

**MINUTES OF THE MEETING  
OF THE  
ASSEMBLY COMMITTEE ON EDUCATION**

**Eightieth Session  
February 21, 2019**

The Committee on Education was called to order by Chairman Tyrone Thompson at 1:33 p.m. on Thursday, February 21, 2019, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4406 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at [www.leg.state.nv.us/App/NELIS/REL/80th2019](http://www.leg.state.nv.us/App/NELIS/REL/80th2019).

**COMMITTEE MEMBERS PRESENT:**

Assemblyman Tyrone Thompson, Chairman  
Assemblyman Edgar Flores, Vice Chairman  
Assemblywoman Bea Duran  
Assemblywoman Michelle Gorelow  
Assemblywoman Alexis Hansen  
Assemblywoman Melissa Hardy  
Assemblywoman Lisa Krasner  
Assemblywoman Brittney Miller  
Assemblywoman Connie Munk  
Assemblywoman Sarah Peters  
Assemblywoman Jill Tolles  
Assemblywoman Selena Torres

**COMMITTEE MEMBERS ABSENT:**

None

**GUEST LEGISLATORS PRESENT:**

None

**STAFF MEMBERS PRESENT:**

Kelly Richard, Committee Policy Analyst  
Victoria Gonzalez, Committee Counsel  
Sharon McCallen, Committee Secretary  
Trinity Thom, Committee Assistant



**OTHERS PRESENT:**

Robyn Caspersen, Member, Board of Directors, United Way of Southern Nevada  
Lisa Morris Hibbler, Director, Youth Development and Social Innovation, City of Las Vegas  
Stavan Corbett, Chief Strategist and Government Relations Officer, United Way of Southern Nevada  
Michael Brazier, CEO and President, United Way of Northern Nevada and the Sierra  
Denise Tanata, Executive Director, Children's Advocacy Alliance  
Julie Houchins, Early Education Program Manager, United Way of Southern Nevada  
Patti Oya, Director, Office of Early Learning and Development, Department of Education  
Chris Reilly, Workforce Development and Education Programs, Tesla, Inc.  
Kerry Larnerd, Director, Career and Technical Education, Clark County School District  
Ray Bacon, representing Nevada Manufacturers Association  
Chris Daly, Deputy Executive Director, Government Relations, Nevada State Education Association  
Tricia McLaurin, Private Citizen, North Las Vegas, Nevada  
Verona Sutton-Dunn, Private Citizen, Las Vegas, Nevada

**Chairman Thompson:**

[Roll was called. Committee protocol and rules were explained.] Today is a very special day in the Legislature. We are having our Black History Summit. I would like to give a special welcome and shout out to those participants. We appreciate their efforts to be here and actively involved in the legislative process.

Today we will hear presentations concerning early childhood education, Nevada Reading Week, the Read with My Barber program, and a workforce development program.

We would like to open with public comment for anyone wishing to address the Committee, and we will also have public comment at the end of the Committee.

**Robyn Caspersen, Member, Board of Directors, United Way of Southern Nevada:**

I am a board member with the United Way of Southern Nevada. I am also a donor and a volunteer, as well as chair of our policy committee. I am here on behalf of our 21 board members, our 25,000 donors, and our volunteers, representing over 350,000 hours invested in southern Nevada communities alone. I am here to encourage your continued support of early education funding for the state's Nevada Ready! Pre-K program and budget appropriation which will be addressed later in your agenda today by my colleagues.

Investing in early education provides our low-income children and families a pathway to success. That case for success includes a variety of important parts of our communities, including the creation of jobs, the generation of revenue for our state, and improved earnings and income especially for our low-income families.

**Chairman Thompson:**

Is there anyone else in southern Nevada for public comment? [There was no one.] We will move on to our first presentation. We would like to invite Dr. Lisa Morris Hibbler, with the City of Las Vegas, to talk about a great program that is dear to our hearts on promoting literacy in our communities, Read with My Barber, because next week is Nevada Reading Week.

**Lisa Morris Hibbler, Director, Youth Development and Social Innovation, City of Las Vegas:**

Literacy continues to be a problem in the Clark County School District (CCSD) and for our young people. We are always looking at innovative ways to excite and motivate our young kids to read—read for fun, enjoy reading. We know that in K-3 kids are learning to read, but then there is a shift beyond the third grade where they are reading to learn. It is so critical that they get that foundation.

Local barbers are issuing books and giving out free haircuts. They are talking with the kids and helping them with words. What was really motivating is the fact that some of the barbers themselves also struggled with reading. They could understand what these young boys were going through. We talk about the boys because, oftentimes, it is our young boys who are not interested in reading. As a mother of a 9-year-old son, getting him to read is often a challenge. Getting him off of Fortnite is also a challenge. We have to find those unique ways. When the kids get their hair cut and barbers give them a book and they read together, it is a different dimension and brings about a unique opportunity.

We started the Read with My Barber program in 2016 [page 3, [Exhibit C](#)]. Assemblyman Thompson had seen that in some small town there was a barber who was giving free haircuts and thought we could do that here, and we made it happen. We reached out to spread the word in Nevada, books were donated to us, and we just started calling people and going barbershop to barbershop asking if they would be interested. The barbers agreed to participate if we brought the books. The more we talked to them about the importance of reading, the more they were seeing that this was a way to give back and get involved. In our community, people want to get involved, but they are not always sure how to start. When you present those opportunities, they jump right in.

Our national statistics around reading are that 34 percent of children entering kindergarten lack basic language skills needed to learn how to read [page 4]. The national statistics are not too far off from Nevada's statistics when we look at the CCSD. Superintendent Jesus Jara made a presentation to the City Council and also a series of presentations to the community to let us know where we were, and 49 percent of our children in Grades 3 through 5 are proficient [page 5]. That is a large number when you are talking about a school district that has 321,000 students.

We also see that our African-American babies are reading at about a 30 percent proficiency rate. Understanding the criticality of literacy and language and being able to read for other subjects such as math and science, that is the importance of keeping our kids on track to graduate and ensuring that they are not struggling

On page 6, we show Grades 6 through 8, and again, you see the same pattern that 45.7 percent of our sixth through eighth graders are proficient in English language arts.

By putting out the call to action [page 7], we have continued to get people involved. We often get calls from beauticians asking "What about us?" We tell them that they are invited. We talk about books and barbers, but it is open to everybody. The importance is getting people excited about helping kids learn how to read. We give everybody a shirt, we give them the books, and we come back around if they need more books. We will provide more books because we often get book donations. We have had people also provide donations so we can buy books and give them out.

We started with five barbershops and we now have ten barbershops that participate, as well as dozens of individual barbers [page 8]. Next week they will be getting their books and their T-shirts. They also like to post on social media. It is exciting to see that as well.

A list of our participating barbershops is on page 9. Not only do the barbershops participate, but they also have a barber school that participates, and they usually have around 30 students that are also participating.

Our partners are the Clark County School District, the Nevada Black Legislative Caucus and the Nevada Hispanic Legislative Caucus, and of course, our very own Assemblyman Tyrone Thompson [page 10].

We also took it to the next phase, which are these little libraries [page 11]. We started with seven and placed them in strategic places with books—bring one, take one. Then quarterly we go out and add additional books. These little libraries can be placed anywhere, and it is just another way to make sure that books are in the home. A lot of our families do not have home libraries. Many of our schools do not have libraries or they do not have a librarian, so they do not have a lot of books. It is more common than you think that we have a literacy gap or an access gap to books.

For more information or to participate or sign up, it is not too late. Please call our office at (702) 229-KIDS [page 12]. Spread the word. Even if people are in Reno, in the north, and they want to participate, it is very easy for us to get them started.

**Assemblywoman Peters:**

Are the barbers volunteering their time?

**Lisa Morris Hibbler:**

Yes. During the Nevada Reading Week, they typically volunteer to give free haircuts and read with the kids. They keep the books all year round, but they do volunteer to participate.

**Assemblywoman Peters:**

Just during that one week?

**Lisa Morris Hibbler:**

Yes, just during the one week for the free haircuts, but they commit to read to the children all year long.

**Assemblywoman Hansen:**

Where do you get the books?

**Lisa Morris Hibbler:**

We purchase the books or we get donated books.

