

New Hampshire State Board of Education
Department of Education
Hugh J. Gallen State Office Park
101 Pleasant Street
Concord NH 03301

Wednesday, August 8, 2018



REVISED AGENDA

- I. **CALL TO ORDER - 9:00 AM**
- II. **PLEDGE OF ALLEGIANCE**
- III. **PUBLIC COMMENT** (LIMITED TO 5 MINUTES, BOARD WILL ASK CLARIFYING QUESTIONS ONLY, OTHERWISE NO FEEDBACK PROVIDED)
- IV. **CONSENT AGENDA**
 - A. Meeting Minutes of July 11, 2018
 - B. Commissioner's Non-Public School Approval Designation Report
- V. **SPECIAL PRESENTATIONS** (TIMES ARE APPROXIMATE)
 - A. 10:00 AM – Heartwood Public Charter School Charter Application - STACEY WHIPPLE
- VI. **LEGISLATIVE ISSUES/RULES**
 - A. Adopt - Special Education Aid (Ed 1128)
 - B. Adopt - Non-Public School Approval (Ed 403.03; Ed 405.01; Ed 407.01)
 - C. Adopt - Basic Academic Skills (Ed 513.01) Amendment to Existing Rules in Response to HB 1498
 - D. Adopt - Mathematics Teacher; General Requirements (Ed 507.26); Middle Level (Ed 507.27); Upper Level (Ed 612.17); Mathematics – Middle Level (Ed 612.17) and Mathematics – Upper Level (Ed 612.18)
- VII. **REPORTS, NEW BUSINESS and/or DEPARTMENT UPDATE**
 - A. 9:15 AM - Extension Request for the Approval of Plymouth State University's Professional Educator Preparation Programs (REMOVE from TABLE) (nonpublic session)
 - B. Update on Social Studies Standards – ASHLEY FRAME, NHDOE, Division of Learner Support, Education Consultant
 - C. New Hampshire Academic Standards for Computer Science – DAVID BENEDETTO, State Director of STEM and Computer Science
 - D. Overview of the Rule Making Process – AMANDA PHELPS, NHDOE, Division of Educator Support & Higher Education, Office of Policy (REMOVE from TABLE)
 - E. Nominations for Professional Standards Board– AMANDA PHELPS, NHDOE, Division of Educator Support & Higher Education, Office of Policy

Category I – Teachers and Education Specialists *

1. Reappoint - **Joanne Goelzer** – 2nd three-year term (2018-2021): Science Educator at Coe Brown-Northwood Academy, Northwood, NH
2. Reappoint - **David Webster** – 2nd three-year term (2018-2021): Science Educator & Department Chair at Linwood High School, Lincoln, NH

Category II – Higher Education and Education Administration

3. Reappoint - **Cynthia Lucero** – 2nd three-year term (2018-2021): Professor of Education/Clinical Coordinator at NH Technical Institute, Concord, NH
4. Reappoint - **Page Tompkins** – 2nd three-year term (2018-2021): Executive Director & Faculty Member, Upper Valley Educators Institute, Lebanon, NH
5. **VACANCY** (2018-2021) – six applicants:
 - 1) **Gale Adams-Davis**, Principal, Waterville Valley Elementary School, Waterville Valley, NH
 - 2) **Marion Anastasia**, Superintendent at SAU # 36, Whitefield, NH
 - 3) **Pam Harland**, Educational Leadership Faculty, Plymouth State University, Plymouth, NH
 - 4) **Julie Heon**, District Curriculum Coordinator for SAU #63, Lyndeborough, NH
 - 5) **Beth McClure**, Principal at Strong Foundations Public Charter School, Pembroke, NH
 - 6) **Daniel Tanguay**, Associate Dean of Faculty & Programs for Education at Southern NH University, Manchester, NH

Category III – Qualified Lay Person

6. **VACANCY** – no applicants

** Currently no vacancies, only Higher Ed/Edu Admin reappointments. One application received from Lois-Jean Stevens, Director of Special Services at Prospect Mt. High School, Alton, NH.*

VIII. OPEN BOARD DISCUSSIONS

- A. **Agenda Items for the Wednesday, September 26, 2018 Retreat**

IX. OLD BUSINESS

X. TABLED ITEMS

- A. **Extension Request for the Approval of Plymouth State University’s Professional Educator Preparation Programs**
- B. **Overview of the Rule Making Process – AMANDA PHELPS, NHDOE, Division of Educator Support & Higher Education, Office of Policy**

XI. NONPUBLIC SESSION

XII. ADJOURNMENT – 2:00 PM

If accommodations are needed for communication access such as interpreters, please call (603) 271-3144 at least 5 business days before the scheduled event. We request 5 business days’ notice so that we may coordinate interpreters’ schedules. Although we will attempt to accommodate any requests made, we cannot guarantee the presence of the service. Thank you for your cooperation.

New Hampshire

State Board of Education

Minutes of the Wednesday, July 11, 2018 Meeting

AGENDA ITEM I. CALL TO ORDER

The regular meeting of the State Board of Education was convened at 9:23 a.m. at the State Department of Education, 101 Pleasant Street, Concord, New Hampshire. Drew Cline presided as Chairman.

Members present: Cindy Chagnon, Drew Cline, Chairman, Sally Griffin, Helen Honorow, Ann Lane and Phil Nazzaro. Frank Edelblut, Commissioner of Education and Christine Brennan, Deputy Commissioner were also present. Kate Cassady was not able to attend due to another commitment.

AGENDA ITEM II. PLEDGE OF ALLEGIANCE

Sally Griffin led the Pledge of Allegiance.

AGENDA ITEM III. PUBLIC COMMENT

Mr. George D'Orazio of Manchester addressed the issue of public funds being directed to nonpublic schools by stating there are many differences of

opinion about what is an ideal education and the attempt to bring public funding to students attending nonpublic schools should never be characterized as an attack on the public schools but rather an attempt to provide a different kind of education for our children.

AGENDA ITEM IV. SPECIAL PRESENTATIONS

A. Home Education Advisory Council Annual Report

George_D'Orazio, Chairman addressed the board and noted that a copy of the Home Education Advisory Council (HEAC) annual report was provided to the Board in advance. Mr. D'Orazio presented an overview of the council membership, duties and responsibilities. He noted that a section of the policy for the NH School Boards Association Model Policy for Home Education was found to be out of compliance with RSA 193-A and the Board was provided a copy of the proposed revision. The council has also authorized the chairman to contact the Department of Health and Human Services (DHHS) to assist the Division of Children, Youth, and Families (DCYF) with a better understanding of home education and application of the law in an effort to enable better communication.

Cindy Chagnon inquired as to the oversight that would be provided with the proposed legislative bill to provide funding to families who are home schooling. Mr. D'Orazio stated that the way the law is currently written a parent

is in compliance as long as they report they are home schooling. At this time there is no oversight.

Helen Honorow expressed her concern with the article included with the report that crosses into an area antagonistic of public education. Mr. D'Orazio responded that the insert was provided by him personally for the statistical information only, not the article itself. He clarified that he did not feel it was necessary to attack the performance of public schools and that home education and nonpublic school education are simply alternatives to public schools.

B. Teacher/NHDOE – SB-FY-18-03-013 (nonpublic session)

The parties requested that this hearing be held in nonpublic session.

MOTION: Cindy Chagnon made the following motion, seconded by Helen Honorow that the State Board of Education return to public session.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

MOTION: Cindy Chagnon made the following motion, seconded by Helen Honorow, that the State Board of Education accept

the Hearing Officer's Report and adopts the Hearing Officer's recommendation.

