Seclusion and Restraint Data Analysis

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KANSAS STATE DEPARTMENT OF EDUCATION

Kansas leads the world in the success of each student.

History of Seclusion and Restraint

- Philip Pinel in Paris France 1793, first record of seclusion and restraint used with patients
- Seclusion and restraint used in English hospitals in the 19th century
- Parliament required use of logs and recommended finding alternative practices in 1954
- United States began using seclusion and restraint in institutions
- 1950s first records of practices used on children with disabilities
- 2009 publication School is Not Supposed to Hurt reports deaths and injuries of seclusion and restraint

KS History of Seclusion and Restraint

- 2004 - 2007: Legislative educational planning committees, proposed bills, directing of KSDE to develop policies, KSBE developed guidelines
- 2012: KSBE developed regulations regarding seclusion and restraint
- 2013: Regulations passed in February to be implemented in the 2013-14 school year
- 2014: KSBE discussed seclusion and restraint frequently with several proposed amendments to regulations
- 2015: Before KSBE amendments were added, HB 2170 passed. The Freedom from Unsafe Restraint and Seclusion Act was published June 4

Seclusion and Restraint

- Seclusion and Restraint are not new topics to Kansas – known as Emergency Safety Interventions
- Kansas is one of the few states that transitioned from guidance to regulations to statute in only a few short years
- On January 28, 2015, a bill was introduced in the Kansas House regarding restraint and seclusion.
- A final bill was passed and signed by the governor and became law upon publication in the Kansas Register and that occurred on June 4, 2015.
- The data analysis developed out of need to better understand what is happening in schools and how we can limit the use of the practices by focusing on prevention

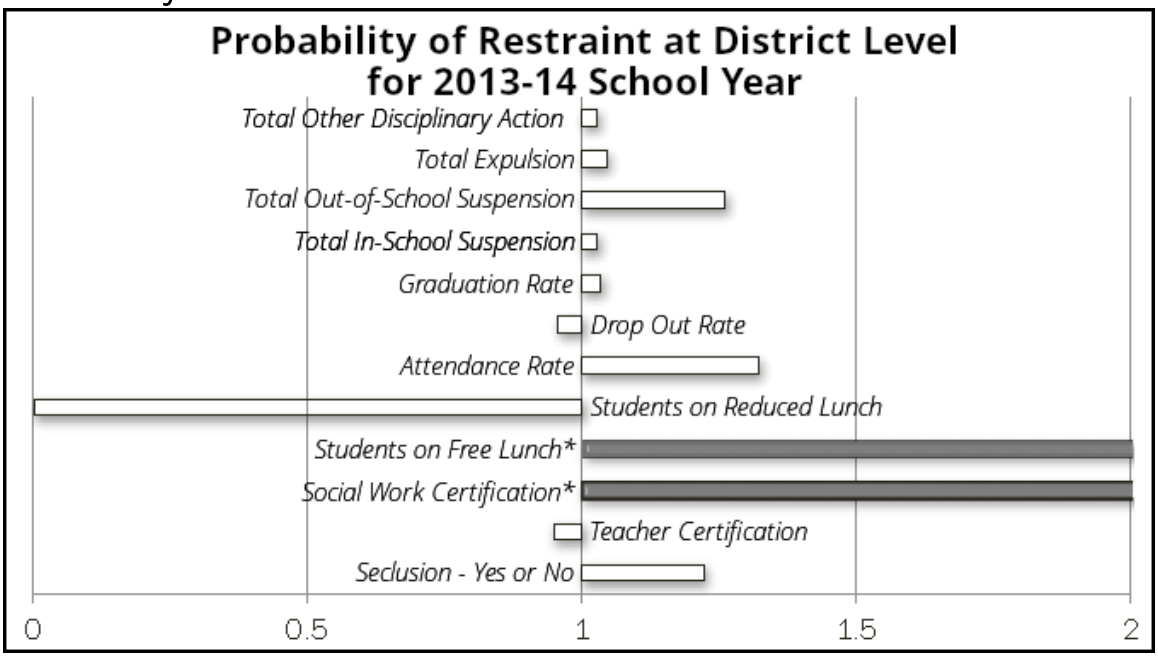
Data Analysis

- Data reported to KSDE during the 2012-13, 2013-14, and 2014-15 school years
- Brought together variety of data sets including seclusion and restraint, demographic, NCLB suspension and expulsion, and teacher certification
- Conducted multiple data analyses including:
- Logistic regression to understand the probability of seclusion and restraint occurring based on characteristics of the building and school
- Ordinary least squares regression to understand how various characteristics predict seclusion and restraint

