Award Leakage and the Case for an Opt-Out Award System

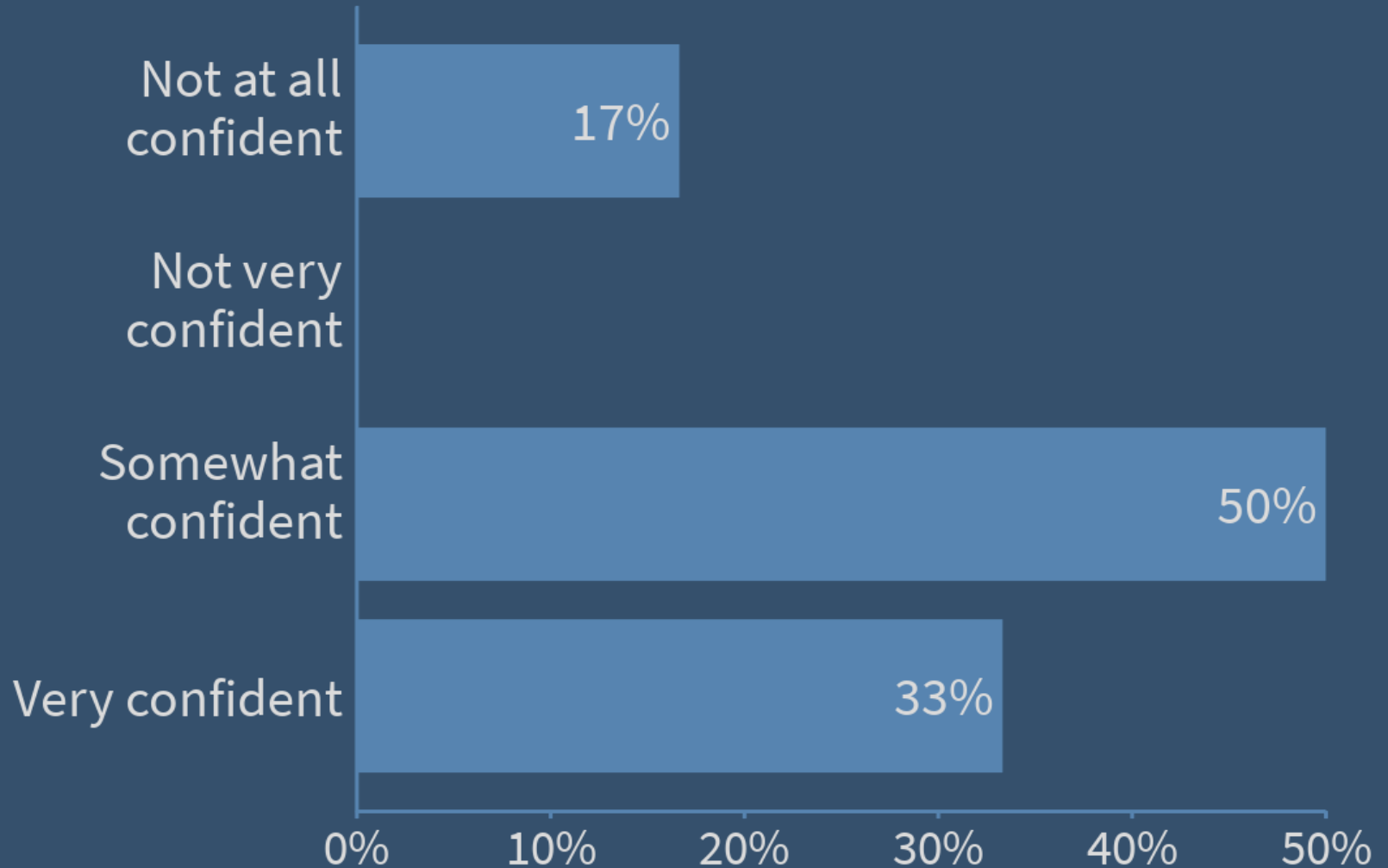Poll Everywhere: pollev.com/vinhnguyen321
Presentation: bit.ly/award-leakage
Code: bit.ly/award-leakage-code

Presented by: Vinh Nguyen and Loris Fagioli
Irvine Valley College

Agenda

1. Background / Motivation

2. Analysis and Results

3. Implementation and Concerns

4. Review of logic to replicate locally

Why are awards important?

Students
- Increased salary (vs some college)
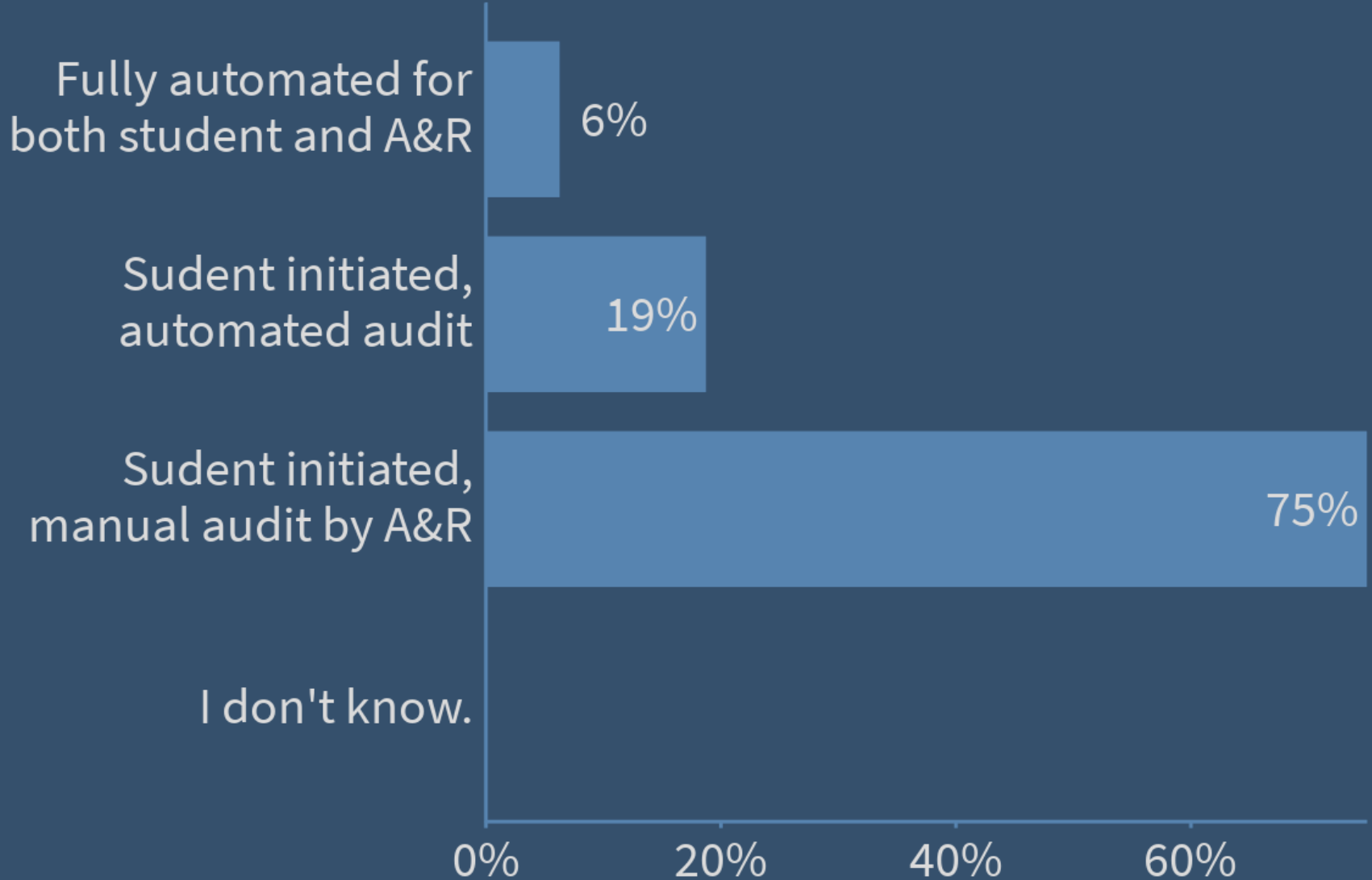- Accomplishment
- Equity Issues

