

1. General Information

- Name of Proposed School

Polaris Charter School

- Grade levels to be offered and enrollment projections

Grade Levels to be offered	Projected Total Enrollment
6, 7, 8	260

- Primary Point of Contact

Name	Michele Altherr				
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2. Names, roles, and current employment of all persons on the applicant team, and qualifications of the team members to establish a high-quality charter school

Names	Role on Team	Qualifications: Education, Employment, and Experience
Michele Altherr	Member	Michele started her New Mexico teaching career in 1997 and has taught grades K-6. Currently, she teaches sixth grade science and implements best practices in inquiry, hands-on and project based learning while using a repertoire of instructional strategies to address individual student growth. She is currently serving as a New Mexico Public Education Department Teacher Leader School Liaison, the District Science Fair Site Coordinator, the Chairperson of the Site Data Team, and a representative on the Los Alamos Public Schools Foundation Teacher Advisory Committee. Other recent leadership experiences include serving on the New Mexico Literacy Dream Team and the LAPS XQ Grant Writing Team to Re-imagine High School. In the community, Michele served as a founding board member of the Pajarito Environmental Education Center, which 15 years later established the award-winning Los Alamos Nature Center. In 2017, she won the Dorothy Hoard Stewardship Award for her environmental education programs for children. She is a graduate of Leadership Los Alamos and has served on the Parks and Recreation Board. Michele received a B.S. degree in Biological Sciences from Florida Institute of Technology, a teaching certification from UNM, and a M.Ed. in Educational Leadership degree from Highland's University. She holds a NM Level 3B Pre K-12 Administrative License and a NM 3A Educational Leader K-8 Elementary License with an Endorsement in Gifted Education. Michele is a NM Exemplary teacher.
Bill Hargraves	Member	William Hargraves is currently an LAPS School Board Member but is working on this team as a private citizen to avoid conflict of interest concerns. Bill is a parent of two Los Alamos High School graduates. He is retired from Los Alamos National Laboratory. Bill earned undergraduate and graduate degrees in Aerospace Engineering from Georgia Institute Of Technology. He worked in academia, NM State

		Government, Federal Government, private sector, and Los Alamos National Laboratory.
Elizabeth Martineau	Member	Elizabeth has a M.Ed. in Instructional Leadership, a NM level 2 K-8 teaching license and recently earned her art endorsement. She has 12 years of experience teaching in public and private schools in NM and has spent the last 12 years working as an Education Specialist for LANL training scientists to speak with the public, providing professional development for teachers and teaching science programs to northern NM students. She is a Leadership Los Alamos graduate and is a past president of the Los Alamos Public Schools Foundation. Currently, she is faling retirement and operating the Mathamuseum LLC, collaborating with local communities and nonprofits to provide engaging STEAM activities and programs. She enjoys traveling, camping, and observing the night sky.
Branden Willman-Kozimor	Member	Branden Willman-Kozimor has eight years experience working as an informal educator in the fields of place-based and environmental education in California and New Mexico, and 2 years experience teaching courses in Nonprofit Management for San Juan College in Farmington. She was the program director at the Pajarito Environmental Education Center in Los Alamos from 2007-2010. She has served on the board of directors for several nonprofits including the Jemez Education Foundation in Jemez Springs. Branden holds a B.A. in Sociology and Human Services from Fort Lewis College and a Masters of Public Administration with a focus in Nonprofit Management from San Francisco State University. She will complete a NM teaching license in 2018. She is a proud mama of two boys in the Los Alamos school system and enjoys volunteering at their schools.
Amy Bartlett Gaunt	Member	Amy has been teaching 8th grade science and various levels of mathematics to 7th and 8th graders since 2003. Before then, she earned a BS in Physics from New Mexico Tech and then a K-8 NM teaching license with an endorsement in science. Since then, she added a secondary teaching license with an endorsement in mathematics. In 2017, she was presented with the New Mexico School Board Administration Excellence in Student Achievement Award for her work with a district-wide teacher survey highlighting the needs of teachers as they endeavor to create a relevant and enjoyable educational experience for students. Amy is currently the mathematics department chair of Los Alamos Middle School. She has also recently entered into participation with Los Alamos National Laboratory's Math Teacher Leader Network and is cherishing the rich collaboration with teacher colleagues of K-8 grade levels and from various public schools around northern NM.
Scott Johnson	Member	Scott B. Johnson received a B.A. in English from Ohio Wesleyan University and completed a teacher licensure program at New Mexico Highlands University. He is a Level 2 K-8 teacher. For 21 years Scott has been teaching Kindergartners, First, Second or Third graders in Los Alamos, NM. In 2008 he was selected as Los Alamos Public Schools' Teacher of the Year. Scott also facilitates young adult programs such as Restorative Justice and Boys Council.