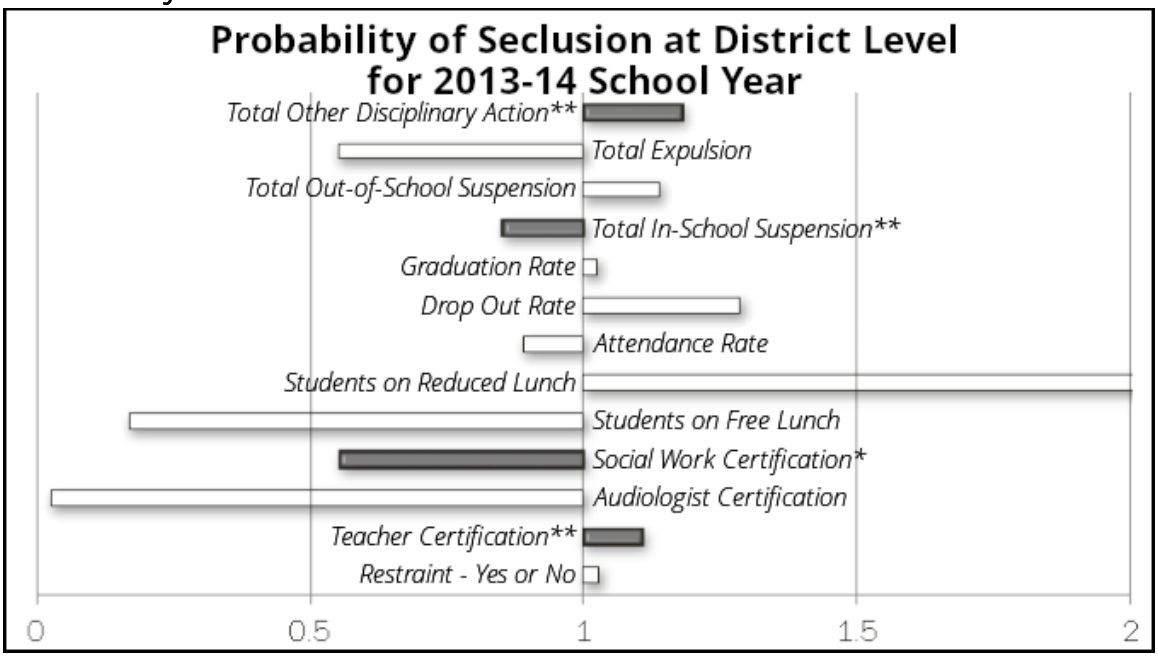
General Observations

- The data from 2014-15 appeared to be more accurate than 2013-14
- Seclusion and restraint incidents from 2013-1014 predicted the likelihood of using seclusion and restraint in 2014-2015
- The relationship between in-school suspension, out-of-school suspension, restraint, and seclusion must be further investigated:
- Building level data provided richer information about predictors of seclusion and restraint incidents

Probability of Restraint at District Level for 2013-14 School Year



Probability of Seclusion at District Level for 2013-14 School Year



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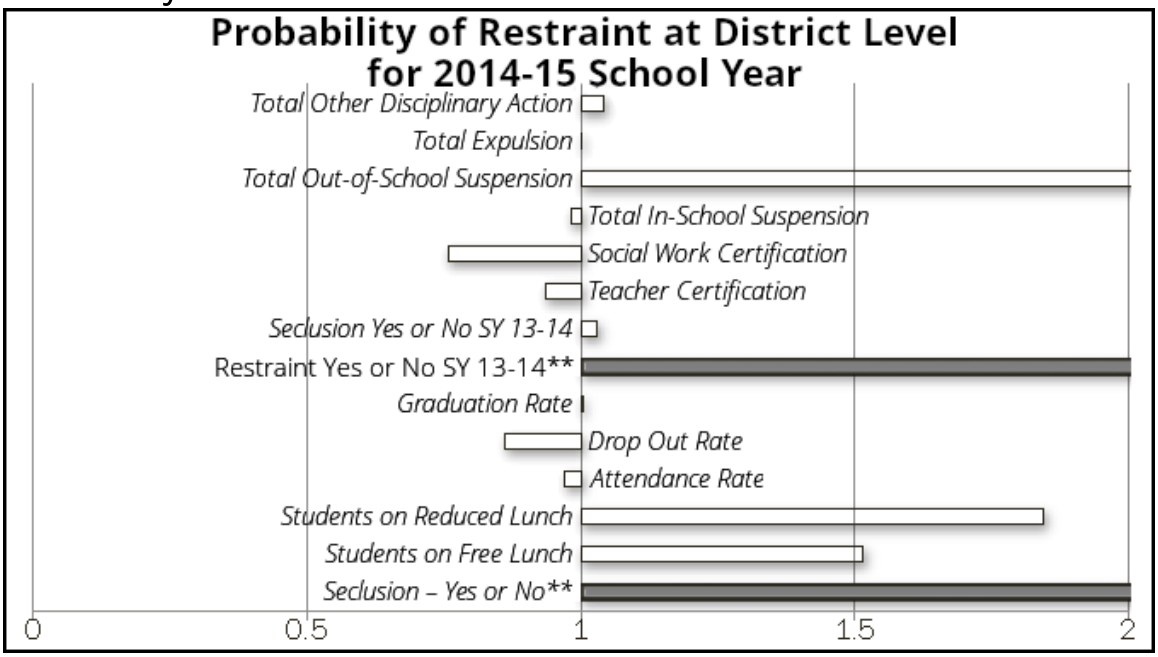


