

Minutes
State Board of Education Special Session
Friday, August 10, 2007

The Arizona State Board of Education held a Special Session at Rio Salado Community College Conference Center, 2323 W. 14th Street, Tempe, AZ., 85281. The meeting was called to order by Dr. Karen Nicodemus at 10:08AM.

Members Present

Mr. Jesse Ary
Dr. Vicki Balentine
Dr. John Haeger
Ms. Martha Harmon
Superintendent Tom Horne
Mr. Larry Lucero
Ms. Anita Mendoza
Mr. Jacob Moore
Dr. Karen Nicodemus
Ms. Cecilia Owen

Members Absent

Ms. Joanne Kramer

1. GENERAL SESSION

Presentation, discussion and possible action relating to Arizona's minimum course of study and competency requirements for graduation from high school. Discussion may include, but is not limited to, implementation strategies, and possible modifications to Arizona Administrative Code R7-2-302.

Dr. Karen Nicodemus opened the meeting by stating that the goal of this special session is to review:

- graduation requirements
- increasing graduation rates

She introduced Ms. Joanne Hilde, who facilitated the meeting, and Dr. Nicodemus thanked Ms. Hilde for her assistance.

Dr. Nicodemus announced that public comments will be taken at 11:30am and that the Honorable Governor Janet Napolitano will join at 1:30pm to give her comments. Dr. Nicodemus welcomed everyone to the meeting and publicly thanked Rio Salado for providing the space and refreshments.

Dr. Nicodemus added that the special meeting is one of several steps to receive public input and that there will be more time and meetings in the future to solicit additional public input, as this is a very important issue to the State of Arizona.

Ms. Hilde took the podium at 10:14am to facilitate the discussion for the framework that will direct Mr. Vincient Yanez, Executive Director, State Board of Education, in drafting the rule language. Ms. Hilde explained that the goal for the session is to come to consensus decisions, not a vote on the rule. She noted that decisions made today will provide direction. She stated that opportunities for full-blown debate will come at a future meeting and that today's purpose is to gather information and that it is very important for each Board member to make their thoughts known.

Ms. Hilde initiated the discussion by asking the Board members what their expectations were for the day:

- Dr. Vicki Balentine stated that she hopes that the meeting will result in real movement to change graduation rates
- Mr. Lucero stressed the importance of not losing sight of the fiscal impact and producing professional staff that will accomplish goals
- Ms. Anita Mendoza stated her goal is that the Board will understand the implications to instruction, teacher preparation and student achievement
- Dr. John Haeger asked the Board to review the issue's impact on Arizona's economy and students' futures
- Mr. Jesse Ary stated that his goal is for the Board to come to a consensus that impacts the best possible output of the most of our constituents
- Mr. Jacob Moore stressed the importance of being able to meet the capacity to support schools for intervention, preparation, and retention and for schools that may not have the financial capabilities to implement the program effectively
- Ms. Martha Harmon stated that the importance of this process for her is to get input from the field and have clear direction as to how to move forward so the Board is not talking about implementation for the next five years
- Superintendent Tom Horne stated that he anticipates major input from field and public over the next few weeks, as the goal for resolution of this issue is set for December. Mr. Horne stressed that he wants to ensure that the public and field have had an adequate chance to have their voice heard and that the Board does not move prematurely without consideration of the public.

Ms. Hilde stated that by the end of the day the Board will have discussed pathways to graduation in Arizona, determined Math expectations, Science expectations and developed timelines for implementation.

Ms. Cecilia Owen arrived at 10:25am during the previous discussions.

Ms. Owen apologized for tardiness and stated that the timeline was important for her and that the school districts in her area had expressed issues regarding timelines as well.

Dr. Nicodemus stated that there seemed to be a consensus on the goals for the day and drew the Board's attention to the packet. She stated that she had specifically placed a draft proposal in the packet for the Board's use that would move the meeting forward and spring-board the conversation. She stated that she hoped to identify the specific details as the "devil is in the details". She noted that the goal in presenting this proposal is to demonstrate an aggressive timeline since many states and some Arizona districts are already utilizing "above and beyond" minimum requirements. She reminded the Board that her tenure as Board President will be ending in January 2008.

Dr. Nicodemus addressed the flexibility and multiple pathways as well as the capacities and implications to students in the model presented that were important goals for the Board. She stated that she hopes that the proposal reflects dialogue from earlier Board meetings and asked members to consider the goals of the Achieve and P-20 Council as well. She stated her appreciation for Superintendent Horne and Governor Napolitano being involved in the process. Dr. Nicodemus stated that the proposal considers a staggered approach including:

- moving Social Studies to three credits beginning with the 2008 freshman class
 - this would enable Economics to be worth one credit

- there seemed to be consensus from the Board in this regard
- consideration to increase Math from two to three credits
 - per current survey results 60 percent of districts are currently offering more than the minimum two credits of Math
 - beginning with the 2009 freshman class multiple pathways will be available for students to pursue graduation requirements
 - Standard Diploma
 - Math moving to four credits
 - students would complete Algebra I, Geometry and Algebra II or its equivalent class for graduation
 - Additional courses in Math may include courses in other subjects such as Career Technical Education (CTE) and even art classes so that students will have continuous reinforcement in Math principles – critical and logical thinking
- Science requirements will be looked at as well although they are currently undefined
- with the requirement changes listed above the total graduation requirement would move from 20 credits to 22 credits, and electives will move from eight to seven
 - creation of a Regent’s Diploma that is aligned with university admission requirements is also being discussed and with this diploma the Math requirements would still be four credits, however it is more defined, and that the fourth credit should have an Algebra II pre-requisite
 - Science will contain three credits, which must be met in Chemistry, Physics, Biology or Earth Sciences
 - electives in the Regent’s Diploma must include two credits of a foreign language
- flexibility around the Algebra II requirements
 - Michigan model sets up a structured process detail for alternative pathways for struggling students, a strong model that would help facilitate this discussion
 - hope is to reach a rule modification decision by the end of December
 - a very aggressive effort should follow the outcome of the rule in December even soliciting the help of outside sources in order to develop a blueprint for action

Today’s goal is to:

- know how to pursue a dual-agenda item of increasing graduation requirements and increasing graduation rates
- establish how the Board will measure the impact of the policy so that future Boards are able to continue