VOTE: The motion was approved by a 3 to 2 vote of the State Board of Education with Sally Griffin and Ann Lane opposed and the Chairman abstaining.

C. Student/Errol School Board – SB-FY-18-04-016

The parent chose to have this case heard publicly.

Karen Hughes, attorney for the parent, Elana Pouliot, explained there had been a number of hearings on this matter and they were before the Board to request an approval for manifest educational hardship as the parent has been unable to obtain daycare for her daughter before and after school within the school district. The child did not attend kindergarten due to this same situation. The school district denied a request for manifest educational hardship in 2017 and options provided by the Hearing Officer were for the family to move, pay tuition to a private school, or pay tuition to another public school. These options would create hardships for the family. The Board is being asked to consider this unique situation and approve the request for manifest educational hardship that would allow the student to attend a school outside of the district.

Diane Gorrow, attorney for the Errol School Board, stated the issue in this case is a question of who is responsible for providing daycare before and after school. The Hearing Officer noted that it was a parental obligation and previously the State Board of Education had determined that the hardship must be likely to affect the educational needs of a particular child. The school district provided the parent a list of names of daycare providers and one individual was able to provide daycare three days a week. Many parents in the community work outside of Errol and face the same issue of daycare. The district is requesting the Board uphold the recommendation of the Hearing Officer.

MOTION: Cindy Chagnon made the following motion, seconded by Ann Lane, that the State Board of Education accept the Hearing Officer's report and adopt the Hearing Officer's recommendation.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

Chairman Cline announced the agenda will have to be adjusted to allow for the Public Hearings to take place at their legally advertised time.

The parent chose to have this case heard publicly.

Mr. Robert Bevel of Merrimack was sworn in and stated the Board of Education needs to reexamine Education 204's appeals process by which a child or parent can appeal a dispute with a school board. He feels the process is flawed and no one can ever expect to get a fair hearing. He went on to explain that in 2017 Assistant Superintendent Mark McLaughlin unilaterally changed the homework policy and distributed it to parents and students without authorization from the school board and without proper notice. The proper due process procedures for changing policy under RSA 541-A for all administrative agencies in New Hampshire was not followed. He cited what he felt were six instances of violation of his daughter's due process rights throughout the series of hearings and appeals that brought him before the Board. He is requesting the State Board of Education find that his daughter was denied due process by the lack of adequate notice and opportunity to be heard regarding the changes to the homework policy, and that there is a lack of basis for meaningful judicial review by the administrative process by the school district. He is also asking the Board to overturn the decision of the Merrimack School District and instruct them to reestablish homework as a part of the cumulative grading system for the students.

Dean Eggert, Attorney for the Merrimack School Board, introduced himself and representatives of the school district. Mr. Eggert provided the district's

perspective of why the Hearing Officer was correct in his recommendation and it is their opinion that the parent was not bereft of other options if he felt this was uniquely adversely impacting his child. The district is requesting the Board to affirm the recommendation of the Hearing Officer.

Chairman Cline read Ed 306.14 into the record and opened the floor for discussion or a motion.

MOTION: Cindy Chagnon made the following motion, seconded by Ann Lane, that the State Board of Education accept the Hearing Officer's report and adopt the Hearing Officer's recommendation.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

Phil Nazzaro stated for the record that the appeals process is laborious for parents and suggested that during the Board retreat they look at this process from the parents' perspective and find ways to ensure the process is as simple and coherent as possible.

AGENDA ITEM V. OPEN BOARD DISCUSSIONS

There was no open board discussion.

AGENDA ITEM VI. LEGISLATIVE ISSUES/RULES

A. 11:00 AM - 11:30 AM – PUBLIC HEARING – Educational Interpreter/
Transliterator for children and Youth Ages 3-21 (Ed 507.35 and Ed 612.36)

The Public Hearing opened at 11:02 AM.

Laurie Gilbert, Nashua School District, stated nationwide there is an increase in standards to obtain a bachelor's degree and the National Bureau of Labor and Statistics recommends the educational requirement for an interpreter be a bachelor's degree. It is her feeling that leaving the requirement to an associate's degree would be rolling things backwards in the process and requests the Board send it back to the committee for more work.

Brianna Cameron, an Interpreter in the Nashua School District, spoke in support of the requirement for a bachelor's degree and feels it would put interpreters on the educational level to more accurately interpret what students are being taught.

Susan Wolf-Downes from Northeast Deaf and Hard of Hearing Services provided her personal comments and asked that the Board support this proposal but if not, then it should be returned to the subcommittee for more work.

Commissioner Edelblut asked Ms. Wolf-Downes if she felt this change would affect the ability to provide interpreters and she did not feel it would be more difficult. She did recommend that a good system be in place for interpreters to refer each other and noted that there were parts of the State where it might be difficult to cover assignments. She added that there are two regional programs available.

Chairman Cline spoke about his tour of several Manchester schools last month and stated when he asked what the State Board of Education could do to make things easier the consistent response was help with reducing credentialing requirements. Several people he spoke to were not able to attend the meeting and he did get permission from a few of them to speak on the record today on their behalf to note that the bachelor's requirement would be a significant burden to Manchester in the hiring of interpreters.

Helen Honorow noted that to be part of the public record actual letters or documentation from the individuals for whom Chairman Cline spoke should be provided to the Board. The record will be open for five days and she

encourages anyone who could not attend today to provide written documentation of their comments to the Board.

Ms. Connie Clanton, retired teacher's aide from the New Hampshire Program for the Deaf and Hard of Hearing spoke in support of the requirement for a bachelor's degree.

The Public Hearing closed at 11:32 AM.

B. 11:30 AM – 12:00 PM – PUBLIC HEARING – Digital Learning Specialist (Ed 507.22 and Ed 612.19)

The Public Hearing opened at 11:32 AM and closed at 12:06 PM with no testimony.

C. Final Proposal - Code of Conduct for Educators (Ed 501.01, Ed 501.02, Ed 502.01, Ed 510, Ed 511, and Ed 512) (REMOVE from TABLE)

Amanda Phelps, NHDOE, Division of Educator Support & Higher Education, Office of Policy reviewed and discussed areas that were changed in Ed 510.05 Duty to Report and Ed 511 Investigations and Disciplinary Proceedings. The implementation process for the Code is in the process of being finalized. A checkbox will be provided for affirmation that the credential

holder has read and agrees with the Code in the online process. The Code will also be a part of the curriculum in the New Hampshire educator preparation programs as well as part of any New Hampshire educator credential renewal process. Chairman Cline offered to write and send a letter out to all state credential holders notifying them of the Code prior to the start of the new school year and suggested that the media also be contacted to provide press releases.

MOTION: Cindy Chagnon made the following motion, seconded by Phil Nazzaro that the State Board of Education approve the Final Proposal Ed 501.01, Ed 501.02, Ed 502.01, Ed 510, Ed 511, and Ed 512 as amended.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

Commissioner Edelblut introduced Richard Sala, who is replacing Erin McIntyre as an attorney for the Department of Education.

AGENDA ITEM VII. REPORTS AND NEW BUSINESS

A. Granite State Academy Charter School Charter Renewal Extension Request – Jane Waterhouse, NHDOE, Division of Educator and Analytic

Resources, Charter School Administrator introduced Mr. Anthony Polito who is requesting an extension for the charter. Mr. Polito expressed his pleasure and excitement at the conclusion of five successful years and noted this year saw the first graduating class.

