Notes From The State Superintendent's Standards Review Council

3/14/17

GEF 3, Room P41
125 South Webster Street,
Madison, WI 53707

Standards Review Council Members	
Mike Beighley	Heather Mielke
Kim Brown	Carrie Morgan
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Jenni Hofschulte	Representative Jeremy Thiesfeldt
Stephen Kolison	Connie Valenza
Howard Kruschke	

The State Superintendent's Standards Review Council was called to order at 9:00 a.m. by John Johnson.

Computer Science

- **Standards of Practice and Theory**
    - Discussion of computational thinking
        - Recommendation to use this in implementation
    - Suggest gettting implementation guidelines
    - Structure appreciated: targeted bands which make it easier to move between schools, be more targeted than 4th, 8th, 12th, grades, etc.
        - Goal of more consistency in standards
    - Using common vocabulary and linking to other subject areas
    - Note: Some of our content looks like it made it into the new ACM standards, particularly cyber-security
- **Implementation**
    - Comment: Elementary teachers stressed about taking all these standards and learning how to implement them. Struggled a lot to give them the skills to teach the various subjects.
    - Comment: Worried DPI will put out excellent standards that never get looked at by elementary teachers - need skill/support for implementation in elementary. If they don't take in elementary, they won't roll up to higher grades.
        - All the support doesn't change the fact that time/money are the main constraints. But having standards to refer to in workshops and advocate for staff development helps a lot whether they can fully implement them or not. WIthout standards there's no way to move forward together.
        - Not against standards, just wants there to be follow-through for next stages
- **Questions**

    - How quickly will these be out of date?
        - Writing committee worked hard to not tie this to specific tools/technology. Finally clear what are the enduring understandings that outlast the constantly changing tools
        - Intention to do 5-6 content areas per year, which puts us on a 7 year cycles. Can't do it more often due to spending cycles, etc. but can't let them go too long either.
        - CS won't go faster than other subject areas
    - Have rules coming up dealing with licensure... is CS under Sci or Math? How do the new rules affect this?
        - It's its own license.
        - Not related to the other sciences.
    - Once we have standards, what do teachers teach? Is there a curriculum?
        - Curriculum taught in PD, in college. Curriculum written by teams, districts, etc. Not DPI.
        - Implement the standards through quality state funded/run trainings. Use Code.org lots for free resources/training. Resources are out there it's a matter of implementing them.
        - Professional orgs play a role as well
        - Problem isn't that there aren't enough curriculum resources, there are too many. Google, Microsoft, etc. everyone's got a curriculum. Need to stitch them together with local universities, etc. That's much easier with standards.
        - A textbook isn't a curriculum either.
        - Many of the local curriculums were created by the same people who worked on the standards
- **Consensus to adopt**

Information Technology & Literacy

- **Driving Evidence of Need to Update**
    - Ties to computational thinking again
    - Encourage people to think about the tie-ins from this to CS, ELA, etc. E.g. how is writing different if writing for a videogame?
    - Strong negative impact of not taking action
    - Old Standards from 1998, now 2017. A lot has changed.
    - Students and employers recognize the need for problem solving and 21st century skills
- **Questions**
    - Do you feel like the current standards were written too specifically, and thus got out of date quicker?
        - They were written at a good time - in 1998 they had the web, which was key. Mostly not written so specifically, but is missing the fundamental Web 2.0/social shift, and now the complicated media landscape. Need to teach analysis of the sources.
        - Old ones are very operational, hardware specific, e.g. how to use a mouse. Now we're getting into inquiry/thinking//application levels.
- **Comments**
    - Comment: Amazing how much high schoolers don't know, when you see them on their 1:1 devices. Things you'd assume they know.
    - Comment: Lots of one to one devices and everyone's going through Google. We're putting all our eggs in one basket. Need for students to sort data from propaganda.
- **Consensus to Revise**