Vision For Success
- State CO:
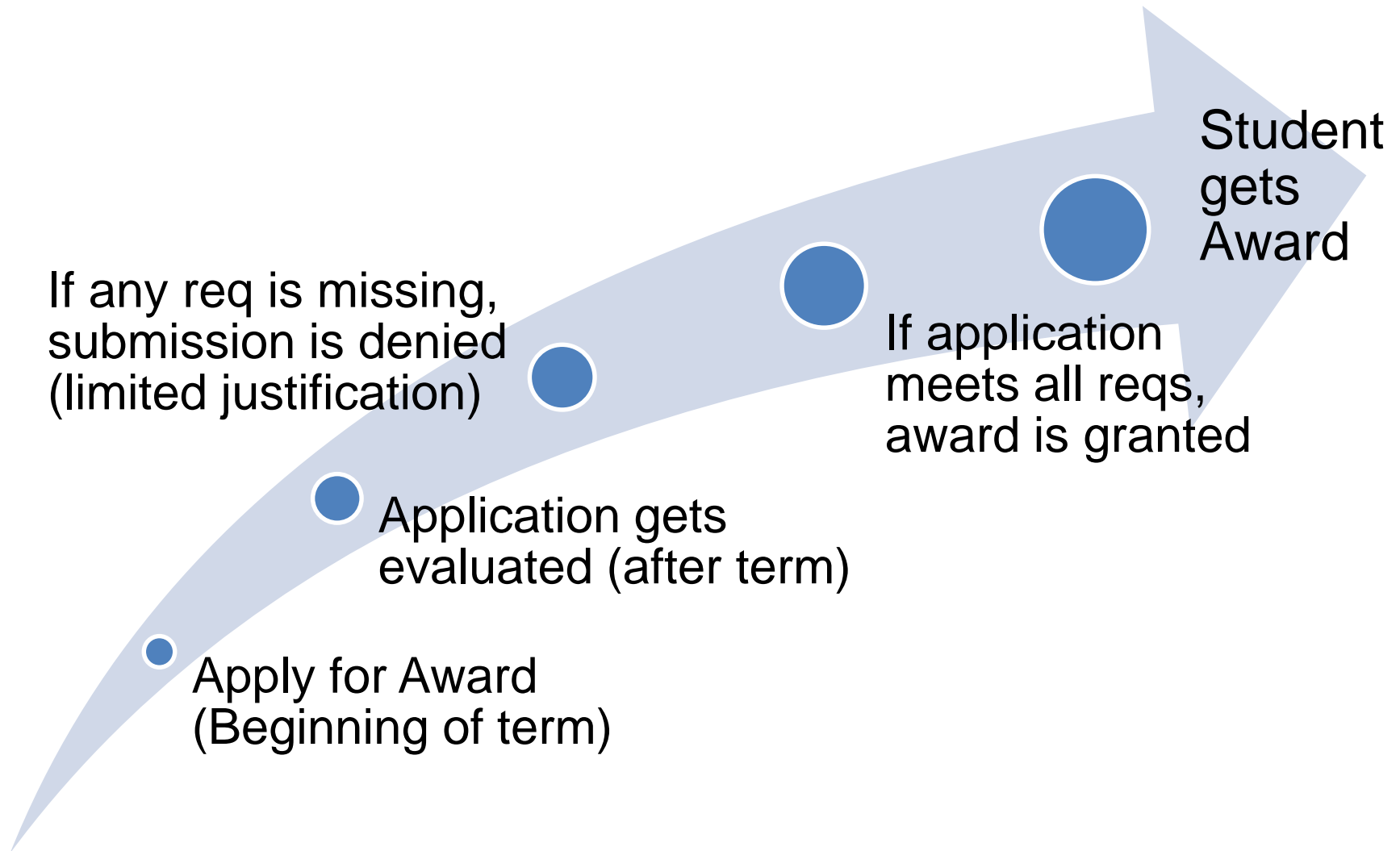 - Increase awards by 20%
- SOCCCD Board
  - Increase 7% annually

Funding Formula
- Certificates: $880
- Associates: $1320
- Associates for Transfer: $1760
- Premiums for some students

How are awards granted to students at your institution?

- Fully automated for both student and A&R — 6%
- Sudent initiated, automated audit — 19%
- Sudent initiated, manual audit by A&R — 75%
- I don't know.

Current State of Granting Awards

Student gets Award

If any req is missing, submission is denied (limited justification)

If application meets all reqs, award is granted

Application gets evaluated (after term)

Apply for Award (Beginning of term)