Probability of Seclusion at District Level for 2014-15 School Year

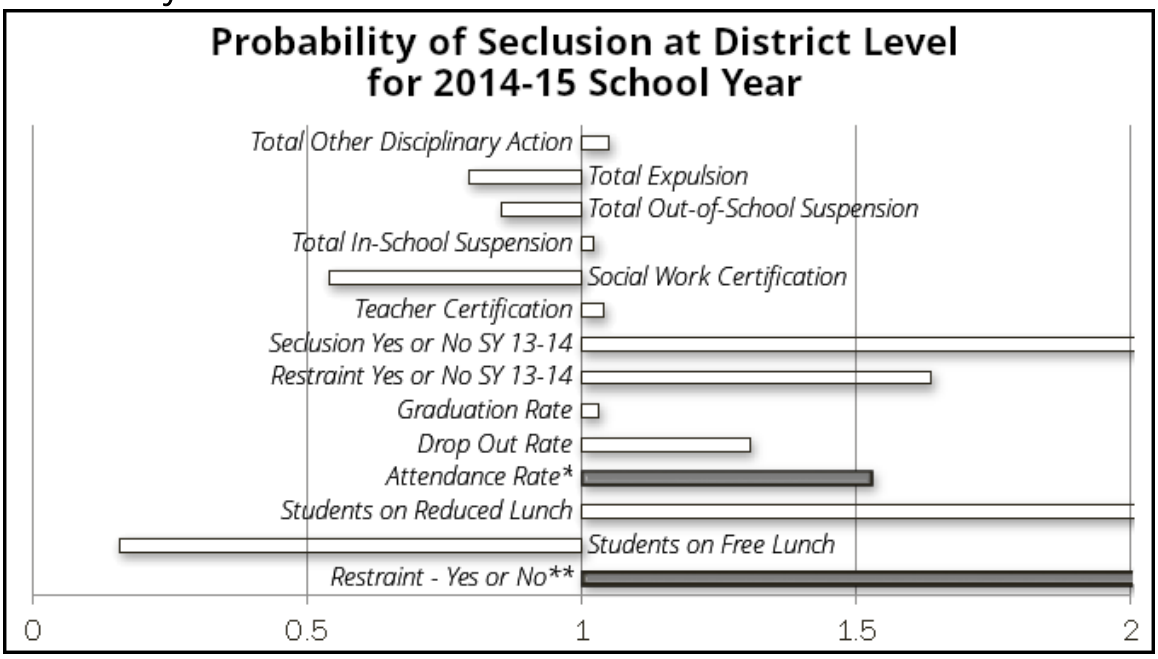


Table 1. Ordinary Least Squares Regression Predicting Restraint Minutes 13-14 at the District Level

Variable	Coefficient	Standard Error
Restraint Minutes Quarter 3 2013-14	0.387**	0.116
Restraint Minutes Quarter 2 2013-14	0.162	0.085
Seclusion Minutes Quarter 4 2013-14	-0.053*	0.023
Seclusion Minutes Quarter 3 2013-14	-0.011	0.024
Seclusion Minutes Quarter 2 2013-14	0.001	0.019
White Students	0.041	0.088
Asian Students	0.114	0.106
Black Students	-0.003	0.091
Hispanic Students	-0.04	0.098
Native American Students	0.066	0.15
Hawaiian/Pacific Islander Students	-1.519	0.833
Multiple Races Students	0.196	0.131
English Learner Students	0.088	0.056
Students with Disabilities	0.211**	0.069
Total 4th Grade Students	0.109	0.329
Total 7th Grade Students	-0.242	0.29
Total 9th Grade Students	0.264	0.208
Total 12th Grade Students	-1.100**	0.255
Principle Certification	-3.819	3.807
Special Education Certification	0.097	0.643
Pre-K Teacher Certification	-3.231	2.032
Kindergarten Teacher Certification	0.599	2.714
Teacher Certification	-0.141	0.33
Counselor Certification	-1.199	2.754
School Psychologist Certification	1.533	5.359
Speech Language Certification	-2.772	2.425
Audiologist Certification	21.901	26.384
Social Work Certification	6.033	2.803
Students on Free Lunch	-13.301	25.248
Students on Reduced Lunch	-6.394	84.886
Attendance Rate	-0.977	1.486
Drop Out Rate	-0.753	2.163
Graduation Rate	0.165	0.292
Total In-School Suspension	-0.915	0.471
Total Out-of-School Suspension	-1.174	2.859
Total Expulsion	-0.591	3.014