**Assemblywoman Miller:**

You mentioned that many of the schools do not have libraries or librarians. Can you speak to the importance, and the link or correlation between having available libraries and actual librarians in the schools and literacy of our students?

**Lisa Morris Hibbler:**

Absolutely. First of all, a librarian is skilled in helping kids with literacy and helping them to find the right books. Sometimes kids do not like to read because they are not matched with the right materials. That is important. Oftentimes, schools have to choose between other types of staff and librarians, so sometimes the librarians are the first to go. The libraries do not always have up-to-date materials, are missing materials, or have tattered books. A librarian is critically important when we have already indicated how important literacy and those early reading skills are. It is a missed opportunity and a setback for our young people when they do not have a librarian in a library that is fully stocked.

**Chairman Thompson:**

Are there any further questions from the committee?

**Lisa Morris Hibbler:**

We will get you a copy of that link.

**Chairman Thompson:**

At this time we would like to invite Michael Brazier and Stavan Corbett of the United Way of Southern Nevada, Patti Oya from the Department of Education, and Denise Tanata from the Children's Advocacy Alliance to speak to us about early childhood education.

**Stavan Corbett, Chief Strategist and Government Relations Officer, United Way of Southern Nevada:**

We want to share the importance of early childhood education and what is happening—the opportunities and the multigenerational impact that it has for our state. The United Way of Southern Nevada is an organization that has been in Nevada 75 years. Currently we have a community-based agenda item which provides support in the areas of early childhood education, graduation, postsecondary attendance and completion, as well as workforce supports [page 3]. We have a partner in northern Nevada.

**Michael Brazier, CEO and President, United Way of Northern Nevada and the Sierra:**

Our goal in northern Nevada is to increase the number of third graders who are reading at grade level at the end of third grade across our 13 counties—70,000 square miles in our area that we cover. We know how important an investment in prekindergarten is, because that is the foundation of future learning for those third graders to ensure they are on track to read at level by the end of third grade.

**Denise Tanata, Executive Director, Children's Advocacy Alliance:**

We are fortunate to work with a multitude of partners around a variety of policy priorities impacting children. School readiness is one of our major issue areas.

Some of the opportunities for early childhood education in our state are, in part, understanding the data [Page 7]. The main point we want you to see is that right now, when you are looking at early childhood educational opportunities for young children, we are looking at quality opportunities that provide those young children with the skills and resources they need to enter school ready to learn. We have approximately 73.5 percent of children aged 0 to 5 years who do not have access to any type of formal or licensed early childhood education in our state.

Additionally, we have a capacity issue. From 2008 to 2015, we have seen a huge decline in licensed early childhood education programs [page 8]. Primarily, this has to do with the recession. When we saw a decrease in our employment rates, we also saw a lot of centers and licensed facilities closing, but it does provide that opportunity where we need to begin to expand as our state expands.

There are approximately 220,000 children between 0 and 5 years of age in Nevada [page 9]. Sixty-five percent of those children reside in households in which both parents work. When we look at that number and the number of children who are living below the poverty level, our capacity to serve those children in our quality licensed centers, whether it is a public preschool program or a private center, does not meet the need.

**Stavan Corbett:**

There is also an economic impact as it relates to early childhood education [page 10]. We know that the early childhood centers are actually small businesses, which is good for our economy. We also know that it provides low-income families a break, and it interrupts the

generational poverty cycle to assure that there is generational progress within the family. Access to our early learning programs also inspires graduation and postsecondary education, as well as helps prepare the twenty-first century workforce.

In Nevada alone, there are 9,000 full-time equivalent jobs that are provided through early childhood centers [page 12]. We also know that it generates about \$345 million annually in Nevada. For every dollar that is invested, we can see up to a \$7 return. When there is a lot of dialogue around return on investment, we know it is a great investment to make. Nationally, it is \$8.2 billion in additional income for families.

High-quality education enables the completion of high school, it increases worker productivity, and it generates significant income through the workforce [page 13]. It also creates essential job functions for early childhood educational professionals. This is the emerging space where professional development comes in and provides that lateral support to ensure that who is teaching our children are the most highly qualified individuals within our early childhood centers across the state.

When we talk about a wealthier and healthier local economy [page 14], nationally there are 768,521 early learning establishments, 861 of which are in our state. We also know that there is \$45.1 billion in revenue across the nation with \$345 million for our state. There are 1.57 million owners and staff across the nation—9,000 in Nevada.

Early education professionals generally spend most of their money in the community. It is good for folks to earn a livable wage and to be able to invest those monies into the communities—especially in those under-resourced communities where there is opportunity for economic and generational progress. We also know that there is roughly \$2 in local spending for each early education dollar spent.

There was a national survey around businesses across the United States. We recognized that limited access to early childhood education results in a parent's loss of time and productivity at work. Those employees had a negative effect on their employer's businesses—63 percent of those employees would leave work early, 56 percent were late for work, 54 percent missed a full day of work, 54 percent were even distracted at work, and 32 percent missed part of the work shift [page 16]. We know that having access to early childhood education is not only good for the child and the student, but also has that multigenerational impact, and a small or large business impact as well.

I was at a conference in California over the last two days and one of the emerging practices that we are seeing, even in the rural communities, is that there are farmers subsidizing access to early childhood education for their farmworkers. Within the past three years, they have seen higher retention and higher productivity for the economy and for their businesses. We also know that parents who had a lack of access had 25 percent more challenges participating in work-related educational trainings or professional development. Sometimes

they were reprimanded because they did not have access to early childhood education and 8 percent were let go or fired, and 7 percent were demoted or transferred to a less desirable position [page 17].

The U.S. Chamber of Commerce reported nationwide that with the American Enterprise Institute, who did the research for them, 73 percent of the nonworking poor actually said they would engage into the workforce if they had access to early childhood education. We also know that it impacts the percentages you see on page 18 as it relates to the inability to accept new job offers, get reduced regular work hours, and also turn down professional reassignment, and 13 percent of those employees would end up leaving their job because they do not have access to early childhood education. How does early childhood education benefit our next generation?

**Julie Houchins, Early Education Program Manager, United Way of Southern Nevada:**

United Way supports the Nevada Ready! Pre-K development grant. We are the subgrantee awarded through the U.S. Department of Education. In Las Vegas we have 68 preschool classrooms in which nearly 1,257 children are receiving free pre-K programming in high-quality programs. We have been partnering with the Clark County School District, Acelero Learning, and we now have 11 private child care programs that we are working with as well. We have seen great success over the past four years and we are hoping to continue to see that. We were able to support our teachers through training and coaching sessions.

We are hearing from families that 84 percent of our parents have said that the quality of early childhood education has a major impact on kindergarten readiness [page 20]. We have heard from several of them as their child is going to kindergarten or first grade how advanced their child is by participating in one of these Nevada Ready! classrooms. Oftentimes that child is being used as a peer tutor to support other children in the program. Over half believe that early childhood education quality has a major impact on their child's future and success.

We found that 54 percent are more likely to earn a high school diploma [page 21]. They are twice as likely to attain a postsecondary degree or certification, and 46 percent are more likely to work full-time by the age of 25.

**Patti Oya, Director, Office of Early Learning and Development, Department of Education:**

I would like to talk to you about the history of our state pre-K program and our preschool development grant program moving forward. Our state pre-K program was originally funded in 2001 [page 23 ([Exhibit D](#))]. Originally, it received \$3.5 million of state funding; it was a half-day program serving approximately 700 children; and it has received the same funding over the past few years. In 2015 we received a federal preschool development grant which enabled us to expand those half-day seats to full-day seats and to add additional seats. We are very excited that United Way has partnered with us to provide and help us implement those seats in the CCSD. We work with most of the school districts as well.



Moving forward, we are asking for additional funding now that the federal grant is ending. We are asking for funding to maintain those 3,023 seats that we started under the federal grant and to move forward as one state pre-K program. We are beginning to see some great results from screenings we have implemented. However, we are going to keep the eligibility and some of the quality requirements from the federal grant moving forward into our state pre-K program. We are still looking at 4-year-olds who are 4 by September 30 and whose families are earning under 200 percent of the federal poverty level. We are only serving approximately 11 percent of eligible 4-year-olds, so it is important to note that we do not want to expand and open it yet until we are serving a majority of the 4-year-olds who need pre-K.

