# Evaluation of Inquiry by Design (IBD) and Strategic Instruction Model (SIM)

**April 24, 2012** 



## **Inquiry by Design: Overview**

- What is Inquiry By Design?
- > Inquiry By Design Components
- Inquiry By Design Professional Development
- Next Steps

# What is Inquiry by Design?

Inquiry by Design (IBD) provides both professional development and Common Core State Standards aligned supplemental curricular materials to help maximize classroom learning.

IBD professional development focuses on a clear set of classroom rituals and routines. These best practices are integrated with supplemental curricular materials that provide multiple opportunities for students to do the following:

- Comprehend and interpret literature and informational texts
- > Write in a range of genres including argument and exposition
- ➤ Get smarter about real reading, writing, and discussion work and master the discipline-specific practices of English classes that will prepare students for ongoing academic success

## **Writing**

- In every unit, multiple writing tasks help students construct text-based arguments in response to interpretive questions about important ideas.
- Units of study are structured so students are taught how to write informative/explanatory reports and essays.
- Writing tasks are structured wherein students write whole narratives and scenes like those they are studying.
- An emphasis is placed on the writing process that includes planning, revising, rewriting, and publication.
- Research-based report writing projects of varying length are focused by research questions that require students to draw on multiple sources, including print-text source material.

## Reading

- An emphasis is placed on close reading and the construction of original, text-based arguments. In every IBD unit, tasks help students to identify, summarize, and evaluate the ideas and arguments within (and often across) texts.
- Retrospective tasks have students analyze how two or more texts address similar themes or topics.
- Units of study and procedural guides are structured to have students reading widely in a range of various literary and informational genres.

## **Speaking and Listening**

- Central to all Inquiry by Design units of study are cycles of content-focused, text-based work that are anchored by significant amounts of integrated discussion and writing work.
- Discussions take place in small and large groups and are intentionally sequenced to help support close reading and text-based writing.
- Students are regularly positioned to present information, findings, and evidence in ways appropriate to audience and purpose.

## **Professional Development**

#### **Curriculum Institutes**

These sessions are designed to help teachers prepare for teaching IBD materials, using common rituals and routines. Teachers experience the majority of each institute as learners — reading, writing, and discussing texts just as their students will.

## **Teacher Coaching**

Once teachers have spent some time implementing units of study, IBD professional developers work with them in their classrooms — observing, coaching, and planning. During this time, teachers develop an essential pedagogical framework for engaging students in inquiry-based work.

## **Professional Development**

## **Principal Coaching**

Principals learn to use the IBD learning walk protocol in order to better understand how to promote inquiry-based learning based on their observations.

## Peer Learning Labs

Teachers and administrators come together to observe and discuss IBD lessons implemented by their peers as they inquire more deeply into the nuances of classroom practice and peer collaboration.

## **Professional Development 2011-12**

Grade Level	Number of Participants	Number of New Units	Training Days	Coaching Days	Learning Lab Days
4 <sup>th</sup> - 5 <sup>th</sup> Grade <i>(Pilot)</i>	9 teachers 1 administrator	2	3		1
6 <sup>th</sup> -8 <sup>th</sup> Grade	29 teachers	6 <sup>th</sup> & 7 <sup>th</sup> – 4 8 <sup>th</sup> 6	6	3	4
9 <sup>th</sup> Grade	9 teachers	4	6	2	3
10 <sup>th</sup> – 11 <sup>th</sup> Grade (Pilot)	9 teachers	1	2		
IBD Content Area (Pilot- MS, HS)	9 teachers	1	2		1

## **Comments and Feedback**

#### I have learned:

- So much! Comprehension based assessment is key
- Several ways to get students excited and engaged about reading
- Different ways to think about rubrics and student writing
- Some pros and cons about rubrics that I didn't think about
- More about the metacognitive portion of these units
- How to use the Error Journal and to incorporate IBD into my class better
- That reviewing before the school year is invigorating

#### I am inspired to:

- Collaborate
- Help students build more complex ideas and arguments with their writing
- Restructure and improve my school year
- Organize all of the IBD materials into a logical sequence for meeting CA standards
- Focus on purpose/audience
- Read more poetry with kids