- 277 recorded observations
- R^2 = 0.745, p < .01
- represents p < .05
- ** represents p < .01

Table 2. Ordinary Least Squares Regression Predicting Seclusion Minutes 13-14 at the District Level

Variable	Coefficient	Standard Error
Seclusion Minutes Quarter 3 2013-14	0.474**	0.063
Seclusion Minutes Quarter 2 2013-14	0.362**	0.05
Restraint Minutes Quarter 4 2013-14	-0.441*	0.188
Restraint Minutes Quarter 3 2013-14	0.271	0.342
Restraint Minutes Quarter 2 2013-14	-0.097	0.246
White Students	0.188	0.251
Asian Students	-1.213**	0.293
Black Students	0.38	0.26
Hispanic Students	0.256	0.281
Native American Students	0.929*	0.427
Hawaiian/Pacific Islander Students	-2.674	2.404
Multiple Races Students	0.689	0.374
English Learner Students	-0.014	0.161
Students with Disabilities	-0.466*	0.199
Total 4th Grade Students	-2.318*	0.933
Total 7th Grade Students	3.564**	0.802
Total 9th Grade Students	-2.255**	0.58
Total 12th Grade Students	-0.026	0.763
Principle Certification	6.747	10.955
Special Education Certification	4.443*	1.823
Pre-K Teacher Certification	-11.257	5.824
Kindergarten Teacher Certification	33.360**	7.481
Teacher Certification	-1.534	0.944
Counselor Certification	3.582	7.915
School Psychologist Certification	2.435	15.403
Speech Language Certification	-14.263*	6.924
Audiologist Certification	31.6	75.91
Social Work Certification	-15.547	8.071
Students on Free Lunch	7.338	72.602
Students on Reduced Lunch	90.674	243.884
Attendance Rate	0.894	4.273
Drop Out Rate	-1.548	6.216
Graduation Rate	0.337	0.84
Total In-School Suspension	-3.019*	1.349
Total Out-of-School Suspension	-28.360**	8.002
Total Expulsion	-4.269	8.657
Total Other Disciplinary Action	2 131	1 156

- 277 recorded observations
- R2 = 0.831, p < .01
- * represents p < .05
- ** represents p < .01

Table 3. Ordinary Least Squares Regression Predicting Restraint Minutes 14-15 at the District Level

Variable	Coefficient	Standard Error
Students Restrained 2014-15	8.355**	1.895
Incidents of Restraint 2014-15	2.513**	0.245
Minutes of Seclusion 2014-15	0.060**	0.02
Students Secluded 2014-15	-3.385	1.799
Incidents of Seclusion 2014-15	-0.757**	0.283
Students on Free Lunch	150.977*	61.142
Students on Reduced Lunch	-310.328	220.399
Attendance Rate	-2.137	3.912
Drop Out Rate	2.889	5.378
Graduation Rate	0.242	0.717
Principle Certification	-8.088	11.171
Special Education Certification	3.579*	1.6
Pre-K Teacher Certification	7.964	6.712
Kindergarten Teacher Certification	0.981	4.108
Teacher Certification	1.521**	0.571
Counselor Certification	-8.052	6.826
School Psychologist Certification	30.465*	12.741
Speech Language Certification	-33.888**	7.26
Audiologist Certification	-19.864	38.706
Social Work Certification	-21.887**	7.702
White Students	-0.207	0.209
Asian Students	0.249	0.255
Black Students	-0.393	0.227
Hispanic Students	0.004	0.219
Native American Students	-0.615	0.373
Hawaiian/Pacific Islander Students	-0.399	1.71
Multiple Races Students	-0.595	0.313
English Learner Students	-0.457**	0.134
Students with Disabilities	-0.126	0.157
Total In-School Suspension	6.225**	1.095
Total Out-of-School Suspension	10.191	6.786
Total Expulsion	6.268	7.765
Total Other Disciplinary Action	-5.517**	0.93