You can see who we partner with on our subgrantees in our current preschool development grant [page 25]. We have encouraged our subgrantees to do braided funding and all of them have done a great job between United Way with the Acelero Learning Head Start funding. In the north, we also have community service agencies and their Head Start funding, as well as Zoom and Victory pre-K programs, and special education federal program dollars. These are the subgrantees that are currently running the Nevada program.

On page 26, you can see the number of children and the number of classrooms that were developed under the federal preschool grant.

We are trying to stay with what we implemented under the federal preschool development grant. That includes hiring highly qualified teachers in terms of having a birth-to-second-grade license or an early childhood special education license with the early childhood endorsement. For those programs that are in our child care center classrooms, we are requiring a 5.2 on the Nevada Registry's Career Ladder, which is equivalent to a bachelor's degree in early childhood education [page 28]. Plus, those child care centers must pay a comparable salary to the district. What that means for the child care centers is that we are really helping them raise quality and address the wage compensation issue in child care, as well as the high turnover rate that we still have in child care. We are trying to stabilize child care with the seats that are in the private pre-K programs.

Another big component that we have added because of the federal preschool development grant was the family engagement piece. We want to focus beyond having potlucks and fun activities for families, but to really think about how preschool sets the whole family on a great path to education and in getting to know their schools [page 28]. We do a family engagement survey, we have the grantees develop a plan based on survey results, and then the family participation rate is a big part of that.

In terms of quality, the programs say that any pre-K seat is not just any pre-K seat, it is about a high-quality pre-K seat and a high-quality experience in early childhood. One of the ways we look and measure quality is a quality rating and improvement system (QRIS); we have a Silver State Stars QRIS. It is very different than the Nevada Department of Education's K-12 star system. It uses national tools and looks at the environment, classroom, and teacher interactions. We do have a separate star rating for all of our programs [page 29].

We are looking at what screenings are available and requiring screenings in terms of how we measure our success. It is not something that we have done on a wide scale before this. With the federal grant, we were able to begin to require a pre- and post-BRIGANCE Early Childhood screening in our pre-K programs. We have added that component into our child care centers as well. We can begin to see, in a broad sense, what types of programs we are investing in and if they are impacting child outcomes. We have the pre- and post-family engagement survey. We require a comprehensive student assessment as well because the screening is just an initial screening.

**Julie Houchins:**

United Way has recently partnered with the Listen4Good Organization to conduct a parent survey throughout our Nevada Ready! programs. Some of the results we have found is that 95 percent of those parents think that their center has met their needs very well to extremely well [page 32 ([Exhibit D](#))]; 92 percent of those parents think that the quality of the center is high-quality to very high-quality [page 33]; 89 percent of those parents would recommend their Nevada Ready! centers to others [page 34]; 93 percent of those parents agree that their child is learning curriculum that will promote social and intellectual development [page 35].

We have a few comments from the parents [pages 36 and 37].

Ms. Jasmine provides a secure and loving atmosphere for her students and my daughter has grown so much in her class. I have seen growth not only academically but also my daughter is more confident! The class room is a warm and welcoming atmosphere that enables growth and learning in such a special way. I'm very grateful for all the dedication Ms. Jasmine puts into her room and students.

That is from a parent from Kids First Neighborhood Childcare in Assembly District 14, Senate District 21.

I appreciate how they take the time to pay attention to my child's needs and my concerns as a parent. no matter how big or small, i always get the answers i need and I feel like my child is safest here with the Acelero Family. I love miss jasmine and miss Denetris.

This is from a parent from Acelero Learning Lorenzi in Assembly District 10, Senate District 3.

Acelero Learning Lorenzi is one of our Strong Start Centers that we support with the support from Dr. Morris Hibbler and her team.

**Denise Tanata:**

I will close by asking, What action can you take [page 38]? One of the things we want to emphasize in this presentation is that when we talk about early childhood education, it is not

just pre-K. It is not just child care. Early childhood education is a comprehensive system, and in order to provide supports for the children and for the families, we have to look at not only access to those seats, but also quality improvements and affordability for parents.

In following up, it is important to give you an overview of what happened in the last legislative session [page 39]. We have seen a lot of progress around making improvements to quality access and affordability over the past several years in Nevada.

More importantly, it is what is coming and things to look for. On the pre-K side, there are a few bills—not only the budget—to make sure that we are keeping the level of seats that we have currently under the federal program and, that we start to build and expand that program, and keep the quality high. Senate Bill 84 is a bill that would institute the pre-K program into the *Nevada Revised Statutes* and also institute some of those higher quality requirements that were mentioned [page 40].

There is also an effort to not only keep to the level we are at with those high-quality seats, but also to expand that on a gradual basis. Bill Draft Request 729 would put additional funding to begin that expansion to serve an additional 1,500 students per year. We also need to look at the infrastructure in our state. Currently, if the Legislature were to allocate enough money to the Department of Education to fund every single child in a preschool program, we would not have classroom space for them or qualified teachers to teach in those classrooms. It needs to be an incremental process while also building the infrastructure of our state to support a very high-quality program both in the public and in the private settings.

Early childhood education is not only the pre-K program. It is the broader early childhood system—looking at our child care subsidy program of ensuring that we are particularly meeting the needs of the specialized populations [page 41]. We are also doing the early childhood social-emotional piece, not just the academic piece. It is the physical health. We are working with the state looking at early childhood obesity prevention. We have 30 percent of our kindergarten students entering kindergarten either overweight or obese. This directly impacts their ability to learn and to do well in school.

I would also like to mention some items that are not on these pages. There are a couple of bills on the Senate side which I am sure you will be seeing. One is looking at an analysis of high-quality education systems internationally and conducting a study in the state of Nevada to see how we can implement some of those programs. It has four core components. The first one is high-quality early childhood programs. I would encourage you to look at that and ensure that early childhood is represented. The second component is looking at the teacher pipeline. Traditionally, we think about K-12 education. We are encouraging including the early childhood population in those efforts. That concludes our presentation.

**Chairman Thompson:**

That is a lot of information. I will open for questions from our Committee.

**Assemblywoman Peters:**

My question is about some of the compliance and paperwork that is produced for early childhood educational requirements. Being the mom of three young children—my first went into kindergarten this last year—I have heard a lot from providers as I interviewed them myself about how hard it was to meet the QRIS criteria and other licensing and grant criteria to ensure that they get that funding and those supports, and also to meet the needs of their children. They also said that we are brimming over with two-year waitlists in some places. Can you speak to what we are doing around compliance and paperwork requirements and if there is any process to streamline that?

**Patti Oya:**

We are always looking at our processes. We did start a new "step to stars" as an introductory piece to QRIS. Our office does implement the QRIS with other community partners. There is paperwork involved and some of that is just documentation. We also provide a coach to help walk through some of the quality pieces. It is all based on an environment rating scale. They can look at where their strengths are and where they need improvements—then make a plan of small incremental steps. We require director qualifications. You have to remember that the QRIS builds upon licensing requirements, so that we do not duplicate what licensing is looking at. We go above and beyond that and look between what are national standards and what are licensing standards, and we try to help the center walk through and build up to those levels. We provide a lot of support and grants as well. If there is something that the program needs, whether it is materials, playground equipment, or other types of equipment, we have that. We do require the BRIGANCE screening, but it is a quick screening and we only require that annually. Sometimes we hear that there are other things required by programs or districts, that are above and beyond what we require. We do provide a coach and that would be the most support for those programs.

**Denise Tanata:**

With regard to the QRIS program, it is still relatively new, not only for the state but for the providers, so there is a learning curve. A lot of what we are hearing from providers, more to your point, is not just about the QRIS program but requirements from QRIS, child care licensing, the health departments, and fire departments. The list goes on.

We recently have been working with the state in looking at our child care provider's underutilization of the child and adult food program—money to provide nutritious foods. We have a lot of providers who do not take advantage of that program. The study was looking at why. Much of it had to do with those requirements—some of them being conflicting—and the paperwork involved. There is an effort to look at those different requirements and create some alignment. Quality early childhood programs have to be the top priority. We need to look at quality over quantity as we expand. There are going to be growing pains with that in our state.

