K12-University IB partnerships: Supporting authentic intellectual work through collaborative conversations

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Superintendent  
Green Lake School District

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English Teacher  
Green Lake School District
How can ALL students have access to high-quality IB units and assessments?
Today’s Roadmap

Share details of K12-University Partnership

Introduce AIW framework

Explore AIW tools within an IB context

Reflect on possibilities and challenges
The Partnership: Context, People & Goals

Green Lake School District

UW-Madison: ELPA
"I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!"
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Authentic Intellectual Work is...

...the construction of knowledge, through the use of disciplined inquiry, to produce discourse, products or performances that have value beyond school.

--Newmann & Associates, 1996; Newmann, Carmichael, & King, 2016
Authentic Intellectual Work [AIW] Criteria

Construction of Knowledge

Disciplined Inquiry

Value Beyond School

Improved Student Learning

Knowledge Base
In Depth Understanding
Substantive Communication

Teacher Tasks
Student Performance
Instruction
AIW applications to IB

Teacher Tasks
- IB unit plans
- Formative Assessments
- Summative Assessments

Student Performance
- PYP Exhibition
- MYP Personal Project
- MYP Service Learning
- DP Extended Essay
- DP Creativity, Action & Service
- DP Theory of Knowledge Course
- DP Internal and External Assessments

Instruction
- ATL
- Interdisciplinary units
- Global awareness

Construction of Knowledge
- Improved Student Learning

Disciplined Inquiry
- Knowledge Base
- In Depth Understanding
- Substantive Communication

Value Beyond School
### MYP Unit Planner

<table>
<thead>
<tr>
<th>Teacher(s)</th>
<th>Cathy Moore, Green Lake School District</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit title</strong></td>
<td>Struggle for Freedom</td>
</tr>
<tr>
<td><strong>Subject group and discipline</strong></td>
<td>Language A, American Literature</td>
</tr>
<tr>
<td><strong>MYP year</strong></td>
<td>Level 5</td>
</tr>
<tr>
<td><strong>Unit duration (hrs)</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

#### INQUIRY: Establishing the purpose of the unit

<table>
<thead>
<tr>
<th>Key concept</th>
<th>Related concept(s)</th>
<th>Global context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication (Conceptual Learning)</td>
<td>Purpose, Context</td>
<td>Fairness and Development</td>
</tr>
</tbody>
</table>

#### Statement of Inquiry

Throughout history, language has been used to inspire and influence.

#### Inquiry questions

- Factual – How did American forefathers use language to achieve freedom?
- Conceptual – How do we use language to our own purposes?
- Debatable – Is language reliable?

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MYP Unit planner PILOT
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Summative assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• understand and analyse the language, content, structure, meaning and significance of both familiar and previously unseen oral, written and visual texts</td>
<td>Outline of summative assessment task(s) including assessment criteria:</td>
</tr>
<tr>
<td>• analyse the effects of the author’s choices on an audience</td>
<td>• Students will create a mark up of a speech, pointing out and presenting the rhetorical devices they have learned about through the literature.</td>
</tr>
<tr>
<td>• compose pieces that apply appropriate literary and/or non-literary features to serve the context and intention</td>
<td>• Students will identify a problem they feel strongly about. They will then propose a solution for that problem through a persuasive essay that employs rhetorical devices.</td>
</tr>
<tr>
<td>• compare and contrast works, and connect themes across and within genres</td>
<td>• Students will convert their persuasive essay into a persuasive speech and deliver it.</td>
</tr>
<tr>
<td>• use language to narrate, describe, analyse, explain, argue, persuade, inform, entertain and express feelings</td>
<td>• By delivering their essay as a speech, students will gain the experience using language to inspire or influence verbally.</td>
</tr>
<tr>
<td>• use language accurately</td>
<td>• By writing a persuasive essay, students will learn to use the techniques they have identified.</td>
</tr>
<tr>
<td>• use correct grammar and syntax</td>
<td>• Students will be able to identify specific language (connotation, denotation, allusion, repetition, parallelism, elevated language, imagery, and logical, emotional, as well as ethical appeals) used to inspire or influence.</td>
</tr>
<tr>
<td>• use appropriate and varied sentence structure</td>
<td></td>
</tr>
</tbody>
</table>
**Approaches to Learning (ATL)**

**Communication:** Students will read American Revolution and Civil Rights era literature critically and for comprehension. They will have the opportunity to make inferences about the context of this literature and the perspective of the authors and audience. They will analyse the language devices the American forefathers used. They will write and then publicly speak to persuade.

