times 28}{525} = \frac{[105] \times 28}{525} = 5.6$

Alternative Accounting Formula

With recent revisions to Title 5 sections 58003.1 and 58009, the Total Student Contact Hours for *all* credit courses with *any* online components across *all* of California's 116 community colleges follow this formula:

$$TSCH = \left[\left(\frac{Lecture}{Units}\right) \times 17.5\right] + \left[\left(\frac{Laboratory}{Units}\right) \times 52.5\right]$$

The formula is currently silent on Activity Units – but the right answer is clear. It should be:

$$TSCH = \left[\left(\frac{Lecture}{Units}\right) \times 17.5\right] + \left[\left(\frac{Activity}{Units}\right) \times 35\right] + \left[\left(\frac{Laboratory}{Units}\right) \times 52.5\right]$$

This is exactly what the table in the COR indicates the contact hours should be!

Attendance Accounting Methods

Noncredit Distance Education Courses

- First, the Total Student Contact Hours (TSCH) are calculated
- The number of students is based on two census points
  - *First census: one-fifth in the length of each course*
  - *Second census: three-fifths point in the length of each course*
  - *Enrollment (N) is counted as the **average** of these two.*

Deriving the TSCH for noncredit distance education

(1) Calculate the total number of hours of coursework required for a class:

- The total number of hours of instruction to be received by students in the class.
- The number of hours expected for any outside-of-class work (as noted in the approved class outline), plus
- Any instructor contact as defined by Title 5 Section 55376(b).

(2) Divide the sum of the hours as determined in (1) by 54
(a measure equating to a unit of credit similar to that used in credit distance education).

(3) Multiply (2) by 17.5

- *Note: The factor of 17.5 is to be used no matter what length the course.*

This is not a term length multiplier

Attendance Accounting Methods

Calculating FTES for Noncredit Distance Education

- Determine first census attendance at 1/5 point in term
- Determine second census attendance at 3/5 point in term
- $$\text{FTES} = \frac{\text{TSCH} \times \text{Average of Census Enrollments}}{525}$$
- $$= \frac{\text{TSCH} \times \left(\frac{1st\ Census + 2nd\ Census}{2} \right)}{525}$$

Attendance Accounting Methods

FTES Calculation for Noncredit Distance Education - example

6-week class: 10 hrs/week of instruction & 5 hrs/week of HW

TSCH = (15 × 6) ÷ 54 x 17.5 = 90 ÷ 54 x 17.5 = 29.1667

First Census: (at 1/5 point) 24 students actively enrolled

Second Census: (at 3/5 point) 20 students actively enrolled

$$\text{FTES} = \frac{\text{TSCH} \times \left(\frac{1st\ Census + 2nd\ Census}{2}\right)}{525}$$

$$= \frac{29.1667 \times \left(\frac{24+20}{2}\right)}{525} = 1.222$$

Interactive Moment

Intricacies of Non-Credit Distance Education Apportionment

1. What do the 54 and 17.5 in this calculation trace back to?
2. Do the two factors “relate”?
3. Is there homework in noncredit?
4. What about “office hours”?
5. Do you earn *more* or *fewer* hours with this average value?
6. Is this a prevalent methodology?

