

APPENDIX 6

DISTRIBUTION OF SENSE-MAKING INSTANCES FOR EACH CURRICULUM CYCLE, BY STUDENT

In the tables below, the components of SMD are abbreviated as follows:

CL (**C**larifying the facts of a phenomenon or result), **P** (**P**redicting), **UE** (Describing or providing an **u**nderlying **e**xplanation for a phenomenon or result), **DDC** (**d**efining, **d**escribing, clarifying, and **c**onnecting scientific concepts, procedures, processes, and representations), and **TC** (**t**esting knowledge **c**ompatibility).

Numbers above the dotted lines (-----) represent requests for that particular component of SMD (i.e., they represent instances of the sixth component of SMD). Numbers below the dotted line represent actual instances¹ of that component. Instances of **P** are presented in Level 1/Level 2 format.

¹ An "actual instance" is an actual act of clarifying, predicting, etc., rather than a request for a clarification, prediction, etc.

Table A6-1. Distribution of sense-making instances for cycle 3, by student.

	Student	CL	P	UE	DDC	TC	Total
Group 1	Darla	0	0	0	5	0	5
		-----	-----	-----	-----	-----	-----
	Grace	1	1/0	0	9	1	12
		-----	-----	-----	-----	-----	-----
	Lacey	3	2/0	1	6	2	14
		-----	-----	-----	-----	-----	-----
	Porter	2	0	0	2	0	4
		-----	-----	-----	-----	-----	-----
	1	3/3	1	9	2	19	
	-----	-----	-----	-----	-----	-----	
	0	0	0	0	0	0	
	-----	-----	-----	-----	-----	-----	
Group 2	Arthur	0	0	0	0	0	0
		-----	-----	-----	-----	-----	-----
	Roxanne	5	1/0	5	7	4	22
		-----	-----	-----	-----	-----	-----
	Jasper (3 days)	0	0/1	3	3	0	7
		-----	-----	-----	-----	-----	-----
	Sabrina	0	0	0	0	0	0
		-----	-----	-----	-----	-----	-----
	0	0	0	4	1	5	
	-----	-----	-----	-----	-----	-----	
	1	1/1	1	5	0	9	
	-----	-----	-----	-----	-----	-----	

Table A6-2. Distribution of sense-making instances for cycle 4, by student.

	Student	CL	P	UE	DDC	TC	Total
Group 1	Darla	0	0	5	1	0	6
		-----	-----	-----	-----	-----	-----
		11	2/2	14	10	8	47
	Grace	0	0	4	1	0	5
		-----	-----	-----	-----	-----	-----
		5	1/2	5	0	0	13
	Lacey	2	0	10	1	1	14
		-----	-----	-----	-----	-----	-----
	15	0/3	3	2	8	31	
Porter	1	0	0	0	0	1	
	-----	-----	-----	-----	-----	-----	
	1	0	4	0	1	6	
Group 2	Arthur	2	0	3	0	2	7
		-----	-----	-----	-----	-----	-----
		18	1/2	15	11	6	53
	Roxanne	0	1	1	1	3	6
		-----	-----	-----	-----	-----	-----
		23	1/1	19	5	12	61
Sabrina	4	0	3	4	2	13	
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	16	0/2	12	8	6	44	

