## State auditor's analysis of open enrollment

In December of 2015 the Coventry Local School District was placed in "fiscal emergency" status by the Ohio Department of Education. In accordance with the Ohio Revised Code, all Ohio school districts in fiscal emergency are to undergo a performance audit by the Ohio Auditor of State's office. Coventry's performance audit was released in July 2016. However, while Coventry's performance audit was part of a routine procedure, the results were hardly run-of-the-mill.

Coventry has long been among the statewide leaders in inter-district open enrollment and accepted 776 open enrollment students from neighboring districts in Fiscal Year (FY) 16, while losing 140, for a net inflow of 636 students. The district's formula Average Daily Membership (ADM) in FY 16 was 1,477 students and 34 students attended community schools. Therefore the 636 students attending Coventry schools through open enrollment comprised 30.6% of the FY 16 total enrollment of 2,113. The rationale for accepting such a large of number of open enrollment students each year was that Coventry received \$5,900 in state aid for each student accepted through open enrolment, while receiving an average of only about \$2,850 per pupil in state aid for each for the district's own (resident) students. In dollar terms, Coventry received \$4,208,123 in state formula aid in FY 16 and \$3,749,740 through the open enrollment adjustment. The \$3.7 million in open enrollment transfer payments is 47.1% of the district's total state formula aid.

While receiving 47.1% of state assistance from 30.6% of the students may appear to be a good deal financially, the Auditor's assessment was starkly different. The Auditor's rationale was that while open enrollment students do indeed bring with them a disproportionate amount of state aid, they do not, however, bring with them any local tax revenues. In FY 16 Coventry received roughly \$11.7 million in local property taxes for operating purposes. The Auditor's report, which relied on FY 15 data, computed that local revenue for the district's own students was \$7,063 per pupil which, when added to FY 15 average state aid of \$2,804 per pupil, resulted in a total of \$9,867 per pupil in total resources to be used to educate the district's own (resident) students. By this comparison, the Auditor's report reasoned that open enrollment students actually generate substantially less revenue per pupil than do the district's own students. As a result, the very first recommendation in the Auditor's report to help stabilize Coventry's financial situation was for the district to establish capacity limits on open enrollment. In fact, based upon analysis of maintaining an average class size of 25 students, the Auditor's report recommended that Coventry reduce open enrollment from the current level of roughly 650 students down to 116 students.

The gist of the Auditor's conclusion was that Coventry should only accept as many students through open enrollment as can be educated at a cost of \$5,900 per pupil. This by itself is not a controversial conclusion. But there is a reason that the adage "the devil is in the details" is used as often as it is in the context of school funding in Ohio. From the perspective of an economist (the profession of the writer of this article), the proper way to analyze open enrollment is to compute the marginal cost to Coventry (or any other school district) of educating an open enrollment student. The marginal cost will include the cost

of additional staff, supplies, and other support services that will be incurred as a result of adding more students to a school building. Economists call such costs "variable costs." At the same time, costs for such things as administration, building maintenance, and most utilities, which tend to not vary with the number of students, should be excluded. Economists call such costs "fixed costs."

For example, if the district judges acceptable class size to be 25 students per room, and a school building has 20 classrooms each averaging 23 students, then 40 students can be added without requiring the need for additional staff. These 40 students will bring in an additional \$236,000 in revenue to the district. As long as the marginal cost of incidentals is less than \$5,900 per student (which is highly likely as teacher costs typically comprise 70% of school district budgets), then it makes financial sense for the district to allow open enrollment. Furthermore, if non-teacher variable costs are even \$2,000 per pupil (which frankly seems high), then the district's "profit" from open enrollment is \$156,000 (\$236,000- \$80,000). This "profit" would then allow for the enrollment of 18 more open enrollment students if the marginal cost — including an additional teacher — is \$8,000 per student (the Auditor's report shows an average state + local operating revenue figure of \$8,701 for Coventry and this revenue also covers some fixed costs relating to administration, maintenance, etc...). These 18 students would bring in an additional \$106,200 in revenue through open enrollment (18 \* \$5,900), leaving the district with this amount as "profit."

Looked at another way, if a school district has an empty classroom, should it accept 25 new students through open enrollment? Twenty-five open enrollment students would have generated \$147,500 in revenue in FY 16 (25 \* \$5,900 per pupil). Hiring a new teacher at a salary of \$45,000 plus an additional 30% in benefits costs would cost \$58,500. This would leave \$89,000 for the incidental costs of educating these students, which does not seem unrealistic.

The Auditor's report claimed to have examined Coventry's open enrollment costs from this marginal cost perspective; however, not enough detail was provided in the publicly released report to assess the methods that were used to make these calculations. While it does not seem unreasonable to think that it might be advantageous for Coventry to scale back open enrollment from its current levels, the extent to which the Auditor's report recommends cutting back (a roughly 80% reduction) seems quite large. In addition, it appears that the Auditor's estimate of the cost savings that could be generated by reducing open enrollment are based on average teacher salary levels. This assumption seems unrealistic as most collective bargaining agreements preference seniority which means that when reductions in teaching staff are required, newer, lower paid teachers are let go first. To this extent the Auditor's analysis may be over-stating cost savings from reducing open enrollment in Coventry.

Finally, initial discussions with staff from the Auditor's office suggested that the general conclusions relating to open enrollment from the Coventry audit would also apply to other Ohio school districts. From this perspective, it seems imperative to gain further understanding of the methodology used by the Auditor to make these cost calculations in

order to assess the extent to which other school districts in Ohio may also be over utilizing the open enrollment option.