MOTION: Cindy Chagnon made the following motion, seconded by Sally Griffin that pursuant to Ed 318.12 and Ed 318.13, the State Board of Education authorize the six (6) months extension of the charter or until the Department of Education is able to complete the renewal visitation report for Granite State Academy Charter School.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

B. Extension Request for the Approval of Plymouth State University's Professional Educator Preparation Programs

MOTION: Phil Nazzaro made the following motion, seconded by Cindy Chagnon, that the State Board of Education enter into nonpublic session per RSA 91-A:3, II(c).

VOTE: The motion was approved by roll call vote by State Board of Education members Cindy Chagnon, Drew Cline, Sally Griffin, Helen Honorow, Ann Lane, and Phil Nazzaro.

MOTION: Cindy Chagnon made the following motion, seconded by Phil Nazzaro that the State Board of Education return to the Public Session.

VOTE: The motion was approved by roll call vote by State Board of Education members Cindy Chagnon, Drew Cline, Sally Griffin, Helen Honorow, Ann Lane, and Phil Nazzaro.

MOTION: Phil Nazzaro made the following motion, seconded by Sally Griffin that the State Board of Education seal the minutes of the nonpublic session.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

MOTION: Phil Nazzaro made the following motion, seconded by Sally Griffin that the State Board of Education table the Extension Request for the Approval of Plymouth State University's Professional Educator Preparation Programs until the August meeting.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

C. Overview of the Rule Making Process

MOTION: Phil Nazzaro made the following motion, seconded by Helen Honorow that the State Board of Education Table the Overview of the Rule Making Process until the August meeting.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

Chairman Cline notified the Board that Amanda Phelps has prepared a calendar to track credentials and rules that are expiring as well as new rules that come up, so that the Board can take a more proactive role in advance of the expirations. This calendar will be provided to the Board at the August meeting.

Chairman Cline noted he has been working with Angela on changing the agenda structure to hopefully cut down on the amount of disruptions to the meetings. He suggested moving the Public Comment portion to the lunch hour to allow for higher attendance. Helen Honorow stated she thought Public Comment should be left as is.

D. Year-End Highlights from the New Hampshire Department of Education

Frank Edelblut, Commissioner of Education, presented slides that provided an overview of work conducted by the Department through the last year such as (*a copy of the presentation can be obtained on the State Board of Education's webpage*):

- Reorganization of the Department of Education
- Addition of 170 new robotic teams across the State
- A cyber robotics coding challenge was designed allowing students to learn programmatic skills for robots which ran in conjunction with Code.org. The first year there were 2,600 kids coding to program robots and 10 States reached out to the Department that were interested in participating. The process has continued working with Intelitek, Inc. In Derry, NH and 31,000 students participated from around the world. The goal is to have a million kids participate in the next two to five years.
- The new statewide assessment system has reduced the footprint of the assessment and made New Hampshire once again in charge of its assessment.
- The Career and Technical Education (CTE) set of rules went from 39 pages down to 16.

- CTE credentials were approved allowing New Hampshire to hire experienced and qualified CTE instructors into our classrooms.
- CAST's Universal Design for Learning (UDL) educator training is helping us move toward personalized education.
- With the passage of a law requiring schools to test water for lead, Commissioner Edelblut has applied for and received a grant providing schools remediation in cases where lead may be found.
- A federal audit was conducted and the Department is awaiting final results.
- An error in Smarter Balanced assessment student data was discovered resulting in \$1.5 million being sent to the local school districts where it belonged.
- Work was done with the legislature that passed a bill giving authority to all State agencies to transfer excess funds to meet maintenance of effort (MOEs) requirements.
- The Department is working with school districts in completing school board federal assurances
- The Department website is being updated and branded
- A Director of Communications has been hired.
- The Department has been working on computer science standards as well as continuing work on social studies
- There will be a new statewide contract for a student information system which will lower the cost from \$10.45 to \$7.10 per student. This should

eliminate the burden on schools to report and create a more efficient, streamlined, and secure system.

- A data dashboard is being developed and should roll out in conjunction with the updated website.

Helen Honorow observed that the Board has been more involved in the past with things like changes to the website and would like to have Commissioner Edelblut report to the Board each month regarding ongoing projects and processes to allow the Board a less passive role in what is going on with the Department of Education. Chairman Cline stated that the Board retreat would be a better forum for this discussion.

Phil Nazzaro commented he would like more information on the Board's organizational priorities and maybe this would be a conversation to have for the Board retreat as well.

AGENDA ITEM VIII. OLD BUSINESS CONSENT AGENDA

A. Meeting Minutes of June 13, 2018 (see motion after agenda item VIII, C below)

B. Nonpublic School Advisory Council Nominations

MOTION: Phil Nazzaro made the following motion, seconded by Sally Griffin, that the State Board of Education approve the recommended reappointment for Nonpublic School Advisory Council Membership per the list provided.

VOTE: The motion was approved by vote of the State Board of Education with the Chairman abstaining.

C. Nonpublic School Approval Designation Report

MOTION: Phil Nazzaro made the following motion, seconded by Ann Lane, that the State Board of Education approves the Meeting Minutes of June 13, 2018 and the Nonpublic School Approval Designation Report.

VOTE: The motion was approved by vote of the State Board of Education with the Chairman abstaining.

AGENDA ITEM IX. TABLED ITEMS

A. Final Proposal - Code of Conduct for Educators (Ed 501.01, Ed 501.02, Ed 502.01, Ed510, Ed 511 and Ed 512)

MOTION: Cindy Chagnon made the following motion, seconded by Sally Griffin that the State Board of Education removes this item from the Tabled Items.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

AGENDA ITEM X. NONPUBLIC SESSION

There was no nonpublic session.

AGENDA ITEM XII. ADJOURNMENT

The meeting was adjourned at 2:25 PM

MOTION: Ann Lane made the following motion, seconded by Phil Nazzaro that the State Board of Education adjourns.

VOTE: The motion was approved by unanimous vote of the State Board of Education with the Chairman abstaining.

Secretary

August 2018

EXECUTIVE SUMMARY

Commissioner's Non-Public School Approval Designation Report

A. Action Needed

A vote is needed to accept and approve the recommended designation for NH non-public school for initial approval status.

Shalom Christian Academy	Salem, NH	AA- Initial	expiring 6/30/2019
Building Block Commons	Exeter, NH	AA- Initial	expiring 6/30/2019
The Trinity School of Bedford	Bedford, NH	AA- Initial	expiring 6/30/2019
Mount Royal Academy, North	Lancaster, NH	AA- Initial	expiring 6/30/2019
St. John Paul II Academy	Claremont, NH	AA- Initial	expiring 6/30/2019

B. Rationale for Action

Administrative Rule Ed 400 requires non-public schools to submit a request every five years to renew their program approval status and every three years to renew the attendance approval status. Report Designations include:

AA- Initial Approval, Approved for Attendance for one year

AA – Approved for Attendance for three years

AP – Approved for Program for five years

CA – Conditionally Approved for one year followed by the number of years the school has been in that status.

SP- Approved for Special Education program- up to 5 years

C. Effects of this Action

Approval of this Report allows the schools with expired approval status to continue to operate.

D. Possible Motion

I move that the State Board accept and approve the Commissioner's Non-Public School Approval Designation Report.



V, A

April 8, 2018
Mr. Frank Edelblut, Commissioner
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Edelblut,

We would like to thank you for taking the time to review our application for the proposed Heartwood Public Charter School. This letter outlines the updates that we have made to our application based on the feedback we received from our legal review from Bernstein, Shur, Sawyer & Nelson, P.A. and our 3 peer reviews.