Budget 101: The SCFF, Exhibit C, Maximizing Points, and Breaking Even

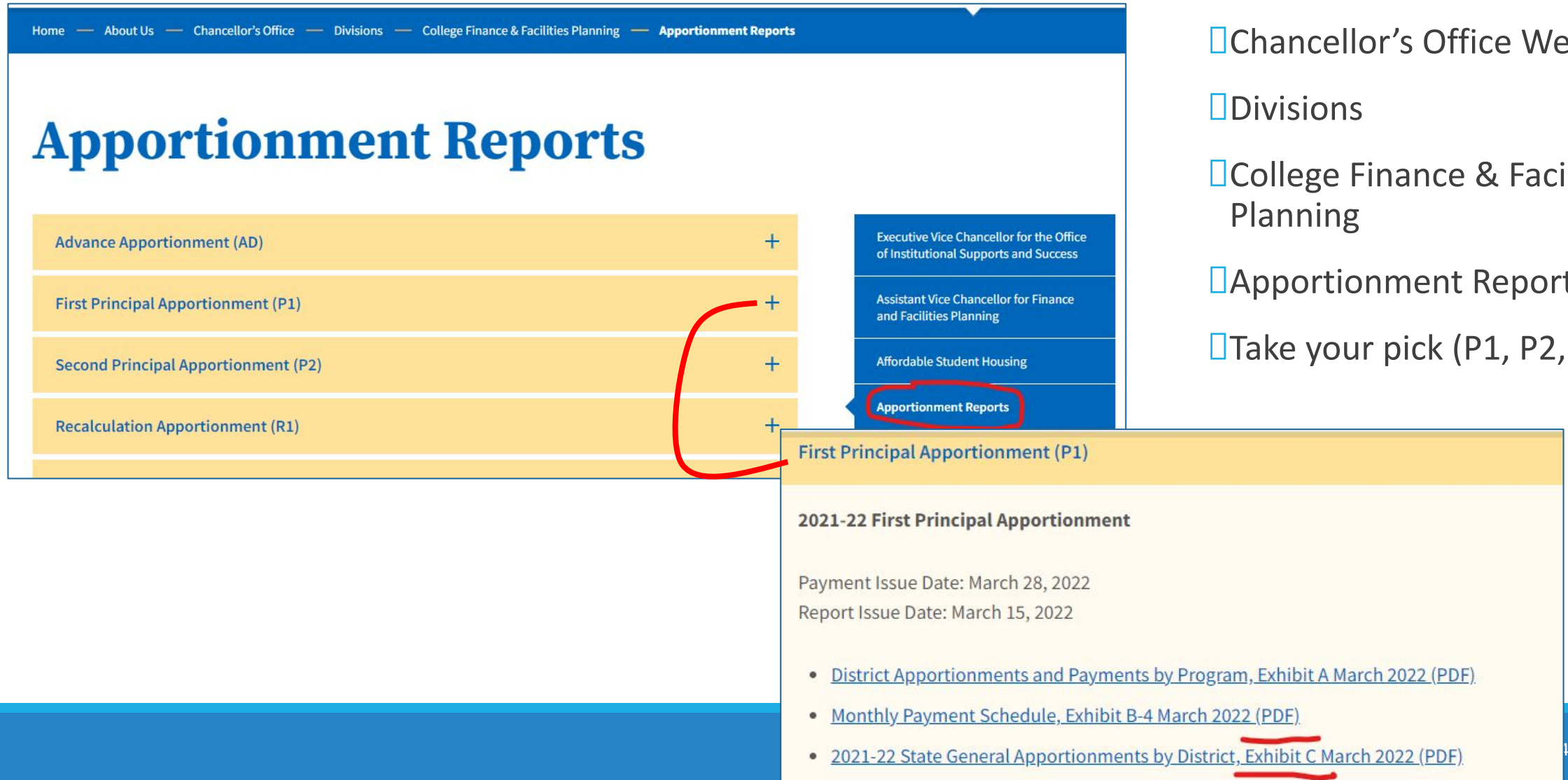
DOLLARS AND CENTS

Exhibit C

APPORTIONMENT REPORT SHOWING RICH DETAIL OF HOW WE ARE EARNING REVENUE FROM THE STATE

cccco.edu

Navigating to Apportionment Reports



- Chancellor's Office Website
- Divisions
- College Finance & Facilities Planning
- Apportionment Reports
- Take your pick (P1, P2, R1)

To be explored in live demo

Pick your favorite district and find..

1. Basic Allocation - Per-College and Per-Center payments
2. Per-FTES payment rates, FTES counts, total FTES allocation
3. Base Allocation (FTES + Basic Allocation)
4. Supplemental points, payment per point, total supplemental allocation
5. Success points, payment per point, total success allocation
6. Hold Harmless
7. Stability
8. Emergency Conditions