# **Comments and Feedback (continued)**

#### I have questions about/recommend next time:

- I'm a little concerned about timing
- Finding the balance between check for understanding and interpretive work
- How to get students from difficulty charts to writing interpretive papers
- · How to give good feedback to improve student writing
- How to get this all to work together
- How to get kids interested in required texts
- Grammar instruction
- How I can build history units that support the IBD work in English
- Middle school level anchor papers are they coming?
- How to keep students engaged in longer units
- We do one lesson (in PD) and have work time, rather than another lesson
- Schedule training for time to implement the curriculum before the next PD I would like to say:
- Guiding principles are sound. Work is interesting and authentic. Still think there needs to be plenty of room for non-IBD work
- I enjoy learning new ideas that improve my job. Thank you.
- This has been very useful
- I'm once again impressed by the richness of IBD texts

## Peer Learning Lab Comments and Feedback

How has this peer-learning lab helped you to increase your knowledge and understanding of inquiry based work?

- This is difficult and exciting work. I love that we are modeling and working with this.
- I learned that group work must be explicitly taught. We assume students understand it.
- Choice is essential.
- I was able to go to two different classrooms and see the differences in teaching IBD. While the teachers' styles were different, the students had great success in the discussions.

What will you immediately bring back from this peer learning lab to your classroom or school?

- Continued refinement of my practice
- Some routines used validated the way I want to get the students discussing stories.
- Poster for my sentence stems
- The IBD procedures I hadn't implemented or was having trouble with
- Explicitly teaching group work dynamics
- · Deliberate planning

How might this peer learning lab experience be improved?

- More, more, more ©
- Teachers cycling through as observers and participants over the course of a year
- It went well. I liked the process. Maybe doing more of them like injections during our teaching would be very inspirational.
- Well planned
- I wish I had read the story in advance.

## **Additional Professional Development**

## Professional Development – March 16, 2012

<b>Grade Level</b>	Number of Teachers	Number of Administrators
3 <sup>rd</sup> – 5 <sup>th</sup>	11	2

# March 16 Comments and Feedback I have learned:

- how to organize and plan dialogue and collaboration with reading that allows more creative and critical thinking
- that more student talk is important
- how hard it is to create quality interpretive questions/tasks
- the difference between comprehension and interpretive questions and how to write
- that meaningful text is crucial for good discussion and inquiry based learning
- excellent collaborative strategies
- how to develop thought provoking interpretive questions

# March 16 Comments and Feedback (cont'd)

#### I am inspired to:

- try these steps and be a better facilitator for discussion groups
- find an engaging/controversial text to use with students so that we can have an interpretive discussion
- apply IBD to Houghton Mifflin Reading stories
- ask higher level/open questions with writing and more structured student collaboration
- implement this at site

#### I have questions about/recommend next time:

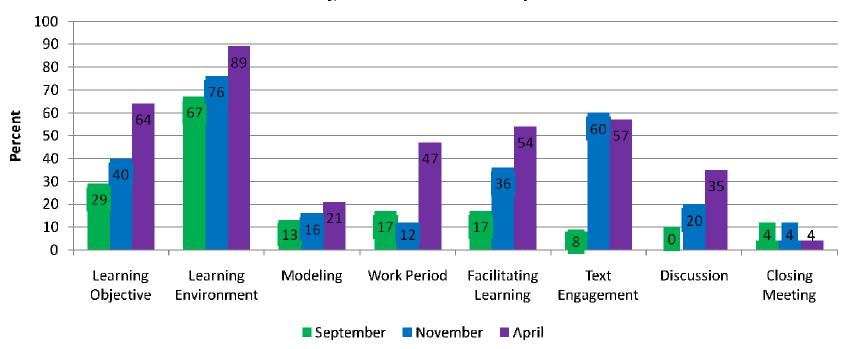
- How would this work with non-fiction, especially history, science, etc?
- Provide us with a text/common books we could use with our students right away.
- What are sources for finding good test to use with students?
- How can we get more training?
- What does this actually look like in a 3-5 classroom?

#### I would just like to say:

- I plan to integrate this into my HMR curriculum!
- · This was definitely worth coming to. Thank you.
- Thank you so much for a great learning experience.
- thank you for having us be "students". I learned a lot by doing.
- I would like to attend more sessions and/or coaching.
- 3<sup>rd</sup> grade should be included (in the training).