Superintendent Horne stated that the Board previously had a recommendation from Ms. Jan Amator, Deputy Associate Superintendent for Highly Qualified Professionals, Academic Achievement, Arizona Department of Education, to increase the amount of Math teachers to about 70 per year to meet the retirement rates and deal with the current shortage of Math teachers. In addition, he added that Arizona would also need over 600 additional Math teachers to meet the need posed by the increase being set forth in the requirement and that it would be difficult to meet those needs due to the current salary structure. Superintendent Horne questioned how long it would take for enough teachers to be recruited to meet these needs. He noted that the Governor’s P-20 Council concluded in their vision statement, that “every graduating student from the freshman class of 2012 would be prepared to work in post-secondary education.” He also noted that the work plan for the Educational Alignment Committee of the P-20 Council in paragraph 6C speaks of raising the Math

requirement to three years of Math with the goal of implementing the requirement of four years in 2012. Therefore, Superintendent Horne deduces that there is a gap between the 2008-2009 push to roll the program out as opposed to the 2012 date. He stated that he leans toward the later date so that there can be time for Legislature to implement money for financial incentive plans and to increase the pool of teachers. Superintendent Horne noted that the Board should consider a trigger mechanism to take effect only if the Legislature will pass legislation to provide financial resources to solve the problem. He said that it's important that the Board doesn't allow schools that don't have the money to implement the requirements to fall behind.

Superintendent Horne added that at the last study session the idea to use this opportunity to require a personalized learning plan was discussed, which would require students in the 9th grade to have a plan in effect where they would know what is coming in the future. He noted that this kind of plan has a tendency to encourage students to look at a more rigorous course since they will know and understand graduation requirements. Dr. Nicodemus suggested a name that would not be confused with the personalized curricula and Superintendent Horne suggested post-secondary education plans, and then he circulated some language.

Ms. Hilde invited members to talk about their initial thoughts regarding Dr. Nicodemus' comments, beginning with Math and staffing.

Dr. Haeger:

- questioned Arizona's ability to produce the needed Math teachers with the current standards as Arizona will never be able to produce the needed Math teachers without changing the current standard
- Arizona doesn't have enough prepared students
- colleges and universities are far more attuned to public agendas
- compared the current issue to the universities' progress to get the nurses' population increased in 4 or 5 years, and stated that once it was mandatory the Legislature got behind it

Dr. Balentine:

- agreed completely with Dr. Haeger and related the parallel of the SEI endorsement process and how the alternative methods to meet the requirements for that rule were identified
- pointed out opportunities to identify parallel structures to be used to model the successful programs in the past

Ms. Mendoza:

- the issue of credits is doable, however the Board will need to look at the preparation of what the requirements will entail
- cited research from a doctorate student showing that Arizona couldn't affect the amount of Math requirements without changing teaching methods
- the parents of high school students are not good at Math, and 9th grade students are lacking the preparation to do advanced Math

Dr. Nicodemus:

- agreed that teaching methods need to be reviewed
- Kindergarten through 8th grade is an important time to prepare and that a lot of public comment indicates that the public feels the same way

Ms. Mendoza:

- studies show that youth are not developing the cognitive skills to really be able to deal with higher-level, abstract-thinking skills
- shared research that proves this theory

- she is one of the few on the Board that actually works in the classroom on a daily basis
- from her experience students are able to memorize facts and rules but they don't know why and don't understand the patterning and reasoning

Ms. Owen:

- she also sits in classroom like Ms. Mendoza
- teachers are consumed by instruction and don't take the time to help students get to the application level, which is the highest level
- students aren't taught to apply the information learned to anything further than a worksheet
- career ladders have taken the place of curriculum and instruction departments
- there are silos of teaching in Math and Science, that Math concepts occur best in CTE classes and that there is a need for CTE classes to develop frequent and collaborative relationships with Math and Science teachers

Ms. Harmon:

- foundations and other private sector organizations exist to help teachers and to support these structures
 - one such example is the Science Foundation of Arizona, Education Foundation
- referenced Dr. Haeger's earlier comment that Arizona is, indeed, able to raise the standards
- she has been enlightened by previous beliefs that SEI and AIMS couldn't be accomplished but they are now in effect
- prefers to focus now on "how" things will get done

Mr. Ary:

- also wants to spend less time on looking at needs and more time focusing on the resources that are available
- suggested that the Board connect with individuals and organizations that have the power to make change
- stressed the immediacy of resolution to this issue

Mr. Moore:

- it takes a push from the SBE to move things forward
- unless there is an incentive for the Legislature the trigger will likely not happen
- Legislative representatives work for the public and the SBE needs to get involved with the Legislature
- currently 60% of the schools in Arizona are already at the standard and the Board is impacting the other 40 percent
- if Arizona maintains lower standards the students will not be helped
- if Arizona doesn't follow suit as other states have done it will be difficult to maintain competitiveness

Ms. Owen added that about 20% of Arizona's population is students but that they account for 100% of Arizona's future. She stressed that it is the Board's responsibility to determine the best pathway for those students.

Dr. Balentine stated that the Board could potentially combat the low expectations that have been created for Arizona students.

Dr. Nicodemus asked Mr. Yanez to make sure that members keep the fiscal impact in mind in regards to Science.

Mr. Yanez read the rule provided in the materials packet and reminded members that they must supply a fiscal impact study with increasing any requirements. He added that if it is determined that there will be capital costs then the Board will need to be flexible in those areas.

Mr. Moore asked how this applies to school districts that have the ability to set their own standards and Mr. Yanez replied that the statute is specifically targeting the minimum course of study and many school districts exceed that as they are able to do so. Dr. Nicodemus stated that if districts are already performing beyond the standard, the impact will be minimal, which will be included in the assessment.

Dr. Haeger agreed that it is important to look at the fiscal impact on Arizona school districts but also the SBE will need to look at the fiscal impact of not raising the standards. He pointed out that this is a matter of state and national competitiveness.

Mr. Lucero recommended reviewing the actual lab space that will need to be developed and what will happen if Arizona chooses to stay status quo. He added that it is not acceptable to remain at the current level and that a balanced approach should be used to get a complete answer rather than a narrow one.

Superintendent Horne stated that in regard to operations, a study can determine that the cost will be X amount and then the Board can decide whether to put a trigger on it. He added that in regard to capital costs there is a prohibition but that the Board can do anything it pleases with respect to a Regent's Diploma but is prohibited in regard to a Standard Diploma.