3. Model or focus of the proposed school (e.g., performing arts, dual language, college prep, STEM, Montessori, IB):

Polaris Charter School, a 6-8-grade middle school, will adopt a Place-Based Learning model that leverages the local community and landscape as a framework for learning.

**Real-World Learning:** Students will engage in inquiry-based, interdisciplinary learning connected to the real world. They will tackle purposeful projects that positively impact their community and promote a broader understanding of the world.

**Student Centered:** Students will be encouraged to become more self-directed as they acquire skills and deeper learning competencies needed in the 21st century. The faculty will guide students in the shaping of their educational experience and meet regularly with small multi-grade groups of students to build community, support student progress and plan for the future. Through schoolwide participatory practices, students will develop their voice and agency.

**Design thinking:** The future requires individuals who can collaborate and tackle complex challenges. Using design thinking we will learn to embrace challenges, explore new strategies, value input from others, and innovate solutions. Our innovation driven learning culture will be supported by continuous iterative cycles of investigation, design, implementation, and evaluation.

**Social Emotional Learning:** Students will develop a sense of belonging through an inclusive learning culture based on mutual respect, dialogue, interdependence, and compassion. Students will be emotionally supported as they explore new horizons, make mistakes, and persevere through challenges. Through a "Pedagogy of Place" students become rooted in their community and discover their purpose is tangible and important.

4. Does the school expect to contract with another entity for either management, or substantial oversight or direction in the school's operation?  Yes  No

If YES, describe the entity and the role it will have in the school's operational plan.

N/A

5. Does the applicant team or any members of the team currently operate any other schools?  Yes  No

6. Vision/Mission statement (2-3 sentences)

Polaris Charter School's mission is to provide an enriching and emotionally grounded learning environment that inspires global citizenship in an interdependent world through local, place-based resources and experiences.

7. Student population and geographical setting of the school

- Define the targeted geographical area of the proposed school from which you expect to draw a significant number of your students.

Our targeted geographical area includes Los Alamos county and the surrounding communities of Jemez, Espanola, and Pojoaque. The school anticipates drawing a number of students from Los Alamos county, where the school plans to be located. Los Alamos has a population of about 18,000. In addition, about 3,600 employees commute from surrounding communities to work at Los Alamos National Laboratory. Currently, 17-18 % of LAPS students are from outside of the district, including Pojoaque, Espanola, Jemez, and San Ildefonso.

- Describe the student population including key demographic data (academic performance, home languages, English Learners (ELs), and special education populations) in the location in which the school intends to locate.

Demographic data obtained from recent school report cards (<http://webed.ped.state.nm.us/sites/conference/2016%20District%20Report%20Cards/Forms/AllItems.aspx>) provide a guideline for the population that our school plans to serve.

Most of the student population will be from Los Alamos Public Schools (LAPS). Data for LAPS for the school year 2015-16 recorded the ethnicity of the population as 31% Hispanic, 2.7% American Indian, 5.6% Asian and 59% Caucasian.

Special populations for LAPS also include 12.3% economically disadvantaged, 2.4% English Language Learners, and 16.7% Students with Disabilities.

The most recent Los Alamos Middle School report card details academic performance for special populations in Reading Proficiency: White 53%, African American 46%, Hispanic 28%, Asian 69%, Native American (too few), Economically Disadvantaged 16%, Students with Disabilities 17%, and ELL (too few). Math Proficiency for special populations details are also provided: White 53%, African American 31%, Hispanic 23%, Asian 73%, Native American (too few) Economically Disadvantaged 19%, Students with Disabilities 17%, and ELL (too few).

- Identify where these students are most likely being educated currently and why they are expected to choose the proposed charter school for their future educational needs.

This proposed charter school would provide an option for middle school students from Los Alamos and surrounding areas. According to the NM PED School Grading map, (<http://aae.ped.state.nm.us/>), the middle schools in our area have recently received Ds and Fs: Los Alamos Middle School received a D in 2017; Carlos F. Vigil Middle School in Espanola received an F in 2015, 2016, and 2017; Sixth Grade Academy in Pojoaque received an F in 2014, 2015, 2016, and a D in 2017; Pojoaque Middle School has received Ds in 2014, 2015, 2016, and an F in 2017; Jemez Valley Middle School received a D in 2016 and 2017. Parents wanting to exercise the option to transfer to a better school need another option, and our school can meet that need.

8. Provide evidence that the applicant team has assessed community need for a school of the nature that will be proposed in the application (e.g., objective surveys or other measures of local demand for the proposed educational program).

Many students in Los Alamos come from families highly educated in STEM fields that hold high academic performance expectations, particularly in sciences and math. This sets up an experience of inadequacy for students who are intelligent but hold different interests and talents. A mental health survey in November of 2015 completed by 1,300 local students indicated 753 reported concerns of stress/anxiety; 610 depression; 335 self-harm behavior; 310 feeling suicidal.

