

**STEM ADVISORY COUNCIL MEETING
FEBRUARY 14, 2014
9:00 am – 11:45 am
MINUTES
Adopted April 28, 2014**

The meeting was video conferenced between the following locations:

**Nevada Department of Education
Northern Nevada Office
700 E. Fifth Street,
Board Room
Carson City, NV 89701**

**Nevada Department of Education
Southern Nevada Office
9890 Maryland Parkway,
Board Room
Las Vegas, NV 89163**

Present – Carson City

**David Brancamp – Co-Chair North
Nancy Martineau – Support Staff
Katherine Neddenriep
Shelace Shoemaker**

Present – Las Vegas

**Mary Pike – Co-Chair South
Dr. Nancy Brune
Dr. Theresa Corry
Dr. Anne Grisham
Wes Harper
Richard Knoeppel
Judy Kraus
Michael Mohar
Sharon Pearson
Dr. Carl Reiber
Frank Woodbeck
Missy Young**

Excused Absence – Las Vegas

Derek Fialkiewicz

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1. ***Call to Order/Roll Call:*** The meeting was called to order by David Brancamp at 9:02 am. Nancy Martineau did Roll Call and verified that a quorum was met.

Before the Pledge of Allegiance, David Brancamp announced to the public that they are to obtain a public comment card located near the entrance of the board rooms. Once completed, if they are in attendance in Las Vegas, hand them to Lisa Ford, and if in attendance in Carson City, hand them to Nancy Martineau.

The Pledge of Allegiance was recited.

2. **Welcome and Introduction of Members of the STEM Advisory Council:**

- **David Brancamp** Dave welcomed the council to the first meeting, and introduced himself as an appointee by Dale Erquiaga, Superintendent of Public Instruction and Dave is the Assistant Director of Assessment, Program Accountability and Curriculum (APAC). Lisa Ford was introduced as the Nevada Department of Education's representative assisting in Las Vegas. The Council Members in Carson City and Las Vegas introduced themselves. Dave introduced Senator Joyce Woodhouse to speak on Senate Bill 345,
- **Senator Joyce Woodhouse:** Senator Joyce Woodhouse was the sponsor of Senate Bill 345, and graciously attended our meeting to speak about the creation and intensions of Senate Bill 345. The passing of the bill demonstrates a solid commitment to STEM education in Nevada and building upon the great work that has already begun in our schools across the state. The process of encouraging STEM education begins early at the pre-kindergarten stage and continues through college and technical courses. The bill that passed by the state legislature requires the development of a strategic plan. She made reference to three main elements to the plan tha she wanted to emphasize:

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- Developing such a plan will serve as a foundation for workforce development, college preparedness, and economic development for our state. Company's in Nevada want to know that we have a capable and knowledgeable workforce readily available to step into our jots.
- The plan will identity and recognize students that demonstrate exemplary achievement in STEM fields. Recognizing student achievement serves as a motivating factor by showing students the exciting projects in which they can become involved and the application of STEM field in the world around them.
- The plan will identify and recognize a maximum of 15 schools in Nevada that demonstrate exemplary performance in the STEM fields.

She strongly encourages our efforts in developing a strategic plan that will produce a skilled workforce that is internationally competitive and appealing to existing industries and those that are considering moving to Nevada and thus inspire students to enter the STEM fields. On behalf of the legislators that pasted this bill unanimously, she looks forward to the work that we will accomplish and that we will bring forward to the Senate and Assembly Members in the 2015 and 2017 legislative sessions because they want to hear what the next steps would be and if there are legislative proposals that we have to present to them. They are ready, willing and able to take them on. She thanks you, and congratulates you for your service on this council.

3. **Public Comments**: There were no public comments at this time in Carson City or Las Vegas.
4. **Election of STEM Advisory Council Chairperson**: Mary Pike suggested Co-Chairs for the North and South. Dave Brancamp agreed based on that there is no fiscal backing to travel to one location for our meetings. David Brancamp and Mary Pike were nominated. Michael Mohar officially made the motion to have Mary Pike Co-chair in the South, and David Brancamp in the North. Frank Woodbeck seconded that motion. No further discussion was made. After the motions were made, the vote was completed, and no one opposed, the STEM Advisory Council will have Co-Chairs. David Brancamp was elected for the North, and Mary Pike was elected for the South.
5. **Governmental Open Meeting Law – Presented by George Taylor, Senior Deputy Attorney General**: George Taylor gave a presentation on the open meeting laws using a PowerPoint that was distributed to all member of the STEM Advisory Council prior to the meeting. He also used another PowerPoint that will be sent to all members with the minutes. He gave an overview on the Public Comment Law and Public Meeting Law.

There are three requirements to have a meeting:

- **Quorum** - You must have a quorum of members (we determined this morning there must be 9 present for the STEM Advisory Council).
- **Deliberation** - Before action can be taken, there must be deliberation amongst the quorum toward a decision.
- **Action** – An action means making and decision, a commitment, or a promise over a matter within your supervision, your jurisdiction, your control, or your advisory power.

