

INDICATOR TARGET LEVEL ISSUES

Prepared for the Wyoming Department of Education by Michael Flicek, Ed.D.
(Draft -- 4/9/2015)

Indicator Impact

Wyoming has many schools with low enrollment. In order to be assigned a score on an Wyoming Accountability in Education (WAEA) indicator, a school must have at least 10 students with evidence on that indicator. Look back procedures are implemented when schools have fewer than 10 students with evidence from the current year. When necessary, up to three years of evidence may be combined in order to obtain enough evidence on an indicator to meet the 10 student requirement.

Some schools in Wyoming meet the minimum of at least 10 students on some but not all of the school accountability indicators. For schools serving students in grades 3 through 8, the three indicators are achievement, growth and equity. A business rule has been implemented that defines a small school as one with a score on just one indicator or on none of the indicators. As such, schools with two indicators may receive a school performance level score. Small schools do not receive a school performance level score. Instead they are included in a small school review process.

A professional judgment panel (PJP) established cut-points that were used to place schools within the target level categories for each indicator. The target level categories were exceeds target, meets target and below target. Table 1 presents the percentage of schools exceeding, meeting and below target on each of the indicators in 2014. The most obvious outlier in Table 1 is the percentage of schools in the below target category on the grade 3 through 8 *equity* indicator. Just 8% of schools serving students in grades 3 through 8 were in the below target category for equity. Among the indicators, the median percent of schools in the below target category was 33%. A high school indicator for equity had the next lowest percentage of schools in the below target category with 24% of schools in the below target category.

Table 1. Percentage of Wyoming Schools in Each Indicator Target Level Category in 2014.

	Exceeding	Meeting	Below
3-8 Achievement	14%	51%	35%
3-8 Growth	18%	54%	28%
3-8 Equity	35%	57%	8%
HS Achievement	20%	34%	46%
HS Equity	29%	48%	24%
HS Readiness	37%	30%	33%
HS Grad Rate	36%	27%	37%
Median	29%	48%	33%

Among the three indicator schools, only those schools that were below target on all three indicators were placed into the below expectations school performance level. As a result, the low cut-point for meeting target on the grade 3-8 equity indicator effectively served to establish an upper level for the percent of three indicator schools that could fall within the below expectations performance level. 241 grade 3-8 schools had target level scores on all three indicators. Of these 241 schools, 38 (i.e., 16%) had below target scores on both the achievement and growth target levels. Of these 38 schools, 25 (i.e., 66%) were in the meets target category on the equity indicator. There were 13 (i.e., 34%) of the 38

schools that were below target on both achievement and growth that were also below target on equity. These 13 schools represented just 5% of the 241 three indicator schools and, by virtue of being below target on all three indicators, these schools were the only schools of the 241 that were within the below expectations category.

Moving the cut-point for the equity indicator by one point would have resulted in 15% of schools in the below target category for equity and moving the cut-point two points would have resulted in 24% of schools in the below target category for equity. The second of these possible adjustments would have brought the impact on the grade 3 through 8 equity indicator more in line with the impact on the other indicators that were presented in Table 1. Moving the cut-point by two points would have resulted in 28 of the three indicator schools being in the not meeting expectations school performance level. This would have resulted in 12% of the three indicator schools falling within the not meeting expectations category.

Recommendation: During standard setting by the PJP, a table like Table 1 should be made available prior to finalizing the work of the PJP. Should there be an outlier like the equity indicator for grade 3-8 schools that is present in Table 1 the PJP would have one final opportunity to make adjustments to the cut-points.

High School Readiness Indicator

There are four sub-indicators for readiness. The sub-indicator for graduation is considered separately from the other three sub-indicator. Cut-points for target levels were established by the PJP for graduation rate. Schools were then given three methods for meeting the cut-points: with their four year on-time graduation rate, with their extended graduation rate or by improvement toward the cut-point from the previous year's four year on-time graduation rate. A bias showing the improvement feature of the graduation sub-indicator favored small schools was documented elsewhere¹.

The remaining three readiness sub-indicators, tested readiness, grade 9 credits, and Hathaway eligibility, are combined into *additional readiness*. The score on additional readiness is weighted aggregate combined score of the three sub-indicators. Target levels on additional readiness were based upon cut-points on the additional readiness aggregate score. *Overall readiness* was determined by a decision table within which the graduation target level and the overall readiness target level were entered.

With just one combined score for additional readiness there have been no target levels established separately for the three sub-indicators that go into the additional readiness score. This creates two concerns. First, the only basis the PJP has for establishing cut-points on the combined score is the impact of the cut-point. Specifically impact is the percent of schools that fall within the three target levels given the cut-points. When the three sub-indicators are combined to form additional readiness, the level of performance expected on the individual sub-indicators is not really knowable to the PJP as they establish the target levels for additional readiness. Beyond impact data, there is no contextual basis for the establishing the additional readiness cut-points.

The second concern is that schools are not given target levels for the three sub-indicators. It might be helpful to school improvement efforts if schools knew, for example, what tested readiness scores would

¹ Flicek, M. (2015). *Correlations among school performance levels and indicators*. Prepared for the Wyoming Department of Education.

result in a school falling within the meet or exceed target level. The same would be true for grade 9 credits and for the Hathaway scholarship eligibility level.

Recommendation. The establishment of target levels for the three additional readiness sub-indicators would be one way to address both of the concerns stated above. The PJP would have a contextual basis for establishment of meets and exceeds target level cut-points on the separate sub-indicators. For example the PJP would be considering what percentage of grade 9 students should have one fourth of the credits needed to graduate by the end of grade 9 in order to be at the meet and exceed target levels on that particular sub-indicator. Schools would then know where they fall in relation to the grade 9 credit target cut-points and they would know if their performance on this sub-indicator warranted attention in their school improvement planning. Finally, once schools have target levels identified on the three sub-indicators, a three-by-nine decision table could be utilized to obtain an overall additional readiness target level.