

Supplementary Tables for Illingworth and Radhakrishnan, "I came here to escape": how poetry can be used to better understand undergraduate students' first-year chemistry or related course experiences"

Table S1: The code book that was used by Illingworth in the initial coding exercise, including a definition and an example for each code.

Code	Description	Example	Occurrences
Collaboration	Indicates that taking this course encouraged and enabled the student to collaborate with peers.	As we break glass in fields and thrive in the progress made by others For the future is ours and science is created with us altogether. (Poem 16)	8
Prior uncertainty	Suggests that prior to taking this course the student was uncertain about the course / their own ability.	I came here to escape From my house of horrors One where science doesn't see my gender As an explorer (Poem 21)	13

<p>Pastoral Care</p>	<p>The student indicated that they felt cared for / supported by their professors and/or classmates.</p>	<p>I was struck by how the professors cared not only about my academic questions but also about what made me, me.</p> <p>(Poem 1)</p>	<p>8</p>
<p>Pride</p>	<p>The student exhibits a sense of pride in taking the course.</p>	<p>And at night, atop a pillow I gaze outside through a small window And to myself I proudly say I'm glad I went to [course name] today</p> <p>(Poem 15)</p> <p>Make it known With a smiley face in the margins joyfully scribbled notes</p> <p>(Poem 19)</p>	<p>9</p>

Rewarding	Taking this course was a rewarding experience for the student.	An exciting intellectual journey to embark Working on it from sunset to dark (Poem 4)	15
Hard work	Taking this course involved hard work / cramming / intellectual involvement.	The class that makes my brain twist As we switch between Biology and Chemistry (Poem 8)	24
Community	A sense of community / friendship was developed amongst the student and their colleagues.	As I belonged To a supportive community Which provided me with opportunities (Poem 2)	22
Fun	Taking this course was fun.	But always full of pHun (Poem 2)	5

Specific Concept	Mentions a specific scientific concept that was learnt during this course.	I learnt how to calculate Avogadro's constant And understood how DNA ended up becoming a protein (Poem 2)	13
Improvement in knowledge	Acknowledges that the student has improved their knowledge because of taking this course.	But this class has also given me proof to some of life's greatest truths: (Poem 1)	10
Self-doubt	Questions the student's ability, especially in relation to other classmates.	Sometimes I feel I don't belong I should learn to be less My energy is just a sign of my unstableness (Poem 5) Doubts stir, Thoughts whirl, Imposter syndrome occurs. (Poem 17)	18

Identity	Lines that question identity of student and reflect on themselves as individuals.	<p>Maybe I'm not meant to live in a quantized state Maybe I'm meant to go through the peaks and troughs If we're all made up of waves How can we ever have an identity that's static?</p> <p>(Poem 9)</p>	14
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* The number of occurrences is not limited to one per poem.

Table S2: The code book that was used by Radhakrishnan in the initial coding exercise, including a definition and an example for each code.

CODE	Description	Example	Occurrences*
Challenges	The student mentioned a challenge or struggle within the course	But I've never struggled so badly I've never tripped so roughly to the finish line (Poem 14)	11
Good fit?	The student asked or addressed questions about whether science was the right field for them.	I have pondered if I should quit. Is STEM truly the right fit? (Poem 29)	7

Caring professors	The student acknowledged support from the faculty	I was struck by how the professors cared not only about my academic questions but also about what made me, me. (Poem 1)	6
Unfamiliar	The student acknowledged new or unfamiliar experiences	I told my parents on a call "I've never taken a class like this one before." (Poem 1)	8
Community, friendship	The student mentioned making friends, lifelong friends, feeling part of a community	A tight and inclusive group, we truly wish well for each others' progress (Poem 25)	19
Collaboration, help	The student talked about collaborating with peers	science is created with us altogether (Poem 16)	9
Late-night studying	The student acknowledged putting in long hours/lots of effort outside of class	Working on it from sunset to dark It's 4 A.M. but in Lulu I'm there (Poem 4)	8
Triumph, pride	The student describes successful feelings	Strut with it In and out of the lab Or runway Make it known With a smiley face in the margins joyfully scribbled notes (Poem 19)	9

Pain/frustration/	The student describes negative emotions	I realized that studying without passion made me depressed (Poem 28)	17
Belonging (or not)	The student discusses or mentions questions of fitting in or belonging within the group/class	I belong here No matter what paradoxes come in sight Even blackholes Won't stop my fight (Poem 21)	15
Confidence/nervousness	The student discusses or mentions ideas related to confidence or lack thereof	With regained confidence, Assured we could achieve such feats (Poem 17)	17
Learning	The student talks about academic learning and/or learning in general	Until The golden glorious Moment of scientific understanding Eureka! knowledge is rightfully your at that moment (Poem 19)	12
Fun	The student mentions fun!	I had so much fun learning about you... (Poem 8)	5

Hopes for future/excitement for opportunity	The student expresses emotions related to anticipation, excitement, longing, or desired opportunities	I sat with anticipation on the first day of class Ready to transfer this energy to maximize my performance (Poem 3)	15
Adjusting, uncertain	The student mentions that they are adjusting or uncertain during this class	Since September, my life has been a transition state Where nothing feels permanent (Poem 9)	8
Confusion	The student feels confused during the learning process.	But I couldn't see shit for the most part Sometimes I saw a few bursts of color and magic here and there But I think those were merely lucky days (Poem 14)	9
Stress	The student expresses feelings of stress.	While the course made me very stressed... (Poem 8)	5
Formal Support	The student mentioned formal support structures in place for the course, such as supplemental instruction or office hours	Walking at night coming back from SI I just got answers to my questions "why" (Poem 4)	8

Stability, instability	The students referred to feeling stable or not.	Am I truly stable- the noble gas I wish? (Poem 5)	7
Saturation/overw helmed	The students expressed feelings of being overwhelmed	The current is strong, Relentless with its prongs, Leaving me gasping for air (Poem 29)	7
identity	The student discusses questions of who they are and how that might change, etc.	I have so many different versions of myself in my head They create resonance... (Poem 9)	8
Worth it, rewarding	The student acknowledges that the class was worth it on balance or rewarding.	...I would not trade those hours... (Poem 8)	5
growing	The student alludes to growing in some way.	Maybe this is a sign that i'm evolving Isn't that what I'm here for?/Maybe this is a sign that I'm moving towards Equilibrium in myself (Poem 9)	6

study or time management skills, scheduling	The student alludes to managing time and/or study strategies.	Coordinating schedules became a daily chore. (Poem 13)	5
Routine, familiarity	The student finds comfort in the routine of the class and the familiarity of it.	The smile of recognition Then trekking to science center Through rain or shine And walking up the same stairs to enter The cement and glass building (Poem 26)	5
perseverance	The student alludes to persevering throughout the course.	...And her own determination and diligence... (Poem 12)	2
competition	The student finds competition	The competition has begun. Between a select few To come into view And establish the hierarchy. (Poem 17)	2
Admiration of peers	The student admires others in the course	...and I think it's truly a feat That this class has so many student athletes (Poem 7)	2
interdisciplinary	The student mentions how this class is interdisciplinary.	...to experience interdisciplinary learning (Poem 1)	3

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