# **IBD Implementation at Middle School**

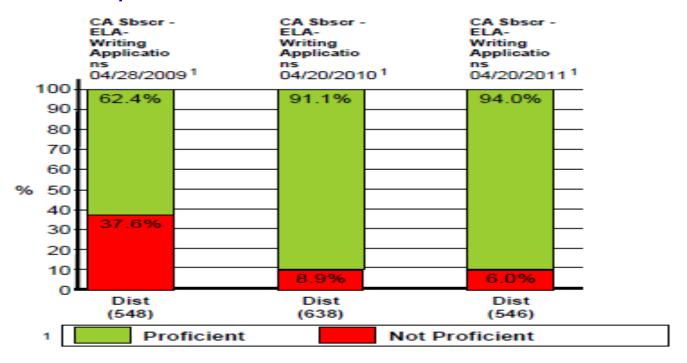
# Percent of Walk-Through Dimensions Scoring Moderately, Somewhat or Definitely Present



Key Point: For most dimensions, there was an increase in the percentage of classrooms that received a rating of Moderately, Somewhat or Definitely Present from September to November to April. Largest gains were noted for Learning Objective, Learning Environment, Work Period, Facilitating Learning, Text Engagement and Discussion.

# 7<sup>th</sup> Grade CST Writing Proficiency

3 Year Comparison for 2008-2009, 2009-2010 & 2010-2011



Key Point: AUSD 7<sup>th</sup> graders have shown significant improvement in their writing scores for the last two years. This corresponds to the beginning of IBD implementation at the middle school. (For further history, 2007 results were at 63% and 2008 results were at 74% proficient.)

## **Inquiry By Design Next Steps**

- ➤ Identify and train a group of grade-level teacher leaders at the middle school levels. Build internal capacity to support this work.
- Expand 4-5 pilot to include more teachers.
- ➤ Use IBD units, as well as rituals and routines, to ground the work of transition to the Common Core State Standards

## What is SIM?

The Strategic Instruction Model, known as SIM, is a program developed by the University of Kansas to address issues of adolescent literacy and provide teachers with research-based strategies and routines to ensure students have access to and attain mastery of grade-level content.

#### Two Main Components of SIM:

- CER-Content Enhancement Routines are used across secondary disciplines/subjects by teachers with all learners to access/master challenging content.
- LS-Learning Strategies are intensive units used with struggling students to promote the development of skills and strategies that are essential for academic success in core classes.
  - Fusion is an ELA intervention curriculum based on SIM Learning Strategies and other best practices.

## The SIM Model in AUSD

- Since 2006, AUSD has worked with the University of Kansas and certified professional developers to provide training and coaching to secondary teachers to help them learn and implement SIM Content Enhancement Routines and Learning Strategies.
- ➤ SIM professional development for practitioners involves trainings at workshops, classroom visits and feedback, collaboration, and coaching conversations.
- ➤ AUSD has concentrated efforts in the last 5 years to build internal capacity for teachers and administrators to take over SIM professional development.

## SIM Evaluation Criteria

- 1. Capacity for internal professional development
- 2. Trainings and coaching statistics for 2011-12
- 3. GRADE scaled test score growth in Fusion classes
- 4. Lincoln Fusion: New teacher data
- 5. CAHSEE Scaled Score growth and passage rate in Island High School Fusion classes
- 6. CST Biology percent proficient growth, comparing EHS whole department implementation to others
- 7. Training feedback

# **Professional Developers**

## **Building AUSD Capacity for Sustaining the Model**

	Content Enhancement	Learning Strategies	Dual	Totals
Professional	10	3	1	14
Developer	10	3	Τ.	14
Potential				
Professional	1	1		2
Developer				
Totals	11	4	1	16

Key Point: AUSD has been building capacity to continue improved implementation of SIM. We are in the process of identifying more professional developers for a 2013 SIM Potential Professional Developers Institute.

## **2011-12 Training Statistics**

Sponsor School	Teachers Trained: New and additional training
EHS	12
AHS	17
Island	13
WMS (PPD)	31
LMS (PPD)	40

Key Point: In-district professional developers lead to an increase in the number of practitioners who have access to ongoing training.

# **FUSION: Learning Strategies**

## Using the GRADE Standard Scores to measure growth

	6th	7th	9 <sup>th</sup>
2010-2011	-6	3	14

Key Point: An additional year of growth is 5-15 scaled points, the larger range applying to students who are farthest below grade level. Students who were in the program for the required two years showed growth. At the high school where teachers worked with students to fully embed Fusion strategies into the range of their course work, students showed significant growth.