Maximizing Points via Program Design

A SECOND PASS AT GUIDED PATHWAYS

Nested Awards Model – for Max Pts

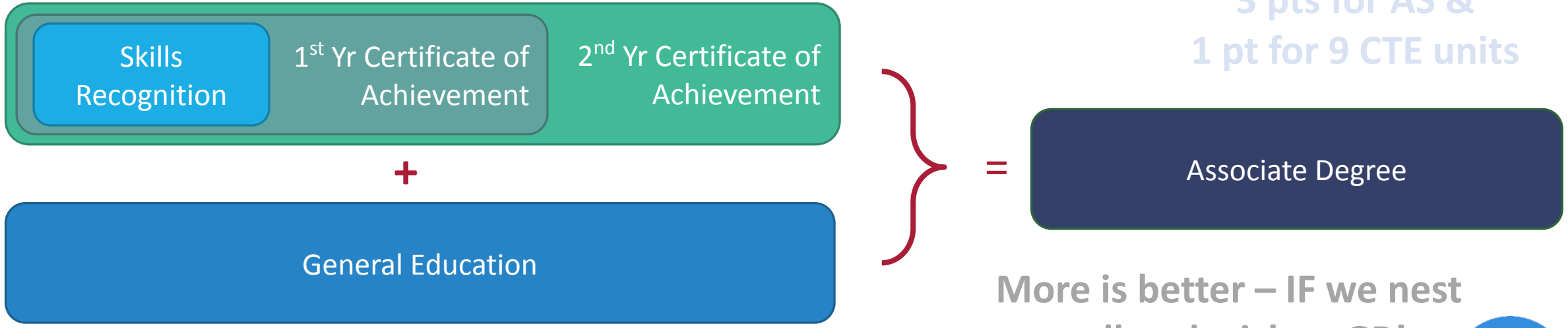
Various combos of points

Skills Recognition (local award) – 9 units, immediate job options — 1 pt for 9 CTE units

1st Year Certificate of Achievement – 16-ish units, career prep: intro job — 2 pts for COA

2nd Year Certificate of Achievement – 25-ish units, career prep: more advanced job — 2 pts for COA & 1 pt for 9 CTE units

Associate Degree – 60 units including major and GE courses — 3 pts for AS & 1 pt for 9 CTE units



More is better – IF we nest well and stick to GP!

Current Catalog

Confusing, convoluted, long list

Relationships between awards are unclear

School of Agriculture

Advanced Heavy Equipment Technician Certificate of Achievement
Agricultural Environmental Science A.S. Degree
Agricultural Environmental Science Certificate of Achievement
Agricultural Sciences A.S. Degree
Agriculture: Sales, Service A.S. Degree
Agriculture: Sales, Service Technician Certificate of Achievement
Agriculture Animal Sciences for Transfer Degree
Agriculture Business A.S. Degree
Agriculture Business for Transfer Degree
Agriculture Plant Science for Transfer Degree
Agriculture Science A.S. Degree
Agriculture Science Certificate of Achievement
Agriculture Welding Fabrication Certificate of Achievement
Agriculture Welding Repair Certificate of Achievement
Animal Artificial Insemination Technician Certificate of Achievement
Animal Science A.S. Degree
Basic Heavy Equipment Technician Certificate of Achievement
Commercial Floristry Technician Certificate of Achievement
Crop Science A.S. Degree
Dairy Science A.S. Degree
Design & Fabrication Skills Recognition
Environmental Horticultural Science A.S. Degree
Equine Science A.S. Degree
Equine Science Certificate of Achievement
Fruit Science A.S. Degree
Gas Metal Arc Welding and Gas Tungsten Arc Welding Skills Recognition
Heavy Machinery Management Certificate of Achievement
Irrigation Construction and Installation Certificate of Achievement
Irrigation Design Certificate of Achievement
Irrigation Management Certificate of Achievement
Irrigation Technology A.S. Degree
Irrigation Technology Certificate of Achievement
Landscape and Park Maintenance Certificate of Achievement
Large Animal Veterinary Technician Certificate of Achievement
Mechanized Agriculture A.S. Degree
Mechanized Agriculture Technician Certificate of Achievement
Pipe Welding Skills Recognition
Plant Nursery Production Certificate of Achievement
Poultry Science A.S. Degree
Small Animal Veterinary Technician Certificate of Achievement
Veterinary Technology A.S. Degree
Welding A.S. Degree

2023-24 Catalog

Add hierarchy

Illustrate nested awards

Possibly show links to diagrams of nesting

- Agriculture
  - Agriculture Business
    - AS-Agriculture Business
    - AS-Agriculture: Sales, Service
    - AST-Agriculture Business
    - COA-Agriculture: Sales, Service Technician
  - Agriculture Science
    - AS-Agricultural Sciences
    - AS-Agriculture Science
    - COA-Agriculture Science
  - Agriculture Welding
    - COA-Agriculture Welding Fabrication
    - COA-Agriculture Welding Repair
  - Animal Science
    - AS-Animal Science
    - AS-Dairy Science
    - AS-Equine Science
    - AS-Poultry Science
    - AST-Agriculture Animal Sciences for Transfer
    - COA-Animal Artificial Insemination Technician
    - COA-Equine Science
  - Environmental Horticulture
    - AS-Environmental Horticultural Science
    - COA-Commercial Floristry Technician
    - COA-Landscape and Park Maintenance
- Environmental Science
  - AS-Agricultural Environmental Science
  - COA-Agricultural Environmental Science
- Irrigation Technology
  - AS-Irrigation Technology
  - COA-Irrigation Construction and Installation
  - COA-Irrigation Design
  - COA-Irrigation Management
  - COA-Irrigation Technology
- Mechanized Agriculture
  - AS-Mechanized Agriculture
  - COA-Advanced Heavy Equipment Technician
  - COA-Basic Heavy Equipment Technician
  - COA-Heavy Machinery Management
  - COA-Mechanized Agriculture Technician
- Natural Resources
  - AS-Soil Science
- Plant Science
  - AS-Crop Science
  - AS-Fruit Science
  - AST-Agriculture Plant Science for Transfer
  - COA-Plant Nursery Production
- Veterinary Technician
  - AS-Veterinary Technology
  - COA-Large Animal Veterinary Technician
  - COA-Small Animal Veterinary Technician