Our Analysis

Students enrolled in an Academic Year

Qualify but did not apply

Received Award

Our Analysis

Students enrolled in an Academic Year

Qualify but did not apply

Received Award

Single Award

Multiple Awards
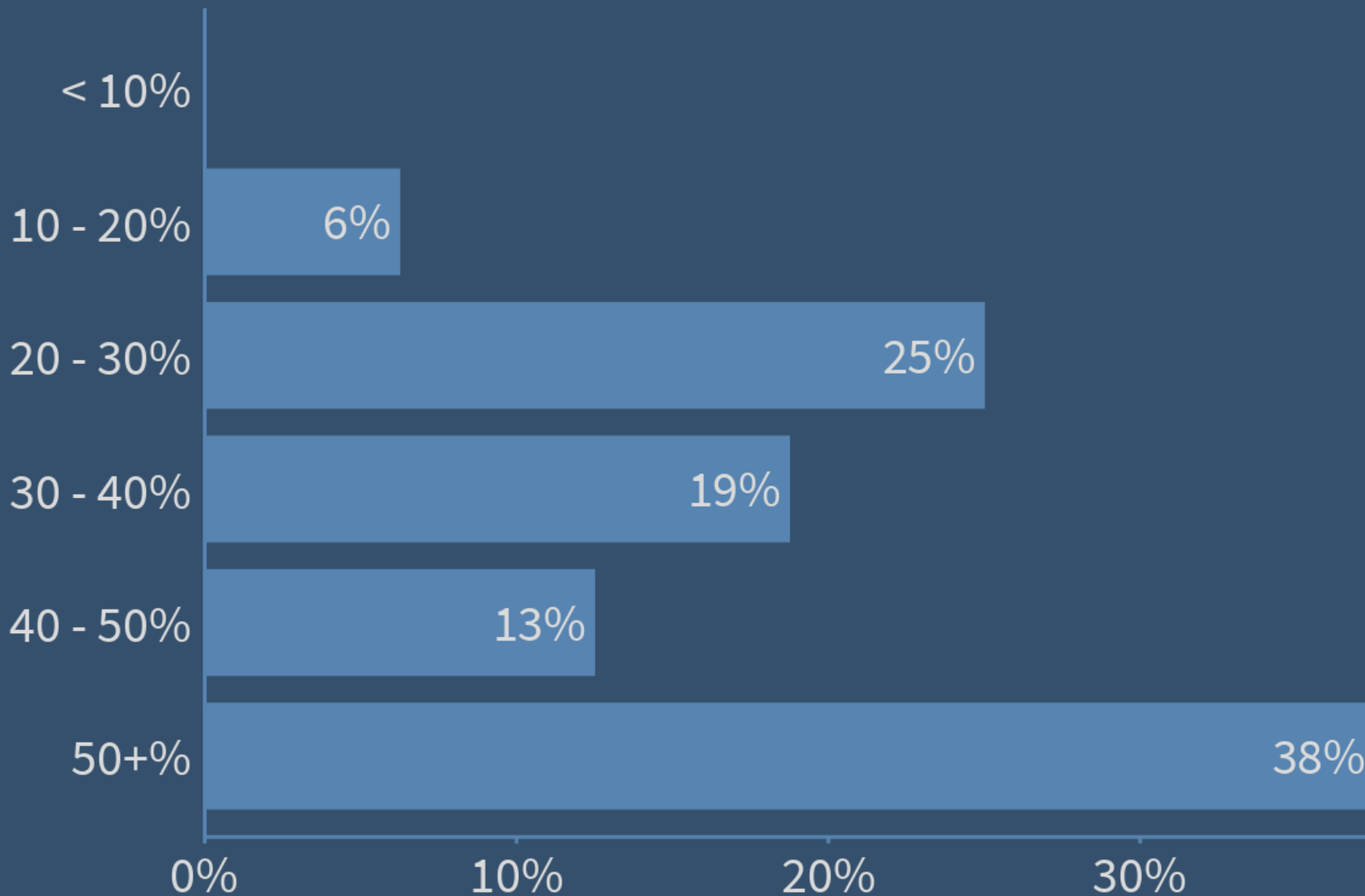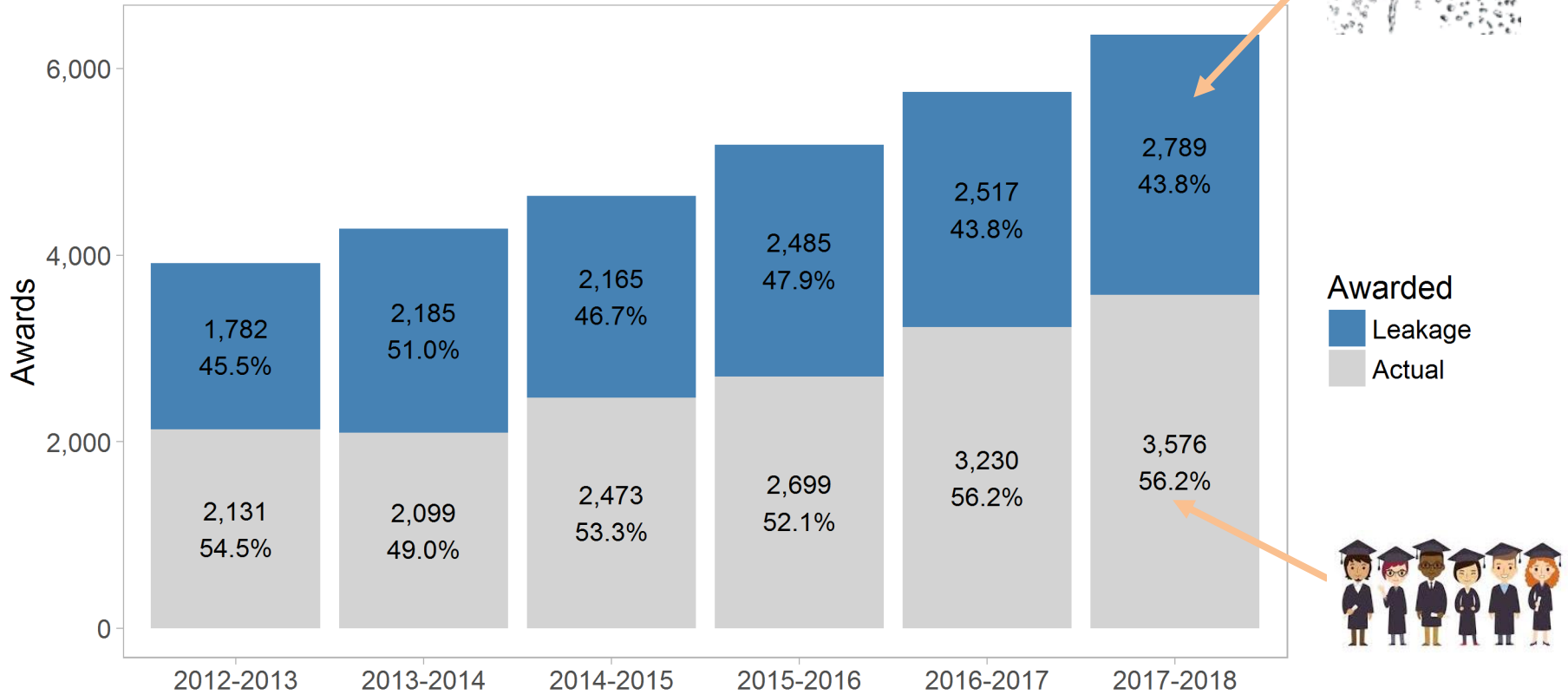
Please note the limitations slide

What do you think is the overall leakage rate at IVC?

Range	Percentage
< 10%	
10 - 20%	6%
20 - 30%	25%
30 - 40%	19%
40 - 50%	13%
50+%	38%