The three items that were highlighted by Deputy Taylor are:

- A quorum must take place.
- An agenda – most likely prepared by the Chair and Co-Chair, need to be looked at by several members to make sure that the agenda items are clear and complete and provide a list of topics that will be discussed by the body. However, you can pull or table an agenda item at any time if it is not relevant to the issues. This can be done even before the meeting starts.
- Action - not every item on an agenda is for action, some are just for discussion, and that is fine.

Two critical terms that are also important: Deliberations were only put in the open meeting law last term. We have been using a Nevada Supreme Court definition for many years until the legislature codified it. Action has always been in the open meeting law. Nevada has had an open meeting law since 1960. Every state in the union has some type of open meeting law.

The open meeting law and parliamentary procedure are different. There is nothing in the open meeting law that tells you how to run your meeting. For example, whether you have a Chair or Co-Chair, motions practice, and how you take action. The open meeting law

does not require a public body to actually adopt rules, like Roberts Rules of Order. You can just proceed. The open meeting law is only concerned about making decisions in the open.

Deputy Attorney General Carrie Parker who was absent from this meeting, is assigned to the Nevada Department of Education She is very good with parliamentary procedure and will be at our next meeting.

The basic rule for an agenda is to make it clear and complete. It is in the statute and it is very important for the entire Body, the Scribner, and for people who review the agendas. It is very critical that the agenda items are specific enough to alert the public to items that will be discussed. It is recommended that even if it is germane that it be put on the agenda. You don't have to talk about it, but if it is not in the agenda you can't talk about it. If it becomes important, you would have to put it on the next agenda. Be specific; make an effort to find out what is going to be discussed, and the topics. Put enough effort in writing the agenda topics to avoid a situation where you can't talk about something. As you are writing a topic when a matter is of significant interest to the public, use this higher standard of specificity rather than general topics. Stick to the agenda, you may end up in the newspaper.

All actions can only be done in the public body. The open meeting law does not prohibit every private discussion of a public issue by members of a public body. But a quorum must not be involved. Our quorum is 9, so up to 8 can talk to each other about various issues without offending the open meeting law and the quorum requirement. You can discuss matters with colleges, but do not use social media such as Twitter, a blast e-mail, media that gets the information out to everybody. If you want to talk about an issue you need to contact your Co-Chairs, and they will determine how to and if it is necessary to get in touch with the other members. Serial communications amongst the quorum is prohibited. Serial communications are when you pick up the phone, when you fax, you e-mail, or use social media to contact each other. Less than a quorum the open media law is not concerned. Appointed committees are considered public body covered by the open meeting law.

If a committee is authorized to go forward to meet, and do research and do some fact finding, but is not required to make decisions regarding what to select, they are not subject to the open meeting law. If the committee has to make a choice to create a recommendation to the bigger board, then it has participated in the decision making process and is subject to the open meeting law.

Every public body has to record their meetings, take minutes, have an agenda, and post the public notice and agenda 3 days prior to the meeting before 9:00 am. This does not include the day of the meeting.

Our constitution is not a Sunshine Law. The US Supreme Court has repeatedly held up that there is no first amendment right of access to the public, or the press, to judicial, or other governmental proceedings. However, once a person has been given the right to

address the public body as our legislature has done in statute, people have a right to address this public body. The legislative grant may be limited only within constitutional parameters. Hence the first amendment does apply. Time, place and manner restrictions are applicable to open meetings, to public bodies.

You are able to restrict public speakers to:

- Subjects within your supervision.
- Limit public comment if the speech becomes irrelevant or repetitious.
- You can apply reasonable time restriction limitations, such as 3 minutes. Time can fluctuate depending on how many public people are there to speak.

No public body can limit public comment based on disagreement with view point of the speaker. Even if they disagree with the road you're going down, the subject you're talking about, the eventual decisions you make, or have made in the past. They are free to discuss that. Content is something that you can control. Content meaning you don't have to listen to someone rant about the political seen, or what is going on in Washington, DC.

Public comment pit-falls:

- Halting a person's public comment based on the belief that defamation is occurring.
- Halting comment based on the view point of a speaker.
- Halting critical comment of a public official.
- Comment can be stopped if it strays from the scope of the agenda topic, or if an actual disturbance occurs.

He gave Nancy Martineau materials he prepared on Public Records. Regarding the use of private e-mail. She will also receive an electronic copy and attach them to the minutes.

He then opened the floor to questions from the council.

- **Mary Pike:** Are we supposed to have public comments on non-agenda items during one of the two public comments times?

George Taylor: Yes, one of those two public comments on the agenda should allow the public to speak about anything within your jurisdiction of control, not just what is on your agenda. You can indicate at the very beginning of the meeting that one of the two public comment agenda items can be on any matter, not just what is on the agenda. He referred to the .Senate Bill 345 and the purpose, the mission is your jurisdiction and control, and the strategic plan is something they may ask about.

Senior Attorney General George Taylor had to leave the meeting. He is no long in attendance. He recommended we stick to the agenda.