**Social:** Students will actively listen to each other’s analysis of language and delivery of original speeches to gain perspective and ideas.

**Self Management, Organizational Skills:** Students will plan and organize persuasive essays and speeches.

**Self Management, Emotional Skills:** Students will use strategies to reduce stress in order to deliver a speech.

**Research:** Students will evaluate information that may or may not support their persuasive essay and speech argument.

**Thinking:** Students will transfer the language techniques they have learned in order to deliver a compelling argument.

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### Action: Teaching and Learning through Inquiry

<table>
<thead>
<tr>
<th>Content</th>
<th>Learning Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Speech in the Virginia Convention</em></td>
<td><em>Learning experiences and teaching strategies</em></td>
</tr>
<tr>
<td><em>The Declaration of Independence</em></td>
<td>Students will read American Revolution and Civil Rights era literature critically and for comprehension. They will have the opportunity to make inferences about the context of this literature and the perspective of the authors and audience. They will analyse the language devices the American forefathers used. They will write and then publicly speak to persuade.</td>
</tr>
<tr>
<td><em>The Rights of Man</em></td>
<td>Students will actively listen to each other’s analysis of language and delivery of original speeches to gain perspective and ideas.</td>
</tr>
<tr>
<td><em>Poor Richard’s Almanac</em></td>
<td>Students will plan and organize persuasive essays and speeches.</td>
</tr>
<tr>
<td><em>Stride for Freedom</em></td>
<td>Students will use strategies to reduce stress in order to deliver a speech.</td>
</tr>
<tr>
<td><em>Necessary to Protect Ourselves</em></td>
<td>Students will evaluate information that may or may not support their persuasive essay and speech argument.</td>
</tr>
<tr>
<td><em>Rhetorical Devices</em></td>
<td>Students will transfer the language techniques they have learned to deliver a compelling argument.</td>
</tr>
<tr>
<td><em>Persuasive Essay Organization review</em></td>
<td></td>
</tr>
<tr>
<td><em>Speech techniques</em></td>
<td></td>
</tr>
</tbody>
</table>
In addition to the Unit Planner, MYP also encompasses:

Service Learning and The Personal Project, holistic projects that guide students through inquiry, research, action, presentation and reflection - employing all of the elements in AIW.
AIW applications to IB: DP approaches and assessments

The new DP Unit Planner

- Begins with inquiry (Disciplined Inquiry)
- Inquiry and Action sections are all addressed in content-based, skill-based, and concept-based manners (Construction of Knowledge)
- Learning Process often employs Socratic Seminar, Individual Presentations, Group Presentations (Substantive Communication)
- Approaches to Learning (Value Beyond School)
- Metacognition (In Depth Understanding)
- TOK Connections (Disciplined Inquiry & Construction of Knowledge)
- CAS Connections (Value Beyond School)
Exploring IB-AIW in context
The planning process and student voice
Research Foundations

Over 20 years of research in diverse contexts has shown the power of AIW for higher and more equitable student learning outcomes.
I see you did well in school, but what real-world skills do you have?

Tests. I can take tests.

http://weknowmemes.com/2013/06/what-real-world-skills-do-you-have/
Subjects and Grade Levels Where Research Shows Authentic Pedagogy Benefits Student Learning

**Authentic Achievement:**

- ★ Math (3, 4, 5, 6, 7, 8, 10, 9-12)
- ★ Science (4, 8, 9-12)
- ★ Social Studies (4, 5, 8, 10, 11, 9-12)
- ★ Literacy/Language Arts (3, 4, 6, 8, 9-12)
- ★ PDHPE (4, 8)

**Standardized Achievement:**

- ✤ Math (3, 6, 8-10, 10-12)
- ✤ Reading (3, 6, 8)
- ✤ Writing (3, 6, 8)
- ✤ Social Studies (8-11)
- ✤ Science (8-10, 10-12)
Low SES students overtake high SES students when task IQ is higher.