Music

- **Comments**
  - Benefit to pull language from the other new standards to keep things consistent.
  - Hears theme of enhancing the current standards. Lots to add, but not the same as the IT standards.
    - Lots of habits of mind being developed. Orchestration. Tremendously productive.
    - All the art forms are moving towards treating students as young artists, so that when they're given creative tasks they look at them through that creative, project-based learning lens that's already infused with being a musician/etc.
- **Questions**
  - Are we just doing music, or incorporating the other arts into it?
    - There are existing standards in each of the other arts areas, which will be revisited on their own timelines.
  - Serious need to cross-integrate/coordinate with the other arts fields
  - The old standards are organized with skills by 4th, 8th, 12th grades in; are you looking at making it more fluid?
    - Expanding to go by grade level, like other current models. National Core Arts Standards look at broader concepts and let kids demonstrate knowledge in multiple ways (e.g. instead of just singing).
  - We're hearing the same skillsets, whoever we talk to (problem solving, creativity, etc.). If we focus on those skills, we're onto something. We don't need to sell this to the specialists, it's the generalists who could benefit from this structure.
  - What has changed? How are the deeper parts not curriculum?
    - The creation aspect: the new standards are focused on the process not the product. Helping kids to discover what they can do with music besides be in band/choir.
    - These standards tie together different areas: how will I consider the role of music in eldercare, in all areas of life, etc.
    - The old standards don't get into culture, exploration. Just the verbs: sing, dance, etc.. No investigating the thought process, how to get involved beyond performance (composing, technology, etc.). This is a deeper, more conceptual thought process. Then districts/etc. will decide how to teach it.
    - Areas of technology and composition in particular have changed. The 1997 standards don't place much emphasis on that - if you had a music technology course, for example, it would be hard to align to the standards.
    - Increased connections to other content areas.
    - Improved learning science - how kids learn. Reading notes is literacy and kids who struggle with reading also struggle there. Connections are a focus - across subject areas, and connecting students to themselves.
      - Instead of practice charts, teaches how to build skills through what actually happens in their brains (myelin).
    - It would be useful to see more of the standards from 1997 and then 2014. How have the basics changed vs. how you apply them?
      - Standards are the floor, not the ceiling. Road signs to help teachers get students where we all want them to go. The current standards aren't packaged well and don't include the latest research. We can better articulate creativity, etc. than in

the past. The old standards were also very prescriptive - by the end of 6th grade, students should X.
    - 1997 standards were skill silos - they really section off what you're doing into singing, performing, etc. New standards interconnect those ideas. More synergy, less skill-based. More points of entry. With the '97 standards you can't bring in someone new as a freshmen - would take years just to catch them up. Whereas could apply the National Core Arts Standards to their first day.
    - Great for meeting needs of different communities as well.
- **Consensus to Revise**

Science

- **Comments**
    - Something that should be there - scientists are unable to communicate their research. Need to be able to explain in everyday language.
        - This relates to Disciplinary Literacy in All Subject Areas
        - One of the practice standards in NGSS is to evaluate science
    - Teaching starts with job skills, and NGSS is helpful for that.
- **Questions**
    - Does DPI know which schools use which standards?
        - ~55% of school districts are using NGSS, based on informal survey 1.5 years back
    - Why WI standards? The national standards are popular.
        - Part of the state need is to have something that informs test development, teacher prep programs, etc. The NGSS are in-play as a foundational document.
    - How does this relate to what's happening at the national level?
        - This is the transparent way of working at the state level. What's happening both nationally and locally will inform what we do.
        - There's an important role for public input in the process as well. Make sure all voices are heard.
        - Looked for gaps between the standards. Value was in those rich conversations.
    - What were the glaring differences? We're going with X standards because... why?
        - Difference in rigor, building in 21st century skills. Good structure for performance, very thorough.
        - Hears again and again that they're good at blending skills with content, better than past standards. Learn through doing science.
        - They don't tell teachers not to lecture but NGSS focuses on doing, not just knowing. And that's what teachers are seeing in their classrooms every day since they adopted NGSS.
        - With the old standards there were some things about inquiry but separated the content standards from them. Teachers someimtes struggled at figuring out how they went together. NGSS shows how they fit together - understand this, to do it in model, to show it in an experiment, etc.
        - NGSS is focused on application.
    - Ist the discussion whether we should adopt the NGSS?
        - That could be the committee's recommendation
- **Consensus on the need for new WI science standards**