What is Authentic Intellectual Work (AIW)?
AIW provides reflective professional development for teachers and schools to increase rigor and relevance in teaching diverse students:

The AIW framework sets standards for teaching that:
- Maximize expectations of intellectual rigor for all students,
- Increase student interest in academic work,
- Support teaching for in-depth understanding rather than superficial coverage of material,
- Provide a common conception, Instructional Language and Point of View that enables teachers across the disciplines in a secondary school to be “critical friends” to help sharpen teachers’ lessons and instruction,
- Most important equip students to address the complex intellectual challenges of work, civic participation, and managing personal affairs in a contemporary world.

What is the data that demonstrates Authentic Intellectual Work (AIW) improves student learning?
The Iowa Department of Education in 2012 conducted a matched sample study of 33 schools, nearly 8,000 students. Half the schools had been doing AIW full staff affecting all the students in those schools. 3,908 students were in AIW schools.

An Initial Evaluation of the Iowa DE Project to Enhance Students’ Authentic Intellectual Work (pp. 15-24)

<table>
<thead>
<tr>
<th>Grade</th>
<th>4</th>
<th>8</th>
<th>11</th>
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</thead>
<tbody>
<tr>
<td>Reading</td>
<td>9.2*</td>
<td>5.5*</td>
<td>2.9</td>
</tr>
<tr>
<td>Math</td>
<td>11.4*</td>
<td>8.1*</td>
<td>11.2*</td>
</tr>
<tr>
<td>Science</td>
<td>4.8</td>
<td>6.5*</td>
<td>6.7*</td>
</tr>
<tr>
<td>Grade</td>
<td>5</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4.4</td>
<td>-.06</td>
<td>11.9*</td>
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</tbody>
</table>

This chart shows the percentile advantage on the Iowa mandated tests for students at the 50% percentile in AIW schools whose teachers had been participating in AIW Learning Teams for at least one year as compared to a matched sample of schools which were not doing AIW.

How does Authentic Intellectual Work (AIW) affect a student, family or teacher? One teacher’s testimonial:
I have been an educator for over a decade in two states, three high schools and two middle schools. I have gone through various staff developments. Like all investments, school districts are looking for returns like gains in student achievement and staff collaboration. Yet, most of the investments I have been part of as an educator never produce returns or have longevity. After experiencing this first hand, it is understandable why some educators accept apathy towards innovation and expect isolation professionally. Then last year I was introduced to the AIW framework, and I felt as if a switch had been turned on.

AIW has been the most profound and important professional development I have ever done. For over a decade I have felt frustrated when collaborating with my peers and isolated in my desire to think outside the box. Yet the ‘go it alone’ philosophy never helped me produce the results in the classroom I desired. Now I realize it was because my collaboration time lacked a common language, objective and purpose. When I sit with my AIW colleagues and score a task, student work, or instruction, I’m empowered by teachers leading teachers. Together we break down the barriers of isolation and help each other become better professionals in the classroom by creating student work that is meaningful and purposeful. (Laura Hensley, AIW teacher, The AIW Journey, 2013, p. 22)
The Improvement Journey—Just the Outline

- January 2010: “Your high school has been identified as one of Minnesota’s persistently lowest achieving schools.” Ogilvie was one of 10 rural schools on that list, 34 schools in the state.
- May 2010: Ogilvie collaborative leadership chose to implement five strategies:
  - adopt Authentic Intellectual Work (AIW) as the clear instructional point of view,
  - curriculum mapping,
  - ongoing intensive professional development,
  - using time effectively for instruction in the core subjects, and
  - collaborative culture and distributed leadership.
- In 2010-2012 Ogilvie Faculty engaged in 95 hours per year in staff development including AIW coaching in scoring tasks, student work, instruction, and teaching for substantive conversation and value beyond school.
- From 2010 through today, Ogilvie High School faculty members have each participated in at least 15 AIW scoring repetitions per year in learning teams. Formal AIW coaching and in-service ended in 2012.