Multiple Award Count

Award Leakage at IVC
All degrees and certificates

Awarded
- Leakage
- Actual

Year	Leakage	Actual
2012-2013	1,782 / 45.5%	2,131 / 54.5%
2013-2014	2,185 / 51.0%	2,099 / 49.0%
2014-2015	2,165 / 46.7%	2,473 / 53.3%
2015-2016	2,485 / 47.9%	2,699 / 52.1%
2016-2017	2,517 / 43.8%	3,230 / 56.2%
2017-2018	2,789 / 43.8%	3,576 / 56.2%
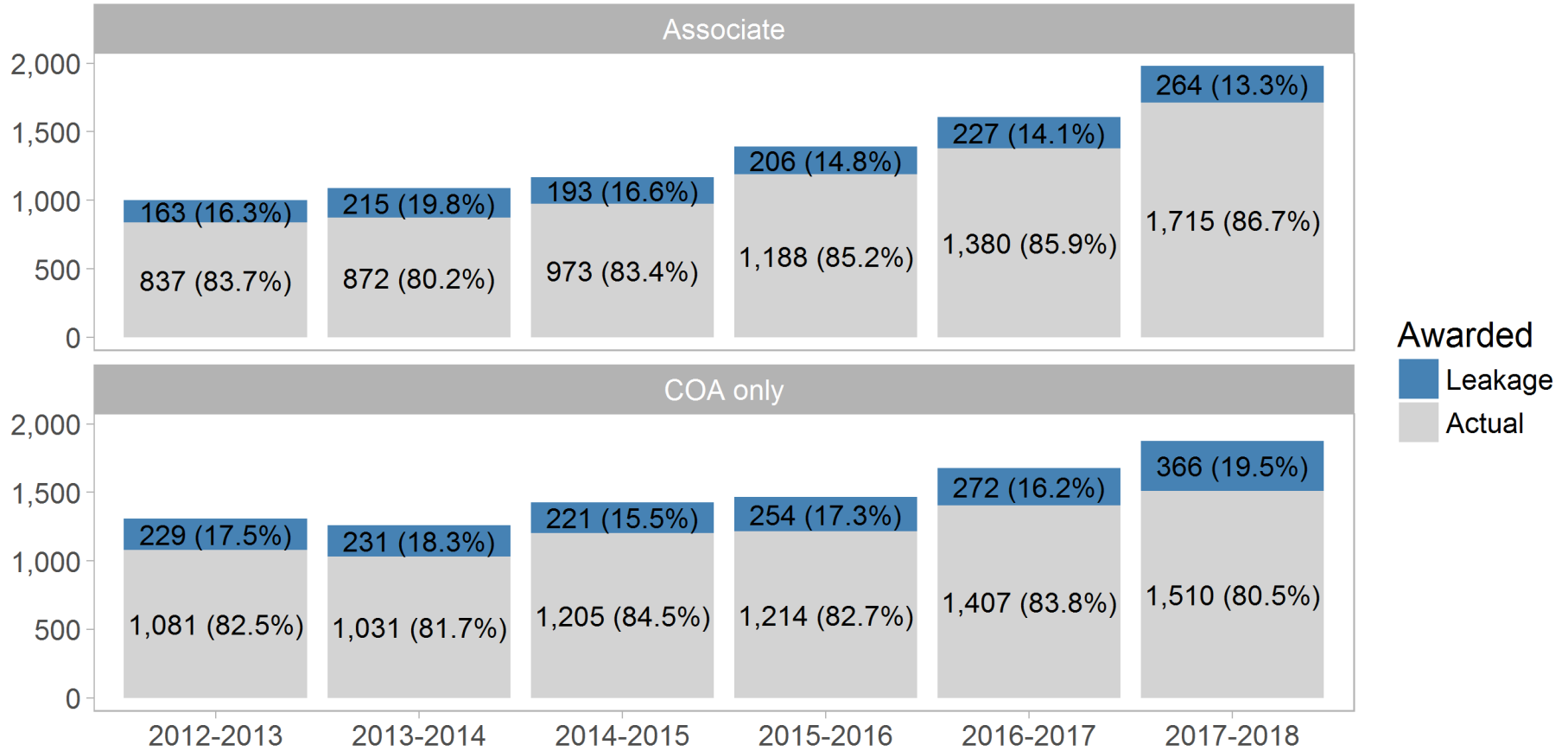
Impact on Equity

Increase in Awards for Different Groups (2012-2018)

Leakage de-dupe: leakage counted only if student has not earned degree/cert

Associate

	Black or African American	DSPS	FinAid	First Gen.	Foster Youth	Hispanic / Latino	Military
Actual	18.0%	23.8%	24.4%	18.2%	26.0%	20.5%	30.0%
Hypothetical	19.9%	26.7%	28.4%	21.2%	33.0%	23.1%	31.6%

Overall = 25.79%

COA only

	Black or African American	DSPS	FinAid	First Gen.	Foster Youth	Hispanic / Latino	Military
Actual	17.6%	22.1%	24.9%	18.9%	26.6%	19.5%	24.1%
Hypothetical	20.6%	25.7%	29.8%	23.0%	33.2%	23.1%	28.9%

Overall = 28.26%

Actual   Hypothetical

Estimate of Leakage Cost (2017-2018)

Award Type	Multiple Awards	Rate	Cost
Associate Degree	1,355	1,320	**1,788,600**
Certificate of Achievement	1,172	880	**1,031,360**
Total			**2,819,960**

Award Type	Single Awards	Rate	Cost
Associate Degree	264	1,320	**348,480**
Certificate of Achievement	366	880	**322,080**
Total			**670,560**

Under new funding formula, IVC would be leaving behind at least <u>$670,000</u>!

Guided Pathways $250K	Basic Skills $260K	Student Equity $800K	SSSP $3.2M

Note: Premiums associated with ADT's, Pell Grant recipients, and California College Promise Grant Recipients have not been incorporated (= underestimation).

Most Leaked Awards

Rank	Name	Type	Count
1	IGETC	COA	4,406
2	Liberal Studies: Teacher Education	AA	2,901
3	CSU General Education - Breadth	COA	2,447
4	Social And Behavioral Sciences	AA	1,206
5	Natural Sciences And Mathematics	AA	568
6	Business	AA	485
7	Real Estate Sales	COP	389
8	Business Administration	AA	381
9	Early Childhood Assistant Teacher	COP	266
10	Accounting	COA	250

- #1 IGETC and #3 CSU Breadth makes sense (GE certificates)
- #2, #4, #5, and #6 are four of six "Associate in Arts Degrees with an Area of Emphasis" (generic AA's)

Within 2 Courses (Single Award)

Award Leakage at IVC

Leakage counted only if student has not yet earned degree/cert
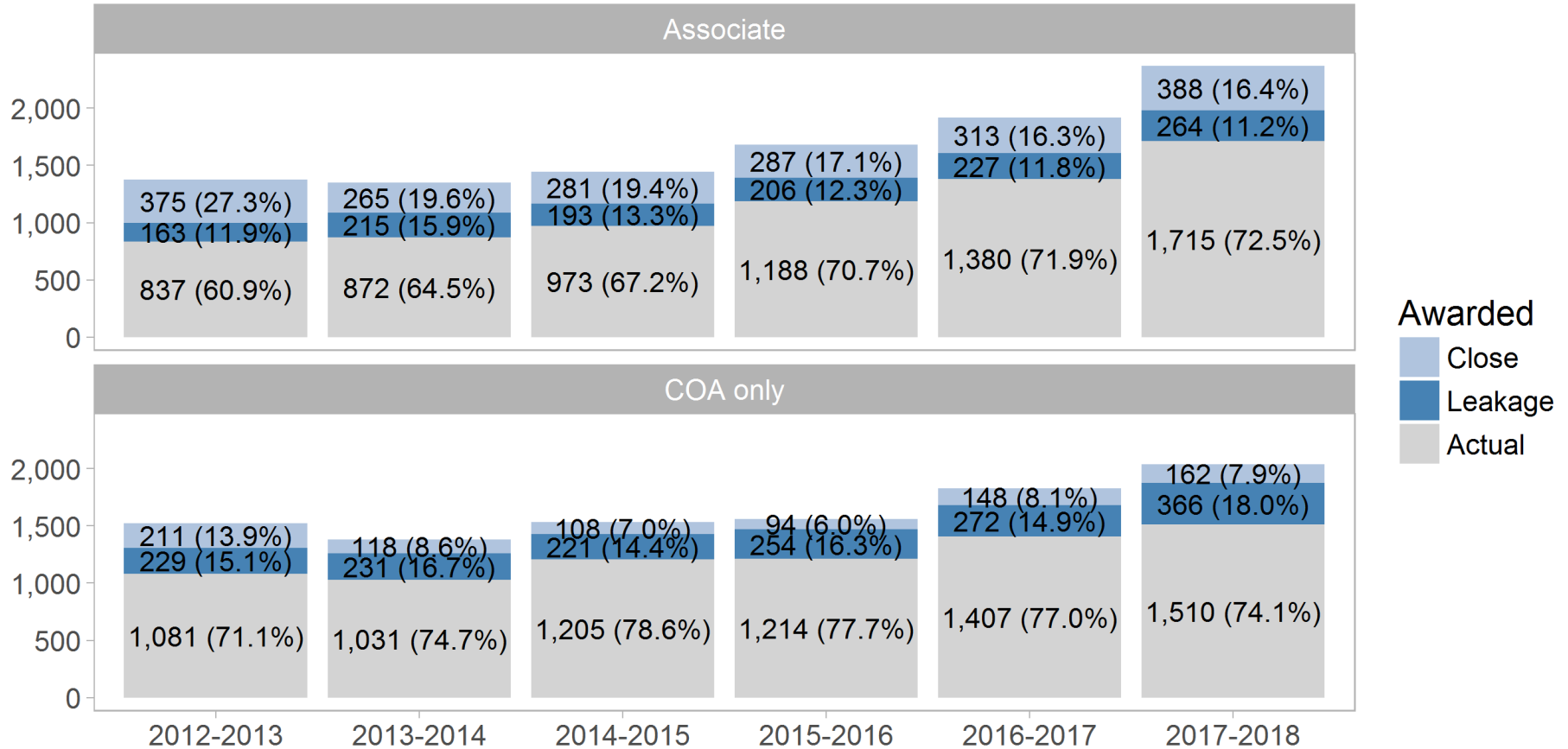
Limitations of Analysis