Please find updates in the following sections:

1. Methods by which trustees are determined (c) — The application now includes more details regarding the length of terms for board members, See page 7.
2. Maximum number, Age or Grade levels (e) — The application now includes clear expectations of the total number of teachers and the average teacher/student ratios for the first five years. See page 9.
3. Application filing formalities (g) — The application now includes an alternate phone number on the application cover sheet and third grade has been added to the table on the application cover sheet.
4. Achievement test (h) — The application now identifies how students will be assessed in addition to statewide testing. See pages 23–24.
5. Staffing overview (j) — The application now includes a staffing overview, including qualifications for our assistant teachers and the learning coordinator. We have expanded this section greatly. See pages 25–29.
6. Personnel compensation plan (k) — We have clarified this section of the application. See page 29.
7. Pupil transportation plan (l) — We believe that the application satisfies the current statute’s mandate on transportation of out-of-district students.
8. Special Education coordination method (n) — The application now describes (1) how our Learning Coordinator and teachers will coordinate with an LEA to provide required special education programs; (2) how the school will work with our students’ IEP team to ensure appropriate placement and services are provided for our students. See pages 31–32.



9. Philosophy of pupil governance and discipline (p) — The application now includes an extensive description of our school’s proposed disciplinary policies. See pages 33–35.
10. Administering fiscal accounts & reporting (q) — The application now includes appropriate checks and balances regarding fiscal accounts. See pages 35–36.
11. Annual budget (r) — The application now includes a budget that is based on realistic revenue and expenses, we have included a section for parent contributions and all known items are accounted for. See Appendix B.
12. Consultants (u) — We have included more details about identified consultants for our school. See page 37.

In addition to the revisions based on the attorney feedback, the following items were adjusted based upon the peer reviews:

1. Curriculum (f) — The application has been edited to more effectively and thoroughly communicate our curriculum outline. See pages 11–16.
2. Academic & Other Learning Goals & Objectives (g) — The application now better aligns with the NH State Standards, and integrates more clearly our teaching methods and Place-based education framework into each curriculum section description. See pages 16–23.
3. We added Appendix D: Friends of the Charter, as recommended.
4. We’ve included letters of support.

Thank you for your consideration,

The Heartwood Public Charter School Founding Board



Heartwood Public Charter School

Proposed by the Heartwood Foundation, 2017, updated 7/12/18

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Introduction

Why Charter?

Heartwood Public Charter School creates an additional public school option for children and families looking for an alternative approach to their child's education. A public charter school model is a good fit for this geographical area because it provides the needed flexibility to use new and innovative approaches for teaching and learning. With emphasis on connecting students with their greater community, our place-based model allows students to learn from the people and places around them while also helping to foster a greater understanding of the value of education within our community.

Why Coös County?

Northern New Hampshire is a region defined by its natural beauty, hardworking people, and tight-knit communities. However, Coös county is also a place of hardship, as many people struggle to make ends meet, access to healthcare and high quality food can be limited, and employment opportunities in our rural communities are sparse.

As members of our region have come together to try to heal our struggling communities, we have realized that it is this place itself and what makes the region unique that will ultimately spur revitalization. It is the clean and beautiful environment that will attract people to live and visit. It is our farming landscape that will feed us and lead the way in wellness. It is the safety and closeness of our neighborhoods that will attract young families. It is our people and the local economies we create that will keep our youth in the region. This place defines us and it is through our connectedness to it that we will flourish.

However, for our continued growth, for both businesses and young families to come and for our youth to stay, we need more. To prevent our youth from leaving the state, we need to invest in our children and in education. We need to engage our children in our local communities, to teach them that they are active participants of their communities and the world. For our children to value our local community, this place—we need to take actions to improve the quality of life here, making it a nicer place to learn, live, and work.

Considered the Gateway to the Great North Woods and home to the County Seat, Lancaster and its surrounding area provides a suitable location for an elementary place-based charter school. The White Mountains Regional School district (SAU 36) is comprised of five towns and 685 elementary students. There are 288 children under the age of five in our district alone, and 1,320 additional children under the age of five in the neighboring towns all within 30 miles of Lancaster. We are also in very close proximity to a Vermont School Choice District, who often send their children across the river to NH schools.

Why Place-Based Education?

Heartwood Public Charter School strives to help connect students to themselves, to each other, to their community, and their environment. Through this connectedness and by using the

community as our classroom, children will discover the impact that they can have locally. Place-based education gives children a voice as well as a sense of civic pride and responsibility. Through integrated academics children are immersed in their educational context in an authentic and experiential way. Through their years at Heartwood Public Charter School students will be in control of their own learning, actively engaging with their community, and looking for ways to improve the world that surrounds them.

What is Place-Based Education?

Place-based education is learning that is grounded in what is local—the unique people, happenings, history, economy, and culture of a particular place. Place-based education offers students a foundation in the nature, history, culture, and ecology of their own environments before moving on to broader subjects.

“Place-based education is the process of using the local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, science, and other subjects across the curriculum. Emphasizing hands-on, real-world learning experiences, this approach to education increases academic achievement, helps students develop stronger ties to their community, enhances students’ appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens. Community vitality and environmental quality are improved through the active engagement of local citizens, community organizations, and environmental resources in the life of the school” (Sobel, 2004).

Place-Based Education:

- Grows from the distinct natural and human environments that our students live in.
- Is interdisciplinary by nature.
- Engages students in the community and simultaneously strengthens the community’s investment in our local education.
- Promotes community growth and creates active, involved, responsible citizens.
- Places equal value on the social, emotional, physical, and cognitive growth of students
- Promotes authentic learning with high expectations.
- Provides a space and opportunity for students to fully explore and discover themselves, others, and the world.
- Encourages deep connections to the natural world and community through in-depth, integrated learning.

Why a Place-Based Educational Framework?

Place-based education can "feed three birds with the same seed" as it addresses the integrated goals of:

- **Student Achievement:** Place-Based Education boosts students' engagement, academic achievement, and sense of personal efficacy as stewards of their local environment and community. It also can re-energize teachers.

- **Community Social and Economic Vitality:** Placed-based education forges strong ties between local social and environmental organizations and their constituencies in the schools and community, which helps to improve quality of life and economic vitality.
- **Ecological Integrity:** Through project-based learning, students make tangible contributions to resolving local environmental issues and conserving local environmental quality.
(www.promiseofplace.org/what-is-pbe/what-is-place-based-education)

(a) Educational Mission & Vision Statement

Educational Mission

Heartwood Public Charter School educates students through authentic place-based experiences, empowering them to find meaning, engage deeply, and think critically. By using our community as our classroom, students cultivate a love for learning and explore academics within meaningful contexts. We strive to develop inspired students who become stewards of the earth and active citizens of the world.

Educational Vision

At Heartwood Public Charter School we learn beyond our classroom walls. We provide opportunities for our students to build valuable relationships within our community through service, experiential learning and an integrated curriculum. We believe our kind, self motivated, and empowered students will grow up to be compassionate, informed, and engaged citizens that will create healthy communities.

Guiding Values

- We believe respect for ourselves and others is essential to forming positive relationships.
- We believe kindness and gratitude are the foundations of a joyful life.
- We believe that a connection with the earth and life around us encourages action toward a positive impact.
- We believe a sense of community begins in the home and grows larger through the school experience. The student's community continues to widen as they grow and mature.
- We believe knowledge is not enough; action is key to making the world a better place.
- We value play and believe that students learn best at their own pace.
- We believe taking risks in a safe environment is an essential component of lifelong learning.
- We believe that an innate curiosity and love for learning should be nourished.
- We believe that every student can find their voice and have an impact on the world around them.
- We believe reflection on an experience is as important as the experience itself.