Process Results:
In an end of the year survey in the spring of 2011, starting with the sentence frame:
As a result of my participation in Authentic Intellectual Work,
- 93.5% agreed or strongly agreed “I have raised my expectations for my students,”
- 100% agreed or strongly agreed “I have improved my professional skills as a teacher,”
- 93.5% agreed or strongly agreed “My students have improved their skills in my content area and in higher order thinking skills.”

These results were also noted in an MDE Evaluation Report, Ogilvie, May 17, 2011

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The development of PLCs has brought together teachers from different subject areas to discuss and debate aspects of curriculum. Learning and teaching, for the first time in a long time, has created an enthusiasm for change that must now be translated into real, and much needed improvements in quality and standards;

The school has made some progress in the PLCs in developing Authentic Intellectual Work (AIW) and this has resulted in rich professional dialogue about teaching, learning and the planning of lessons. (p. 7)
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“This institution is an equal opportunity provider and employer”
Ogilvie High School’s Journey of Achievement and Achievement Gap Reduction

Student Results

- 2012 Ogilvie HS was Celebration Eligible, the second highest MMR ranking.
- 2014 Ogilvie HS met AYP in all sub groups.
- “I wish this AIW stuff had been here years ago because school was a joke and I hated it, but I now look forward to it because I come to school with the expectation that teachers are going to teach and I am going to learn.” (Ogilvie student to High School Principal in 2012)
- 10th and 11th grade achievement has increased significantly to state average and the gap between FRE eligible students and non-FRE eligible has dramatically dropped to less than ¼ the statewide gap.
The Project Description: 2012-2015

This three year project brought Authentic Intellectual Work (AIW) reflective professional development to the faculty of five smaller high schools in Northern Minnesota with an introduction to scoring, regular coaching of teacher learning teams, and with regional sharing among the schools. In the first two years the bulk of the funding came from the Blandin and Northwest Minnesota Foundation. In the third year, the schools are providing the majority of the funding.

In this project, participating schools developed the local and regional capacity to sustain this educational transformation with the guidance, coaching, and support of the Center for Authentic Intellectual Work, the Minnesota Rural Education Association, and the NW Service Cooperative. Continuing the project in 2014-15 are Bagley, Kelliher and Laporte. Clearbrook-Gonvick and Fisher began the project but dropped due to financial issues and a change in leadership.

The results of the project.

110 teachers and 8 administrators participated in AIW scoring sessions for at least one year, participating in an average of 20 scoring sessions each year in AIW. 60 teachers and 8 admin, participated for two years. In a May 2014 survey:

- 91% of participating teachers found the collaborative scoring sessions helpful or very helpful.
- 96% of participating teachers trusted their AIW team to bring lessons that were not working as well as they would like and they would get useful ideas to improve their instruction and student learning.
- 100% of participating teachers felt confident scoring tasks, which they scored the most times.
- 94% of participating teachers felt that their staff development activities have been sustained and coherently focused. This is a dramatic increase from 44% who agreed to this statement in the beginning in 2012.

Student Achievement Increases and Achievement Gap Reduction:

These schools went full staff in 2013-14--the first year was with pilot teams of teachers. These MCA III results show the difference between 2012-13 (pilot team only), and 2013-14 with full staff participating AIW Learning Teams.

<table>
<thead>
<tr>
<th>Year</th>
<th>Bagley</th>
<th>Kelliher</th>
<th>State</th>
</tr>
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<tbody>
<tr>
<td>2013</td>
<td>61</td>
<td>62.3</td>
<td>60.1</td>
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<tr>
<td>2014</td>
<td>67.1</td>
<td>60.1</td>
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In the AIW Schools, Reading achievement increased 6 percentage points, while the state average went down 2 percentage points.

The gap between Non FRE and FRE students went down slightly in the AIW Schools, while the state-wide gap increased by nearly 1/3 to 45.2 percentage points.

Both schools have a significant AMI population. 50% of Bagley’s AMI 10th graders were proficient in reading compared to the state-wide average of 36%. No other 10th grade AMI cells in these schools were large enough to have reportable data.

Bagley and Kelliher were only 3 year project schools large enough to have cell scores for FRE 10th graders. Math changed from MCA II to MCA III between 2013 and 2014 invalidating comparison data.