This is not a formal award audit!

Analysis is best estimate and potentially:

– Underestimates awards

1. Only based on current 2018-19 IVC Catalog
2. Does not include qualifying courses from other districts
3. Does not count all equivalent courses at Saddleback (if prefix and number differ)

– Overestimates awards

1. Does not account for variable unit courses (counts courses, not units)
2. Does not include IGETC foreign language requirement (HS counts)
3. Does not include multiple award limitation (12 unit difference)
4. Students might opt-out of award conferral

Note: A&R is spot-checking analysis for accuracy

Current Band-Aid

Targeted Outreach via email based on list
- Summer 2018: 30 (11%) of 273 students applied for certificate
- Fall 2018: 56 (22%) of 258 students applied for certificate
- Spring 2019: 277 (30%) of 916 students applied for certificate/degree

Limitations
- Students receive hypothetical email (… you might be close to achieving an award …) based on partially vetted list.
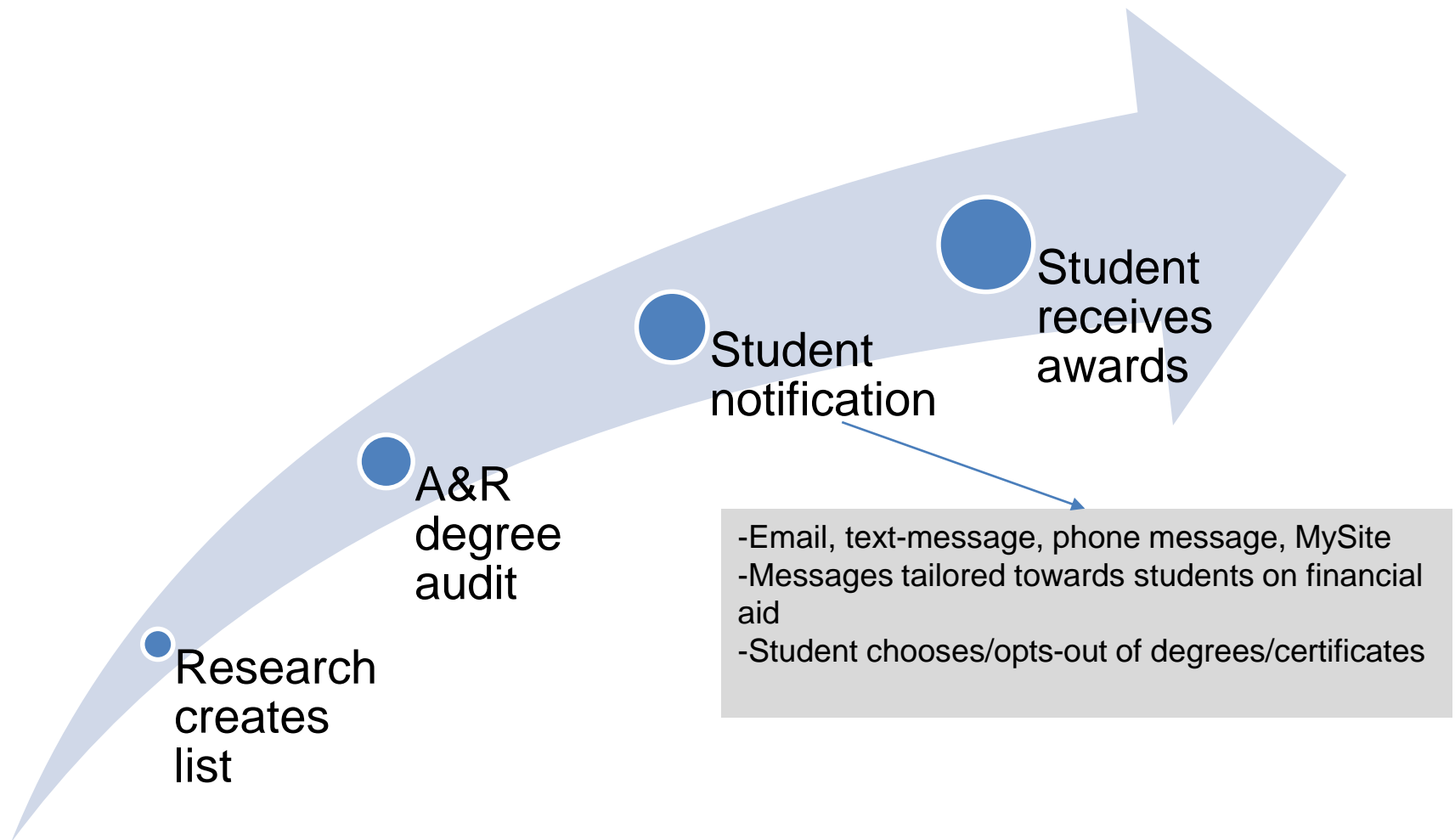- Time constraints

Solution at Scale

Move to opt-out and automatic award conferral

Survey of other CCCs *(N=35)*

- 4 CCCs auto-award Degrees (11%)

- 12 CCCs auto-award Certificates (34%)

One option of implementation

Student receives awards

Student notification

A&R degree audit

Research creates list

-Email, text-message, phone message, MySite
-Messages tailored towards students on financial aid
-Student chooses/opts-out of degrees/certificates

Note: Students still need to apply for awards if they complete courses outside the district

Legality

5 CA ADC § 55063 Minimum Requirements for the Associate Degree

The governing board of a community college district shall confer the associate degree upon a student who has demonstrated competence […] completed at least 60 semester units [… and] course work [..] which falls into the categories described in section 55062.

Financial Aid

Federal Financial Aid Policy:

[…] you may receive federal financial aid ==until you exceed 150% of the published length== of an eligible program in which the student is enrolled. [for AA degree = 90 units]

Internal IVC Policy:

Students who have exceeded the maximum timeframe for a certificate or degree program, or ==graduated from an associate's or higher degree program will automatically be placed on financial aid== suspension.

Students may appeal their SAP suspension by submitting an appeal form with a personal statement, financial aid academic plan (MAP)

Priority Enrollment

§ 58108. Registration and Enrollment Procedures.

[…]

(c) Districts adopting policies and procedures that include the administration of a registration system that grants priority enrollment to certain students, shall grant registration priority in that system, for each term the registration priority system is administered, to students who:

(1) are first time students within the meaning of section 55530(c) and have completed orientation, assessment, and developed student education plans; or

(2) are not first time students within the meaning of section 55530(c) and have not lost registration priority pursuant to subdivision (h).