Students’ Gains in Reading and Mathematics on the Iowa Test of Basic Skills (ITBS) According to Quality of Teachers’ Assignments in Reading and Mathematics in 46 Chicago Schools with Gain Scores Averaged Across Grades 3, 6, and 8 for 3 years

Authentic performance for students with and without disabilities in the classes with highest and lowest authentic tasks—4 Inclusive High Schools

Equity Results

• Student Background Need Not Influence Degree of Exposure to Authentic Pedagogy

• Achievement Benefits of Authentic Pedagogy Are Positive and Virtually Equal for Students of All* Backgrounds
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Explore AIW tools within an IB context

Reflect on possibilities and challenges
Preparing for collaboration
Speaking the same language

Instructional leaders’ roles

AIW coaches’ roles

Shared Vision of School Improvement, Instruction
AIW Rubrics: Scoring Teacher Tasks

Animal Area Project
7th grade Math
Ms. Washkovick
## AIW Rubrics...Scoring Teacher Tasks

### Construction of Knowledge

<table>
<thead>
<tr>
<th>Score</th>
<th>Criteria</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The task’s dominant expectation is for students to organize, interpret, analyze, synthesize, or evaluate mathematical information rather than merely to reproduce information.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>There is some expectation for students to organize, interpret, analyze, synthesize, or evaluate mathematical information rather than merely to reproduce information.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>There is very little or no expectation for students to organize, interpret, analyze, synthesize or evaluate mathematical information. The dominant expectation is for students to retrieve or reproduce fragments of knowledge or to repeatedly apply previously learned algorithms, definitions, rules and procedures.</td>
<td></td>
</tr>
</tbody>
</table>

### Elaborated Communication

### Value Beyond School
## Posting Group Scores

<table>
<thead>
<tr>
<th></th>
<th>Construction of Knowledge</th>
<th>Elaborated Communication</th>
<th>Value Beyond School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walter</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lydia</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Jesse</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Marie</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Gustavo</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Saul</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
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</table>
Disciplined Inquiry… through Elaborated Communication
### Elaborated Communication

<table>
<thead>
<tr>
<th>Score</th>
<th>Criteria</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Elaborated communication is exemplary. Explanations or arguments are clear, complete, accurate, coherent and convincing, with no significant errors.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elaboration is offered. Explanations or arguments are reasonably clear and accurate but lack sufficient support or coherence to be convincing.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Some elaboration is present, but explanations or arguments are significantly incomplete, contain significant errors, or are incoherent.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Little or no elaboration is offered.</td>
<td></td>
</tr>
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</table>
The Principal’s Many Roles

• Articulate purpose

• Make connections

• Communicate with coaches

• Organize logistics and strategic grouping

• Observe and participate
“How are you going to lead [students] to the point where they can complete this summative assessment successfully?”

-Mary
The AIW Coaches’ Roles

• Co-plan team meetings
• Create a safe space
• Model AIW rubrics, language
• Pose questions
• Record observations
• Celebrate team expertise
Coaches’ Questions & Prompts

“Will the student’s responses show you that they have the conceptual understanding that you hope they will have?”

“Have you considered situating the summative assessment in a real-world context?”

“How and when do you see substantive conversation happening during this lesson/unit?”

“Consider the extent to which the prompt encourages students to communicate elaborately about their process and thinking.”
The Teachers’ Roles

In Advance:

● Re-familiarize with the focus AIW Standard (Higher Order Thinking, Depth of Knowledge and Student Understanding, Substantive Conversation, or Value Beyond School)

● Select an artifact that needs improvement

During AIW Collaboration:

● Engage in Substantive Conversation with peers

● Active Listening and Questioning
Teachers’ comments

“This is super inspiring because you guys have these amazing things.”

“I need ideas from you guys for a summative assessment.”

“I love the question: Do we need games. Maybe another question is: Do we need rules? That’s a great question for 7th graders to answer.”

“Maybe at the end you could do a Socratic circle. Discuss whether people should change the way they speak in a given context.”
Today’s Roadmap

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↓

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↓

Explore AIW tools within an IB context

↓

Reflect on possibilities and challenges
Green Lake - UW Partnership

The Possibilities and Challenges of Our Work
Effective Partnerships Require...

That university partners
• Value existing expertise and prior knowledge
• View themselves as “partners”
• Be flexible, yet maintain focus on agreed-upon goals

That K-12 administrators and coordinators
• Openly share what’s working, not working with partners
• Remain active participants in the work
• Identify and support ongoing, emergent needs
“...we have found the single factor common to every successful change initiative is that relationships improve. If relationships improve, things get better. If they remain the same or get worse, ground is lost. Thus leaders must be consummate relationship builders with diverse people and groups...” (Michael Fullan, 2002)

http://www.michaelfullan.ca/media/13396053050.pdf
Your Questions and Comments