Educational Goals

- Cultivate a thriving school culture that is embraced and supported by our community.
- Deliver an academic experience that exceeds the NH State Standards using place-based education.
- Establish mixed grade classrooms where peer-to-peer modeling and teaching is encouraged and supported.
- Provide differentiated instruction that guides, supports and enables each student to succeed at their own pace.
- Shape an environment where students believe in themselves and are valued and validated.
- Help students find their voice, remain curious and tap into their creative selves.
- Support and encourage the development of each student’s social-emotional intelligence.
- Support students in developing a sense of community, that will expand and widen as they grow and mature.
- Use community service to foster a connectedness throughout our local region and our neighborhoods.
- Inspire students to become active shapers of culture, community and society.

(b) Governance & Organizational Structure & Plan

The Founding Board of Trustees

Heartwood Foundation is a registered not-for-profit organization, established to create and sustain a public charter school in Coös county, New Hampshire. The current work of the foundation is to prepare the charter school application for approval, serve as an ambassador-organization in promoting the School, and select the first board of trustees of Heartwood Public Charter School. Following the approval of the charter and appointment of the school’s board of trustees, the purpose of the Heartwood Foundation will become one of support and development—for students, teachers and the overall success of the school’s mission.

Brief biographical information of the initial Heartwood Foundation Board of Trustees —the 5 Founding Trustees—appears in Appendix A.

Board of Trustees

A board of trustees will govern the Heartwood Public Charter School with statutory responsibilities pursuant to RSA 194-B: 5 for “general supervisory control and authority over operations of the charter school.”

Day to day management of the school and staff members will be the responsibility of The Head of School. The Head of School will report directly to the Board of Trustees.

Heartwood Public Charter School's Board of Trustees will be the guardian of its Mission, charged, by definition, to establish the School, monitor its health and viability, advocate for the School and its students whenever possible, and assess, with regularity, the Mission's relevance and vitality.

Trustee selection will be based on personal and professional background as well as a commitment to the School's Mission, support and sustainability.

The Board of Trustees will have officers including: Chairperson, Vice Chairperson, Treasurer and Secretary. Role descriptions for Board of Trustees officers will be developed by the Board of Trustees and approved as part of its operational guidelines. There will be 7 Trustees at a minimum, of which at least 2 will be parents of students currently enrolled.

The Board of Trustees will establish governing policies and bylaws, including policies that establish subcommittees and standing committees of the Board of Trustees. Initial subcommittees will likely include: Board of Trustees Recruitment, Finance, Marketing & Development, Curriculum, Student Recruitment, and Community Liaison, among others.

The Board of Trustees will hire and oversee the Head of School, with Board of Trustees Officers working most directly with this person. During the planning year, the Board of Trustees will establish roles reserved for the Head of School and those for the Board of Trustees. The Head of School will be empowered to direct and implement many operational decisions (e.g. day-to-day issues that arise in matters relating to curriculum, personnel, and daily school business and organization), but will always be responsible to the Board of Trustees, in ways clearly defined. As such, methods of communication and reporting will be established for a successful and productive relationship with the Head of School.

It is expected that the roles reserved for the Board of Trustees will include, at a minimum:

- Hiring of the Head of School
- Approval and oversight of annual budget and fund-raising programs
- Setting policy (e.g. code of ethics, personnel manual, etc.)
- Appointment of Board of Trustees advisory members
- Delineation of educational priorities
- Oversight for the School's growth plan
- Establishing a professional salary and compensation program
- Reviewing and approving significant contracts (e.g., for facilities and benefit programs)
- Oversight of major appeals
- Fundraising
- Any other matters prescribed in statute or rule.

The Board of Trustees will meet monthly during the school year to discuss School operations, hear reports, and take action as per its governance functions. The Officers may be called upon to meet more frequently. Decisions will be made by a majority vote of Trustees (a quorum) at each meeting.

The following principles of good practice for the Heartwood Public Charter School are based on guidelines from the National Association of Independent Schools. The Board of Trustees and the Head of School will work in partnership in fulfilling these principles.

1. The Board of Trustees shall oversee Heartwood Public Charter School's Mission and objectives.
2. The Board of Trustees shall review and maintain bylaws, and establish policies and plans consistent with the Mission.
3. The Board of Trustees shall be accountable for the financial well being of the School, including capital assets, operating budgets, fundraising, and endowments.
4. The Board of Trustees shall select and support the Head of School.
5. The Board of Trustees, or a committee of the Board of Trustees, shall conduct a written annual evaluation of the performance of the Head of School and work with the Head of School to establish goals for the following year.
6. The Board of Trustees shall evaluate itself annually and establish goals for the following year.
7. The Board of Trustees shall keep full and accurate records of its meetings, committees, and policies.
8. The Board of Trustees shall work to ensure that all of its Trustees are actively involved in the work of the Board of Trustees and its committees.
9. The composition of the Board of Trustees shall reflect a balance of expertise and perspectives needed to achieve the Mission of the School.
10. The Board of Trustees shall develop itself through ongoing education, new Head of School orientation, and leadership succession planning.
11. The Board of Trustees shall assure compliance with applicable laws and regulations and minimize exposure to legal action.

(c) Methods by Which Trustees & Their Terms are Determined

The Founding Board comprised of the 5 members of the Heartwood Foundation submitting this charter school application and overseeing the School's development, will appoint the School's initial Trustees. The Heartwood Foundation initial Board of Trustees will be appointed by Trustees of the sponsoring entity. Trustees of the *Heartwood Public Charter School* will have terms of three years. Terms of Trustees will be staggered. First-year Trustees will be appointed for two or three-year terms to establish initial staggered terms and governance stability. The Board of Trustees may appoint a Head of School to fill a vacancy if vacated but that Trustees will only be allowed to serve until the original date expires. Trustees may serve consecutive terms if so voted by a Board of Trustees majority. The overarching goal in selecting Trustees is

finding individuals who support the Founders' vision and have a commitment to the School's Mission and goals. Founders will seek Board of Trustees members who bring professional expertise, including educational, financial and governance experience to the Board of Trustees of the Heartwood Public Charter School.

Once the Board of Trustees is in place, current Trustees of Heartwood Public Charter School will select and appoint future Trustees and vote on policies for Board of Trustees governance and filling vacancies. For purposes of conducting business, the Board of Trustees will be subject to New Hampshire Right to Know Law, RSA 91-A. For purposes of lawful meetings, a quorum is defined as a majority Trustees who must be physically present. Records and minutes of meetings will be kept in accordance with statutory guidelines. Trustees are expected to regularly attend Board of Trustees meetings. The Board of Trustees will consider regular participation to be crucial in order to ensure success of the Board of Trustees effort and the School overall.

Openings on the Board of Trustees will be filled by recommendation, nomination, and vote of a majority of the Trustees, keeping in mind the various stakeholder positions to be filled and a desire for diverse and balanced perspectives. Trustees elected to fill out the term of a Trustee will have a term that completes the remainder of the prior Trustee's term.

(d) General Description & Proposed or Potential Location of Facilities To Be Used

As mentioned above, the Founding Trustees have identified Lancaster, NH as the area best suited for our school's location. Although we have not finalized our facilities location at this time, we instead will share our vision for our school's atmosphere and physical space.

An ideal location for our school would be an existing facility or an area of land that would accommodate Heartwood as it grows and fulfills its maximum enrollment of 108 students. We envision a tranquil, natural site that is in close proximity to the center of town. Our classrooms and other indoor settings will be holistic spaces that will evoke feelings of warmth, simplicity, and comfort; they will facilitate learning, and will ultimately help guide our students toward success. We envision our classrooms to be visually quiet, with warm colors, natural materials and sunlight. We believe that our students will benefit from a well designed classroom, having a space that allows for the ease of movement and the flexibility for learning varied activities. Furthermore, our school building will have a learning kitchen and a variety of other common spaces for meetings and gatherings.