6. **Nevada STEM Advisory Council Purpose and Charge:**

- **David Brancamp:** He went over what Senator Joyce Woodhouse discussed earlier. The seven main charges that as a council we need to accomplish over this time period:
 - Developing a Strategic Plan for the development of educational resources to support STEM.
 - Developing a plan for identifying and awarding recognition to pupils in the State of Nevada who demonstrate exemplary performance in the STEM fields.
 - There are 15 schools, to recognize them for exemplary performance in the STEM. Identify them and award them.
 - Conduct a survey of education programs and proposed programs in STEM. In the state of Nevada and other states. Identify recommendations for these programs and public schools in Nevada and report the information from our survey to the State Board.
 - Apply for Grants on behalf of the State relating to the development and expansion of the educational programs in the STEM field. As stated earlier there is no fiscal attached to this committee. This may help us with 2 and 3 above.
 - Identify a nonprofit organization or corporation to assist in the implementation of the first three: the strategic plan, identifying the pupils, and identifying the schools.
 - We need to prepare a written report for the recommendations by January 31, 2015 and in 2017 they will go to the State Board, the Governor, and the Director of the Legislative Council Bureau. The council or a sub-committee may seek the input, advice and assistance of persons or organizations that have knowledge, interest, or expertise relevant to our duties.
 - Beneficial for all of us to know where STEM is both National and State perspective. There have been things done; we do not have to start at ground zero.

7. **STEM National and State Perspective:** A PowerPoint presentation was given by Dave Crowler, Executive Director of Raggio STEM Center, University of Nevada, Reno, Raggio Center; Beth Wells, Executive Director of the Nevada STEM Coalition, Gathering Genius; and Mary Pike, Director, K-12, Curriculum & Professional Development Division, Clark County School District.

- **Mary Pike:**
 - Presentation on STEM Nationwide and Statewide.
 - STEM Education in the State of Nevada
 - Quote “There is rather convincing and empirical evidence and it suggests that children are turned off by math and science by the 4th grade”. If we don’t engage these students at an early age they are done by middle

School. As we feed our students into higher education or technical schools to feed the STEM pipeline, we have to get the students excited, even as early as pre-K.

- STEM job holders earn at least 11% higher wages compared to people with Non-STEM jobs. It is another way for our work force in Nevada to increase our medium income.
 - There is some data that shows that some higher education graduates do meet the need of STEM. They tend to drop out of the STEM pipeline after about 10 years. Other studies say that we are very short in STEM educated professionals.
 - STEM skills are highly desirable form any jobs. Whether you are writing technical manuals, or hands on technical engineering, higher level thinking, team work, problem solving, innovation skills, and communication skills are all extremely important. STEM does not allow for people to work on an individual basis all the time. These skills are in demand in Nevada at IGT, SWITCH, Microsoft, as well as across the workforce in the Nation in both STEM and Non-STEM occupations.
- **Beth Wells:**
 - Numerous states are creating STEM Councils, Networks, and Strategic Plans. Nevada does not have to start from scratch when thinking about Strategic Planning for our state. There has been a lot of good work done. Nevada needs to look at its own unique issues and perspectives to solve problems in our state.
 - How the name STEM was developed nationwide. It is what the federal government uses, and we need to follow the money. There is a consortium of states collaborating on STEM called STEMEX.
 - There is increased federal funding for STEM initiatives.
 - Need to apply for money from the Federal Government using acronym STEM
 - International and National corporations are becoming very engaged in STEM and funding STEM. The Gates Foundation donated funds early on in the development of STEM but has moved on in its focus. The US News and World Report entity host an annual STEM conference. National Council of Science Teachers Association, National Council of Teachers of Mathematics, and School Science and Mathematics Association also hold conferences, WHICH incorporate a STEM strand, or have standalone STEM conferences. National Corporations like Chevron and Intel are funding a lot of research in each state and have created a state by state report card *Vital Signs*. The National Governor's Association has done a lot of work and created a tool "The Governor's Tool Kit" that are guidelines for the Governor to create a statewide campaign.

The Brookings Institute Report stated: *Focus on STEM in Nevada*, six steps:

1. The definition of STEM – very broad definition, if an occupation required STEM skills they count it.
2. STEM occupations pay well, but do not all require a Bachelor's Degree., and Nevada is one of the top two states in the nation for the number of STEM jobs that are going to be required with a 2 year degree, vs a 4 year degree by 53.7%.
3. Average wage for STEM occupation in Nevada is \$33,557.
4. Rapid job growth is characterized as Nevada targets the industries sector.
5. 90% of jobs in the future in America will require STEM job skills.
6. Corporate investment is significant in Nevada. We are trying to raise awareness, and promote the good that is occurring in Nevada.

There is a current initiative going on to develop an initial framework for defining of a Nevada STEM school in a partnership with the Nevada Department of Education and the Nevada STEM School Coalition. This work has been supported by corporate sponsorships. There have also been increased STEM grant awards to the districts through both federal and state corporations. Many of these schools have STEM coordinators and are becoming more aware of the support educators need.