Jennifer Pollock, Asst. Attorney General, stated that per statute the Board may not amend the minimum course of study rules established as of July 1, 1998. She pointed out that the current rules have been amended since that time and provided the Board with copies of the rule as of July 1, 1998.

Ms. Mendoza stated that charter schools have been meeting the requirements and business has been really important in providing that support, i.e. University of Arizona. She suggested that the Board examine other ways to provide lab experiences without incurring capital costs.

Ms. Owen added that some Native American students have not been able to participate in certain labs and that the schools have been able to overcome this by providing alternative pathways, such as virtual learning.

Mr. Yanez advised the Board that it has the ability to set up minimum standards and the School Facilities Board will set the standards that impact the study.

Mr. Moore agreed and stated that he jumped from expectations to the issue. He stated that his concern is for tribal students and addressing issues with rural communities that already struggle with meeting the existing standards. He noted a need for creativity to be utilized to address issues.

Ms. Owen stated that she felt that Arizona's role in telecommunications should be reviewed.

Dr. Nicodemus challenged the Board to recognize and put some detail to the Math discussion. She stated that there are a variety of ways to define four credits and that how it is defined will impact how Mr. Yanez drafts the rule.

Mr. Lucero added that more additional detail has to be defined and that electives may also contain some possibilities. He noted that he has seen information from other states where there was a provision to allow for previous language experience to count as a viable option.

Dr. Nicodemus stated that some CTE classes can meet two requirements in one class.

At 11:30am Dr. Nicodemus opened the floor for public comment.

Public Comment:

- Dr. Stanley Rabinowitz, Director of Assessment and Standards Program, West Ed:

- WestEd possesses a 30-year history working with Arizona on policy and technical issues and Dr. Rabinowitz possesses over 10 years' experience advising boards on AIMS and NCLB implementation
 - his goal is to advise the Board on considerations and added that core requirements must be research-based with external success factors
 - cautioned members to deal with “musts” not “wants and/or desires”
 - recommended looking carefully at the validation studies that are pushing the rule
 - after working on several of the committees of validation studies he advised the Board that how the question is asked determines the answer
 - employers say they want Geometry or Trigonometry but the skills they are requesting are often very different from what would be found in a traditional classroom setting
 - it is important to separate the name of the skill with the specifics of the skill
 - reminded members that it is very easy to add requirements but the hard part is making the requirement successful
 - suggestion is a multi-faceted feasibility study where the first part consists of adding the requirement
 - he has seen states simply split classes into two parts – Algebra I becoming Algebra I & II
 - content drives the reform
 - important to dictate the specific requirement
 - there are several steps for the feasibility study:
 - the availability of teachers
 - the professional development component
 - equity issues
 - who's likely not to succeed and what will the Board do to intervene with schools who are not ready
 - detailed implementation plan: when, who, how, how much, what not to do
 - view is that every student needs to master a core
 - key is that what goes into the core is that every student must go deep in something but not necessarily in the same thing
 - some students will go deep in Math while others in the Arts, Science, etc.
 - cautioned members to be careful as Latin II used to be seen as important like Algebra II
 - general attributes are what is important and should be required
 - cautioned members about a differentiated diploma path
 - advised members to state explicitly that all students should be successful regardless of what their path is
 - asked members what they are willing to do for those students who are not up to par
- Dr. Nicodemus thanked Dr. Rabinowitz and welcomed Representative Mark Anderson.
- Representative Mark Anderson:
 - greeted the Board and said he would be brief as the dialogue for this issue will go forward and that there would be plenty of time for detail
 - commended the Board for what it is trying to do to enhance and strengthen the standards so that Arizona can have the best students possible

- recognized that this issue is a national movement to focus on areas of Science and Math to expand and strengthen the pool of people that can be researchers and scientists and key leaders in this field
- cautioned the Board that in the quest to achieve these national priorities to not leave behind the students who have no desire to take this course of study
- there are countless areas of industry, law, childcare, retail, sports and fitness, etc. where advanced Math skills are not necessary to be successful
- the Board should not be forcing students who have no desire for higher Math to endure classes that are irrelevant to their field of interest
- the Board should provide courses for students that they feel will enhance their ability to succeed in life
- advised the Board to provide incentives for students to take more Math and Science by providing scholarships, recognition, etc.
- he is supportive of the personalized plan options as every student is different and unique
- recognized that, as a nation, students are lacking in more areas than Math and Science and that History, Civics, Physical Education/Fitness, money management, and communications are skills used in everyday life that students are also lacking
- agreed with the spirit behind the issue to raise the bar and that the Board should look at incentives rather than mandates
- asked the Board to give the issue a little more time as the downsides have yet to be evident

Mr. Ary asked about the trigger on the impact in terms of resources for what the Board is striving to achieve and Representative Anderson stated that the cost is an important aspect. He added that unfortunately he is one person in a group of people and that he can only do what he can, but that there are other economic and budget needs that will go into effect. Representative Anderson added that he didn't know where the Legislature would be at the next session as the reports say that in regards to economy and budget, the Legislature is not in good shape.

Mr. Moore asked about the JLBC process, the costs on infrastructure, and to what extent the Legislature looks at the overall impact on job development. Representative Anderson stated that his experience in 13 years in the Legislature is that JLBC doesn't really do that good of a job at looking at the overall benefit of this program for the group and that they tend to focus on immediate costs.

Mr. Horne stated that Representative Anderson is the best Education Chair that Arizona has had in its history.

Ms. Mendoza stated that she had to change her mind in regards to Math and Science as she didn't do well in Geometry. She stated that it is not the same definition of higher level Math and that problem solving and critical thinking skills are being developed. She added that some of the basic education thoughts are broader.

Representative Anderson stated that there is research that supports the benefits of higher level Math and he believes that there are a lot of other ways to achieve the same goals.

Dr. Nicodemus thanked Representative Anderson for his role in education and stated that Legislation will be key in this issue and many future issues.

- Susan Carlson, Executive Director, Arizona Business and Education Coalition (ABEC):
 - requiring higher standards for Arizona Math and Science are aggressive goals that much be reached
 - the study of Math and scientific inquiry sharpen skills that are needed in the workforce for decent paying jobs

- ABEC is concerned about future dropout rates, however she doesn't believe in Arizona weakening its system for less proficient students
- in order to meet a four-year Math requirement Arizona must build infrastructure to support higher expectations
 - better paid teachers, Math in particular
 - better prepared teachers
 - better ways to instruct
 - finding innovative and relevant ways to teach
 - finding appropriate innovations for students who need help
- poverty and English Language Learners are part of our future workforce
- SBE should make decisions in the best interest of children and not from a political standpoint
- advised the Board to work together with the P-20 Council committee and other constituents

Superintendent Horne stated that the CTE department authorized him to represent their interest. Mr. Ary also stated that he is a member of the CTE council.