- 277 recorded observations
- R2 = 0.950, p < .01

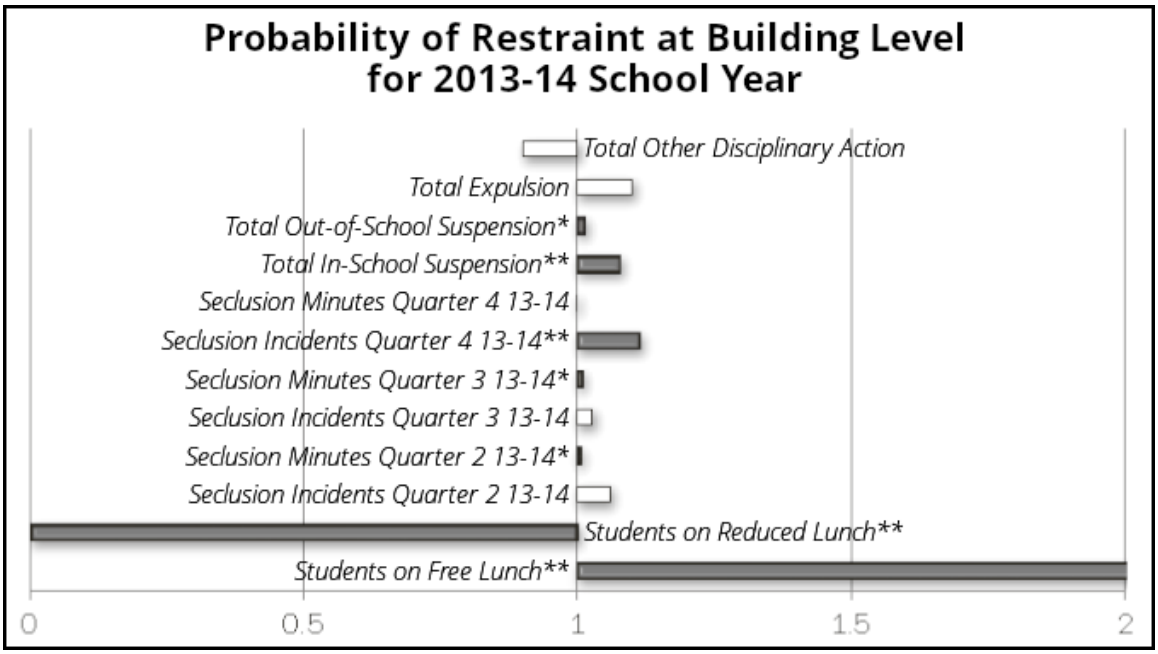
- * represents p < .05
- ** represents p < .01

Table 4. Ordinary Least Squares Regression Predicting Seclusion Minutes 14-15 at the District Level

Variable	Coefficient	Standard Error
Students Secluded 2014-15	37.588**	5.156
Incidents of Seclusion 2014-15	7.948**	0.744
Minutes of Restraint 2014-15	0.596**	0.199
Students Restrained 2014-15	-9.856	6.163
Incidents of Restraint 2014-15	-1.519	0.919
Students on Free Lunch	-441.753*	192.618
Students on Reduced Lunch	-345.384	695.65
Attendance Rate	6.95	12.302
Drop Out Rate	-7.608	16.916
Graduation Rate	1.05	2.254
Principle Certification	29.659	35.118
Special Education Certification	3.57	5.079
Pre-K Teacher Certification	88.043**	20.393
Kindergarten Teacher Certification	25.340*	12.817
Teacher Certification	-6.404**	1.773
Counselor Certification	-33.339	21.421
School Psychologist Certification	-89.643*	40.131
Speech Language Certification	36.494	23.731
Audiologist Certification	92.856	121.649
Social Work Certification	-0.813	24.626
White Students	-0.898	0.657
Asian Students	-0.297	0.803
Black Students	-1.429*	0.711
Hispanic Students	-0.723	0.686
Native American Students	0.828	1.179
Hawaiian/Pacific Islander Students	-21.696**	5.193
Multiple Races Students	-0.854	0.992
English Learner Students	-0.003	0.432
Students with Disabilities	-0.638	0.493
Total In-School Suspension	8.205*	3.629
Total Out-of-School Suspension	50.173*	21.195
Total Expulsion	-41.178	24.31
Total Other Disciplinary Action	-6.365*	3.104

- 277 recorded observations
- R2 = 0.925, p < .01
- * represents p < .05
- ** represents p < .01