Questions to Ask and Answer

Do students *need* both an AS and an AS-T? Think "guidance":

- What are the specific *distinctions* between them?
- Who (which *specific* students) should pursue which award?
- Default philosophies:
  - When an AD-T exists, it should be our sole program *unless* there is a compelling need to also have a local award.
  - Why is just the AS-T insufficient?
  - Is a *generic* AA/AS a sufficient option for the local degree? E.g. AS General Science, AA Behavioral and Social Science, AA Arts and Humanities

Does *every* component of the "smaller" program meet a requirement of the "main" program in each field? (E.g., no course in SR or COA is "wasted")

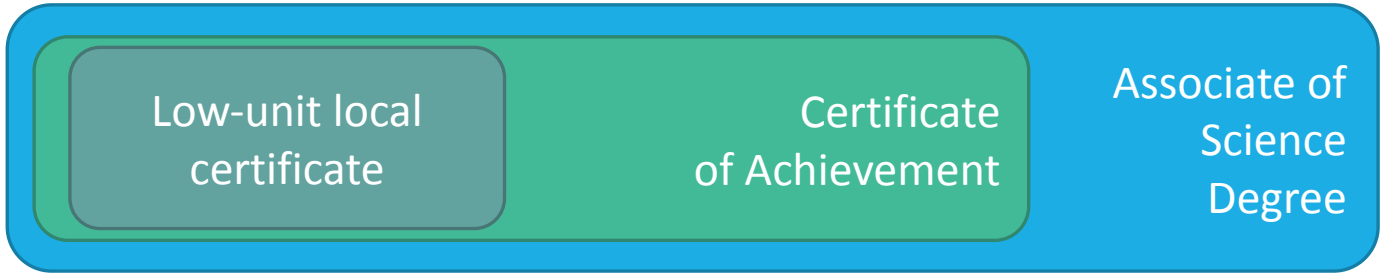
How do the "smaller" programs piece together into the "main" one?

Simple Example – Environmental Science

- Environmental Science
  - AS-Agricultural Environmental Science
  - COA-Agricultural Environmental Science

