



CRA

Computing Research
Association

2020 C

F :

F

B B , C A
-H , H C C AB
H , C A-E -
,
,
A , D C A-E -
C I C A CE -C C AB

I

I 2020

C ID-19

2020 .

450 , 54% C A IGC E . A
46%

450. 1 2

: [:// . / - / /2020/07/F - - .](#)

Tab e 1. Re e b l T e, e ce c b c .					
H C D (=450)		I C (=448)		F (-) (=450)	
B	15.6		54.2	< 35	58.7
	10.0		45.8	>= 35	41.3
D	74.3				

Tab e 2. Re e b Fac P a d E e e ce, e ce c b c .					
(=452)		E , (=452)		E (=450) +	
/ -	69.7	1-2	8.0	,	17.0
F -	21.7	3-5	13.5	,	15.9
-	5.3	6+	78.5		67.0
*	3.3				

* , .

+

A C
 E - 3
 , 4
 , 5
 , 6
 , 7 , 8



Table 3. T e/Le e f C e a d P e c e f Fac Teac Eac S de S e G , f T a					
Teac T a T e f C e.		H ?			
C A /		< 25	25-49	50-99	>= 100
() (=24)		8.3	37.5	12.5	41.7
- (=136)		19.1	28.7	16.2	36.0
- (=168)		24.4	41.1	24.4	10.1
G - (=69)		58.0	20.3	13.0	8.7%
(=12)		16.7	25.0	41.7	16.7%
(=409)		27.1	32.8	19.6	20.5%

Table 4. H a c e c e e e d a f e e c e e ? (N=406)	
I ,	37.2
I /	23.2
/	20.0
(- , -)	17.0
	2.7

Table 5. C e c e a d e e e a d e a f e e e e.					
W c f e f a c e b e e? (e e c a a a)			P e c e a d e d a a f e e e, f e e a d c e		
	C	% (=409)	D		
A	250	61.1	34.9	43.4	21.3
C ()	180	44.0	13.9	71.7	14.4
	172	42.1	3.8	76.1	20.1
	166	40.6	9.1	64.6	26.2
	106	25.9	17.3	67.3	15.4
	85	20.8	38.6	53	8.4
I	75	18.3	23	64.9	12.2
G	44	10.8	36.4	54.5	9.1
	42	10.3	28.6	64.3	7.1
C	23	5.6	4.5	72.7	22.7
F	7	1.7	71.4	14.3	14.3

Table 6. H e e e a a d e d A F T E R e c a e d e? (P e c e b e a e)					
		,	:	:	: l
			/		
, , (. , 1, 2, 3)	38.2	16.2	10.7	25.4	9.4
" " (-)	71.2	8.3	5.3	10.4	4.7
,	43.3	13.7	9.1	24.6	9.4
	73.6	8.2	3.6	5.5	9.1

Table 7. H d d a d e a e e f c e e a e a a f e e d e? (Se ec a a a .) (N=409)	
A	63.6
F - -	12.7
	13.0
A	15.4
C	29.6