**Assemblywoman Munk:**

There are 68 pre-Ks, is that correct?

**Julie Houchins:**

In Las Vegas, we have 68 classrooms.

**Assemblywoman Munk:**

How many children are you serving?

**Julie Houchins:**

We are serving 1,257.

**Assemblywoman Hansen:**

My passion is the reading portion in particular. My questions might be aimed for a broader discussion later since we have a lot of Department of Education people here and the interest in the Read by Grade 3. As I was looking at the statistics from the CCSD in the prior presentation regarding CCSD student achievement Grades 3-5 and then the Grades 6-8 component, we say that early childhood education is very important to get us prepared to read. I noticed a drop-off in achievement in the English language arts. The Grades 3-5, especially in some of the subcategories was maybe at 30 percent or 40 percent, but when we get to the Grades 6-8, they are dropping back. We are not seeing that progression. I am curious and the statistics are poking at the worry I have had that somewhere we are losing students in reading. We might be getting them up to speed, but then they are dropping off in their skill level. Because of who you represent, maybe we can get into that more so we might understand as parents and legislators why we have this falloff in reading achievement.

**Patti Oya:**

I understand what you are saying on investment. It is not what we would call a vaccine. High-quality pre-K does not solve all issues and is not a guarantee that someone's child is going on to do well. It is looking at the birth-to-third-grade system. In our Office of Early Learning and Development in the Department of Education, we collaborate closely with the Office of Student and School Support, also within the Department of Education, which runs the Read by Grade 3 program. What we are starting to look at with some early data is that it is not quite an apples-to-apples comparison. With our BRIGANCE scores coming out of pre-K going into kindergarten, we have those scores. This year, we will have the winter MAPs [measure of academic progress] that are used for the Read by Grade 3 initiative, and we will be able to start because of the unique identifiers we are giving all children. We can then see where the drop-off is starting to occur more closely than just looking at kindergarten all of the way to third grade where it is then too late for them to learn reading. We are addressing that issue, but without knowing the CCSD statistics you were looking at, I cannot answer in more detail.

**Assemblywoman Hansen:**

My question is not aimed at any criticism. I think the statistics are certainly in your favor for what you have presented today. We have all made this investment and we do not want to see that curtail downward. This can be a larger discussion later.

**Assemblywoman Peters:**

I also found with the waitlist that we have a provider desert in my district particularly, but also throughout the state. One of the biggest hurdles that I have heard is pay and benefits and what that looks like for professional early childhood educators. My mother was in early childhood education when I was little. I walked to preschool because she was a director at a preschool—otherwise we could not have afforded it. As much as a parent who cannot afford three children in preschool, those teachers cannot afford to be there either. What are we doing to bridge that gap? It seems like one of the biggest obstacles we have—you can do whatever you want to with quality—but if we do not have providers to provide that quality care, we do not have access.

**Denise Tanata:**

I will let Patti Oya speak to the pre-K piece. Child care generally has been a huge issue. The Children's Advocacy Alliance has been working with early childhood providers for years to address access quality, and a lot of it comes back to the quality of teachers that you have. When you are talking about the quality of teachers in these settings, you are looking at pay rates for educational levels. That is different than a fast food restaurant where you are trying to get a minimum wage increase. If you increase wages in these facilities, it tends to come back on the parents. The cost of child care is already 60 percent higher than the cost of tuition in our institutions of higher education. It is really expensive and it is not attainable for a lot of people. We are making progress, not only on the pre-K side, looking at those pay equity pieces, but making improvement to our state child care subsidy reimbursement rates. We have been reimbursing child care providers at 75 percent of 2004 market rates for a long time. We are just beginning to improve those rates for at least those kids who are on child care subsidy—those providers are going to begin getting reimbursed at higher rates. As those providers improve their quality and participate in the QRIS, they will also get higher rates of reimbursement under that system. The more that we push quality, which includes qualifications of those teachers and directors, it will directly impact the pay of those providers as well.

**Patti Oya:**

It is a difficult balance. Do we increase the rates? We are trying to do that with the preschool development grant by having the same requirements for child care providers that are taking federal dollars, for example, United Way programs, and making sure that they are making the equivalent to what a CCSD teacher makes, which is generally much higher than the hourly wage of a child care provider. If you look at the licensing requirements of what is required for a classroom, it is nowhere near what is required to teach in the school district. Can we say you should be making the same amount of money when the requirements are not there? Then it is a balance of what comes first. We have always looked at other states that have done wage programs. Again, it is based on experience and education levels. At what point does it make a difference to provide that additional funding so that people stay in the field and can earn a decent wage and provide for their own families? We do have a T.E.A.C.H. Early Childhood Scholarship program, which is different from the Department of Education's Teach Nevada Scholarship Program. The T.E.A.C.H. Early Childhood Scholarship Program, in addition to paying for classes, provides for either a bonus or a wage

increase. It is a partnership between the recipient, the T.E.A.C.H. program, and the child care center employer. As they are moving up and finishing their years of college, they can get an extra wage increase or a bonus, and that also helps address their turnover rate as well. It is hard to talk about wages when we have that high turnover rate. At what point can we get people to stay and make sure they can make a viable wage?

**Assemblywoman Hansen:**

I want to give you the reference of what I was quoting when I mentioned CCSD student achievement showed CCSD elementary school subgroup data for Grades 3-5 in English language arts. Pages 5 and 6 of Dr. Hibbler's PowerPoint presentation ([Exhibit C](#)) are what I was referring to.

**Chairman Thompson:**

You had some really great quotes from some of the parents. Is there mapping so we can see where these child care classrooms are?

**Julie Houchins:**

Yes, we can pull together additional data and give that information to you.

**Denise Tanata:**

In addition to the pre-K classrooms, we are in the process of doing mapping of those early childhood programs, and hopefully by star rating under the QRIS, by district. We will have that to you soon.

**Chairman Thompson:**

Great! We want to see that. What are some of the criteria for the selection process? Even though it is a scholarship, some parents are afraid or very opposed to giving their information to the government. It sounds like there are many people who want their children in these centers, but we have limited resources and limited locations. Explain that selection process for us.

**Julie Houchins:**

Our partners are certainly marketing the program, and word of mouth is the biggest tool for families to hear the success their programs are having. That is where we are seeing some waitlists coming available at some of these sites. Families need to come in and report their income from last year. The biggest guideline is that they are meeting the 200 percent poverty guideline. The child needs to be 4 years old by September 30, and that is the big exception.

**Chairman Thompson:**

Again, some people are afraid. That is not something you easily give up—here is my income tax return. Especially once you have made a connection with the applicant, and you have assessed that this is something this child needs, is it either that you have it or you do not? Or do we work on other ways of verifying income?

**Julie Houchins:**

Yes, we do. We also will accept a notarized letter stating whether the family is homeless, parents are working, whatever their schedule is, and that their income is such. We will also accept a month's worth of pay stubs to verify their current income. Those are some of the other avenues we will accept.

**Assemblywoman Gorelow:**

How are you teaching these children to read? Is this standardized curriculum, or is it something each of these centers get to pick out? Is it something that is more sight-word based versus phonics?

**Julie Houchins:**

We do not dictate which curriculum they are using. It certainly needs to be research-based, developmentally appropriate, and meeting all of the milestones for children. Many of our partners are either using creative curriculum or a high school curriculum which brings together phonics and all of the different components of whether it is math, language, or science. It is touching on every avenue.

**Assemblywoman Gorelow:**

Are you also looking at an evaluation piece to make sure they are reaching the goals and the milestones that they should be?

**Julie Houchins:**

All of our partners are using an assessment tool. There is a child observation record—it is an anecdotal daily assessment of meeting those child's milestones. There is Teaching Strategies GOLD, which is another tool that is used. Yes, there are other assessments being used.

**Chairman Thompson:**

We will go on to our final presentation during which we will talk about workforce development. I want to acknowledge one of our previous colleagues, Assemblyman Wendell P. Williams. He used to be the chairman of this Committee and he served nearly 20 years.

**Chris Reilly, Workforce Development and Education Programs, Tesla, Inc.:**

I focus on workforce development and education partnerships for Tesla, Inc. The goal today was to share a bit of an update regarding Tesla's investment in education, as well as to share our paper that details this ([Exhibit E](#)).