Interactive Moment

Find an example of a 3-level “seemingly nested” CTE program at your college

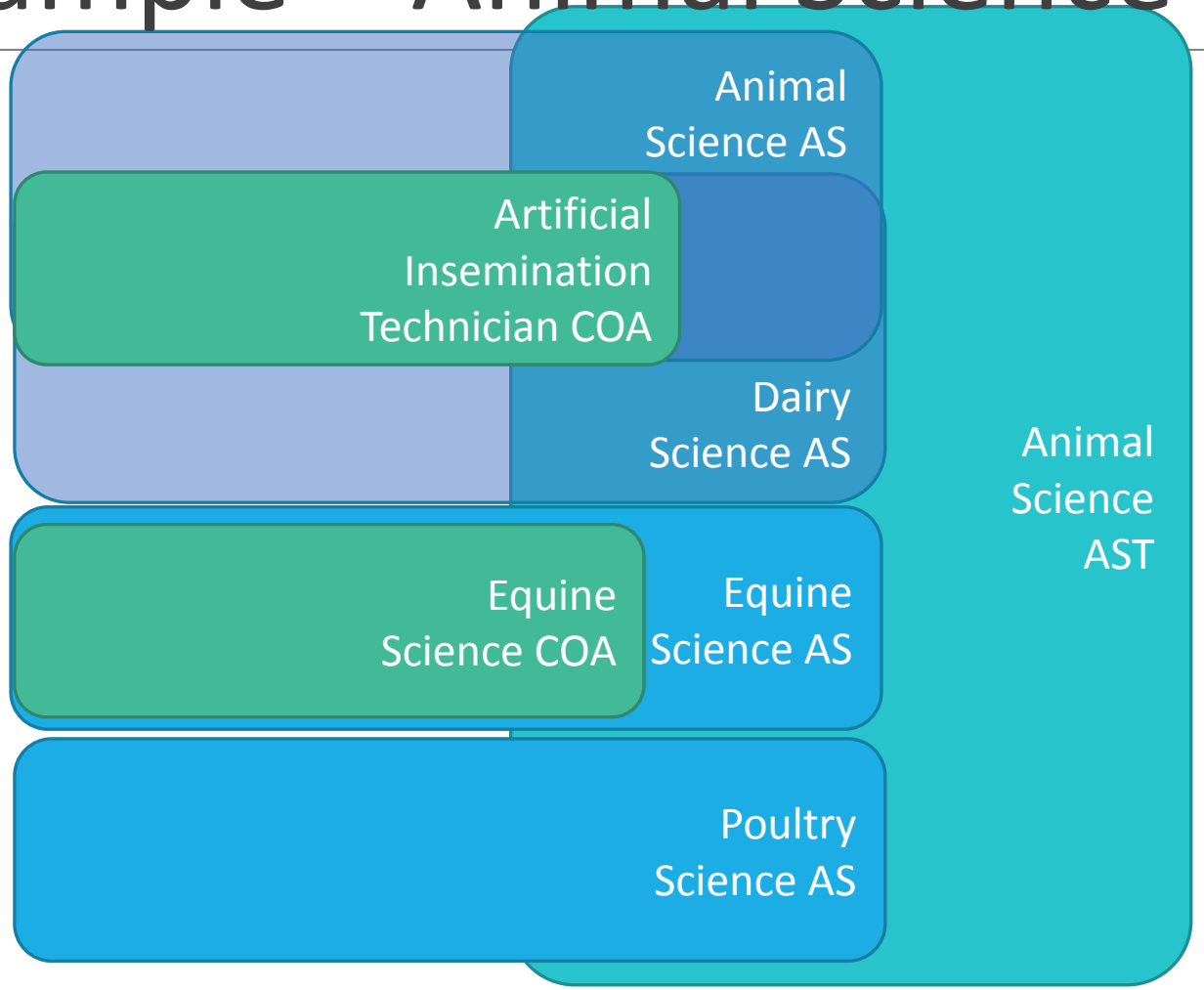


How clear is this nesting *to students* from within your published catalog and/or website?

Are there other documents that clearly communicate these stackable certifications to students?

Challenging Example – Animal Science

Animal Science
AS-Animal Science
AS-Dairy Science
AS-Equine Science
AS-Poultry Science
AST-Agriculture Animal Sciences for Transfer
COA-Animal Artificial Insemination Technician
COA-Equine Science



Or maybe these need separate groupings?

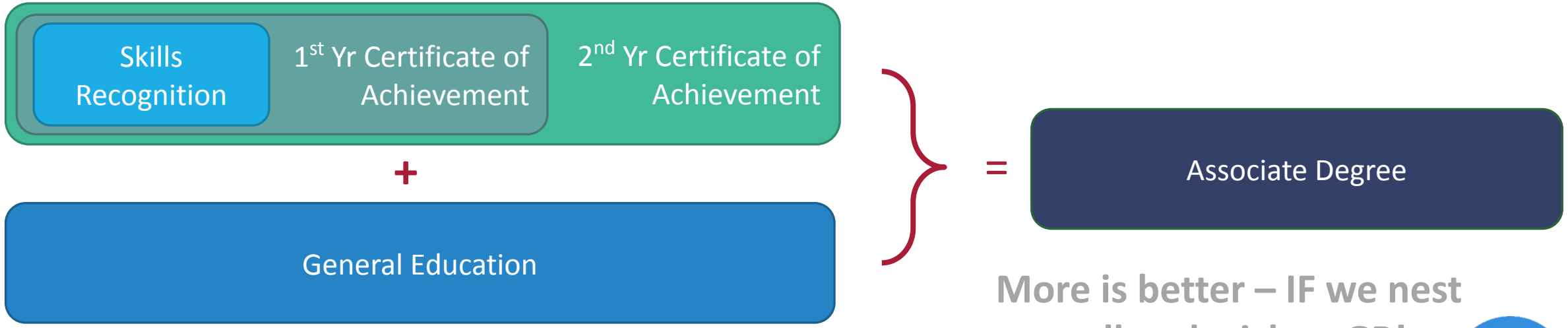
Revisit: Nested Awards Model – for Max Pts

Skills Attainment Certificate – 9 units, immediate job options

1st Year Certificate of Achievement – 16-ish units, career prep: intro job

2nd Year Certificate of Achievement – 25-ish units, career prep: more advanced job

Associate Degree – 60 units including major and GE courses



More is better – IF we nest well and stick to GP!

Suggestion: Ag Science= "1st Year Certificate"?

We HAVE the framework:

- Careers course
- Work Experience
- Breadth Courses

Needs to be 16 units

Must be completable in 1 year!