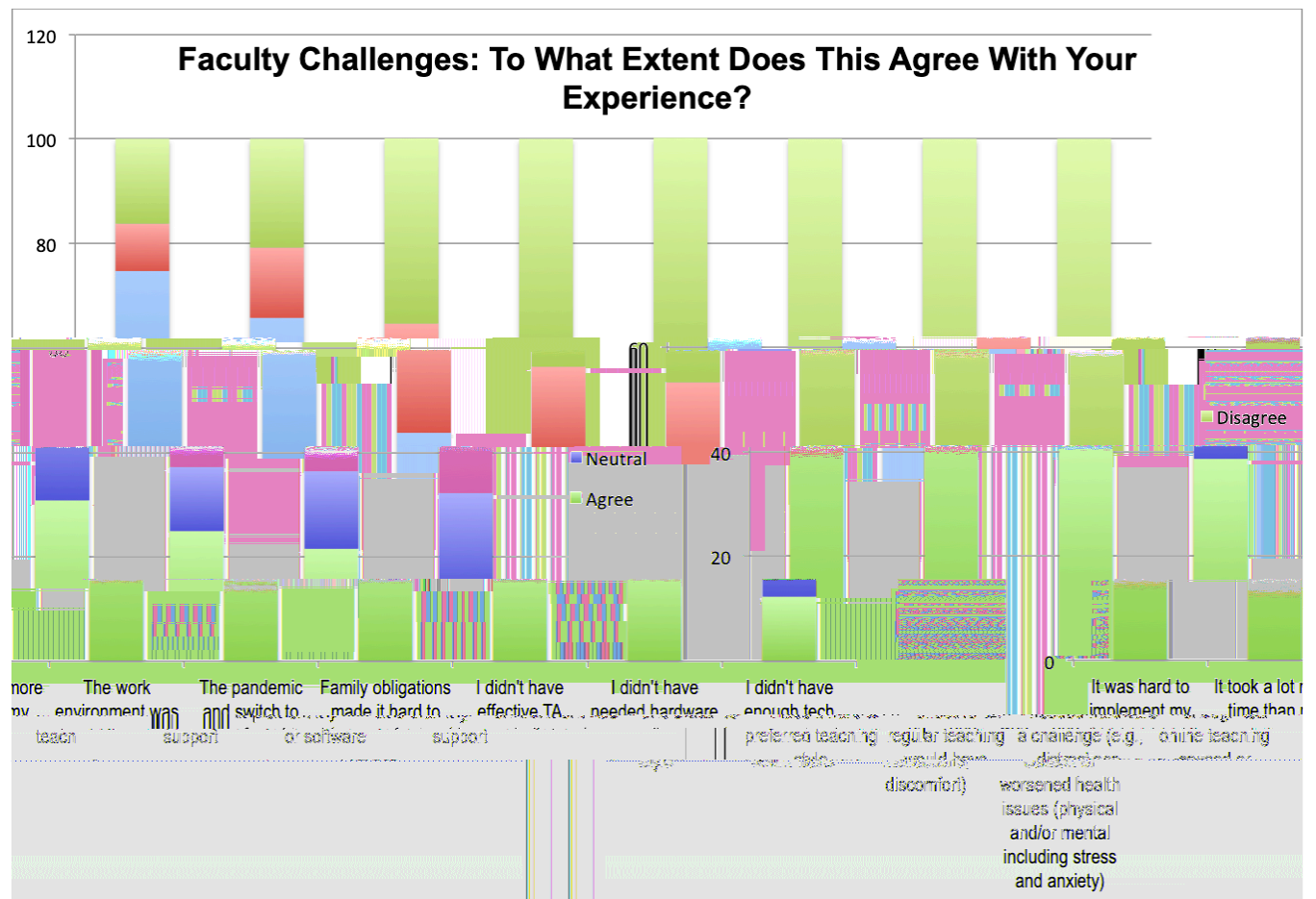
Table 8. T a e e d d b e e a c a d e c e e c a AFTER e c a e e? (N=400)	
	45.0
,	32.0
	15.8
	7.3

F	C
F 1	9, I
	I
10	. F
	. A
,	
.	

11

12

13



F 1: F C

Table 9.S	e e ee e e ced ef a c a e e e eac	e. T	a
e e d e a a ee e e ce?			
	A		D
I	74.6	9.1	16.3
I	65.6	13.5	20.9
(. ,)	43.7	20.8	35.6
(/)	38.7	17.7	43.6
F	30.9	22.5	46.8
I ' A	25.0	12.3	62.7
I '	21.6	14.9	63.5
I '	12.4	19.9	67.7

Table 11. W c f a f e e f e a e d b e e e e e b e e f a e a e f de e a - e ? Se ec a a a . (N=409)	
A	63.6
A	63.1
A	35.0
	18.3
A A	10.3

Table 12. S f e eac f c e a d f f c a d e f ? (N=399)	
A	24.8
A	41.6
	18.5
D	10.0
D	5.0

Table 13. S de ea ed ab e a ea a e d a e f e ad c ed ee e f e d a f e e ? (N=399)	
A	6.3
A	30.3
	19.5

(88%) (8%) -

(4%).

14 2020.

- 60%

-

; I

.

Table 14. W a c a e e a d cce e d d a d de e c e a f e e e ea c e? (N=254)		
I	25.0	75.0

16

17

77%

18

F

/



Tab e 16. If a e eac e f a e ad e Fa 2020 ? I e c e c e d b e ce be a f 25%. (N=369)	
	50.9
()	48.8
/	40.9
H (. . , , .)	36.3
A	33.3

Tab e 17. If a e eac e Fa 2020, a c ce d a e?				
	9.9	34.6	55.4	2.5
B -	7.1	46.2	46.7	2.4
-	12.4	47.8	39.8	2.3
C	20.7	39.8	39.5	2.2
D	23.3	35	41.7	2.2
C	21.5	43.9	34.6	2.1
C	23.2	55.2	21.7	2.0
	35.7	30.2	34.2	2.0
/	33.8	30.6	35.5	2.0
C	47.4	38.6	13.9	1.7
	47.3	34.4	18.3	1.7

Tab e 18. If e -ca - e eac Fa 2020, a c ce d a e?

A	6.6	27.7	65.8	2.6
H) (. .	8.8	35.4	55.9	2.5
H -	16.7	32.5	50.7	2.3
-	16.3	47.3	36.3	2.2

C

- A :
(12)
, (17). I , 3-5
(1-2) 6+ . F
- A .
- F (F 1).
, , (, 10).
- , , ,
(11).
- - (15).
- C (17).

. D .