In addition to utilizing many of the natural spaces at our disposal in our local geographic region, our campus will have outdoor classrooms, a natural playground, and plenty of green space. Ideally, each classroom will have its own entrance to the outdoors, which will serve as a gateway between our indoor and outdoor classrooms, where our students will continue their

education through nature studies, gardening, agriculture, play, and the community that surrounds them.

In accordance with RSA 194-B:8, II, any facility chosen to house the school will be brought up to code to comply with all state and federal health and safety laws, rules, and regulations, including but not limited to fire safety, HVAC, plumbing, electrical, and the requirements of ED 321.23(u) and (v).

(e) Maximum Number, Grade or Age Levels

Enrollment & Growth Plan

The anticipated opening of Heartwood Public Charter School is Fall of 2019. We have a four year plan to add classrooms each year until we have 6 classrooms with grades K-8. In our first year, the school will serve students in Kindergarten in one classroom, grades 1-2 in a mixed grade classroom, and one 3rd grade classroom. In year two, we will add a mixed grade classroom with grades 4-5. In year three we will add a 6th grade classroom. In year four we will add grades 7-8 in a mixed grade classroom. We have strategically devised a system that alternates between single grade and mixed grade classrooms to best accommodate for the developmental needs of our students. Our maximum enrollment will be at full capacity of 108 students, with a total of 6 teachers, and 5 aides. In grades K-3 our staff:student ratios range from 1:6 to 1:12, grades 4-8 staff: student ratio range from 1:6-1:24 depending on classroom needs.

	Grade(s) Added	# of Students	Total Enrollment	# of Teachers	# of Aides
Year 1	K 1-2 3	12 24 12	48	1 1 1	1 1 1
Year 2	4-5	24	72	1	1 (float b/w 4-6)
Year 3	6	12	84	1	1 (float b/w 4-6)
Year 4	7-8	24	108	1	1 (float b/w 6-8)
Year 5	At capacity, no new classes or teachers added.				

Place-Based Learning Approach: Building the School Community

“Place-based education challenges the meaning of education by asking seemingly simple questions: Where am I? What is the nature of this place? What sustains this community? It often employs a process of re-storying, whereby students are asked to respond creatively to stories of their homeland so that, in time, they are able to position themselves, imaginatively and actually, within the continuum of nature and culture in that place. They become part of the community, rather than a passive observer of it (Lane-Zucker, Laurie, 2016).”

Our school will begin by filling the lower elementary classrooms in order to build a cohort of students familiar with place-based education before moving on to our upper elementary program. We anticipate that our students will have diverse backgrounds and varied learning styles. We have planned our growth with the following in mind:

- The need to grow at a reasonable and responsible rate to best serve and support our students, their families, our community, and our faculty and staff.
- The need to integrate all students into our Place-based methodology.
- The need to establish multi-grade classrooms with a maximum of 24 students with one lead teacher and one assistant teacher per classroom.

Our Students

Heartwood Public Charter School aims to be a welcoming community with a diverse student body. We understand that to be successful and sustainable we will need to start small and grow responsibly. We will provide and maintain resources that are necessary and beneficial for all of our students and their families, for our teachers and our school’s staff.

Our classrooms will look and function differently than a traditional public school classroom. A learning coordinator will help to aid new students transitioning into our school to ensure a smooth passage, and our teachers will establish and implement personal learning plans for these students. There are many Place-Based schools around the country that will serve as a resource for us as we develop our programming.

Shape and Size of Our Classrooms

Students are excellent teachers. Our classes and experiences are multi-grade—where students learn from each other, have older and younger peers, and assume leadership roles. We have found that a multi-grade environment encourages a community of collaboration and caring rather than of exclusivity and competition.

Using a multi-grade classroom approach, each class will develop into a supportive community where students will remain side by side, over time, and often with the same teacher. This method will create a close-knit atmosphere where student learning and growth can flourish.

Our student-teacher ratio will help shape our thriving classroom culture. In each lower and upper elementary classroom, we will aim to have twelve (12) students in single-grade classes, and twenty-four (24) in multi-grade classes. Each classroom will have one (1) Lead Teacher and

one (1) Assistant in the lower elementary grades. The upper elementary will have one (1) Lead Teacher, and will share two (2) Assistant Teachers. Our student-teacher ratio will ensure that our students receive the individualized attention they need on a daily basis. These ratios allow for entire classroom collaborations and small-group work as well. We will have additional teacher presence as needed during growth years.

By year five we hope to have one (1) kindergarten classroom, two (2) lower elementary classrooms, one (1) upper elementary classroom, and two (2) middle school classrooms.

(f) Curriculum

Below we have portrayed the roles of our teachers, described the atmosphere our students will learn in, and have outlined the curriculum proposed for Heartwood Public Charter School.

Heartwood Public Charter School emphasizes the importance of our connections to our environment and our community, while nurturing the development of our students in a safe and caring environment. We will strive to create students who are authentically connected to their learning, their community and their environment.

Through a child-centered view of learning, Heartwood Public Charter School will provide an in-depth, authentic, standards-based education. Utilizing local community resources, places, and people, our curriculum encourages students to participate in tangible experiences that help them to develop a sense of place. By design, our curriculum fosters community involvement and encourages the exploration of our natural surroundings. With both of these aspects of our program, our students will first learn about what is closest to them, with their explorations expanding in ever widening circles as they become more cognizant of their roles at school, their local communities, their state, their country, and the world.

Our child-centered philosophy recognizes that each child learns differently. We use an integrated curriculum, which focuses on making connections, allowing students to engage in relevant, meaningful learning that can be connected to real life. Through this integrated curriculum, we will utilize project-based problem solving, nature based learning, inquiry based learning, service learning, and collaborative learning. To provide a challenging and content-rich program, instructional methods (i.e. graphing a garden, literature circles, listening to and presenting oral histories) are used where teachers act as leaders, models, facilitators, and caregivers, and reflect our understanding that children learn through experience, exploration, social interactions, and guided inquiry.

Our teachers use exploratory and creative play, field work, inquiry, and modeling to varying degrees to guide students' development through their growth in social, emotional, physical, cognitive/intellectual abilities, social/civic responsibility, and self actualization. Teachers, along with support staff, parents, and the broader community create a nurturing environment and

help students to connect their experiences to authentic, real-world, community-based opportunities.

A Prepared Environment: Child-Centered Education & Active Learning

Heartwood Public Charter School believes students learn best in child-centered education and active learning. Learning materials and experiences are organized and made available to children in a prepared environment.

Teachers at Heartwood Public Charter School will have a non-traditional view of teaching and learning. We believe movement is more productive for students than sedentary learning, and because we respect and celebrate children's independence, teachers help students to progress at an individualized pace. We will utilize clear, individualized learning plans, in which one-on-one attention is embedded. Learning in math, language, science, history, geography, art, music, etc. may be undertaken by individual students, groups of learners, or individually with the support of the teacher. We believe this methodology of exploring materials and concepts deeply, independently, or collaboratively enables children to develop concentration, focus, and inner-discipline

While the freedom of choice is fostered in what students want to learn there are ground rules and clear expectations for both the students and the teachers in how the learning community should function.