Agriculture Science
1st Year COA

ENVIRONMENTAL CAREER COURSES - COMPLETE 5 UNITS (Total 5)	
Complete all of the following	
AG115 - Introduction to Agricultural Education & Careers	1
ENVIRONMENTAL CAREER COURSES (Total 4)	
Complete the following number of credits: 4	
AG249 - Agriculture Internship	2
AG259A - Agricultural Work Experience	1
AG259B - Agricultural Work Experience	2
AG259C - Agricultural Work Experience	3
AG259D - Agricultural Work Experience	4
NOTE: FOR SECTION 1: AGRICULTURE CAREER COURSES, STUDENTS MUST TAKE AG 115. STUDENTS MUST COMPLETE AN ADDITIONAL 4 UNITS IN THE SECTION BY TAKING AG 259A-C, OR A COMBINATION OF AG 249 AND AG 259-AB.	0
AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS (Total 9)	
Complete the following number of credits: 9	
AGRICULTURE SCIENCE BREADTH COURSES (Total 6 - 9)	
Complete the following number of credits: 6-9	
PLSC200 - Introduction to Plant Science	3
NR200 - Soils	3
AGEC225 - Agriculture Computer Applications	3
AGEC210 - Elements of Agricultural Economics	3
AGEC200 - Agricultural Accounting and Analysis	3
AGRICULTURE SCIENCE BREADTH COURSES (Total 0 - 3)	
Complete the following number of credits: 0-3	
AGM200 - Introduction to Mechanical Technology	3
AGM235 - Irrigation and Drainage	3

Simple Example – Environmental Science

- Environmental Science
  - AS-Agricultural Environmental Science
  - COA-Agricultural Environmental Science

Incorporate 1st year COA to Maximize Points

But… Are they truly stackable certifications?

Sorted by course - very hard to see if the programs are fully nested

Course	Title	Agriculture Science COA (Yr 1) (14 units)	Environmental Sciences COA (23 units)	Environmental Sciences AS (32 units)
AG 115	Introduction to Agriculture Education & Careers	R	R	R
AG 249	Agricultural Internship	R	R	R
AG 285	Agricultural Communications			RE4
AGEC 150	Sustainable Production Systems		RE3	RE4
AGEC 200	Agricultural Accounting and Analysis	RE1		RE1
AGEC 210	Elements of Agricultural Economics	RE1		RE1
AGEC 225	Agricultural Computer Applications	RE1	RE2	RE1
AGGE 146	Agriculture, Environment, and Society			RE3
AGM 200	Intro to Mechanical Technology	RE2	RE2	RE2
AGM 215	Machinery Management		RE4	
AGM 235	Irrigation and Drainage	RE2	RE2	RE2
EHS 201	Plant Identification & Usage 1			RE3
EHS 202	Plant Identification & Usage 2			RE4
EHS 210	Introduction to Environmental Horticulture Science			RE3
EHS 276	Landscape Maintenance		RE4	
ENSCI 108	Environmental Conservation		RE3	RE3
ENSCI 110	California Water		RE3	RE3
NR 200	Soils	RE1	RE1	RE1
NR 222	Native Tree and Shrub Identification		RE3	RE3
PLSC 200	Intro to Plant Science	RE1	RE1	RE1

You have advanced degrees! Confused?? Put yourself in our students' shoes!

Maybe … Close … We can do better!

Sorted by Restricted Elective (RE) category

Course	Title	Agriculture Science COA (Yr 1) (14 units)	Environmental Sciences COA (23 units)	Environmental Sciences AS (32 units)
AG 115	Introduction to Agriculture Education & Careers	R	R	R
AG 249	Agricultural Internship	R	R	R
PLSC 200	Intro to Plant Science	RE1	RE1	RE1
NR 200	Soils	RE1	RE1	RE1
AGEC 225	Agricultural Computer Applications	RE1	RE2	RE1
AGEC 210	Elements of Agricultural Economics	RE1		RE1
AGEC 200	Agricultural Accounting and Analysis	RE1		RE1
AGM 200	Intro to Mechanical Technology	RE2	RE2	RE2
AGM 235	Irrigation and Drainage	RE2	RE2	RE2
ENSCI 108	Environmental Conservation		RE3	RE3
ENSCI 110	California Water		RE3	RE3
NR 222	Native Tree and Shrub Identification		RE3	RE3
AGGE 146	Agriculture, Environment, and Society			RE3
EHS 210	Introduction to Environmental Horticulture Science			RE3
EHS 201	Plant Identification & Usage 1			RE3
AGEC 150	Sustainable Production Systems		RE3	RE4
AGM 215	Machinery Management		RE4	
EHS 276	Landscape Maintenance		RE4	
AG 285	Agricultural Communications			RE4
EHS 202	Plant Identification & Usage 2			RE4

Better – but more needs to be done to align requirements!