- Dr. Mark Francis, Emeritus Director, Arizona School of the Arts, but not on behalf of the Arizona Charter School Association:
 - he has passing knowledge on how to get students to achieve however, he is not a proponent of the Math and Science requirement
 - He is a musician by trade and has started a school and achieved high outcomes
 - at his school he has focused on outputs rather than inputs
 - the requirement will be an enormous burden on poor and rural schools
 - recommended that the Board review current standards and look at the cut score of what those standards are going to be

Superintendent Horne stated that the school that Dr. Mark Francis ran is one of the best schools in the state.

- Jason Bagley, Spokesman, Intel Corporation, and member of the Board of Directors for the Arizona Chamber of Commerce and Industry and Arizona Association of Industries:
 - the United States has enjoyed a position of leadership with respect to innovation and has seen substantial portions of the world enter the global economy
 - there is a competitive tsunami heading this way and that Arizona is unprepared
 - over half of the electrical engineering diplomas being awarded are going to internationals and over 70% of doctoral awards are going to foreign nationals
 - corporations like Intel are filling jobs with overseas nationals
 - Arizona has the 2nd largest Intel site in the world, however the global competition is very brutal and the United States is not even getting the minimal amount of needed engineers
 - Intel and other companies need a solid basis of Science and Math
 - Arizona also needs to have a very competitive profile
 - every 18-24 months Intel has to be innovative to keep up with the market
 - asked the Board to consider aggressive Math and Science policies
- Jane Stiles, Bachelor's in Architecture and Master's of Curriculum, K-12 Curriculum Specialist, Paradise Valley Unified School District:

- has 15 years' experience in architecture engineering and construction fields and 14 years' experience in education including administration
 - approximately 75% of the 2007 PVUSD graduates took four years of Math but the number of students who had to re-take Math in high school is not known as the research is in progress
 - recommendation from PVUSD is that four years of Math be required and that districts be allowed to structure year three and four of that requirement
 - Algebra II should not be the only pathway for requirements
 - suggested Calculus, AP Chemistry, Finance, Economics, Computer Programming, Statistics, Pre-Engineering, AP Physics, and Pre-Construction applications as alternative options for the three- and four-year Math requirements
 - the Board should consider encouraging those who are on the fence to take Math with more options
- Gary Bay, Leona Group, which operates 16 high schools in Arizona:
 - the Board is talking about the outcomes at the end of the stream
 - 3rd graders can't read or do basic fractions and students are coming to high school without critical skills
 - Algebra is the least of Arizona's concern because there are bigger issues to deal with
 - the university-bound students are getting the Math they need and that the Board should focus on the bigger issues such as finding qualified teachers
 - it becomes an issue for those teachers to relate to the kids and teach the children to read, write and do Math
 - K-8 is a critical component
 - Mr. Chester Crandell, Superintendent, Northern Arizona Vocational Institute of Technology
 - applauds the Board's efforts and pointed out that there is a lot of talk about choice and other alternatives such as personal education plans
 - requirements take away the choices from the students
 - advocated letting the students study through career exploration adding that they would develop skills in thinking and reasoning
 - the Board is making the choice for the students and that students are sharper than what we take them for

The Board adjourned for lunch at 12:09pm and re-convened at 12:31pm

Dr. Nicodemus called for public comment from Susie Mast but she was not present when the Board re-convened.

- Herb Weil, high school Math teacher, Deer Valley Unified School District, with a Mathematics degree from the Citadel and a Masters in Business:
 - learned why Math was important in the Air Force
 - Math provides an excellent opportunity to learn and the Board may be losing part of that focus in the discussion
 - requirement should be increased to three or four years however, the Board should focus on the reason why the increase in requirements is necessary
 - asked the Board to look at the standards with respect to Math and Science
 - Science and Math should not be separated as Science drives Math
 - the Board should not allow the focus to get too narrow
 - feels that statistics is more useful with Math

- plead with the Board to not leave the practitioners out of the loop

Dr. Nicodemus asked if there was a statewide K-12 Mathematical teachers' organization that could be included in the discussion. Mr. Weil replied that there is a state branch for the National Council of Teachers' of Mathematics.

Ms. Mendoza commented that some universities will not accept certain classes such as construction classes and suggested that communication up and down the line is imperative.

- Mr. Andrew Morrill, English teacher and Vice President, Arizona Education Association (AEA):
 - AEA supports the increase in Math and Science requirements
 - AEA accepts the premise of a gap between what high school students are leaving with and the gap of what is needed in the working world
 - believes that the Board needs to allow skills to drive the conversation
 - asked the Board to identify skills for success after high school
 - the Board shouldn't begin with the course and the title, but the skills
 - Arizona is in a situation where two years of Math are not enough to develop competency
 - students need to know that it will take an increase in years to develop necessary skills
 - building in relevance and application leads to Math fluency
 - cited the importance of application
 - supported inviting stakeholders to the table
 - AEA would be happy to supply practitioners to implement the increased Math requirements
 - entry point students will have to decide upon their course of study
 - employee concerns about lowered professional standards

Mr. Moore asked for clarification about lowering professional standards and Mr. Morrill responded that if the current system is only producing so many professionals, it is necessary to develop ways to replace the pool and look for other people to replace the pool. He cautioned the Board to not lower professional standards.