(3) who are continuing students not on academic or progress probation for two consecutive terms as defined in section 55031 and first time students who have completed orientation, assessment, and developed student education plans.

[…]

(h) Registration priority specified in subdivision (c) of this section shall be lost at the first registration opportunity after a student:

(1) is placed on academic or progress probation or any combination thereof as defined in section 55031 for two consecutive terms; or

(2) has earned one hundred (100) or more degree-applicable semester or quarter equivalent units at the district.

Senate Bill 478

- (1) Identify those students who have completed an associate degree for transfer.
- (2) Notify those students of their completion of the associate degree for transfer requirements.
- (3) Automatically award the student with the associate degree for transfer.
- *(4c) A student may affirmatively exercise an option to not receive an associate degree for transfer or to be included in the identification system described in subdivision*

Governor Brown vetoed Bill

- Would have only applied in specific years

- Encouraged CCCs to upgrade their systems and processes "in total"

Award Inflation?

GOODHART'S LAW

WHEN A MEASURE BECOMES A TARGET, IT CEASES TO BE A GOOD MEASURE

IF YOU MEASURE PEOPLE ON...	NUMBER OF NAILS MADE	WEIGHT OF NAILS MADE
THEN YOU MIGHT GET	1000'S OF TINY NAILS	A FEW GIANT, HEAVY NAILS

sketchplanations

- No, not creating new degrees/certificates or making existing ones easier.

- Just trying to better measure/count award completions

Student Voices

23% of 905 students responded (Spring 2019)

- Students that Applied from Outreach Email
  - 81% applied for more than one award
  - 46% applied for additional awards beyond program of study
  - 69% would not have applied if not were for email

- Students that Did Not Apply from Outreach Email
 - 14% claimed did not receive notification email
  - 16% did not have time to apply
  - 23% still plan to take courses after term

Student Voices

<u>93% of students are OK with auto-award</u>

- "The automatic award would actually be appreciated."
- "I think this is a great idea because the majority of the students do not know that you had to apply for a degree/certificate"
- "As long as I get email notification"
- Allowed to take additional classes? Continue school?
- Consequences?
- Option to decline
- Lose sponsorship?
- "I fear the automation may affect someone's transferring or scholarship opportunities. Something that they applied for before the automation of the degree, which would get them denied."
- "My only concern is the system missing a degree that I qualify for"

Given these results, do you plan to make a case for something similar at your local institution?

Yes **A** 93%

No **B**

0% 20% 40% 60% 80%
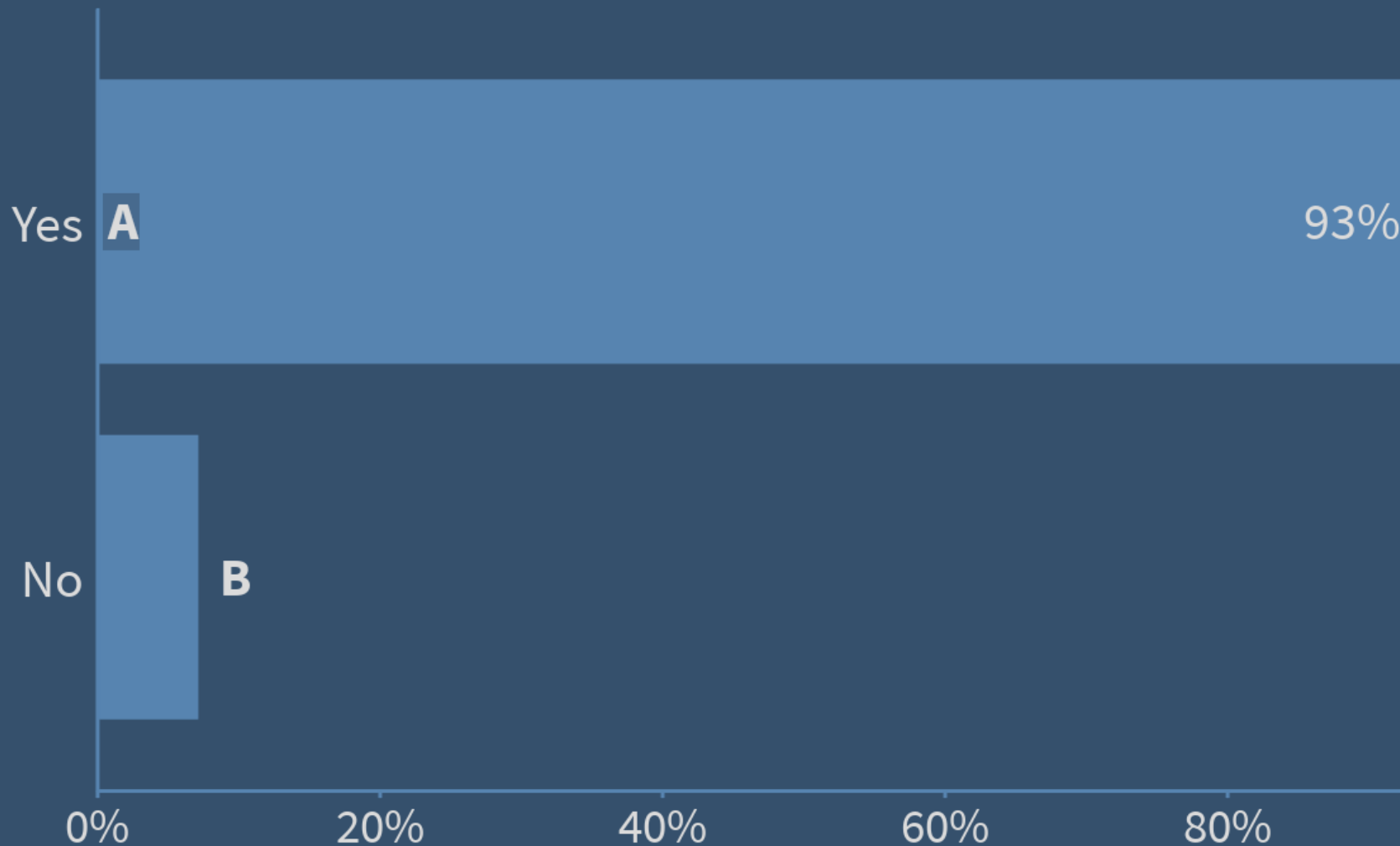
How to replicate locally?

bit.ly/award-leakage-code

Award Requirements

Certificates

- Major (course) requirements
- Cumulative GPA >= 2.0

Associate Degrees

- Major (course) requirements
- Cumulative GPA >= 2.0
- Cumulative units earned (*degree-applicable*) >= 60
- General Ed: IGETC, CSU GE, or native/local college GE

Associate Degrees for Transfer

- Major (course) requirements
- Cumulative GPA (*CSU-transferrable*) >= 2.0
- Cumulative units earned (*CSU-transferrable*) >= 60
- General Ed: IGETC or CSU GE

Data Elements Required

<u>Student</u>

- Cumulative GPA
- Cumulative units earned (degree-applicable)
- Cumulative units earned (CSU-transferrable)
- General Ed flag (one of the following)
  - Flag for IGETC completion
  - Flag for CSU GE completion
  - Flag for native/local GE completion
- Completion of major requirements flag

With these data elements, one could determine if a student qualifies for an award.