The Nevada Department of Education led a statewide collaboration to prepare for the adoption of the Next Generation Science Standards. A majority of the districts and STEM educators we invited to sit in and analyze every standard of the Next Generation Science Standards and compare them to our existing Science Standards, in order to make recommendations to the committee.

Nevada Department of Education's STEM definition:

STEM education focuses on active teaching and learning, centered on relevant experiences, problem solving, and critical thinking processes. STEM education emphasizes the natural interconnectedness of science, technology, engineering, and mathematics, and their connections to other disciplines to produce informed citizens that possess and apply the necessary understandings to expand Nevada's STEM capable workforce in order to compete in a global society.

- **David Crowther:**

Not only did we define what the state idea for STEM is, we put things out there to increase the awareness of STEM..

- There have been three policy reports that have been put out by the National Research Council, published by the National Academy's Press.
 1. Successful K-12 Education. What are the effective approaches?
 2. Monitoring the Progress. This came out two years later. The first was published in 2011, and the second in 2013.
 3. STEM Integration in the K-12 Education Status, Prospects Action and an Agenda for Research, published just this week.

- The three goals of successful STEM education:
 1. Expand number of students who openly pursue advanced degrees in careers and STEM fields, and broaden the participation of women in minorities of those STEM fields.
 2. Expand the STEM capable workforce and broaden the participation of women of minorities in that particular workforce.
 3. Increase STEM literacy for all students, including those who are not participating in STEM related careers and or additional study in the STEM discipline's.

- Four things the State Department and the Districts can do to make sure things happen:
 1. STEM curricula are focused on the most important topics of each of the disciplines.
 2. STEM curricula are not just fun and games. It has to have the rigor that is associated with a successful school.
 3. STEM curricula are articulated as a sequence of topics and performances.
 4. The natural connection with the common core standards, in Mathematics and Language Arts, and the Next Generation Science Standards which will be up for the final vote for adoption late in February by the Nevada State Board.

- Allegations and Advances, 14 priorities, listed are the top 5 most important to what we are doing:
 1. Develop multiple models of STEM featured schools.
 2. Provide adequate instruction time and resources for science in grades K-5.
 3. Ensure access to high quality curricula. A lot of the curricula should be STEM based.
 4. Enhance capacity of K-12 teachers by ensuring they are prepared for the demands of STEM teaching.
 5. Provide quality professional development. Not just for teachers, but for administrators.

- We have to provide money and time. Teachers can't do this without financial support in the classrooms, and the time plan. Not just planning individually but planning in groups.
- What are the challenges and where are they:
 1. Timely adoption of new science standards
 2. We have done this with the Common Core State Standards for ELA and Math, and now the Next Generation Science Standards.
 3. Adequate time for all K-8 students to learn science and experience STEM practice throughout the curriculum.
 4. We need stronger content knowledge in all areas. This might be a good time to examine and look at teacher licensure requirements.
 5. Identification and alignment of exemplary STEM practices. There are many publications that talk about these practices and how they coordinate with the standards.
 6. Increase the research base of teacher professional development programs.
- **Mary Pike:**
Stated that the three documents Dr. David Crowther referenced are available as a free download as a PDF. Just Google the National Research Council or the National Academy's Press. They will make you sign in but the e documents are free. They reference Teaching & Learning and Next Generation Science,

Transitioning to Next Generation Science Standards

- Are slated to be on the agenda for the February 26, 2014 State Board of Education meeting for the final vote.
- These are not STEM standards, but take the disciplinary core ideas in science and integrate the scientific and engineering practices as well as cross cutting concepts.
- Next Generation Science Standards make the inter-connections in the real world and make things more relevant for the students. It gives them a deeper understanding of things instead of memorizing. The mathematics piece is explicitly linked.
- This will provide the rigorous background for science curriculum for every student.
- These are standards for all students. Prepare every student for the workplace no matter what track they choose.
- They support the creation of STEM jobs in the economy. Because we will have a scientifically literate workforce and, equip all students for living in a society that has increasing demands.
- Graphic shared with Teachers and Administrators, shows the interconnectedness of the Nevada Academic Content Standards in Mathematics, and English Language Arts which are based on the common core state standards.

- **Beth Wells:** Nevada’s Challenges and Informal observations from around the State. Feedback from rural counties:
 - Do they have the adequate resources to do the professional development the way they know it needs to be done in the quantities that meet the needs of the teachers?
 - Major gap in science and math among the racial groups, and ethnic groups which will be the future majority workforce of our state.
 - The National average for number of hours of science in the elementary classroom is 2.6%, and in Nevada only 1.6%.
 - Need to increase the access to STEM education to students in the elementary classrooms
 - Teachers would like a one-stop shop website to be able to communicate, share, and collaborate with their colleges.
 - Need to increase capacity for collaboration with community outreach organizations and corporations with schools.
 - Time is of the essence. Are the students getting enough science, STEM, and mathematics to really ensure they are productive citizens to have a good quality of life, to have opportunities for great careers to provide Nevada with a workforce that will help the economy?
 - History of where Nevada is with STEM.

