Table 2
Estimates of Late Hire Status for Logit Models of Labor Market Outcomes After Two Years

	Labor Market Fixed Effects		School Fixed Effects	
	Estimate	(s.e.)	Estimate	(s.e.) [a]
Left Teaching in Michigan				
Teacher was hired late	0.115	(0.181)	− 0.159	(0.335)
Observations	5383		1205	
Number of groups	13		226	
Moved Schools in Michigan				
Teacher was hired late	− 0.228	(0.173)	− 0.255	(0.254)
Observations	5418		1421	
Number of groups	14		283	
Left Their School				
Teacher was hired late	− 0.081	(0.131)	− 0.287	(0.212)
Observations	5418		2239	
Number of groups	14		442	

NOTE: Additional time, school, and teacher variables are included in all models when appropriate but not shown. Asterisks indicate that the estimated coefficient is significantly different than zero.
[+]$p<0.10$.   *$p<0.05$.   **$p<0.01$.
***$p<0.001$
[a] Standard errors adjusted for clustering at the district level

Table 3
Estimates of Late Hire Status for Logit Models of Labor Market Outcomes After One Year: Restricted Sample

	Labor Market Fixed Effects		School Fixed Effects	
	Estimate	(s.e.)	Estimate	(s.e.) [a]
Left Teaching in Michigan				
Teacher was hired late	0.737 *	(0.284)	0.489	(0.353)
Observations	2376		740	
Number of groups	11		108	
Moved Schools in Michigan				
Teacher was hired late	0.855 ***	(0.208)	1.200 ***	(0.342)
Observations	2376		1010	
Number of groups	11		184	
Left Their School				
Teacher was hired late	0.961 ***	(0.183)	1.010 ***	(0.273)
Observations	2376		1402	
Number of groups	11		252	

NOTE: Additional time, school, and teacher variables are included in all models when appropriate but not shown. Asterisks indicate that the estimated coefficient is significantly different than zero.
+$p<0.10$. *$p<0.05$. **$p<0.01$. ***$p<0.001$
[a] Standard errors adjusted for clustering at the district level.

Table 1

Selected Estimates for Logit Models of Having Left Teaching in Michigan or Moved Schools After One Year

	Left Teaching in Michigan				Moved Schools			
	Labor Market Fixed Effects		School Fixed Effects		Labor Market Fixed Effects		School Fixed Effects	
	Estimate	(s.e.)	Estimate	(s.e.) [a]	Estimate	(s.e.)	Estimate	(s.e.) [a]
Teacher was hired late	0.577 ***	(0.124)	0.573 **	(0.171)	0.399 ***	(0.100)	0.461 **	(0.149)
Teacher Characteristics								
Female	− 0.013	(0.109)	− 0.061	(0.126)	0.056	(0.087)	0.211	(0.110)
Age (10s)	0.380 ***	(0.057)	0.466 ***	(0.082)	− 0.054	(0.052)	− 0.146 *	(0.072)
Fulltime	− 0.577 ***	(0.133)	− 0.318 +	(0.189)	− 0.793 ***	(0.103)	− 1.002 ***	(0.181)
Multiple subjects	− 0.392 **	(0.142)	− 0.125	(0.183)	0.194 **	(0.106)	0.073	(0.153)
Non-match: White teacher	− 0.198	(0.309)	0.120	(0.264)	− 0.292	(0.254)	− 0.410 +	(0.221)
Non-match: Non-white teacher	− 0.154	(0.248)	0.031	(0.323)	− 0.115	(0.180)	0.107	(0.268)
School Characteristics								
Mean of standardized ach.	0.098	(0.095)	0.098	(0.343)	− 0.077	(0.073)	0.493 +	(0.258)
% Non-white (10s)	− 0.028	(0.031)	− 0.047	(0.222)	0.017	(0.023)	0.363 **	(0.113)
% Free/reduced lunch (10s)	0.117 **	(0.045)	− 0.007 **	(0.102)	0.055	(0.034)	− 0.333	(0.292)
% Teachers w/ prof. license (10s)	0.066	(0.045)	0.189	(0.173)	0.091 **	(0.033)	0.049	(0.144)
Number of teachers	0.000	(0.004)	0.046 +	(0.027)	− 0.002	(0.004)	0.080 ***	(0.022)
Middle	0.458 *	(0.220)	---	---	− 0.071 *	(0.171)	---	---
High	0.715 **	(0.239)	---	---	− 0.637 **	(0.191)	---	---
Other	0.766 *	(0.313)	---	---	0.376	(0.283)	---	---
City	− 0.249	(0.184)	---	---	0.373 **	(0.138)	---	---
Suburb	− 0.164	(0.136)	---	---	0.215 *	(0.107)	---	---
Town	− 0.213	(0.188)	---	---	− 0.136	(0.152)	---	---
District Characteristics								
Number of students (1000s)	0.004 *	(0.002)	− 0.014 +	(0.008)	0.002 *	(0.002)	0.043 ***	(0.010)
% Students with FRL (10s)	0.069	(0.057)	− 0.128	(0.264)	0.022	(0.043)	− 0.290 +	(0.175)
Observations	7183		2192		7183		3114	
Number of groups	14		371		14		574	
Psuedo R^2	0.0642		0.0725		0.0495		0.0664	

NOTE: Additional time, school, and teacher variables are included in all models when appropriate but not shown.

[+]$p<0.10$. *$p<0.05$. **$p<0.01$. ***$p<0.001$

[a] Standard errors adjusted for clustering at the district level.

Jones, N., Maier, A., Grogan, E. & Schneider, B. (2011, March). The extent of late hiring and its relationship with teacher turnover: Evidence from Michigan. Presentation at the annual meeting of the Society for Research on Educational Effectiveness