- Mr. Denton Santarelli, Deputy Superintendent, Peoria Unified School District:
 - Arizona's young people need skills, abilities and knowledge in line with the conversation today
 - skills needed to be successful in a four-year university are those required to be successful in the work world
 - some students are in college with remedial Math and that the success rate is at 28% for students who are going to college
 - supports the four year Math requirement
 - shared research from an NCS report on courses taken at three different junctures by high school students in 1982, 1992 and 2004 to examine trends in course taking
 - key findings were that in Mathematics the percentage of Math credits tripled from 2.7 total credits in 1982 to 3.6 total credits in 2004
 - percentage of graduates who persisted in the most advanced Mathematics, Pre-Calculus and Calculus tripled from 1982 to 2004
 - average Science credits increased from 2.2 in 1982 to 3.3 in 2004
- Greg Wyman, Superintendent, Apache Unified School District:

- his core belief is that there isn't a study that points to the main factor, children
- kids can achieve by taking these higher standards regardless of economic, racial, or intellectual capacities
- need to raise the level of expectation
- cautioned the Board to not get caught up in how to reach the vision
- minutia is not as important as the vision and referenced Kennedy's agenda of getting a man on the moon
- kids will rise to the level where Arizona sets the expectation
- Greg Donovan, Superintendent, West Maricopa Education Center which includes 12 school districts:
 - his districts spend a considerable amount of time on this subject and stated that CTE does teach Math and Science concepts
 - teachers do a good job of teaching students for upcoming tests but fail to teach applications that will last for years to come
 - asked the Board that CTE be a part of the solution of the issue
 - Nursing and Agricultural programs are heavy in Science
 - asked for specific credit and not wholesale credit
 - asked the Board about how the requirements will be credited on the transcripts and how the teachers will be credited for teaching

Dr. Nicodemus echoed the question Mr. Donovan raised about the Regent's Diploma stating that the Board needed to discuss the issue. Dr. Haeger replied that the issue could certainly be discussed.

- Ms. Elizabeth Volard, President of the Arizona Council on Economic Education:
 - developing students' economic and Mathematic reasoning and thinking can apply to whatever comes down the road
 - Mathematic skills are life changing and relevant for students
 - asked the Board to reinforce standards and that the Arizona Council for Economic Education stands ready to provide services, resources and support to the ADE, SBE, students, teachers and more
- Dr. Amy Fuller, Assistant Superintendent of Instructional Services, Florence Unified School District:
 - supporter of public education
 - expressed the need for a better curricula and feels that, in general, students may not succeed with the Math and Science requirements
 - some students can choose a different career such as armed forces or vocational careers
 - high school should give students a chance to make that decision and get general education
 - in addition to AIMS the SBE is requiring more things and that AIMS has demonstrated that Arizona students are not meeting the standard
 - many students will fail the higher Math courses due to the difficulty
 - fear of an increase in the drop rate and delinquency
 - there are other courses that would prepare students
 - asked the Board for more resources such as highly qualified teachers, professional development, colleges and global research
 - stressed that the Board must start in elementary schools

- Chad Wilson, educator and parent:
 - his children are starting Kindergarten
 - asked the Board to make the timeline implementation decisions as quickly as possible

Dr. Nicodemus thanked all of the individuals for their comments.

Ms. Hilde stated that the Board needs to know which schools are not succeeding now, who will not succeed and the safety net. She added that the common thread was the discussion of the teaching staff and the need to look at the teaching issues and not reduce standards. She cautioned regarding setting the standards too high and reducing the level of applicable teachers. Ms. Hilde stated that courses by titles are different today and that the focus should be on output. She referred to the university level where classes are taught from a different angle. She stressed the need for skills-driven conversation from the districts that would determine 3rd and 4th year Math and career exploration. Ms. Hilde then asked the Board to refer to the blueprint that Dr. Nicodemus presented, which is included in the materials packet, and do a SWOT analysis: strengths, weaknesses, opportunities and threats.

Ms. Mendoza:

- the strength of raising the standards is higher expectations

Ms. Harmon:

- is this a “jumping off” point
- is very impressed
- reminded members to make sure that there are options and choices, i.e., Regents Diploma vs. Standard Diploma
- has heard the same sentiment from the public and feels that the issue is no longer “should the Board adopt four years of Math” but rather the question is “how to do it”

Ms. Mendoza:

- questioned whether the Board has the authority to set the requirements and if the ADE has the option to execute the requirements and interpret to set a sequence of choices

Superintendent Horne replied that it is the Board’s decision on how specific the language of the requirement is and that the ADE does what it is asked to do by the Board.

Dr. Nicodemus:

- per the current standards work the ADE is creating standards appropriate to the four years of high school with the expectation that a student would have the opportunity to acquire those outcomes
- the goal is to not define it by a course description or course title but over a sequence of four years the standards will be defined

Ms. Mendoza:

- will the Math standards be defined in high school or from K-8th grades

Superintendent Horne stated that this is the summer that was scheduled for review and revision of Math standards for K-12. He noted that there are currently three different task forces reviewing the standards:

- first task force is working on revision of the standards to bring recommendations to Superintendent Horne and the Board
- second task force is working with ACHIEVE to recommend the first task force’s national trends

- third task force is also making recommendations to the first task force regarding aligning the standards to (spell out complete name) (NAEP) to, hopefully, have less friction in the fact that some students excel at the Terre Nova and don't do so well on the NAEP.

Mr. Ary stated that he was encouraged with input by the stakeholders and field representatives because comments clearly indicate that there is a misconception of the threat that people feel may occur by raising the expectations. He felt that he heard an overwhelming majority of people from the field saying "let's do it" and "try to deal with the consequences as we move ahead". He said that there will be consequences but the Board shouldn't throw their head in the sand.

Dr. Balentine stated that the timeline is a strength of the requirement.

Ms. Hilde then asked the Board to discuss the concerns and/or weaknesses of the issue.

Dr. Balentine stated that additional courses might be identified as relevant for CTE and that Math and Science should be stated. She also suggested a specific reference regarding students who have learning issues with personal curriculum.

Dr. Haeger added that he is concerned about students getting tracked. He worried about the Board creating a philosophical concept that moves Arizona back to tracking students because it creates severe problems. He stated that maybe Arizona schools will have to work within that paradigm as this is instituted but it raises concerns.

Dr. Nicodemus expressed her concerns with tracking as well and also that the Regent's Diploma may limit a student's collegiate goals. She doesn't want students to not attend community colleges if they receive a Regent's Diploma. Likewise, she doesn't want students with Standard Diplomas to not pursue four-year universities. She went on to say that incentives for students who pursue the more rigorous track should be implemented, however, it may cause a student divide.

Dr. Haeger stressed that the going rate of Arizona students pursuing higher education is extremely low. He stated that college is a matter of aspiration and that Arizona couldn't change the goals of students and parents without setting the aspiration from day one.

Dr. Balentine offered a suggestion to identify students who pursued the advanced curricula with a badge (recognition) on top of a standard diploma. She deferred to Dr. Haeger regarding if this act would mitigate concerns.

Dr. Haeger replied that he doesn't understand the need for two separate diplomas as the rigor from a Regent's Diploma should be standard.