Probability of Restraint at Building Level for 2013-14 School Year



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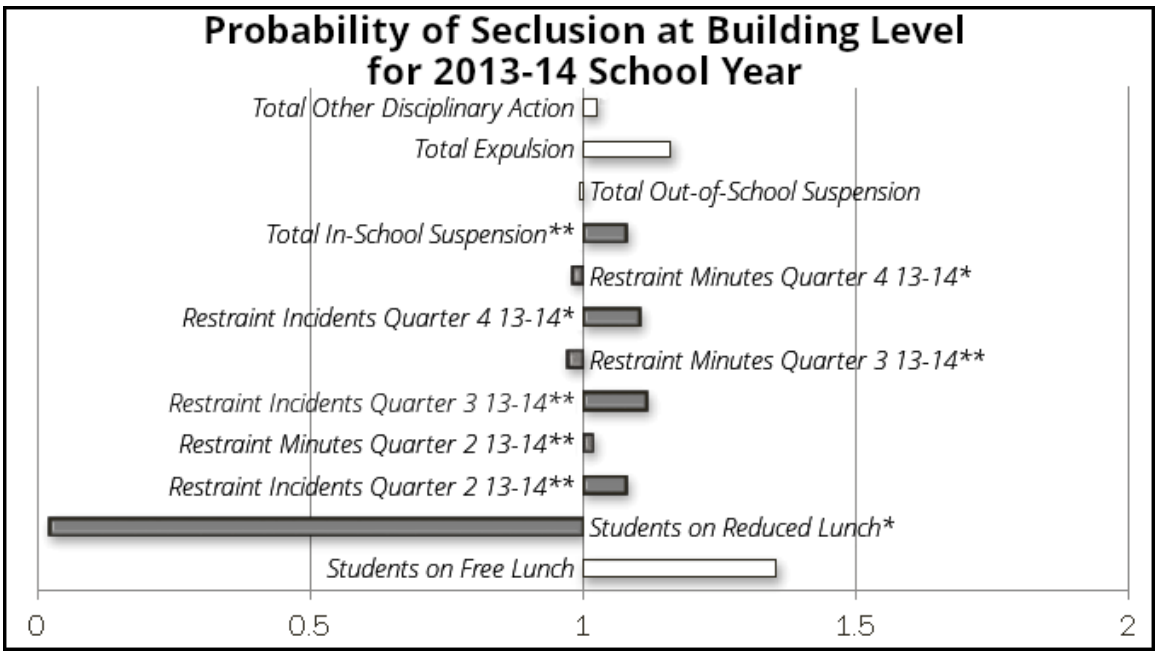

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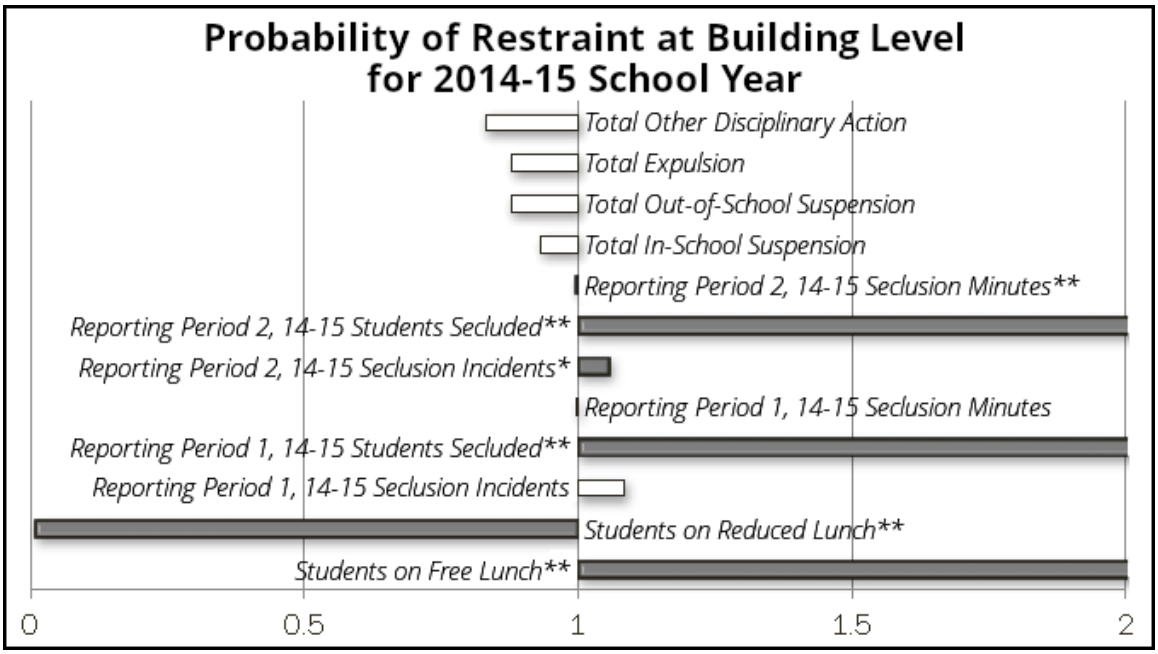