When we think about every single program at the company, we view the company's mission, and we see our mission as the lens for any of these initiatives. Whenever we are talking about whether it is workforce development, whether it is our arcade full of partnerships, it is how these relate back to this end goal of helping accelerate our world to sustainable energy [page 2, ([Exhibit F](#))]. Regarding the workforce development side, we want to focus on Tesla. As we grow in the community we want to create a series of sustainable pipelines across our community colleges, our K-12 system, and our higher education institutions and universities.



Over the past few years, we have been working on a suite of programs in this effort. The other half of the role is talking about this investment. For background, as part of the agreement with the state to build the Gigafactory [pages 3, 4, and 5] here in Nevada, Tesla committed \$37.5 million to be invested in education over five years, beginning in July 2018 [page 6]. Before we dove into that investment, we felt it was really important to partner authentically and to start looking at building a series of workforce development programs that will aid our efforts and then also help us understand how to best invest and how we can best partner.

Page 7 ([Exhibit F](#)) is a photo of a young man who graduated from Reed High School in June of 2018. He started his career at Tesla, the Gigafactory, in August of 2018. He is one of approximately 50 to 60 students annually who are in the manufacturing development program [page 8]. This was an initiative within the state in which we partnered with Mr. Quran in 2017 for a pilot program of 13 students [page 8]. We were able to grow this year over year and we are really excited about this being across all of our districts and something that gives us a good map to look at to when we talk about workforce development [page 9]. We partnered with One-Stop Career Center and JOIN Inc., and we worked with local housing complexes to go after the three main issues we heard from students about starting a career. We prenegotiated housing that was affordable for the students. We added a seven-day transportation shuttle from the housing complex for any individual because only 2 or 3 students out of 54 over this past year had a car. When we talk about education, that was absolutely critical for us. We worked with the state to be able to develop a 20-credit apprenticeship program for every one of these students to be able to take classes from Truckee Meadows Community College (TMCC) and to do so in an effort that is online and lab-based. Regardless of what schedule you have, you could still learn and earn.

This program has been something that has continued to involve and inform our investments. We go from interview day, to signing and celebrating starting that career [page 10]. Just like an athlete celebrating choosing a school, we feel that celebrating the signing up for a career is just as important. You can see some of the students from this past August registering for classes [page 10]. These programs are throughout the company and building these workforce programs. You can see a young man on the left [page 11] from TMCC who took their program and now manages a team of technicians, all from these manufacturing development programs.

The second piece, when we were looking at this investment in education, was that we wanted to be tied in and understand the landscape of what we were seeing. We keyed off of statistics such as seeing the number of open computing jobs, seeing the growth of fields related to STEAM [science, technology, engineering, arts, and mathematics] and STEM [science, technology, engineering, and mathematics] and seeing that middle skills gap. That was an important landscape for us.

The third was the legislation that we have been passing over the past sessions [page 13]. Taking this into account in this statewide focus on becoming the fastest-improving state in

the nation in education was something that was really exciting for us and how we could be a part of this.

As we were traveling around schools, we also saw incredible groups of Nevada robotic teams across every level [page 14]. We started seeing the impacts from these types of teams and it blew us away. These are some of the statistics from the highest levels of robotics competitions in high schools [page 15]. You can see that 33 percent of female alumni from this program are majoring in engineering and talking about being able to address and focus on diversity earlier on—seeing students twice as likely to have an interest in studying science. This was something we started to key off of and began to go deeper. Those three areas we outlined in the investment paper brought us down to distilling this investment to focus on the acceleration of robotics sustainability and STEAM programing across all of our schools. In thinking about those, how can we help be a part of that conversation for future engineers in Nevada? What if we could have robotics programs in every school? What if that becomes a varsity sport? How does that impact, not just Tesla or our advanced manufacturing, but all of our industries? It is something we see as key for the long-term.

We did not want to do this in isolation. Many of our Department of Education partners are here today, as well as the districts. We put together an advisory committee through which we regularly connect on different investments. We are also committed to amplifying our local nonprofits—our local entities—as well as going out and recruiting and finding some of the best work in making sure that team and network have a permanent footprint here.

We do not do a lot of investments every quarter because we want to go deep in every one of those. You will see investments fall into four main categories—quality programs, teacher development, infrastructure, and the Nevada pipeline. Thinking about the workforce we mentioned earlier, we are looking at it through the lens of this investment.

We want to write down and set up measures for success and goals so that we have clear goals with every investment entity that we will review on a quarterly basis [page 19]. These are important to have front and center and to talk about them often—program growth, teacher development opportunities, diversity, and then how we are continuing to partner with the districts and the Department of Education in their support. We have a unique opportunity, and this should be No. 5 in measuring success, but with 7,000 employees in northern Nevada and another 1,000 in Las Vegas, we also have an incredible opportunity in a volunteer infrastructure. One piece of this investment you will see outlined is thinking about a volunteer component for every one of our employees because this investment has given us the opportunity to partner with schools and to create programs that make our team members more excited to go to work every day. We are holding ourselves accountable to this important opportunity.

Some of the activities we are beginning to see are in the pictures on page 21, where there are 45 teachers in Las Vegas on a weekend robotics training and a robotics workshop. The unique thing about this moment is that this is actually veteran teams coaching and supporting

new rookie teams. The funding details incentivize those veteran teams to mentor. It is important as we scale that up that we continue to build that into the structure.

Page 22 shows a photo of middle school girls in a recent STEM camp that we launched with The Envirolution, Inc., Sierra Nevada Journeys, the Girl Scouts, as well as VEX Robotics. Into every investment, we want to bring multiple partners together because that is another unique opportunity with this investment.

Here is a quick snapshot of the first two quarters of what we have been working on [page 23]: standing up 70-plus new robotics teams and partnerships with our schools, helping every one of those to have trained teachers, as well as bringing other sustainability focused programming into the schools.

A note regarding new investments: We continue to have a rolling open investment. Any entity can reach out to education programs at Tesla to start a conversation. We have a team working on those investments—going to the school districts one by one and finding what the top priorities are. We will continue to evolve that communication over time.

**Kerry Larnerd, Director, Career and Technical Education, Clark County School District:**

We have over 65,000 students who are enrolled in career and technical education classes in our district. With those programs, we range from culinary to automation programs. We are going to focus on the ones that Tesla has helped us grow and support in our district in a matter of 18 to 24 months [page 26].

About two years ago we had 70 teams in the Clark County School District and have grown that to 152 teams who are competing in various events with both VEX and First Robotics programs in the district. Imagine the scale and the change that was needed for support in order to take place—the support we have had from Tesla in terms of helping schools get equipment and bringing teams up to speed so they can be involved in these programs. The training has been instrumental in having that growth in a short time. We have had a few manufacturing programs—at Palo Verde High School and Cimarron-Memorial High School. About three years ago we built new manufacturing programs at Southeast Career Technical Academy (SECTA) where we also had students from Mojave High School. We began the program with 60 students, half and half from Mojave and SECTA. This year, with SECTA students alone, there are 68 students in the program and next year we are expecting that number to double. We opened the Desert Rose Tech Center so that the Mojave students had a place to go that was closer to home. That program has doubled as well, and we are expecting approximately another 30 to 40 students in the program next year.

We built off of the robotics that we had in place. Cimarron-Memorial was super successful with a robotics program that they have had for years. Building upon that success, we opened the manufacturing lab at SECTA. We did that with a work grant that we coordinated with College of Southern Nevada (CSN), purchasing some of the equipment they had [page 27]. We built up the success there, saw what was happening, and partnered with Mr. Reilly who

came down to see our students in the program. In a 20-minute conversation we put together a field trip and brought the students in for an actual job interview. Those were students from Mojave and SECTA who were the first group in that workforce pipeline. From there we built the Desert Rose Tech Center in coordination and leveraged funds from the Office of Economic Development with the Office of the Governor (GOED). The Department of Employment, Training, and Rehabilitation (DETR) came up to the plate and helped us with power upgrades that we needed at the facility. We opened up the Desert Rose Tech Center and now have almost 60 students in that program. Built off that success, we have opened a new lab at Sunrise Mountain High School this year. They are building students into that program and in a few weeks we are going to be able to talk about a new program at another high school in Las Vegas for an automation lab. To give you an idea of the numbers for that lab, the equipment in the labs, depending on what we purchase, is around \$200,000 to \$400,000 to get those labs going. They are expensive, but we see the return on investment with our students being able to go straight into the workforce.