Superintendent Horne stressed that the teacher shortage in foreign language is as severe as it is in Math and Science and that if the Board is talking about setting minimum standards it should seriously consider the students who are not meeting those challenges now. Per Superintendent Horne, based on this year's experience, there were 3000 students who only received their diplomas via augmentation. Since this was the last year of augmentation that could pose a significant problem for students graduating next year. He stated that the graduation rate could suffer a decrease from 70 to 65 percent (significantly below the national average). He cautioned that society will react to the rate drop and that the Board needs to be careful by setting minimum standards and that those standards should include safety valves. He feared that the Board may be going from one extreme to another. He feels that this also argues that the issue will need more time to see the results of this requirement.

Ms. Owen stated that Arizona already has Advanced Placement (AP) classes and questioned the need for two different diplomas. She said that she's nervous about the lack of foreign language in addition to Math. She stated that one common characteristic of students who drop out is poverty and that two separate diplomas is not fair. Ms. Owen continued that there are a lot of other pieces and that distinction could be achieved through AP classes (awards with AIMS, AP tests). She cautioned the Board by saying "We may be doing a disservice by having two tiers."

Mr. Moore discussed the preparation of the K-8 grades and asked if credits from 8th grade Math classes will it count for high school student. He stated that the practical perspective is that sometimes students don't pass the first time around and that students only have four years. He questioned what would happen if students fail in the fourth year would they still receive the higher standard. He also expressed that some students would fear not graduating. He stated that what he's observed in poor/tribal communities is the incentive to take some college credits in senior year. He questioned if the new requirements will allow time in the junior and senior year to start taking classes for college credits and get involved in the college and/or university environment.

Ms. Hilde then asked the Board for any other weaknesses they wanted to discuss.

Ms. Harmon said that high school kids don't know what it takes to get to college. She wondered if the schools had any communication to answer that question and if it could be framed it in a way that would be obvious. She worried about the Standard Diploma being considered as a "low-level" diploma. She also suggested uncertainty with the timeline and that she is looking for scientific evidence in regards to how many years the requirement will take to implement. She asked the Board to keep their focus on the students and not just say that the structure couldn't be worked out but do what's best for the students.

Ms. Mendoza stated that one paradigm in education is to departmentalize and over-define things. She suggested there be room to be flexible with both teacher and student skills and possibly allow more opportunity for vocational professionals to enter the field of education.

Dr. Balentine clarified that the Regent's Diploma and Standard Diploma are the same. The only difference is that the Regent's Diploma would have a particular expectation in addition to Math beyond Algebra II as well as two world language requirements. She stated that it is a scholar's program that is something the Board needs to support and provide incentives for. She also agreed with Mr. Moore in allowing some of those requirements to be achieved in 7th or 8th grade.

Dr. Nicodemus welcomed The Honorable Governor Janet Napolitano to address the Board at 1:33pm.

The Honorable Governor Napolitano thanked the Board on behalf of the citizens of Arizona and stressed that only the Arizona State Board of Education is able make some of these decisions because they set the policy for all. She said that the decisions the Board makes are what's best for Arizona kids and that education has been a key priority for her office which has instituted the P-20 Council whose goal is to create an aligned system from the day a student enters kindergarten through graduation. Governor Napolitano stressed that the goal for Arizona is to have a rigorous system and be competitive. She said that Arizona does its students no favor by not having a sense of urgency and that she believes that the Board is on the right road in that they are adopting something to be implemented in December. She believes that Math provides mental pushups and has many applications and that Arizona has provided a rigorous education when students are challenged in Math and Science as they currently have not been. She shared that as she has looked to the P-20 Council that she has found that Arizona can do much more at a quicker rate and that

every year the standards are not in place is a year that students don't measure up. She told the Board that if they get the standards in place that she would support the funding. She added that while there is a push for uniform rigor and standards that pathways do exist for flexible, alternative options, but not opt outs. She referenced the Michigan model and then thanked the Board for their rigor, urgency, and flexibility with the matter at hand. She added that what the Board is doing is a key determinant of whether Arizona students are going to truly be 21st-Century ready.

Dr. Nicodemus asked the Board if they had any questions for Governor Napolitano.

Mr. Lucero asked if the Board would be supported by funding from the Governor and Legislature and if there would be a clear understanding by all parties.

Governor Napolitano answered that sometimes Legislature becomes a matter of Democrat vs. Republican and that the issue at hand is an Arizona issue. She stated that Arizona is the fastest growing state in the country and that many employers will question if we have qualified individuals ready to take those positions. She concluded by saying that raising the graduation standards is relevant to the economy.

Ms. Hilde posed the question to the Board of why now is an opportune time to discuss the issue of raising graduation standards.

Mr. Moore stated that like the public comment before he has a granddaughter starting kindergarten and that the world today is very different for this generation. He stressed that setting the standards will not prevent goal accomplishment as there are issues questioned now that will be answered as technology catches up. He said that setting the standards and knowing that challenges will be present but that there will be knowledge and technology to face those challenges since it's going to be a changing world.

Dr. Nicodemus commented that she heard some good suggestions on what will strengthen the Math and Science rule and suggested to leave Regents Diploma as stated to give the public something to react to. She then stated that there is some urgency as there are two elected officials on the Board. She stated that 2008-2009 Legislative Session would be an opportune time to get a collective effort and appreciates the comments from Superintendent Horne regarding the current drop out rate. Dr. Nicodemus stressed the importance of giving students the same chance and that there is a need for a collective effort from teachers, ADE, Superintendent Horne, colleges, businesses, and other entities for the benefit of the students.

Superintendent Horne stated that in terms of the timeline he's feels that 2010 would be reasonable in his mind for the implementation of the requirement. He stated that has not seen the evidence that the funding will be established to generate the 600 teachers needed to in order for this requirement to be successful. He urged the Board to keep in mind the trigger (funding) and the post-secondary plan to get students to take a more rigorous curriculum.

Dr. Nicodemus stated that she doesn't want to confuse personal curriculums with personal learning plans. She stated that post-secondary plans tend to imply that it is relevant to only students seeking higher education.

Superintendent Horne clarified by stating that post secondary plans are relevant for higher education or employment pathways.

Ms. Mendoza stated that the post-secondary plans could cause a paradigm switch due to the confusion in terms.

Superintendent Horne said that the Board could change the wording because he's not tied to the current language. He would just like to keep it on the table.