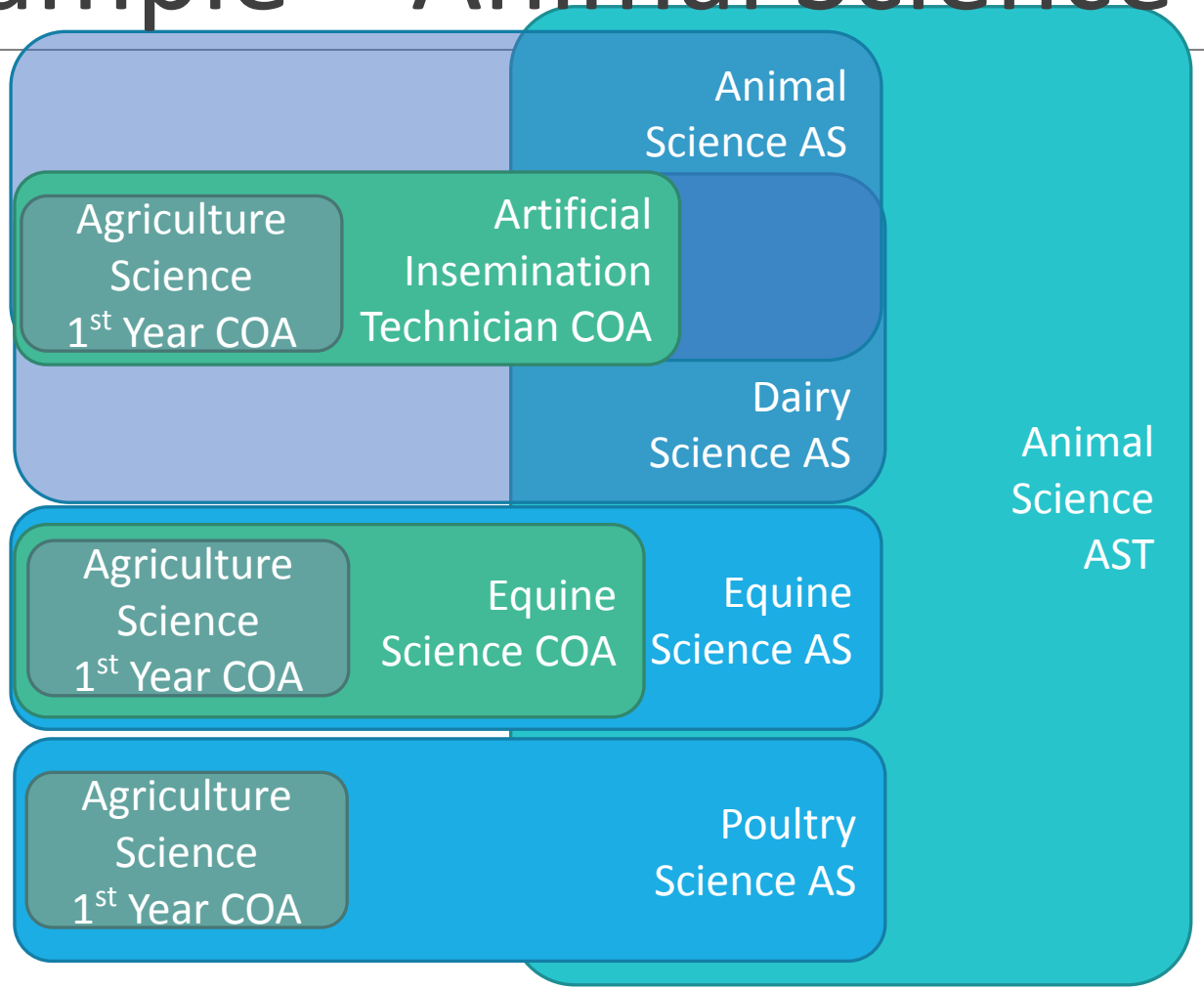
Interactive Moment

Use the Nested Programs tab on the spreadsheet provided to map the programs you selected earlier

Course	Title	Low-unit Cert	COA	AA/AS
Course 1				
Course 2				
Course 3				
Course 4				
Course 5				
Course 6				

Challenging Example – Animal Science

Animal Science
AS-Animal Science
AS-Dairy Science
AS-Equine Science
AS-Poultry Science
AST-Agriculture Animal Sciences for Transfer
COA-Animal Artificial Insemination Technician
COA-Equine Science



Incorporate 1st year COA to Maximize Points

Break-Even Analysis

HOW MANY STUDENTS DOES IT TAKE TO “BREAK EVEN” AT YOUR COLLEGE?