# **FUSION: Learning Strategies**

#### **Lincoln Fusion**

	Prediction Strategy Growth	Fluency Growth
2011-12 School Year	14 pts	14 pts

Key Point: Lincoln has a new Fusion teacher who is receiving training and coaching from our in-district professional developers. Her students are showing significant growth in two of the major indicators.

# **FUSION at IHS: Learning Strategies**

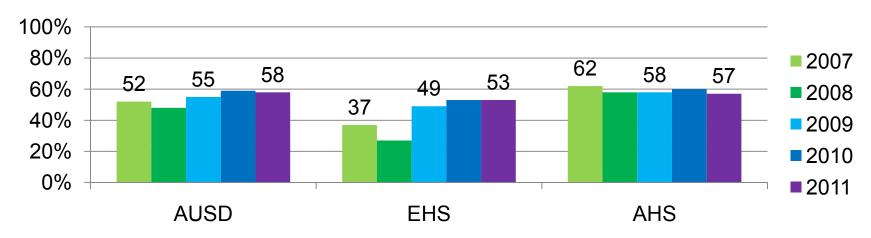
## Using the CAHSEE Scaled Scores to measure growth

	Average CAHSEE Scaled Points Growth FUSION as CAHSEE Prep	Range	
2009-2010	34 pts	Range: 7-140 points growth	
2010-2011	40 pts	Range: 27-50 points growth	
2011-2012	36.5 pts	Range: -1 to 71 points growth (1 student had a slight drop; the next growth jump was 22 points)	

Key Point: Students at IHS benefitted from Fusion intervention to pass the ELA CAHSEE. Of the 14 students who took the course last year and retested on CAHSEE, 9 have now passed the exam.

## **SIM Content Enhancement in Biology**

#### **CST Percent Proficient**



Number of Students	AUSD High Schools	EHS	AHS
2007	805	319	405
2008	823	272	488
2009	865	286	496
2010	931	333	511
2011	800	287	465

Key Point: EHS Biology teachers started intensively using CERs during the 2008-2009 school year and saw a dramatic rise in the number of students proficient on the CST. While there may be other variables involved, this was the primary change in practice. Test scores for the first year of implementation rose 22 points and have maintained 53% for two year. AHS did not implement SIM content enhancement department-wide. State-wide proficiency is 49%; county-wide is 54%.

# **SIM Training Feedback**

#### Something I learned today:

- How to organize the lessons to make them accessible to our students
- That I was (working) with great teachers
- Course Organizer keeps the flow of teaching smooth makes teacher organized, ready and targets the content.
- I loved putting together an organized picture of 6<sup>th</sup> grade science that is meaningful, authentic, and useful to me.
- I understand course questions better.
- I learned that the Course Organizer is not only about the course's content. It includes community principles, learning rituals, other expectations.
- Essential great content questions for Core from a colleague
- There are ways to roll out course organizers late in the year, and uses for a course organizer during the year.
- (Course) organizers are constantly evolving.
- Creating the course organizer with the students makes them responsible for their learning and makes them want to learn better.
- How to link Course Organizer to Unit Organizer
- How to rephrase my critical questions to make my input comprehensible
- Co-constructing with students in an engaging way is challenging.

## SIM Training Feedback Continued

#### A question, comment, suggestion/my concerns about implementation:

- It was great to work with my colleagues.
- Time and student capabilities and exposure
- How often I revisit the organizer throughout the year
- Wonderful to have planning and thinking time
- How to deal with difficulties related to co-construction
- I really enjoyed the gallery walk and looking at other teachers' courses.
- I thought it was great. I will use this to help improve our students understanding.

#### Something I might need support with:

- Completing and implementing the units
- Release time to plan another course organizer with my colleagues
- How to effectively co-construct
- Identifying content concepts and units
- I want to learn FRAME and LINCS.
- Coming up with critical concepts
- Great feedback check-ins on what's working with our units

## **Next Steps**

- Identify and train a third cadre of professional developers.
- Support both existing and potential professional developers at sites.
- ➤ Create a centralized system of trainings in the "big four" CERs for new hires and untrained teachers, allowing site PDs to focus on deepening the work and training teachers in additional CERs.
- Train and coach additional teachers in Learning Strategies/FUSION.
- Work with Special Education to identify, train and coach teachers in high leverage Learning Strategies.