Multi-Age Classrooms

Multi-age classrooms help children build maturity, promote leadership skills, and increase understanding of subjects when older classmates are able to educate one another. A shared culture of positivity and support, along with modeling work habits and social and language skills, guides children in developing a strong sense of self and an ability to work well with others. These are important skills students will need to be successful later in life.

The Teacher's Role: Observer & Guide

The teacher has many roles within the classroom. They design learning opportunities for individuals and groups in an environment in which materials are available and are presented as students are ready to progress. Teachers meet the needs of the whole child, physically, emotionally, socially, cognitively etc. while also ensuring there is documentation of the progress of that student, as well as all of those within the classroom.

Teachers know when to intervene, and when to observe and listen. Children are trusted and respected, and in turn, trust and respect themselves and others. In this way, teachers are able to support children toward their own success.

Guiding Children Toward Their Full Potential

The primary goal of Heartwood Public Charter School is to help each child reach his/her full potential in all areas of life, while also becoming lifelong learners, responsible citizens,

productive members of the community, and protectors of their environment. It is our deepest hope that students experience learning at Heartwood Public Charter School as something to be loved and cherished, and done to follow one's own passions in life.

Emergent Curriculum

When children are engaged in activities that interest them learning happens. Emergent curriculum begins with, and builds on children's interests and experiences. The children decide with their teachers the topic of study together, with teachers participating in the learning with the children. The teacher's role is to listen to the children closely to determine their interests. The teacher then offers a plan (the curriculum) which scaffolds children's current understandings, and helps them to develop a deeper level of learning. Emergent curriculum is meant to be flexible and grow with open ended, playful activities which expand children's understandings and bring real meaning to their questions. When teachers actively listen, nurture, and encourage children in their play, they are creating strong, confident, creative members of our community.

Inquiry & Constructivist Thinking

Inquiry is a student-centered form of active learning that begins by posing questions, problems, or scenarios instead of simply presenting established facts or portraying a smooth path to knowledge. Students are encouraged to ask questions which are meaningful to them, and which do not necessarily have easy answers. Instead of telling students what they "should" know or giving direct answers, teachers encourage students to think through problems by asking them questions.

Through the process of inquiry, students construct much of their understanding of the natural and human-designed worlds. Inquiry implies a premise of "need or want to know". It is not so much seeking the correct answer—often there is none—but, rather searching for appropriate resolutions to questions and issues. For educators, inquiry entails emphasizing the development of inquiry skills and the nurturing of inquiry attitudes or habits of mind that will enable students to continue the pursuit of knowledge throughout life.

Inquiry helps students develop:

- Self confidence in their learning ability
- Pleasure in problem solving
- A keen sense of relevance
- Reliance on their own judgment over other people's or society's
- No fear of being wrong
- No haste in answering
- Flexibility in point of view
- Respect for facts, and the ability to distinguish between facts and opinion

Inquiry also helps:

- Empower student voice and honor choice

- Increase student motivation and engagement
- Foster student curiosity and love for learning
- Teach grit, perseverance, growth mindset & self regulation
- Make research meaningful & develop strong research skills
- Reinforce the importance of asking good questions
- Enable students to take ownership over their own learning and to reach their goals

Fundamentally, constructivism theorizes that people build their own understanding and knowledge through experiencing the world and reflecting on those experiences.

Constructivism is a learning theory:

- Learning is an active process
- Knowledge is constructed from (and shaped by) experience
- Learning is a personal interpretation of the world
- Problem solving and understanding are emphasized
- Authentic tasks, experiences, settings, and assessments are used
- Content is presented holistically—not in separate smaller parts

Interdisciplinary

By looking at an idea, person, or event through a variety of lenses, students are able to see rich connections which are often missed in a narrow examination. Using curricular themes and projects, traditional disciplinary boundaries are often dissolved so that students can explore a topic from many directions. In this way students are able to better appreciate the context, complexity and importance of ideas.

Project Based

By embedding learning within a project, a student learns that skills, topics and concepts do not exist by themselves. Through interdisciplinary projects, a student is challenged to apply and use knowledge in relevant and meaningful ways. A student learns from experience that cooperation, teamwork, communication and conflict resolution within a group setting often produces a higher quality product or solution than working alone.

“Projects provide the backbone of the children’s and teachers’ learning experiences. The approach is based on the strong conviction that learning by doing is important and that to discuss and to revisit ideas and experiences leads to better understanding and learning” (Gandini, 1997, p.7).

The word project when used in the “project approach” has a specific meaning. “A project is as in-depth investigation of a topic worth learning more about. The investigation can be undertaken by a small group of children within the class, by the entire class, or by an individual child. The key characteristic is that the project is a research effort deliberately focused on

finding answers to questions posed either by the children, the teacher, or the teacher working with the children (Katz, 1994, p.1).

The project approach addresses not only academic goals, but also intellectual goals. Intellectual goals focus on habits of mind that help children make sense of their world. Some habits of mind that relate to intellectual goals include the disposition to:

- Make sense of experience
- Theorize, analyze, hypothesize, and synthesize
- Predict and check predictions
- Find things out
- Strive for accuracy
- Experiment
- Grasp the consequences of actions
- Persist in seeking solutions to problems
- Predict others' wishes and feelings

Nature Based

Nature-based education is integral to the curriculum at Heartwood Public Charter School. Using the natural world as our classroom will enliven creativity, incite curiosity, and promote problem solving. Through exploration of our natural environment, our students can learn about any subject in a truly engaging way—the natural world serves as an ideal platform for both interdisciplinary and experiential learning.

As our students spend time outside in nature, they will be less overstimulated, they will be moving their bodies and breathing fresh air, and they will be happier and more focused. Through this sense of well-being and joy, we believe our students will learn more and develop a love for learning.

Nature-based education also connects students to the land both physically and emotionally, cultivating a sense of responsibility for the environment. Through the joy and deep connections made while learning and playing in the natural world, students will recognize their oneness with the natural world around them. It is through these connections that we hope to instill in our students an excitement for life and learning and a desire to care for and respect the land.

Community Based & Place-Based Learning

Students learn best when they are able to place learning in context, and are actively engaged in learning that pertains to their physical and social world. By relating learning to a student's place in the world, a student better understands why knowledge and skills are important. We work towards helping students to develop deep connections within their community, expand their appreciation for the world of nature while building on prior knowledge and experience, and develop an eagerness for serving as an active and committed citizen.

A Small School Setting

Our small size allows us to approach learning in non-traditional ways, and gives us the ability to extend our learning beyond the classroom walls and into our community. It allows us to utilize a variety of learning and teaching methods and techniques that may not be possible with standard classroom sizes. Smaller classes provide the opportunity for young people to share their thoughts and knowledge in meaningful ways, and to give them the confidence to become active participants in our community. This community is fostered in part because of our small size, and it also contributes to the develop a strong sense of community with our students and families.

Experiential & Engaging Learning Experiences

We believe offering learning experiences that extend beyond the classroom provides a unique contribution to young people’s lives, helping them to develop their sense of place and to become aware of resources, needs, and challenges in their community. As students learn through experiences that are close to them both physically and emotionally, learning becomes authentic and meaningful. Students learn best when they are able to "do"; rather than just see or hear. This hands-on learning helps students develop creativity, resourcefulness and critical thinking skills—and it’s fun and interesting, creating a community of students who *want* to learn.

Peace Curriculum

“Peace Education” is teaching, modeling, and encouraging respect and support of one’s self, others, and the community as a whole.