For the past two years, members of the community and Los Alamos Public Schools have been in open dialogue about new educational options for its students. In 2015 a diverse team embarked on a nine-month journey to reimagine our high school and win a \$10 million grant from the XQ Foundation. As one of the top applications a film was made about the project (<https://www.usatoday.com/pages/interactives/sponsor-story/xq/>). A key to the team's success was its ability to engage the community, students, and staff in conversations about reimagining high school. The team hosted over two dozen events including broad community forums, school site discussions, multiple showings of the film "Most Likely to Succeed", an alumni forum and teen input sessions. It is estimated that a thousand people attended at least one event over the nine-month period. The community continues to be informed of research-based innovations in education through a Facebook page with over 300 followers, a weekly coffee conversation and blog with an email list of over 200 people.

An outgrowth of the XQ project was the formation of this team to establish a charter school based on similar beliefs about reimagining education. The Polaris Charter School team has presented to local groups including the Family Strengths Network, Informal Educators, and the Los Alamos Public Schools Foundation. A public launch event on December 1st attracted approximately 120 participants. Of those who completed a survey, 69% said that it is important for students in Los Alamos to have another middle school option, 24% were undecided, and 7% said no. The number one reason that would cause a family to chose a different educational option for their child was "more engaging methods of instructions" at 64%. The message from our community is clear. They want another option for their children.

9. Identify significant innovative features that the school will implement in order to help it realize its vision/mission (e.g., non-traditional school year, longer school day, partner organizations, etc.).

In order to realize our mission/vision, Polaris Charter School will implement the following innovative features:

- Project-based learning
- Studio electives developed around student interests and passions
- Competency based learning
- Built-in teacher collaboration time
- Restorative Practices
- Advisory time
- Statewide leadership in educational innovations

10. Describe how the school will be more effective than the schools currently serving the targeted student population, and/or plans to improve student achievement and exceed the academic performance of existing public schools in the targeted service area and any data you have to support this assumption.

We are creating Polaris Charter School to help improve what is generally accepted as an already successful school district. All components of our model and innovations were chosen with care to specifically promote the social-emotional needs of students. Nurturing social and emotional growth has been shown to lead to increased engagement and further academic success of all students.

Our Place-Based framework was chosen to help improve the academic proficiency of our students who are particularly motivated by real world experience. This framework has been shown to help foster a sense of belonging in the community. Studies have found that integrating the local environment as a context for learning improves student achievement in core subjects. According to *“Closing the Achievement Gap”* by Lieberman and Hoody, students, teachers and administrators report significant positive effects on problem solving skills, critical thinking and decision making. They also report an “increased enthusiasm and engagement in learning and gains in summative measures of educational achievement such as standardized test scores and grade point average.” (Lieberman and Hoody, 1998)

The importance of self-confidence and how it impacts the capacity to learn cannot be overemphasized. In Los Alamos, many students feel like underachievers compared to their peers and on the Youth Risks and Resilience Survey, a greater number of students have admitted to thoughts of suicide than in the rest of the state. We believe that our model will help students “own” their learning and that their effort can lead to improvements in the community and our world.

There is an abundance of research that indicates a strong correlation between self-efficacy and academic achievement. According to Dale H. Schunk and Frank Pajares in their paper *Development of Academic Self-Efficacy* “Students’ involvement and participation in school depend in part on how much the school environment contributes to their perceptions of autonomy and relatedness, which in turn influence self-efficacy and academic achievement.” Our design is created to help raise academic achievement by paying close attention to the students’ sense of belonging, self-worth and relevance of education to the real world. Our premise is that by creating an educational setting where this sense of self-worth is nourished, students will be able to envision themselves as academic performers and, in turn, be academic performers.

*Please Note: Should your charter be awarded, the founding governing body could undergo a background check to determine if it qualifies to be a board of public finance in the state of New Mexico.*

Signature of founder(s):

\_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
[PRINT NAME]

Please Note: Should your charter be awarded, the founding governing body could undergo a background check to determine if it qualifies to be a board of public finance in the state of New Mexico.

Signature of founder(s)

Elizabeth Martineau

Date: 12-10-17

Elizabeth Martineau

[PRINT NAME]

William Ray Hargrave

Date: 10 Dec 2017

William Ray Hargrave

[PRINT NAME]

Scott B. Johnson

Date: 12-10-17

Scott B. Johnson

[PRINT NAME]

Branden Willman-Kozimor

Date: 12-10-17

Branden Willman-Kozimor

[PRINT NAME]

Amy Bartlett-Gaunt

Date: 12-10-17

Amy BARTLETT-GAUNT

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Michelle Autherr

Date: 12-10-2017

MICHELLE AUTHERR

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