The next picture [page 27] is one of our absolute success stories. A student in our first group was a graduate from Mojave High School. He had a scholarship to play college football, but he chose to go to Tesla instead. He is doing extremely well in their program and is meeting all of his targets while getting promotions along the way. We know what we are doing is working and getting our kids into jobs.

One of the big things we learned is that it is really tough to get kids engaged in starting in automation or manufacturing programs in high school. Getting them interested has to begin in middle school. In working with Mr. Reilly and talking about Tesla's vision of putting these robotics programs in middle schools—ultimately, one day in elementary schools—we know that we are able to engage kids in learning to code and learning all of the basics of putting robotics together. For some of the kids, the first time they have turned a wrench is when putting a robot together.

Page 28 ([Exhibit F](#)) is a photo of an after-school club at Johnson Junior High School Academy of International Studies that typically runs around 300 students every single time that club meets. These are middle school students who are staying after school to engage in this program. The investment in middle school robotics is showing more girls in our STEM programs going into the career and technology education (CTE) programs in the high schools. We are beginning to see more typically underrepresented populations engaging in CTE and technical programs. This is because of what we are able to do in middle school. That growth, doubling our numbers of students in robotics in two years, is really starting to pay dividends in terms of kids knowing what they want, having opportunities and experiences to see new things, and realizing that they can do these technical programs.

We have a four-year rollout plan with Tesla. We are looking to obtain 14 schools every year to do what we need to get everything they could possibly need in terms of equipment—even some things with the space in their schools to enable them to enter these competitions and to serve as many students as they can. We do not pick these schools haphazardly. We look at things like star rating and schools which do not have programs like these for their students,

and we try to get into those schools right away. Sometimes it does not work well because if we do not have a teacher, then we choose another school and work to get a teacher for our targeted schools. We are rolling this plan out and beginning to support schools, and we have a plan in place to hit every middle school in the Clark County School District within four years. Mr. Reilly always says that we are going to accelerate that and the reward and the engagement of our students in those programs have been incredible.

In line with that, we had 71 middle school teams last year compete in our first-ever STEAM Olympics [page 29]. This year we had over 100 teams competing. We do not just go with competitions in robotics; we have students who are doing basic computer-aided design, which is typically an architectural program. They are doing virtual welding competitions, forklift, and virtual forklift operations. They have a coding challenge. They are doing safety challenges—safety is a huge business and job opportunity for students in the workforce. There are also engineering challenges. We are targeting many different students and interests to get them into these technical fields. It is growing exponentially and we expect it to continue next year.

We realize that Tesla is not our only partner. What has been great about this partnership with them is that they encourage other businesses to get involved. They are very supportive of our efforts, as are some of the businesses we have had partnerships with, to keep growing these programs and working together on behalf of our students. I would like to call out Clearwater Paper Corporation in Las Vegas [page 30]. They offered a teacher externship two years ago for which they brought in our teachers for a few weeks in the summer and showed the teachers their operations and plant so they were able to convey that to the students in the manufacturing classes. We take tours all of the time and when working with these businesses, we also found what nationally recognized certifications are needed across the board so if we could do that kind of training in high school, it would make the students more marketable when they enter the workforce.

The reality in Clark County is when you look at our free and reduced-lunch numbers and the level of poverty in our schools, most of our students do not have anybody at home that is writing them a check to go to college. No matter what their will is to go to college, sometimes the way is going to be very difficult for them. These nationally recognized certifications can help them get jobs and continue their education paying for themselves, if that is the road they choose. We know how important it is to make sure these kids have the ability to get a job and put themselves through school. Additionally, we partner with CSN and with the Nevada State College to offer dual credit for these students to get their foot in the door in college.

I talked about how we leverage funds—we work with DETR and GOED, and we use some of our Perkins Grant funding to do that. The other piece that we know is that we have to work with our business partners to help with our teachers. No matter what specialized area you have, the teacher shortage is very real. Getting someone who can come in with the skill level and the knowledge to work in robotics programs or to work in our automation programs is

very difficult. Working with the Desert Research Institute (DRI), who is providing a lot of training and giving assistance on the ground, is the only way we are going to successful.

We also know that we have to look at these kids a little differently—they are Generation Y. They want to know why things work, why they should do something. They need to see and touch things, it needs to be cool, and they need to have experiences. All research will show you that experiences—more than parents and more than high school counselors or teachers—actually mold decisions for students and are the largest factor in their choosing that career. I go back to our student who was ready to go to college to play football and his experience in our automation and manufacturing class—his experience going to Tesla changed his decision and put him on the path he is currently on. Part of this program with Tesla is also getting the students into these different manufacturing plants and having these different experiences to see the wide breadth of what is available to them in the workforce.

We have to thank Tesla for the way they have allowed us to use these funds and for their support in making sure our students and our teachers have the training they need. I have to thank the principals who allow these programs to come in. It is a leap of faith taking on a program that ultimately could cost a school more money to help pay for some of the equipment. With Tesla taking that off the table, it is giving these principals an ability to say, Let us do this. We will figure out a way to make it happen and to get these programs in our schools. It is a team effort from the principal to the teacher; Tesla gives us some freedom to say, This school is going to be a really good choice. We know that because here is the teacher in place and we know we are going to grow these programs in the schools that are not quite ready. It has been a great experience in making sure we are getting our kids ready and giving them the experiences they need, not only to go to college and be engineers, construction managers, computer scientists, but also giving them skills to get a job right out of school. Get a high school diploma, get a job, then make a decision to stay with the company and work hard to move up—or stay with a company like Tesla where they are working hard, moving up, and also getting assistance with going to college. It has been a very exciting partnership for us in Clark County.

**Chris Reilly:**

Over the past few years, this journey has been possible because of Tesla being here and because of the feedback and input on these education investments and education entities. It will continue to evolve and I could not be more excited for where they are going in the next four years.

**Assemblywoman Peters:**

My question is regarding retention. As a woman in engineering, it is demoralizing to see the numbers. We have approximately 50 percent female graduates in engineering programs across the country, but we still only see a retention of 13 percent after two years. That is partially because the corporate culture does not include a process for assistance in family balance. As a leader in this process and knowing that you are advancing into an area where, if we want to keep that 33 percent female interest in the field, we are going to have to change something—what are you doing to address the issue of retention?

**Chris Reilly:**

It is important to address diversity in the workforce and something we need to talk about as a company early and often. As of this morning, we have 60 middle school girls at the Gigafactory, another 25 in Las Vegas, and others in six other sites across California, all doing 'Introduce a Girl to Engineering Day.' This week is National Engineers Week. We have more than 200 female middle school students all doing different civil, electrical, and mechanical engineering exercises at a Tesla facility. You see that energy; the most exciting part of these events across the company is they are being held by 80 women volunteers in Tesla. Women in Tesla, as an employee resource group, consists of over 300 team members who are active in different volunteer activities at the Gigafactory. Continuing to build programs that support that, then thinking about the question around workforce family care, is something we are developing and evolving as part of our benefits. We do have a Tesla parent's pathway through which we provide support in different areas. We want to continue to build on that because we have seen some exciting models locally in the community. Companies like Patagonia do incredible work, but also how we can partner and scale. Diversity is critical in building innovation in the long-term with these companies.

**Assemblywoman Peters:**

It was so important to me to be able to have that flexibility while having three children and being a full-time mother while being a full-time employee in engineering and science. I appreciate your effort in trying to change that culture to ensure that mothers like me can be effective scientists and pursue our dreams.

**Chris Reilly:**

It is not something that changes overnight. It does not change fast enough. We have to be vocal about it at every level.

**Chairman Thompson:**

Tell us the composition of the committee that selects, and how does the community know to submit such an application. Tell us how intentional and targeted your outreach is.