COURTESY OF COREY MARVIN, CIO @ CERRO COSO, CMARVIN@CERROCOSO.EDU

Interactive Moment

Part 1 – Break-Even Analysis – Fill in the blanks

Reference	Item	Your District's Values
1	Funded Credit FTES (column i)	
2	Supplemental Allocation (top of Exhibit C)	
3	Student Success Allocation (top of Exhibit C)	
4	(Supplemental + Success)/(Funded Credit FTES): ((2)+(3))/(1)	
5	Credit FTES Rate (column l)	
6	(Credit FTES Rate) + (Suppl & Success per FTES): (4)+(5)	

Overarching Parameters

At Cyril CostCo Community College, the average full-time faculty compensation (salary and benefits) is:

$152,000.00

In 21-22, the SCFF FTES rate for credit classes is:

$4,212.00

On average, the credit rate is 70% of total apportionment. There is *some* correlation between FTES and the other two categories

Approximate $ per FTES at CCCC:

$6,000.00

Break-Even for FT Faculty (Part 1)

How many FTES does a $152,000 faculty member at CCCC have to generate each year?

$152,000 / $6,000 = 25.33

(Annual Salary & Benefits)/(Per FTES Total Rate) = Average Class Size to Cover S&B!

Break-Even for FT Faculty (Part 2)

25.3 students is enough to break *even* on faculty salary and benefits

How much is needed to generate revenue to pay for supplies, equipment, utilities, non-instructional staff, counselors, librarians???

How can we know?

The 50% Law!!

A full-time faculty member requires **50.6 students per section**!

Interactive Moment

Part 2 – Break-Even Analysis for FT Faculty – Fill in the blanks

Reference	Item	Your District's Values
6	(Credit FTES Rate) + (Suppl & Success per FTES): (4)+(5)	
7	Average Annual FT Salary & Benefits	
8	FTES needed per FT Faculty to cover S&B: (7)/(6) *This is your class size to break even on S&B!*	
9	Apply 50% Law: Double (8) *This is your class size to break even under 50% law!*	

Break-Even for Part-Time/Overload/Summer

How about for adjunct/overload/summer?

At CCCC, the pay rate for adjuncts/overload/summer is uniform at $60/hour + benefits, or about $69.46/hr.

A FT lecture load is 15 hrs/wk x 17.5 wks/term x 2 terms/yr = 525 hours.

Effective annual salary for adj/OL/summer:

$69.46/hr * 525 hrs = $36,466.50

$ 36,466.50 / $6,000 = 6.1 FTES = 6.1 students

But we know 50% law says we really need twice that many:

So 12.2 students per section

Interactive Moment

Part 3 – Break-Even Analysis for PT/OL Faculty – Fill in the blanks

Reference	Item	Your District's Values
6	(Credit FTES Rate) + (Suppl & Success per FTES): (4)+(5)	
10	Average PT/OL Hourly Salary & Benefits	
11	Annual Salary of PT/OL: (10) x 525	
12	FTES needed per PT/OL Faculty to cover S&B: (11)/(6) *This is your class size to break even on S&B!*	
13	Apply 50% Law: Double (12) *This is your class size to break even under 50% law!*	

Break-Even Point College-Wide

Ballpark, what's the college-wide average?

At CCCC, we happen to know 39.4 percent of sections are full-time contract instruction, 60.6 percent adjunct/overload/summer

39.4 percent of sections require 50.6 students

60.6 percent of sections require 12.2 students

Average number of students per section required to pay for faculty compensation, supplies, equipment, utilities, non-instructional staff, counselors, librarians, reassigned time and *everything else* is **27.3** students per section. That's CCCC's target class size.

Interactive Moment

Part 4 – Break-Even Analysis for College – Fill in the blanks

Reference	Item	Your District's Values
9	FT Class Size to Break Even Under 50% Law	
13	PT/OL Class Size to Break Even Under 50% Law	
14	Percent of FTES earned by FT faculty in regular load (written as a decimal)	
15	Percent of FTES earned by PT/OL/summer faculty in regular load (written as a decimal)	
16	*College-wide class size target to break even under 50% law!* (9)x(14) + (13)x(15)	

Considerations at your college

- Do you have a lecture/lab differential? For FT or PT or both?
- Do you have a significant number of sections that are dual enrollment?
- How you have a significant number of sections that are in a prison program?
- Do you teach a lot of sections that do not lead to an SCFF outcome (e.g., non-credit classes)?

Questions and Answers

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