Just a reminder, the Joint Nevada State Legislature Education Committee is already working on bill drafts for 2015. State Superintendent Erquiagua stated at the Technology workshop, the Department of Education is now working with the Governor’s office between now and August about the Governor’s proposed budget, the budgets for the agency, and bill drafts. If this council chooses to make some policy recommendations, or decision making recommendations that they would like to see implemented before 2017, now is the time to be looking at the timeline.

- **David Brancamp - Question –Las Vegas:**

Missy Young – Beth, is the deadline really August for us to make any kind of recommendations if we really want to get it done soon?

Beth Wells – I cannot speak to the Governor’s budget, or the Nevada Department of Educations. This would be something Dave could answer. What I have been told informally, is if you want to get a bill draft into the legislative session, the sooner the better. The bill creating our council was not put together and introduced until the session started. August in not the end for bill drafts, it is not too late. .

David Brancamp – If there are any budget pieces that we want to attach with the Nevada Department of Education that we need to present to the Governor, we would need those by August.

10:35 am 10:45 am - Break

8. **Review of Senate Bill 345 and Plan Next Steps – David Brancamp:**

- Section 1 is completed - creating the STEM Advisory Council.
- The Legislative Council Digest, on the first few pages, you will know how members were appointed and who appointed the members. There are 17 of us when all together, which keeps 9 our quorum. Mary and Dave thank you for electing them Co-Chairs.
- Section 1, #7 - we are not to meet more than four times a year. David Brancamp proposed that we need to divide and conquer as in #9 Sub-Committees, for all the work..
- Section 2, A-G - Seven main charges outlined, we need to review and begin working on. Under G, if we give out report to the Legislative Council Bureau by the January 2015 official deadline, we will put pressure on the legislators to do something at that point. It would be beneficial if we were thinking of pieces of either from the Department side or that we want to talk to Legislators to help us so we get this done by the August 2014 deadline.
- Page 4, #2 - we do have the ability to seek advice and input, and assistance of people that have the expertise. Beth Wells, Dave Crowther, and Mary Pike can share names that we could bring in to help us.
- Page 4, #3 – It is very important to know that the State Board shall consider the plans developed by our council on STEM, that is outlined in a, b, an c of section 1, and the written report. They can adopt such regulations as the State Board deems necessary to carry out those recommendations in the report. We will need to attend future Board meetings to present our work.
- Section 2, #2 select subcommittees to seek input, advice, assistance
- Section 2, #3 – important to know the state plan on STEM; conduct a survey on the status of STEM in our state, and submit a written report to the State Board of Education, who may carry out the recommendations in the written report.

Mary Pike: She was told there will be a report out on STEM due out in April. She agrees with David Brancamp that it may be too late for our first report to come out in January 2015. We should aim for Mid-July.

Frank Woodbeck: I assume you plan on completing the seven charges or some form of them by July?

Mary Pike: I think we need a report on our progress of the seven chargers by then.

David Brancamp: Basically, we are looking for any recommendations we would want to bring forth. We could tell them the progress of where we are at in August, considering we are in the middle of the month of February. We can add to that and give the official report in January as the law states. But if we have recommendations to go forth earlier, the Superintendent and the Legislators would appreciate knowing them ahead of time.

Mary Pike: The South is in agreement that we could move forth with recommendations by August and the official report in January.

David Brancamp: Appreciate that, the North agrees. If we divide the council into three Sub-Committees, he will offer support from the Nevada Department Education staff to help collaborate, and pull notes or minutes together. He can line up the right people for each group.

Mary Pike:

Do all seven charges in Section 2, A-G need Sub-Committees? The Nevada Department of Education can offer support. Specifically, applying for grants on behalf of the State of Nevada. She was not sure about this, how to apply, would NSF grants apply?

Michael Mohar: Regarding grants, he said we need to go to grants.gov. As someone who has reviewed, and written grants, he would be able to get this task done at the given time. They go in cycles; usually the deadlines are in March, September, and November. It is a responsibility of the Strategic Plan and should be done.

Nancy Brune: Question on the charge of identifying Non-Profit Organization. As one of their tasks could be to help identify grants and help us apply for them. Do we need to form a committee for that, and as a committee or group can we talk about how we would identify them, do we have a non-profit in mind, or will we accept applications, or put out an RFP? What is the vision, what are the constraints around identifying a non-profit to support us and to help us with the implementation of all the other charges we have?

Mary Pike: I do believe we need to have a discussion on this and we will need some type of application process. There are many to choose from and we should have a committee to develop that application.

Dave Brancamp: It would do well for us to have a committee on that, and we could bring forth our fiscal agents at the Department so they can make sure what proper steps we need to follow. Also, we do not have council from the Attorney General's office here any longer to make sure we are following their steps. I do believe we need a committee to find what would be the application process; I am not sure we all have in front of us a full list.

Theresa Corry: I think if we took each item and discussed what each of them would need we could group them into what we want to have for our committees.