**Chris Reilly:**

Within the document [page 4, ([Exhibit E](#))], we outline some of the committee members. At a high level, we wanted to have a collection of other businesses, nonprofits, teachers, members of the Department of Education, and administrators to make sure we were getting a diverse viewpoint and a diverse perspective. We regularly meet with each individual committee member and talk about various initiatives. It is an evolving group. We want to continue bringing more individuals into the fold. The more we can get other businesses aligned, that means we are not having two businesses investing in two diverging ideas in one school and overwhelming a teacher. That has been the focus of the committee in making sure we come together. We have tried to put out an email address to our state leaders and entities, and that is something we can continue to build on and evolve.

**Chairman Thompson:**

Just putting an email address link is not going to reach all communities. There needs to be face-to-face communication if we are going to do it right. If we are going to do it right and in talking about diversity, you have to dig a little deeper.

I am looking at your advisory board members—they are great people—but many people are from institutions and high titles. Is your vision to have community members on this advisory committee?

**Chris Reilly:**

It 100 percent is. We started everywhere from teachers to state leaders at equal levels. Everyone has an equal voice in that conversation. We will absolutely continue to grow that.

**Assemblywoman Torres:**

As an educator, I can speak to the positive impact the robotics program has on our students. We have spoken a lot about diversity, but I have not seen any numbers. Do you have a breakdown of the demographics of the individuals who are being accepted into Tesla via the apprenticeship programs specifically, and in our company here in Nevada as a whole? I would like to see the demographics of the CTE program that we have as well.

**Chris Reilly:**

The diversity of the manufacturing development program itself is a majority-minority program. I do not have the exact percentages. To your point regarding female diversity, it is less than 20 percent in the manufacturing development program in the first full year. That is our No. 1 priority this year in recruitment. On International Women's Day, we are partnering with Jobs for America's Graduates (JAG) to do an additional unique recruiting event just for female senior students who are interested in STEM careers. That is something we are absolutely looking at because we need to be there.

**Kerry Larnerd:**

I do have those statistics. I can get them to you. We actually are pulling even by events. At our STEAM event we are pulling numbers to see how many total students were participating, and we are breaking that down by demographics as well. That event was two weeks ago, so we are in the middle of compiling that. I can get you the demographics for our CTE programs in the high schools as well as for the robotics programs in the middle schools.

**Assemblywoman Torres:**

It is important for us to look beyond the diversity and look at ethnic minorities who currently are traditionally not serving in STEM roles. I want to make sure we are transparent about that data and that we are seeing how the demographics are taking place in taking a role in Tesla.



**Chris Reilly:**

It is something we chose and worked with in schools for the manufacturing development program. That was also taken into account in starting with schools that do not have the most resources but have incredible talent. We are going to be looking at those investments and sharing more about it.

**Assemblywoman Hansen:**

I am excited about this in general, and I am excited to see this kind of innovation with private partnerships. We have needed innovation in thinking outside the box to get us where we are with CTE in particular. I appreciate Tesla's investment. I am really excited about the idea that you are going into middle schools. It sounded like you feel optimistic that it can happen in four years. I know Teslas are fast, so I have no doubt you might fast-track this. I am wondering if that might help us with some of the concerns brought up by my colleagues about getting into certain populations the sooner the better, and if we can get them at the middle school age to begin tracking them if they have an interest.

I am a mother of eight children—seven are college graduates, and one is due to graduate from college in 2 1/2 years. I am not a college graduate and neither is my husband—we went the trades route. I know personally that college education or the college track is not for every student and that is why I think that CTE is so interesting to me and to the students whom I have associated with in my private life. I think getting in there sooner so they can be prepared starting in middle school and giving them the dignity that there is nothing to be ashamed of about not going to college. Getting your high school diploma, which they get through this program, then getting some sort of skill or certification is so valuable to their self-esteem and their ability to feel like they can contribute. I greatly appreciate the many private partnerships, and hopefully we can address some of the concerns at the middle school level. I am looking forward to more statistics.

**Chris Reilly:**

With regard to opening up to other businesses, everything we do in workforce development in education will be open-sourced. Right now, we are sharing with other businesses and partners how we put together the apprenticeships and build them into a package. We are working with JAG to try to get that into five other businesses per year over the next five years. To your point, that parent mindset, creating moments like the signing day—those are things that you never forget, so the more we can do those things, the more we can have that impact. Regarding the middle school piece, robotics investments specifically, we chose a cohort of high schools and chose at least one middle school for every one of those high schools, and at least one elementary school for every one of those middle schools. The goal is to continue branching that out so we will have students that are starting in fifth grade or fourth grade right now who are in a VEX IQ robotics program that by the end will have had a full elementary to high school robotics pipeline. We will continue to add those teams and partnership with the districts in making sure that the districts are in the driver's seat on choosing those schools.

**Assemblyman Flores:**

We always hear in Nevada that we struggle to attract major industries and innovative industries because we do not have the educator workforce that we need for that type of industry. Through your lens, how do you see these programs changing that perspective at the national level, so we can start trying to reach out to some of these other companies? How influential do you think these robotic programs will be in helping to attract those new industries that do not necessarily want to come here yet? If you could also talk about the relationship you have with the Nevada System of Higher Education (NSHE)—we have these programs from elementary school to high school, then what do we do when graduating them from high school and NSHE comes in—how do we keep that flow going? Obviously, at the end of the day, it is a pipeline to you too.

**Chris Reilly:**

Regarding Tesla's thoughts on this, from 2014 we have said that Nevada is the get-things-done state. That mind-set has only grown stronger and these programs can be a reflection of that. We are 94 percent to 95 percent Nevadan at the Gigafactory as far as employment. To be able to grow from a new facility with zero employees to over 7,000 so quickly is a testament to the mind-set of the state. Seeing programs at the higher education level—for example at Truckee Meadows Community College and Western Nevada College—in industrial automation and those programs, we have partnered with GOED and have more than 125 team members who are taking classes at those campuses. We have invited the instructors to come out for multiday externships to learn more about the work at the Gigafactory and then go back and apply that into their own curriculum. That is creating a mind-set change within our employees too. As we accelerate that, it is important that we are putting these types of programs and empowering our team members with those skill sets.

The second piece, in talking more about other companies and encouraging robotics, we see this across so many different industries, whether it is health care or what we are seeing in food production. These Nevada industries will all be talking about robotics. The more we bring in other companies and partner with businesses from other industries—such as mining—it has been exciting to see a commonality around that. We have also seen probably 150 other businesses that have moved to northern Nevada since 2014. It is a testament to the state's mind-set and speed to put programs up.

**Assemblywoman Hardy:**

Reading over these papers and the amount of investment from Tesla to these programs is quite impressive. We are fortunate as a state that we brought Tesla here to be able to help our students. You mentioned the teacher component of this. Obviously, if we are going to expand this into middle schools and high schools, we need the teachers to teach robotics, engineering, and other things like that. How is that going? I hear that it is difficult to get people to come out of the private sector to want to go into teaching. Are you having success with that? Are you looking at other states to find those teachers?

**Kerry Larned:**

The robotics programs in the middle school, and even in the high school to some extent, take somebody who is passionate about working with kids. The skill level through DRI and the training that Mr. Reilly has set up with different entities for VEX and First Robotics can give the teachers the skills they need to run a robotics team. What we want to encourage, especially in robotics, is that the kids take ownership of not only the build, but taking ownership of their learning. One of the greatest things about robotics is that kids fail. They try to do something, they code something, and then when they go to actually make the robot do it, it does not work. They go back as a team, they collaborate, and they reprogram, rethink, retool, and go back to see if that is working or not. We do not need a super skilled teacher to give me the answers for how to fix that. We do not want the teachers to give the answer how to fix that. It is part of what robotics is about—the kids being engaged. If we have teachers who are very willing, then we are able to get them the training they need to run successful robotics programs. Sometimes they are learning right alongside the kids. We have teachers who are theater teachers running robotics programs. We have many English teachers running robotics programs. It is really about having an interest in the kids.