Ms. Harmon stated that despite the language that the Board decides upon, the idea of the post secondary plans would be very helpful for her day job and the students in particular. She added that the Board is the policy-making body and that she fears putting the trigger in the bracket would cause a message of the Legislature being the policy-making body. She therefore offered that the Board should be firm in regards to the Legislature and make the decision.

Dr. Haeger agreed with Ms. Harmon that there is enough pressure on the Legislature and that the Board should not give them an out as they have a lot of other agendas.

Mr. Ary added that the whole key to what the Board is discussing now has a lot to do with the image and the apparent responsibility that the Board has, as in a number of recent study sessions it has become more clear to him that the Board needs to "bite the bullet" and become a leader in terms of how it feels in regards to policy on education in Arizona. It is Mr. Ary's hope that by his fourth year on the Board that the Board will be elevated to the people, community and stakeholders and that they will see that it's not necessary to put things into brackets for the Legislature to take action.

Mr. Moore spoke of having the opportunity to go to an orientation with the National Association of State Boards of Education (NASBE). He stated that there is a difference in how Boards act throughout the nation. He noted that in some states Boards have authority to be policymakers and some do not. He added that the Arizona State Board of Education has the right to make policies and if it doesn't fulfill that role it diminishes the role of responsibility that it has been given.

Dr. Balentine questioned the feasibility of graduation requirements that include the regulation of the completion of this post-secondary plan. Her specific questions included what the plan will look like and how it will work in terms of policy, turning in copies of the plan, filling out the report, etc. Dr. Balentine also expressed confusion about adding this in the requirement of the graduation.

Ms. Mendoza agreed with Dr. Balentine regarding the question of the implications of compliance. She stated that the requirement seemed like a best practice but may be hard to implement at this level of policy.

Ms. Owen agreed with Ms. Mendoza that counselors are already overwhelmed, noted her concern about teachers stepping into advisory roles and also questioned implementation. She then asked about the possibility of a student changing their mind and if there would be room in the requirement for flexibility.

Dr. Nicodemus stated that she looked at other states that incorporated a personalized learning plan and when she met with the ADE staff she didn't think the path was meant to be rigid. She stated that she didn't think that the rule meant to be a rigid path, but more of an awareness tool. Superintendent Horne interjected that the plan must be revised every year. Dr. Nicodemus noted that the plan would need to be revised each year. She also spoke of an idea that she got at the last P-20 Council meeting regarding the online systems that could supply information for personal education plans.

Ms. Mendoza stated that educating parents is an issue as well. She continued by saying that a lot of individual work is needed to truly implement this program. Ms. Harmon added that parent education is a critical piece to what the Board is considering and that some research demonstrating how the plan would work would be valuable. Superintendent Horne said that the ADE could create

a synopsis so that the public would have a clear understanding. He also suggested keeping the bracket on the table.

Ms. Mendoza stated that she has a video example of a post-secondary education plan being demonstrated and could provide a copy for the Board to review.

Ms. Hilde then asked members to write some of the specifics to develop rule language with the first subject being the dual diploma approach with a Regents Diploma and a Standard Diploma.

Dr. Nicodemus stated that this is not a vote of yes or no on the rule but instead a consensus on how the Board will give the information to the public. Ms. Hilde also clarified that the Board is supplying the information that they want to go public. She then asked members if they will define the Math units as years or credits.

Dr. Nicodemus put on the table that the term credits is comfortable and provides flexibility.

Ms. Hilde asked for more clarification regarding Algebra and Geometry as is current or four credits of Math and the definitions are flexible. She stated that “as defined in the document that standard include...”

Dr. Nicodemus stated that she hears consensus from the Board that they are comfortable with the flexibility regarding Algebra II or its equivalent. Superintendent Horne offered that he has language from Dr. Balentine on what curriculum means and thinks the language is acceptable.

Ms. Owen expressed that she is struggling with the Algebra II requirement. Dr. Nicodemus clarified that there are a variety of equivalent courses for the Algebra II requirement. Ms. Mendoza expressed that the Board needs to review the standard and the specific skills, not the title.

Superintendent Horne advised the Board to be careful with the using the term “*equivalent*” and maybe use the term “*substitute*” regarding classes that could provide credits for the Math and Science requirements. He noted that he didn’t feel that the other courses would be as equally difficult as Algebra II.

Ms. Harmon stated that the term *equivalent* would suffice. Superintendent Horne again cautioned regarding using the term “*equivalent*” in terms of the standard.

 asked if it would it be fair to say “*courses approved by the State Board of Education that require Algebra I as a pre-requisite and Algebra II or its equivalent.*”

Dr. Nicodemus advised that the public needs to understand what the Board is saying and know what they are reacting to. She then asked Mr. Yanez to work with the Board and come back with some ideas on the language for this specific piece. She noted that other states have used the term equivalent.

Ms. Hilde offered the example of a computer class at Peoria High School that teaches the same skills outcomes as Algebra II, noting that it is a class through the CTE program. She also stated that Arizona State University has an equivalent class to college Algebra that is based on real-life scenarios such as buying homes, mortgages, interest, altitude, depth of the oceans, etc. Superintendent Horne explained that the program could not be garnering the same results as Algebra II. Ms. Hilde cited that the same outcome test is administered at Peoria High School for both the Algebra II and CTE computer class and that the students in the CTE computer class are actually scoring higher.

Dr. Haeger voiced concern about students not meeting minimum college entrance requirements. Superintendent Horne clarified that the universities do accept a number of students who are not meeting minimum standards.

Mr. Moore stated that it is very important to remember that the reason for instituting new requirements is workforce development and creating higher standards. He continued that there are Algebra II attributes that can be found in other courses, such as intuitiveness and critical thinking. He stressed that the Board is looking at attributes that inspire rigor.

Dr. Nicodemus echoed Mr. Moore saying that the difficulty the Board has is looking at the Math standards and realizing that it is much more than that. She stated that the dilemma is having language that people can understand and support while still having it be assessable and definable.

Mr. Ary stated that the Board is addressing semantics with the word “*equivalent*”. He stated that the Board serves in the capacity of the State Board of Vocational Education as well as the Board of Education. He added that CTE will have equivalency and will want to be involved in the process and have equivalency clearly defined.

Dr. Nicodemus stated that the field may help the Board create the definition for the term “*equivalent*”. Dr. Balentine offered the definition of “*Algebra II with flexibility as defined by or equivalent. Pre-requisite of Algebra I to include a Math course approved by the Board.*” Mr. Yanez asked the Board for some flexibility.