David Brancamp: We can start with the first one, that we develop a strategic plan for the development of educational resources to support STEM. Not all the legal pieces of that bill are in front of you, but that is what it is asking for us to do.

Missy Young: Agrees with Beth Wells, we don't have to reinvent the wheel. There are other states that have done this successfully. It would be great help if the council could receive examples of what other states have done. We could cherry pick what we like the

best from those and come up with our own ideas as well. In the interest of time, we need to look at what other states have done to get where we are trying to go.

Katherine Neddenriep: I agree. Task D links to that, and the survey or the results will feed into the first piece.

David Brancamp: Do you see what Katie see's that items 1 and 4, or A and D on the legal document are somewhat linked?

Frank Woodbeck: He concurred, and asked Mary if there has not been some framework already been developed within the Department of Education that she is in charge of as division Chair that she is aware of what we are doing as a foundation for that?

Mary Pike: We have been working on developing a framework between the north and south. It is in the works, we have a beginning. This framework will help us more with B and C. The framework we have been working on is not for identifying pupils, but programs and schools identify what a STEM school really is. She suggested that we have a committee for A & D together and B & C together.

Katherine Neddenriep: She agrees, and thinks E and F are tied together. She feels some of the grants should be directed towards the state, but there may also be grants that would go towards a non-profit organization that would need to receive and hold those monies.

Michael Mohar: He agrees, and stated that often a grant is a collaboration between a State entity, a Non-Profit, a University, and a Private Corporation. This is the magic four for grant proposals.

Mary Pike: What do you think Co-Chair Brancamp, do you see three committees to start with, or do you want more than that?

David Brancamp: He agrees the three as we have divided them would be a good start if the council is comfortable with them. With G, putting the report together, the council could address at our next meeting once we know where we are at. Mary and he could start that piece as they start hearing pieces, and present it back to council before it goes anywhere. He does not see G as one we need at the moment. We do need to get working on A and D, B and C, E and F. Is that the correct breakdown?

Mary Pike & David Brancamp: Decided we need a motion to establish those sub-committees and that this is how we will divide the work.

Michael Mohar: First motion to divide into Sub-Committees A and D, B and C, E and F.

Katherine Neddenriep: Second motion to divide into Sub-Committees A and D, B and C, E and F..

David Brancamp: led the vote and the council passed this motion unanimously to divide into three sub-committees. He requests that Mary Pike lead the division of the Council to these sub-committees.

Mary Pike: She asked council members to look through the bill and see where they best fit. She agreed with Michael Mohar that for committee E and F we need a good mix between Education, Higher Education, and Business. She then asked the council to begin volunteering for a sub-committee.

Mary Pike: Went over who is in each of the sub-committees.

Dave Brancamp: He volunteered and assigned Department of Education employees to assist with each committee: Mike Pacheco – B and C, Tracy Gruber E and F, and Andre DeLeon A and D. He requested that the council members volunteer to be chair of each committee.

Mary Pike: Led the nominations and motions for the chairs. There was a nomination, motion and a second, for Nancy Brune to be the Chair of the A and D committee.

Nancy Brune: Question: If we are only four and only fact finding are we constrained by open meeting law?

Mary Pike: Answer: Correct, if it is a recommendation for fact finding, but if you are going to actually make a recommendation you might have to have an open meeting.

David Brancamp: That is true, if you are making any recommendation's forth we would definitely want that in a public meeting.

Mary Pike: When initially you are just finding the facts that's fine, but when you decide to make a recommendation, and discuss that recommendation, the sub-committee will have an open meeting and then bring back to the full council.

Dave Brancamp: That is correct.

Mary Pike: Led the vote for those in favor of Nancy Brune to chair of the A and D committee; There was a unanimous vote for Nancy Brune is now the Chair of A and D Committee.

Moved to B and C for volunteers or nominations. Frank Woodbeck nominated Sharon Pearson, Nancy Brune seconded the nomination. There was a unanimous vote; Sharon Pearson is now the B and C Committee Chair.

Moved to the E and F for volunteers or nominations. Anne Grisham nominated Michael Mohar, and Theresa Corey seconded the nomination. There was a unanimous vote; Michael Mohar is now the E and F Committee Chair. Nancy Martineau will give the

NDE Staff the three Committee Chair's contact information on what committee they will chair and who is on the committee.

David Brancamp; Thanked all the chairs for taking on the task, and assured them the three NDE Staff members will be in contact with the Chairs to discuss next steps within the next week or two so you will know their connections and if you are going to fact find, or make recommendations and the public meeting law.

*The council sub-committees are as stated below:

A&D: Develop a Strategic Plan for the development of educational resources and conduct a survey of education progress and proposed programs.

- Dr. Nancy Brune – Committee Chair
- Dr. Theresa Corry
- Wes Harper
- Mary Pike – Council Co-Chair
- Missy Young

**Andre DeLeon (NDE State Representative)

B&C: Develop a plan for identifying and awarding recognition to pupils who demonstrate exemplary achievement and develop a plan for identifying and awarding recognition to not more than 15 schools that demonstrate exemplary performance.