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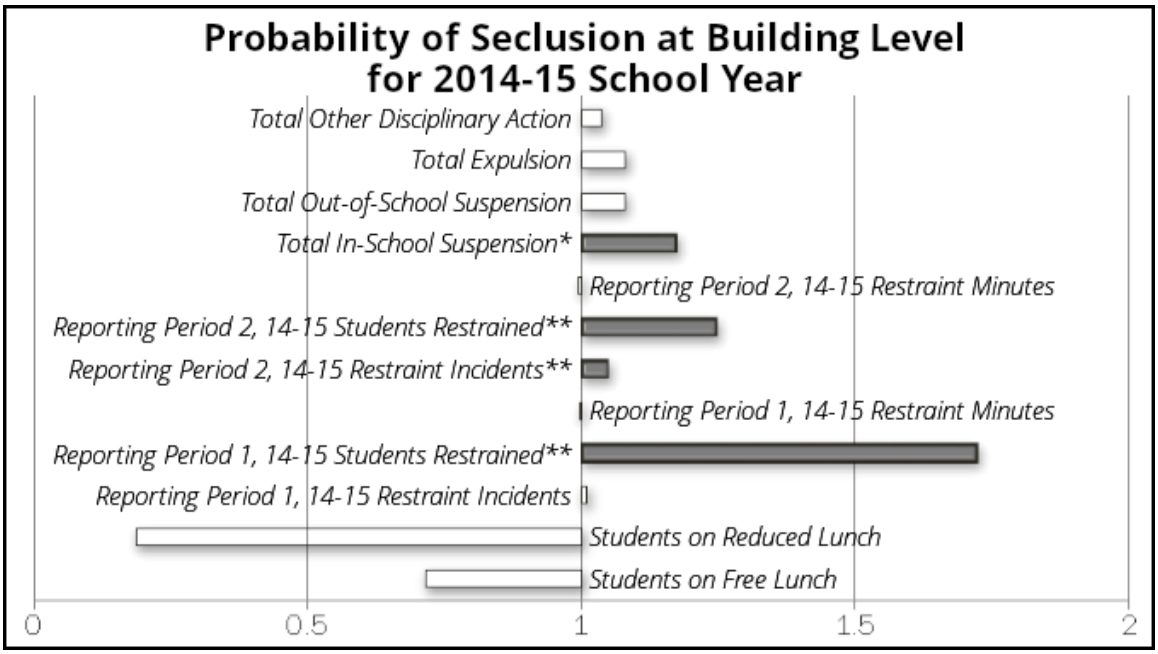


Table 5. Ordinary Least Squares Regression Predicting Restraint Minutes 13-14 at the Building Level

Variable	Coefficient	Standard Error
Restraint Minutes Quarter 3 2013-14	0.854**	0.012
Restraint Minutes Quarter 2 2013-14	0.085**	0.029
Seclusion Minutes Quarter 4 2013-14	0.055**	0.007
Seclusion Minutes Quarter 3 2013-14	-0.081**	0.009
Seclusion Minutes Quarter 2 2013-14	0.011	0.008
Students on Free Lunch	8.317**	2.537
Students on Reduced Lunch	-9.154	10.465
Total In-School Suspension	0.178	0.562
Total Out-of-School Suspension	0.017	0.609
Total Expulsion	0.406	0.972
Total Other Disciplinary Action	0.328	1.638

- 1,340 recorded observations
- R2 = 0.922, p < .01
- * represents p < .05
- ** represents p < .01

Table 6. Ordinary Least Squares Regression Predicting Seclusion Minutes 13-14 at the Building Level

Variable	Coefficient	Standard Error
Seclusion Minutes Quarter 3 2013-14	0.651**	0.032
Seclusion Minutes Quarter 2 2013-14	0.231**	0.033
Restraint Minutes Quarter 4 2013-14	0.920**	0.109
Restraint Minutes Quarter 3 2013-14	-0.784**	0.105
Restraint Minutes Quarter 2 2013-14	-0.044	0.12
Students on Free Lunch	-5.254	10.41
Students on Reduced Lunch	-38.261	42.777
Total In-School Suspension	3.166	2.294
Total Out-of-School Suspension	1.545	2.491
Total Expulsion	-2.177	3.972
Total Other Disciplinary Action	3.584	6.695

- 1,340 recorded observations
- R2 = 0.481, p < .01
- * represents p < .05
- ** represents p < .01

Table 7. Ordinary Least Squares Regression Predicting Restraint Minutes 14-15 at the Building Level

Variable	Coefficient	Standard Error
Reporting Period 1 Restraint Minutes 2014-15	0.123**	0.011
Reporting Period 1 Seclusion Minutes 2014-15	0.018**	0.007
Reporting Period 2 Seclusion Minutes 2014-15	0.028**	0.006
Students on Free Lunch	6.662	5.086
Students on Reduced Lunch	-17.856	20.647
Restraint Yes or No 2013-14	15.947**	2.811
Seclusion Yes or No 2013-14	6.998*	3.294
Total In-School Suspension	-0.725**	0.265
Total Out-of-School Suspension	0.075	0.077
Total Expulsion	0.895	1.515
Total Other Disciplinary Action	1.322	2.837

- 1,270 recorded observations
- R2 = 0.224, p < .01
- * represents p < .05
- ** represents p < .01

Table 8. Ordinary Least Squares Regression Predicting Seclusion Minutes 14-15 at the Building Level

Variable	Coefficient	Standard Error
Reporting Period 2 Restraint Minutes 2014-15	0.602**	0.13
Reporting Period 1 Restraint Minutes 2014-15	-0.036	0.053
Reporting Period 1 Seclusion Minutes 2014-15	0.452**	0.031
Students on Free Lunch	-0.712	23.647
Students on Reduced Lunch	10.865	95.955
Restraint Yes or No 2013-14	17.466	13.216
Seclusion Yes or No 2013-14	54.099**	15.256
Total In-School Suspension	1.201	1.232
Total Out-of-School Suspension	-0.364	0.359
Total Expulsion	-12.925	7.032
Total Other Disciplinary Action	-5.011	13.182