Ms. Hilde asked about the class versus credit language.

Dr. Nicodemus stated that the Board will draft the rule language to read “*credits*” and will look at other states for more examples.

Ms. Hilde then asked members if 8th graders would be able to acquire credits for the requirement and Dr. Balentine responded that the Board will give students the ability to start early. Superintendent Horne said that means yes. Dr. Nicodemus offered to look at models, literature and frequently asked questions from other states.

Ms. Mendoza stated that the information gained from Dr. Nicodemus will help the Board when standards are updated. She also asked about reviewing standards for Algebra I.

Dr. Nicodemus requested that Mike Cohen, President of ACHIEVE, be asked to address the Board to gain more information. She said that his presentation will give direction regarding 8th grade credits.

Ms. Hilde then asked about the Science requirement. She stated that both currently call for three credits and that the Board of Regent’s defines those credits as Chemistry, Physics, Biology or Earth Sciences, allowing one credit from any three of those four classes. Dr. Nicodemus stated that it is aligned right now with the university. Ms. Owen added that Environmental Science is an issue. Dr. Nicodemus stated that the Board needs to get current with the Arizona Board of Regents regarding the Environmental Science issue and Dr. Haeger suggested getting this topic on the upcoming agenda.

Ms. Mendoza stated that the Board has some flexibility.

Dr. Nicodemus stated that the important message is for the public to know that the proposed pathway is aligned with college and university admission standards.

Ms. Hilde then asked about the timeline and if the Board would consider a Freshman 2008 or a Freshman 2009 timeline for the standard. Superintendent Horne stated that it would depend on the language about the 2008-2009 freshman standards, however he asked that the record show that he dissented on the vote.

Mr. Moore asked for clarification about the process of moving forward toward the rule-making procedure. Mr. Yanez clarified that there will be public comment and that the Board is only establishing the rule language today.

Ms. Hilde asked the Board what was important from them in the process of getting the public engaged. She suggested going out to different areas around Arizona to hold informal hearings with an informal proposal before engaging in the official rule process. She again asked the Board what is important to address in the engagement process.

Mr. Moore responded that sufficient, accurate information was important to him.

Ms. Mendez stated that using the website to post the proposal and receive feedback would be a good idea. Mr. Yanez stated that the Board could post the proposal and allow the public to email responses.

Mr. Ary added that only 10% of the public gives 90% of the opinion and that a number of those stakeholders have begun to do that. He stated that the Board does have some consensus starting to occur and that out in the community the Board will start to hear echoes of what it already knows. He continued that the Board is giving the community and public an opportune chance to be heard and that it must go out to the community even though it will only get that 10%.

Dr. Nicodemus noted the importance of soliciting input from stakeholders such as leadership and the communities. She stated that it would be useful to have a document that includes Board rationale, the proposal and the questions that the Board is asking to help the public make their decisions. She added that it is important to recognize and keep on the path of establishing the target to adopt rule by the end of December.

Ms. Owen stated that she has a meeting next Wednesday that would be good to pass around information in order to utilize circles of influence.

Dr. Balentine stated that she would like to see a letter go out to all key stakeholders throughout the state and all legislators. She offered that this process may be step two but that the Board needs to involve legislature very early. Dr. Nicodemus asked Mr. Yanez to work on something that the Board can draft to send out to the public. Mr. Yanez stated that the public comment period is still slated for September and that the Board is on track with soliciting public comment and that there is time according to the original plan. He added that it is up to the Board as to whether to receive public comment on August 27th or at a later date. Dr. Nicodemus stated that the Board will come back to disseminating this information at the regular meeting.

Ms. Hilde asked her final question regarding what the Board needs as individuals, i.e. what materials will meet the Board's needs in speaking with people who are calling.

Dr. Nicodemus asked Mr. Yanez about soliciting more information regarding personal learning plans, but keeping it in the box.

Ms. Mendoza asked if the Board could get input from people doing the teacher preparation regarding their responses to the requirement changes. Dr. Haeger re-stated the importance of getting

the proposed changes on the agenda at the Arizona Board of Regents and getting information in the hands of the Deans who are at that meeting.

Mr. Lucero stated that he is disappointed in the background material, in particular, the lack of comments from the University of Arizona about the teacher shortage. Dr. Balentine stated that she will meet with people from the University of Arizona next week.

Ms. Jan Amator, Deputy Associate Superintendent for Highly Qualified Professionals, Academic Achievement, Arizona Department of Education, stated that the ADE sent information to the committee and a University of Arizona representative was in attendance.

Mr. Ary suggested creating a demonstration of interest similar to the packages that went out to the schools for Individual Education Plans regarding AIMS tutoring. He stated that he believed that Superintendent Horne's staff sent the communication directly to school districts and that a lot of response was received from those who may not have been in the loop. He added that he thought the Board should try to get communication to K-8 schools in addition to high schools.

Dr. Nicodemus stated that the communication would go out to the feeder schools so that the high school students are prepared. She also suggested a communication plan be put together.

Mr. Moore spoke of the National Association of State Board Educators (NASBE) meeting he attended with technical staff that handles proposal critiques. He stated that the Board needs to know consequences and that the technical staff at NASBE will be knowledgeable about similar issues in other states. He also added that a review would be helpful.

Dr. Nicodemus asked if members would be comfortable with creating a blue print or an action plan relating to implementation. She stated that she would like to pursue that concept and start to frame it to bring back at future Board meetings. Per Dr. Nicodemus, in order to affect a legislative session, the Board should have a sense of what it is going to do by June. She stated that there would not be much impact on the 2008 session but that the Board could affect the 2009 session if it is prepared by June. She stressed that the Board must continue to pursue a dual agenda.

Superintendent Horne stated that resource help to develop the teacher supply is needed. Dr. Nicodemus agreed and added that looking at other gaps and issues that exist would be helpful.

Dr. Haeger stated that he has seen the preliminary drafts of university 2009 fiscal budgets and that the universities are asking for legislative dollars assuming that there would be an increase in the Math and Science requirements. Dr. Nicodemus stated that Mr. Yanez has sent a letter to key legislators and will connect with lobbyists to work on these issues.

Dr. Nicodemus asked if Mr. Yanez had everything that he needed to proceed to draft the rule language and Mr. Yanez stated that he did.

Dr. Nicodemus adjourned the meeting at 2:53pm.