Our bigger concern is when we are getting into those automation and manufacturing programs. That is definitely difficult. Teacher salary is not commensurate with what they can make out in industry. Whenever we go to Tesla, we always tell Mr. Reilly that he cannot talk to our teachers about a job here because they could leave in a nanosecond and probably triple what they are making as a teacher. It is definitely a concern. We have partnered with CSN and our campuses, and we have these labs that are open at night. We have some of their instructors coming to teach classes at night to members of our community and then working with our teachers in those programs as well, getting them up to speed and making sure that they are getting what they need. It is definitely a challenge. We have to be very careful growing programs. We will not have an ability to have an automation or manufacturing program in every high school. It is expensive, but the teacher factor is the biggest one. Desert Rose Tech Center is a perfect example of leveraging funds and putting a program in a school as a hub. We have five high schools who come to the Desert Rose Tech Center for training in manufacturing. That gives us one teacher who is able to reach multiple campuses. That is working for now, but as we can find teachers, we can grow programs.

The licensing requirements for business and industry is tough. The salary is our biggest obstacle, but there is an advanced knowledge base in order to run some of these programs. Finding that person is difficult. So many of our workforce companies are aging out. I am laughing that I am going to have to hit up the retirement communities and ask if they are getting tired of playing golf, to come teach for us for a couple of periods a day—tapping into the expertise of some of these retirees. That might be a route we look into.

Across the nation, companies are so desperate to have instructors come in that for part of their workday they are paying them to go and teach two classes. They might teach a class at a high school from 8 a.m. to 10 a.m. and go back to work for the rest of their shift. That could be a model that we could potentially tap into. There are things we can do, but we have to get creative to get the teachers with the expertise we need.

**Assemblywoman Hardy:**

Those are great answers—you are looking outside the box and looking at those creative ways to get instructors for these classes.

**Chairman Thompson:**

Are there any further questions from our Committee? [There were none.] We will go to public comment.

**Ray Bacon, representing Nevada Manufacturers Association:**

It is important to mention the impact that the Tesla project has had across the state. In 2008, at the height of the recession, we lost 24.5 percent of the manufacturing jobs in this state. They started coming back at the rate 100 to 300 per year statewide. That is pretty slow growth when you have lost 24.5 percent. In 2017 the number jumped to 6,800 manufacturing jobs—a substantial jump—and this past year it is 7,200. Less than half of those jobs are at the Gigafactory, so it is growing across the entire state. The requirement in the tax abatement deal was that they had to hire 50 percent Nevadans. They have been hiring more than 90 percent Nevadans. That has changed the entire culture.

The Gigafactory starts with a chemical process, and chemical processes are not one of those things you can start up and shut down at the end of a shift. Once you start the chemical process, it has to continue to run. The plan is 24/7/365, Christmas, and New Year's—those are work days. At this stage, they are making more than 3 million batteries per day. In May of this year is when Tesla got to the point at which they could make 5,000 cars during the month, and they actually had to wait until 6 a.m. on June 1 until they decided that was the end of May. Now they are making 20,000 cars a month. That is half of their expected goal of half a million cars a year. Currently, they are at 240,000. As someone mentioned, the cars are fun and exciting. I bought my first new vehicle in 35 years for my wife. She likes it.

There is an important thing that Tesla is doing that you need to understand: the training in robotics and the training in advanced manufacturing is not just for them. That impacts at least one-third of my membership in the state today. I am going to guess that the rate of automation moving into the manufacturing sector will impact at least two-thirds of the manufacturers in the state in the next 10 years. It is changing that fast. We are automating and we have to automate.

This is not simply an issue for Tesla and Panasonic. It also impacts the blockchain people, the Switch people; it impacts across the sector. We are moving this state toward a technology-based state. If you had asked me ten years ago if I thought that was possible, the answer would have been no.

**Chris Daly, Deputy Executive Director, Government Relations, Nevada State Education Association:**

It is certainly exciting programming in terms of STEM and STEAM programs, but here are a couple of numbers in terms of context. Tesla's investment in these programs into schools is \$37.5 million over five years. In the last two years alone, Storey County School District

has lost out on nearly \$70 million in revenue that is the tax abatement money from the Tahoe Reno Industrial Center. There have been bidding wars out there to get corporations. Maybe with the news from New York and Amazon, we can move forward not bidding against each other, but offering what we have in Nevada building higher quality schools and a workforce that is increasingly ready for this.

One thing that I often talk to Storey County School District Board of Trustees member Dawn Miller about is that the Gigafactory is there, their schools are losing out on this money, this programming is happening and it sounds good, but I do not think very much of it, if any, is going to the Storey County School District. That is a wrong that I am hoping can be made right.

**Tricia McLaurin, Private Citizen, North Las Vegas, Nevada:**

I am here as a parent today. I would like to make reference to two concerns on which I would appreciate further follow up. I am the proud parent of three boys who attend schools in the Clark County School District. One of my sons attends Democracy Prep at the Agassi Campus. Within the past three weeks, without what I would consider proper acknowledgment of notice to the parents, we had a majority number of administrators and teachers leave the school without notification to the parents of what was happening. You can imagine my concern with disruption this has caused, as well as the burden on my mind for the consideration of continuous education and uninterrupted academia. We were told that there were some things that were happening behind the scenes, but in my understanding, the principal left, another administrator left, and my son has come home to say that his math teacher quit in the middle of the day. I would appreciate representation on our behalf to determine what is going on and to also understand why the parents are not receiving the proper notification and of where the situation stands.

As the proud parent of a special needs child who attends school in the Clark County School District, I would like to express my concern for the lack of concentration and support that seems to be directed toward support staff—specifically for the autism classrooms. My 9-year-old son, who is in third grade, has experienced three different teachers in three different years. Anyone who is familiar with autism, consistency is one of the major concerns when interruptions of classes occur. Currently, he has a long-term substitute teacher who is his majority teacher. Because of our consistency and our dedication in attempts to return him to mainstream, it is very important for the successfulness of that entire organization of administrators working with him and for him, as well as communication, that it be open and consistent to the parents.

**Verona Sutton-Dunn, Private Citizen, Las Vegas, Nevada:**

I am an administrator in the Clark County School District with the speech, language, and pathology therapy services. Speech therapy is needed all over the nation and it is a critical shortage area. Not only speech therapists in the school district, but psychologists, nurses, occupational therapists, and physical therapists are needed. My concern is that we are unable to recruit and retain quality, nationally certified therapists because all related services are being paid at the teacher salary. A teacher's salary starts at \$40,000. That is nothing for a

speech pathologist whose student loans are capping at \$90,000. I would love to see statewide where related services are making a percentage over what teachers are making because it is so hard to retain and to recruit quality people.

To give you an example, I had a young lady who I mentored for years to be a speech pathologist. I reminded her that she had to apply to the Clark County School District. Clark County School District was offering her \$40,000. She got a job making \$109,000. There is disparity there. I do not expect the CCSD to match that, but we need to come closer to the medical and other private sectors. There are other states where related services are on a different pay scale. I want Nevada to bring it up.

**Chairman Thompson:**

We will close public comment.

The meeting is adjourned [at 3:32 p.m.].

RESPECTFULLY SUBMITTED:

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Sharon McCallen  
Committee Secretary

APPROVED BY:

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Assemblyman Tyrone Thompson, Chairman

DATE: \_\_\_\_\_

## **EXHIBITS**

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a copy of a PowerPoint presentation titled "Department of Youth Development & Social Innovation (YDSI)," presented by Lisa Morris Hibbler, Director, Youth Development and Social Innovation, City of Las Vegas.

[Exhibit D](#) is a copy of a PowerPoint presentation titled "Early Childhood Education Presentation for Assembly Education Committee," dated February 21, 2019, presented by Stavan Corbett, Chief Strategist and Government Relations Officer, United Way of Southern Nevada; Michael Brazier, CEO and President, United Way of Northern Nevada and the Sierra; Denise Tanata, Executive Director, Children's Advocacy Alliance; Julie Houchins, Early Education Program Manager, United Way of Southern Nevada; Patti Oya, Director, Office of Early Learning and Development, Department of Education.

[Exhibit E](#) is a document titled "Tesla's K-12 Investment in Nevada: Workforce Development & Education Programs," dated February 2019, presented by Chris Reilly, Workforce Development and Education Programs, Tesla, Inc.; and Kerry Larnerd, Director, Career and Technical Education, Clark County School District.

[Exhibit F](#) is a copy of a PowerPoint presentation titled "Education Committee Update," presented by Chris Reilly, Workforce Development and Education Programs, Tesla, Inc.