- 1,270 recorded observations
- R2 = 0.249, p < .01
- * represents p < .05
- ** represents p < .01

Take Away Information

- Schools and Districts that seclude and restrain students are more likely to do so in the future – We may not be addressing needs appropriately and need to assess interventions
- Schools and Districts with higher rates of poverty are more likely to seclude and restraint – a focus on prevention must be used to be culturally responsive, provide wrap-around supports for the students, and support staff in understanding the crisis cycle and de-escalation
- Seclusion and restraint predict one another – it is important to focus on decreasing BOTH practices in order to have a shift in how behavior is handled in schools and districts

A Focus on Prevention

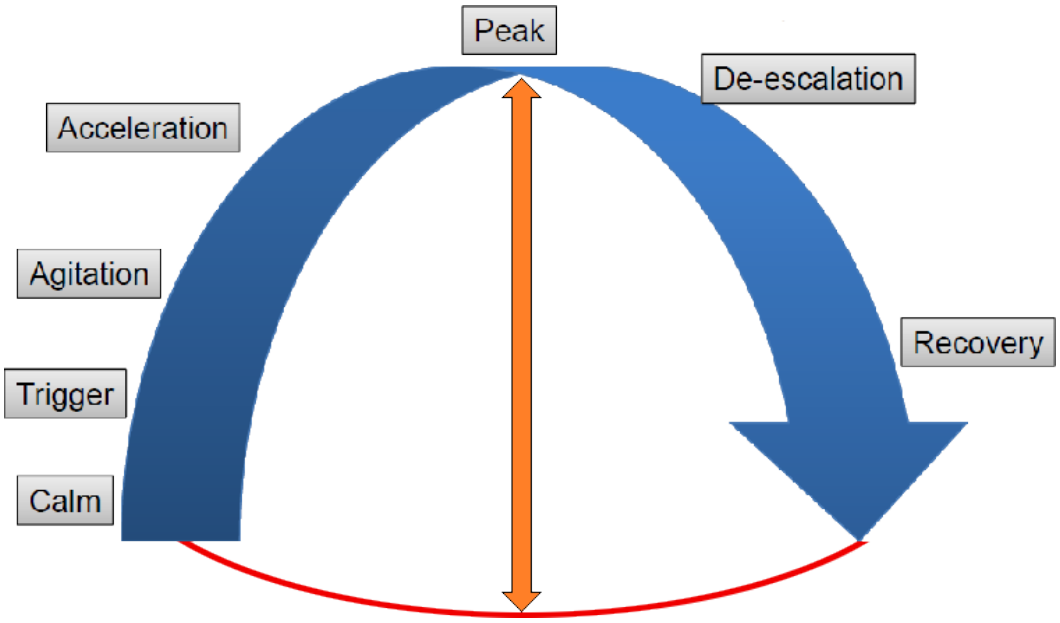
- KSDE does not promote the use of Emergency Safety Interventions with any student
- KSDE recommends a focus on prevention because there are REAL DANGERS when using Emergency Safety Interventions
- Emergency Safety Interventions are not part of a tiered intervention system or student behavior plan – it is ONLY to be used in an EMERGENCY
- Emergency Safety Interventions are a reactive strategy and does not decrease the likelihood of the behavior from occurring
- Focus on using proactive strategies to support students including positive behavior interventions and supports
- De-escalation is helpful to begin to identify acting out behavior early and use proactive strategies to decrease the use of seclusion and restraint

Find more resources about de-escalation on www.ksdetasn.org

Every Student Succeeds Act

- In December 2015, President Obama signed the Every Student Succeeds Act into law, reauthorizing the Elementary and Secondary Education Act
- The statute requires states to report on how they will assist schools to reduce the use of aversive behavioral interventions that compromise children's health and safety, bullying and harassment, and the use of discipline practices that remove children from the classroom
- The HELP committee report demonstrates seclusion and restraint as a critical component of this provision
- Congress believes this issue is of upmost importance and must be the focus of state attention
- "The provisions will encourage all States to determine how every student will be protected from inappropriate use of seclusion and restraint"

The Model: Seven Phases of The Escalation or Acting-out Cycle



Student's ability to cognitively process what is happening in the environment.

Colvin & Sugai, 1989; Colvin, 2004

Conclusion

- Seclusion and Restraint should be used as a last resort.
- KSDE encourages proactive, preventative strategies ensure a safe learning environment for all students and staff.

Helpful Links

- Templates, guidance documents, Emergency Safety Intervention statute and regulations, and de-escalation documents: www.ksdetasn.org
- Reporting ESI data to KSDE through the Kan-Dis web application: http://www.ksde.org/Default.aspx?tabid=571

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