Transcribe [GE Requirements](#)

IGETC

Area	Area_Name	Courses	N_Courses	Comments
1A	English Composition	WR 1, WR 1 H, ENG 1 A, ENG 1 AH	1	
1B	Critical Thinking	WR 2, WR 2 H, ENG 1 B, ENG 1 BH	1	
2A	Mathematical Concepts and Quantitative Reasoning	CS 6 A, CS 6 B, ECON 10, ECON 10 H, MATH 2, MATH 3 A, MATH 3 AH, MATH 3 B, MATH 3 BH, MATH 4 A, MATH 8, MATH 10, MATH 11, MATH 24, MATH 24 H, MATH 26, MATH 30, MATH 31, MGT 10, MGT 10 H, PSYC 10, PSYC 10 H	1	
3A	Arts	ARTH 1, ARTH 4, ARTH 5, ARTH 20, ARTH 22, ARTH 23, ARTH 24, ARTH 25, ARTH 26, ARTH 27, ARTH 28, ARTH 29, ARTH 30, ARTH 31, ARTH 32, ARTH 33, ARTH 50, DNCE 77, DNCE 78, DMA 50, MUS 1, MUS 20, MUS 20 H, MUS 21, MUS 27, MUS 28, PHOT 1, TA 20, TA 21, TA 22, TA 25, TA 25 H, TA 26, TA 26 H, TA 27, TA 29 H	1	
3B	Humanities	CHI 2, CHI 3, ETHN 20, FR 2, FR 3, FR 4, HIST 1, HIST 1 H, HIST 2, HIST 10, HIST 11, HIST 20, HIST 21, HIST 24, HIST 25, HIST 30, HIST 33, HIST 40, HIST 41, HIST 51, HIST 51 H, HUM 1, HUM 1 H, HUM 2, HUM 3, HUM 4, HUM 20, HUM 21, HUM 22, HUM 27, HUM 50, HUM 70, HUM 71, HUM 71 H, HUM 72, HUM 72 H, HUM 73, HUM 74, JA 2, JA 3, JA 4, JA 10, JA 21, JA 23, LIT 1, LIT 7, LIT 20, LIT 21, LIT 22, LIT 23, LIT 24, LIT 30, LIT 31, LIT 32, LIT 33, LIT 40, LIT 41, LIT 43, LIT 45, LIT 46, LIT 48, PHIL 1, PHIL 2, PHIL 5, PHIL 10, PHIL 11, PS 5, PS 41, SIGN 22, SIGN 23, SIGN 24, SPAN 2, SPAN 3, SPAN 4, SPAN 10, SPAN 11	1	

CSU GE

Area	Area_Name	Courses	N_Courses
A1	Oral Communication	COMM 1, COMM 1 H, COMM 3	1
A2	English Composition	WR 1, WR 1 H, ENG 1 A, ENG 1 AH	1
A3	Critical Thinking	COMM 2, COMM 3, PHIL 3, PSYC 13, PSYC 13 H, RD 74, WR 2, WR 2 H, ENG 1 B, ENG 1 BH	1
B1	Physical Science	ASTR 20, ASTR 25, BIO 10, CHEM 1 A, CHEM 1 B, CHEM 3, CHEM 4, CHEM 12 A, CHEM 12 B, ERTH 20, GEOG 1, GEOG 10, GEOG 10 H, GEOL 1, GEOL 2, GEOL 3, GEOL 22, GEOL 23, MS 20, PHYS 2 A, PHYS 2 B, PHYS 4 A, PHYS 4 B, PHYS 4 C, PHYS 20	1
B2	Life Science	ANTH 1, ANTH 1 H, BIO 1, BIO 1 H, BIO 2, BIO 3, BIO 5, BIO 11, BIO 12, BIO 15, BIO 16, BIO 19, BIO 19 H, BIO 21, BIO 30, BIO 32, BIO 43, BIO 55, BIO 71, BIO 72, BIO 80, BIO 81, BIO 82, BIO 83, BIOT 70, PSYC 3, PSYC 3 H	1

Transcribe [Major Requirements](#)

Certificate	Type	Type2	Course_List_01	N_Course_01	Course_List_02	N_Course_02
Accounting	CV	COA	ACCT 1 A, ACCT 1 B, ACCT 1 BH, MGT 104	3	ACCT 112 .1, CIM	3
Financial Accounting	CP	COP	ACCT 1 A, ACCT 112 .1, ACCT 112 .2	3		
Financial/Managerial Accounting	CP	COP	ACCT 1 A, ACCT 1 B, ACCT 112 .1, ACCT 112 .2	4		
Computerized Accounting	CP	COP	ACCT 204, ACCT 112 .1, ACCT 112 .2	3		
Income Tax	CP	COP	ACCT 206, ACCT 207	2		
Payroll	CP	COP	ACCT 1 A, ACCT 205, ACCT 112 .1, ACCT 112 .2	4		
Paralegal Studies	CV	COA	LGL 201, LGL 202, LGL 203, LGL 205, LGL 206 A, LGL 206	6	ACCT 215, AJ 2, L	3
Early Childhood Assistant Teacher	CP	COP	HD 7, HD 15	2	HD 110, HD 115,	2
Early Childhood Associate Teacher	CP	COP	HD 7, HD 15, HD 110, HD 115, HD 120	5	HD 231, HD 232,	2