- Derek Fialkiewicz
- Richard Knoeppel
- Judy Kraus
- Sharon Pearson – Committee Chair
- Shelace Showaker
- Frank Woodbeck

**Mike Pacheco (NDE State Representative)

E&F: Apply for grants on behalf of the State and identify a nonprofit corporation to assist in the implementation of the plans development pursuant to (a), (b), and (c).

- David Brancamp – Council Co-Chair
- Dr Anne Grisham
- Michael Mohar – Committee Chair
- Katherine Neddenriep
- Dr. Carl Reiber

**Tracy Gruber (NDE State Representative)

9. **Additional Opportunities for STEM Advisory Council Leadership and Influence:**

Dave Brancamp discussed that this Council has a very diverse group and a wonderful support system with the legislature. Points he touched on:

- February 26, 2014 the Next Generation Science Standards will be up for adoption. If you have time it would be great if some of you can attend.
- There are three RPDP regions available – Northeast out of Elko, Northwest out of Reno, and Southern out of Las Vegas. They should be involved in the discussion of professional development STEM. They have governing board meetings that we can find out when they are and have council members attend if they could.
- Both UNR and UNLV have some form of a STEM center. This is another avenue for connecting with our post-secondary system.
- The Triangle Coalition, in the math world. We can find out what they are doing on the National level. We will ask Beth Wells to keep an ear out for what is happening in the STEM world as well.

Mary Pike: UNR has the Raggio STEM Center. What doe UNLV have?

Carl Reiber Stated the University of Nevada Las Vegas has a STEM Coalition that has met several times, and he will offer that group for any assistance.

Katherine Neddenriep Nevada Mining has two conferences a year and the next one is an Earth Science Teacher Workshop to be held at Faith Lutheran High School, in Las Vegas on April 15-16, 2014. They target Earth Science Educators but are incorporating the Language Arts. Teachers can get continuing education credit, but it is free to attend. It was suggested that a member of the A&D Sub-committee may want to attend and see what they are doing and understanding a program, and what is already out there, and what is being offered. She has been a member of the Education Committee for the Mining Association, and they are constantly looking for materials to improve on what they are presenting. The workshops have tremendous financial and human resource support from the Mining Industry and the Division of Minerals. These are great resources and connections to be made. They also do a workshop in Reno in the summer. They are a great captive audience for talking to the educators about our council and what we are doing. She will help facilitate and introduction with the Education Committee if a council member wants to attend either of these workshops and address the entire group of participants. There is more information on these workshops on the Nevada Mining website nevadamining.org. She will be happy to answer any questions you may have about the workshops.

David Brancamp: It would be helpful for Katie to send the links and information to Nancy Martineau or myself to send it to all the council members. Mary and Dave will see if it fits into their schedules to help out.

Mary Pike: Every year she has sent those links and posts them for all their teachers in the Clark County School District internet system. She knows the dates and thinks it would be a good thing to visit.

Anne Grisham: There is our CHOYA group down here that is a consortium of informal education groups and a lot of them are STEM focused, as well as Desert Research Institute that does a lot. Gathering all that information would be vital for this group.

Dave Brancamp: Nancy will collect all this information and send it out to the entire group.

Mary Pike: Mary shared the following information about CHOYA:

Connecting Hands Offering Lifelong Learning Adventures (CHOLLA)
CHOLLA is a consortium of local agencies and the Clark County School District that collaborate to provide opportunities for linking and extending classroom learning to the community. Agencies include public and private museums, nature centers, wildlife, and environmental organizations, and regional, state, and national parks. Partners include: Lake Mead, Red Rock Canyon national Conservation Area, UNR-Cooperative Extension, U.S. Fish and Wildlife Service, Nevada Department of Energy, Don't Trash Nevada, National Atomic Testing Museum, Clark County Wetlands Project, Lost City Museum in Overton, Shark Reef, Las Vegas Natural History Museum, Desert Tortoise Conservation Center, Lied Discovery Children's Museum, and the Springs Preserve.

Carl Rieber: It would be nice to collect and post all the information to a portal or website that everyone can access. It would be nice to solicit information from the general public, school districts, and other entities that could have the opportunity to input and list things that are important to us be look at and review.

David Brancamp: We can post it on the Nevada Department of Education's website under Councils. The STEM council is listed there now, and we can speak to our web tech ad see how to go about posting information.

Theresa Corry: Thinking of August, should we put forth some kind of a date when our committee should first meet by a certain time so we can move it along as quickly as possible?

David Brancamp: You gave us a nice lead into agenda item number 10. It would help if we decide when the council's next meeting will be.

Michael Mohar: With a sub-committee we have to identify a non-profit corporation; if we have to go through a procurement process, will that have to be discussed with the entire advisory council, or as a committee can we proceed as a given since it is part of the legislation?

David Brancamp: We would need that back to the entire advisory council for a decision. You can bring recommendation from the committee as long as those were held publically. You could bring the top 2 or top 3 to have the discussion with all advisory council members.

