Supplemental Material

CBE—Life Sciences Education

Lee *et al.*

Supplementary data for:

Error Discovery Learning Boosts Student Engagement and Performance, while Reducing Student Attrition in a Bioinformatics Course

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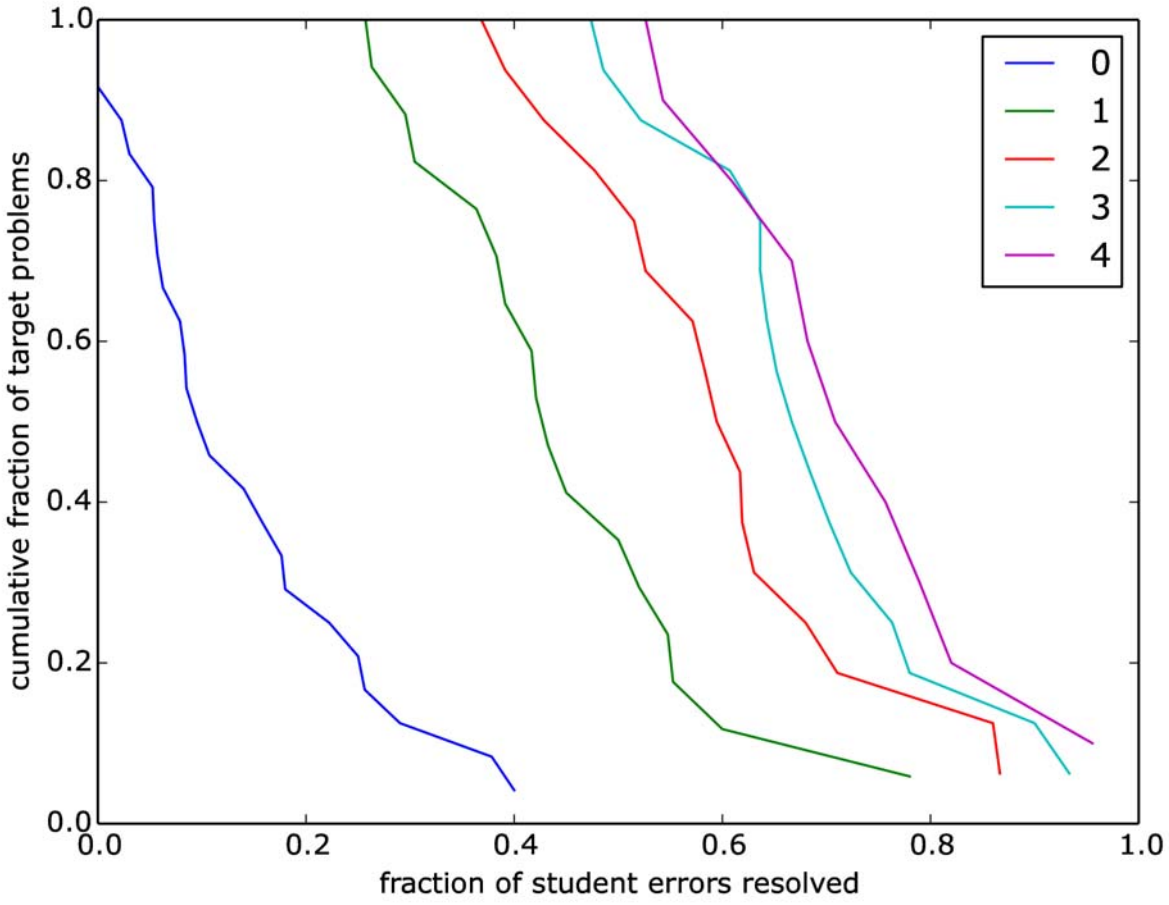
Supp. Table 1: *Departmental cross-listings of this course*

Enrolled Students	Department	Course Number	Course Notes
Undergraduate (UG)	Computer Science	CS 121	Became predominant enrollment track for UGs
	Chemistry & Biochemistry	Chem 160A	Department through which course started
Graduate (G)	Computer Science	CS 221	Became predominant enrollment track for Gs
	Chemistry & Biochemistry	Chem. 260A	Department through which course started
	Bioinformatics	Bioinformatics 260A	Impacted; students could not drop
	Human Genetics	Hum. Gen 260A	No students enrolled via this departmental track after 2004

Supp. Figure 1: *Number of error models needed per target problem, to cover most students' errors*



Each curve plots the fraction of target problems (y-axis) for which the top *M* error models covered more than X% of observed student errors (x-axis), for *M*=0 (i.e. taking into account only Courselet's list of standard, generic "blindspots"-- e.g. "I didn't read the question correctly" -- and NO error models specific to that target problem); *M*=1 (the most common error model for that target problem); *M*=2 (the top two error models for that target problem); *M*=3; and *M*=4.