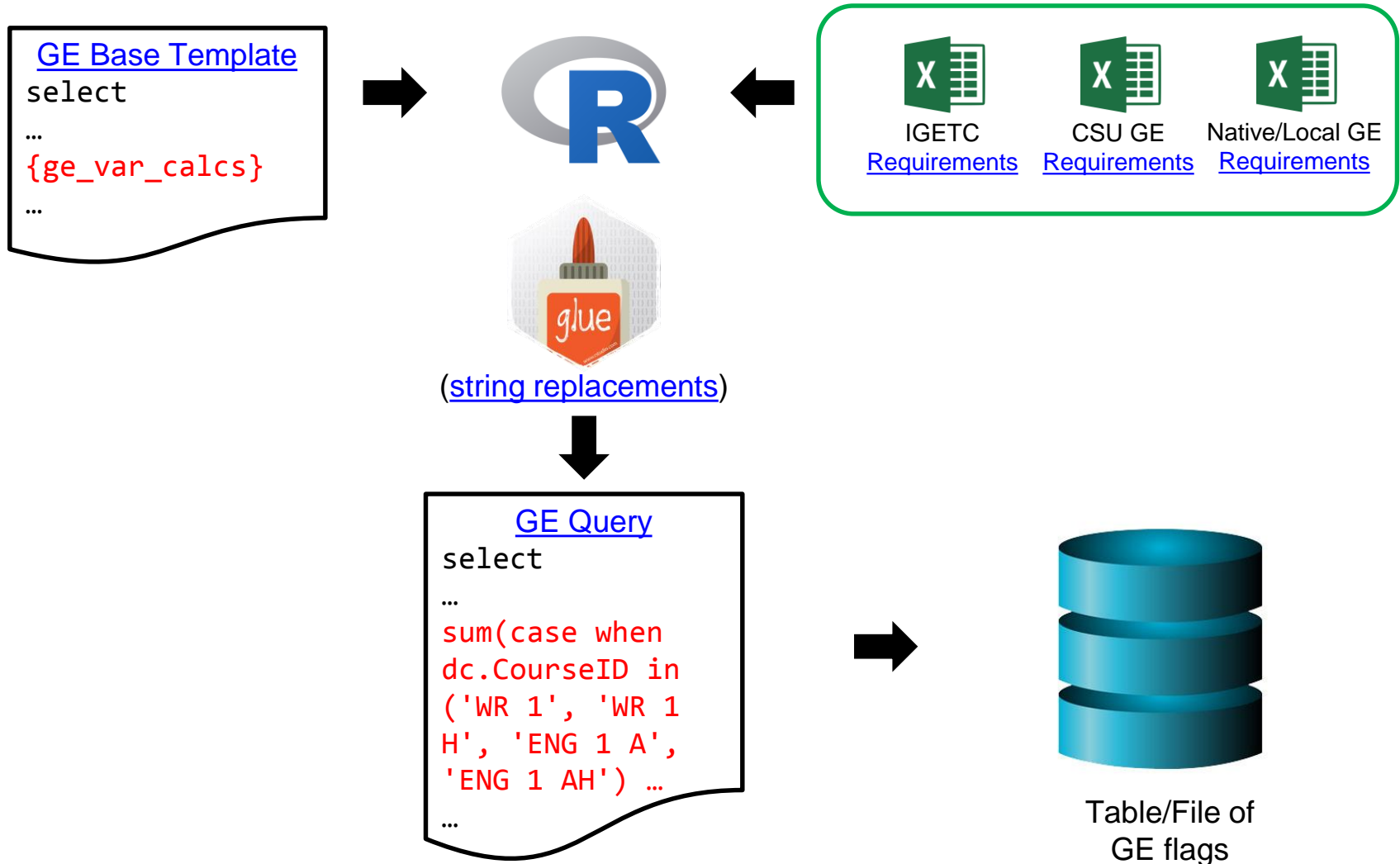| Certificate	Type	Type2	Group_08	Group_09	Group_10	Group_11	Group_12	N_Groups
Theatre Arts	AA	AA						
Business	AA	AA	190, RE 195					3
Fine Arts Appreciation	AA	AA	DNCE 55, DNCE	MUS 1, MUS 3,	TA 20, TA 21, TA 25, TA 26			3
Humanities And Languages	AA	AA	PHIL 1, PHIL 2, F	RD 174	SIGN 22, SIGN 2	SPAN 2, SPAN	WR 2, WR 10, W	3
Liberal Studies: Teacher Education	AA	AA	, HD 15, SOC 15,	HIST 1, HIST 20, HIST 21, PS 1, PSYC 13				3
Natural Sciences And Mathematics	AA	AA	MS 20		PHYS 2 A, PHYS 2 B, PHYS 4 A, PHYS 4 B, PHYS 4 C			3
Social And Behavioral Sciences	AA	AA	PSYC 1, PSYC	SOC 1, SOC 2,	WS 10, WS 20			3

Example: Studio Arts AA-T

Course requirements:

Certificate	Type	Type2	Course_List_01	N_Course_01	Course_List_02	N_Course_02	Course_List_03	N_Course_03
Studio Arts	AAT	AA-T	ART 20, ART 41, ART 80, ARTH 26	4	ARTH 22, ARTH 2	1	ART 81, ART 85,	3

Course area requirements:

Certificate	Type	Type2	Group_01	Group_02	Group_03	Group_04	Group_05	N_Groups
Studio Arts	AAT	AA-T	ART 81, ART 85,	ART 50	ART 60	DMA 55	ART 51, DMA 65	3

Key Idea: Template -> Programs

GE Base Template
```
select
…
{ge_var_calcs}
…
```

IGETC Requirements

CSU GE Requirements

Native/Local GE Requirements

(string replacements)

GE Query
```
select
…
sum(case when
dc.CourseID in
('WR 1', 'WR 1
H', 'ENG 1 A',
'ENG 1 AH') …
…
```

Table/File of GE flags

Key Idea: Template -> Programs
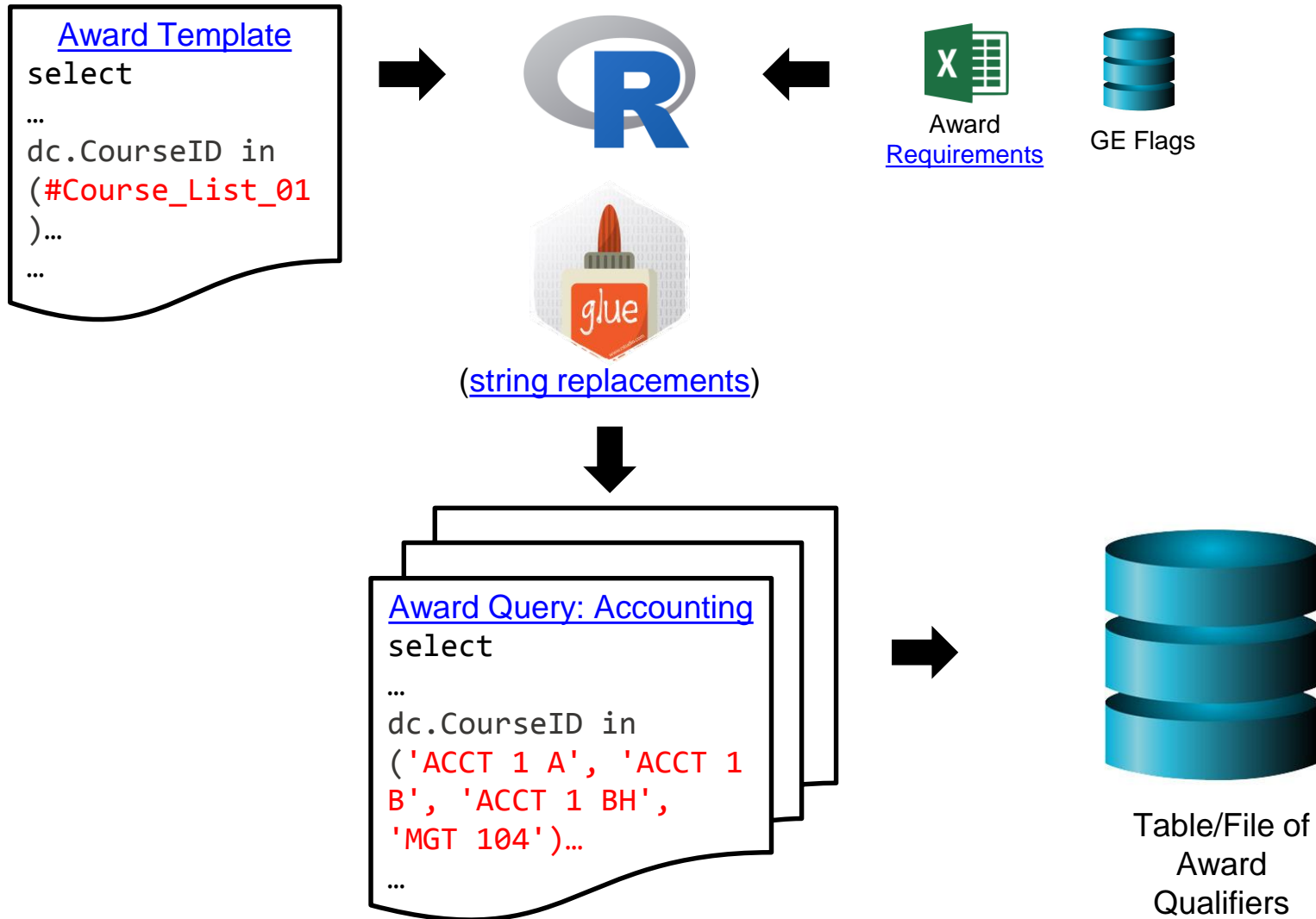
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