Mary Pike: It they developed an application and posted it on the NDE site for our council; once the applications come back would they have to discuss those applicants in a public meeting?

David Brancamp: To make that decision it would have to be made public because it is decision.

Mary Pike: Suggested that we select out months to meet.

10. **Future Meetings and Agenda Items – Co-Chairs David Brancamp and Mary Pike:**

The months to meet were discussed by the STEM Advisory Council members and selected. The months chosen for the four required meetings per year are: January, April, July, and October. There was a motion and a second concerning future meeting months.

The vote was unanimous for the January, April, July, and October meeting schedule for each year.

Nancy Martineau will send out Doodles with dates to determine the exact date in April for our next meeting.

Mary Pike: Each sub-committee should meet at least once, if not twice between those meetings. Specifically the committee bringing back the non-profit recommendation may have to have an open meeting to discuss the recommendation.

Dave Brancamp: Yes, that is correct. As we look at agenda items, each of the sub-committees will have a report for us. Are there additional agenda items you would like to see added at this point? Especially if it involves staff to bring research in like today with Dr. Crowther and Beth Wells.

Katherine Neddriep: Before making a decision, Committee E and F will need an action item for awarding or selecting a non-profit organization if we do have an open meeting prior to our next meeting to put out an application.

David Brancamp: As Co-Chairs, Mary Pike and he will ask the E and F Chair, Michael Mohar the status going into this selection. We will need to know before our next meeting in April to be able to post it. We have to give Nancy enough time to get everything done through all the proper process.

Michael Mohar: Needed clarification, do we need to have the posting of soliciting of a non-profit meeting approved by the entire Committee?

David Brancamp: If you held a public meeting and have a larger group come forth, and you narrowed it down to 2 or 3, that is what you would bring to the council in April as an action item.

David Brancamp: Is there any other items the council members want on the agenda?

Mary Pike: If any council member wants to add an item they can e-mail David Brancamp or Mary Pike to make sure the item is added to the agenda.

David Brancamp: Everyone in the North agrees He would like both Co-Chair names on the e-mail for an agenda item request.

Mary Pike: Everyone in the South agrees.

11. Public Comments:

Carson City - Beth Wells: In referral to an agenda item where we are looking for organizations and entities to provide information in our work, we have many commissions and councils in the State of Nevada. Many that touch on, or directly relate to STEM Education. We should look at some of their strategic plans and see where our strategic plan will merge with theirs. This should give us a more powerful voice when talking to the Governor or the Legislature because STEM is all about collaboration.

David Brancamp: Thank you Beth, we will take that advice and talk to our additional council chairs and bring this back to our group.

Nancy Martineau: No more public comments in Carson City at this time.

Las Vegas – Reza Karamooz: As an engineer he is happy Nevada is making such an effort in STEM. He is the President of the Nevada Business Aviation Association (NVBAA).from the Aviation, Aerospace and UAS Industries. He represents all the Nevada statewide efforts that we are making in aviation and aerospace defense and the new UAS designation that we received. In order to capitalize on that, we need a ready to go workforce with STEM background. They have to have other things done they are working on such as Infrastructure improvements across the state, as far as getting some local and state tax incentives and other things done for their industry before they come to the State. Having this STEM effort and initiative is really important. They have meetings every month and encourage the council to join their group and go to the meetings. The next meeting is at the University of Nevada, Las Vegas at the Howard Hughes College of Engineering at 8:00 am on Wednesday, March 5th. The speaker is the CEO of the Reno Tahoe Airport Authority. It will be a very informative meeting and one of the main initiatives is to connect the North, South and all parts of the State. He wants to bring everyone into the conversation. He noticed that some of your rural areas are not connected.as well as they should be. We need to bring all the children into it. We need to provide them all the opportunity to get into Science and Engineering. They need to

opportunity to see what can happen to get inspired by something. To touch something that ignites something in them so they will do it and keep going down that path to seek the next thing. Anything they can do as an association they are happy to do. They do a lot of different things. Right now they are working with the Nellis Air Base to create tours for children to allow them touch and feel things to get inspired. It is something that has never been done before. Nellis is a great asset to us and is a major economic boost to us, and we need to create a better connection with them. A lot of things that happened there as far as aviation aerospace have a STEM background.

David Brancamp: Are there any comments from the South?

Mary Pike: No, and I think we have a very impressive group assembled and proud to be on this committee with the rest of you. We have a big task ahead of us and I am confident we will get it done.

David Brancamp: I second that comment, and appreciate everybody and that we have an outstanding group. We have big work ahead of us and he thanks those of you who stepped in as Chairs of our sub-committees. We will make sure that everyone gets both Mary Pikes' and David Brancamp's e-mails. Please contact them if you need additional support. He moves to adjourn the meeting.

Mary Pike: She moves to adjourn the meeting and made the first motion.

Katherine Neddenriep: Seconds the motion.

*All were in favor.

12. Meeting Adjournment:

Meeting adjourned at 11:45 am.

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