At Heartwood Public Charter School, we provide lessons and model the skills that are appropriate for developing “peace” for this age group. We will use the classic “Peace Table” for individual situations, and also give group and individual lessons using materials. Peace curriculum skills that we work on at Heartwood Public Charter School include:

- identifying and naming feelings in yourself and others
- respecting of self and others
- reflective listening and conflict resolution
- self-calming (anger management)
- grace and courtesy
- interconnectedness of all things
- environmental stewardship
- befriending and caring for people who are “different” from you

Differentiated Curriculum

Heartwood Public Charter School offers a differentiated educational program, designed to meet the unique needs of each student. At Heartwood, rather than simply assessing at the end of an instructional period, assessments are embedded into a teacher’s practice and are used to drive

daily instruction. Instruction and assessment occurs in various groupings: individually, in small groups, and as a whole class. Teachers use a variety of materials and measures, and continually assess, to find out what their students already know, determine how and what they are learning, and establish what a student is ready to learn next.

(g) Academic & Other Learning Goals & Objectives

The following is a broad description, by subject, of our goals and approach to our K-8 grade curriculum. Please note that a more complete curriculum will be established during our planning period as we assemble our team and work with Place-Based education consultants and other advisors experienced with charter school development. This process will serve as a team building opportunity for our teachers and supporting staff, encouraging collaboration and contributions with the development of our curriculum. We will also include a plan that addresses blending the New Hampshire State Standards into our Place-Based Curriculum.

Social/Emotional Learning

Outcomes:

- Students will become self-aware and able to examine other's perspectives.
- Students will treat everyone with respect and advocate for the respectful treatment of all.
- Students will recognize, appreciate, and advocate for individualism.
- Students will recognize mistakes as opportunities to learn and improve.
- Students will see challenges as positive experiences that offer opportunities for growth.
- Students will collaborate effectively with others.
- Students will value the contributions of all and offer equal kindness and consideration to each other.
- Students will positively contribute to both the school and greater community.
- Students will take responsibility for mistakes, reconcile errors, resolve problems by finding and implementing solutions, and make restitutions as appropriate.

Curriculum: School values will be actualized in the daily actions and interactions of educators, administrators, and students. Targeted concept and skill development lessons will be integrated into the daily curriculum. Using the principles of Place-Based education, students will be given daily opportunities to work with their peers to solve complex problems by sharing ideas, formulating a plan for success, delegating the responsibility of implementation, supporting each other to identify snags, adjusting the plan when necessary to develop a solution and celebrating the achievement together.

Language Arts

Outcomes:

- Students will read with enjoyment at a developmentally appropriate level with fluency, accuracy, and comprehension.

- Students will write effectively and creatively for a variety of purposes and audiences.
- Students will practice storytelling, and oral presentation to develop purposeful and articulate communication skills.
- Students will work together on projects that promote cooperation, problem solving, collaboration and supporting each other.

Curriculum: Rich reading materials combined with language arts manipulatives provide opportunities for our students to acquire both encoding and decoding skills. Phonics, grammar, punctuation, word study, etymology, reference/research skills, and daily writing will be introduced as spelling skills develop. Students will obtain a robust vocabulary and sophisticated oral and written skills. Students will learn to be reflective about what they read and write and to make connections between literary themes, genres and the world around them.

Mathematics

Outcomes:

Students will demonstrate a developmentally appropriate and applicable understanding of the key concepts and principles of mathematics, as defined by New Hampshire state competencies:

- Foundations of Math – Symbolic Expression
- Numbers and Number Systems
- Reasoning and Computational Strategies
- Metacognitive Skills and Communication
- Measurement
- Algebraic Functions Patterns, And Relations
- Geometry
- Data Analysis, Probability, And Statistics

Curriculum:

At the onset of our school, we plan to utilize an established and well regarded mathematics curriculum program to teach our students math. As our program becomes more developed, we plan to transition to a curriculum which helps our students to learn mathematics in an immersive way—utilizing interdisciplinary and experiential learning in conjunction with our place and nature based methods. The mathematics students learn will be in natural and real-world contexts, and will grow in complexity as their understanding of the world grows. Students will work together to apply math solutions to real world problems, which will lead quite naturally to recording data, making predictions and giving supporting data (their reasoning) for their predictions, graphing data, etc. As the students grow and their projects become more complex, their mathematical knowledge and problem solving abilities will become more complex as well. We believe that this will create students who truly comprehend math concepts, and who are confident problem solvers with a love for learning.

History

Outcomes:

- Students will achieve a developmentally appropriate comprehension of time and its passage.
- Students will develop a developmentally appropriate core understanding of the relationships between time, people, and history
- Students will demonstrate an understanding of the major ideas, issues and events pertaining to the history of governance in our state and nation.
- Students will demonstrate an understanding of the events, actions and policies of our nation in relation to other peoples and governments over time.
- Students will demonstrate an understanding of the nature of governments, and the fundamental ideals of government of the United States.
- Students will understand basic economic concepts
- Students will demonstrate a thorough knowledge of the geography of New Hampshire, the United States, and the world and understand the impact of geography on political, economic, and social developments.
- Students will have a developmentally appropriate understanding of and an appreciation for diversity and its role in social development, locally and globally.
- Students will gain a subjective understanding about both historical and current events, and will explore histories through the lens multiple perspectives

Curriculum: After exploring their own personal history, our students will begin to explore the history, government, economy and geography of our community and our local region. As they grow, their circle of learning will expand outward, as they learn about these concepts in the contexts of our state, New England, our country, our continent and our world. Our history curriculum will be introduced to our students through multiple perspectives with an authentic approach that is developmentally appropriate. Our students will explore history and current events from a variety of sources and will be provided with a multitude of opportunities to learn about history through the Place-based model. Through independent and collaborative learning our students will discover the role of history in the development of culture, and will realize the impact of their personal history on their own development and civilization as a whole.

Geography & Culture

Students will demonstrate a developmentally appropriate and applicable understanding of the key concepts and principles of geography, as defined by New Hampshire state standards:

Outcomes:

- Students will experience the earth as a globe, various kinds to study different concepts. They will experience the continents as puzzle maps showing political boundaries.
- Students will demonstrate an understanding of the physical processes that shape the patterns of Earth's surface and the characteristics and spatial distribution of ecosystems.
- Students will demonstrate an understanding of the physical and human geographic features that define places and regions as well as how culture and experience influence people's perceptions of places and regions.

- Students will demonstrate an understanding of human migration; the complexity of cultural mosaics; economic interdependence; human settlement patterns; and the forces of cooperation and conflict among peoples.
- Students will demonstrate an understanding of the connections and consequences of the interactions between Earth's physical and human systems.

Curriculum: Through the study of the earth's features, maps, and landforms, students will explore the connections and relationships between physical boundaries and the development of cultures, countries, governments, capitals, languages, and economics.

Through the examination of the shape, climate, biome and resources of the land, students come to appreciate that where one lives, determines how one lives.

Science

Outcomes:

Students will demonstrate a developmentally appropriate and applicable understanding of the key concepts and principles of science, as defined by New Hampshire state competencies:

- Nature of Science and Engineering
- Patterns
- Cause & Effect
- Scale, Proportion, and Quantity
- Systems and System Models
- Energy and Matter in Systems
- Structure and Function
- Stability and Change of Systems

Curriculum: Our science curriculum will fully integrate hand-on learning, and will focus on process and technique of discovery as students are exposed to the sciences in an immersive way. We will utilize interdisciplinary and experiential learning methods in conjunction with our place and nature based approaches. As our students understanding of the world around them deepens, so will their understanding of science grow in complexity. Students will participate in developmentally appropriate group activities and individual lessons in various scientific disciplines including earth science, biology, chemistry, and physics; and they will employ the Scientific Method as they move through these lessons and into more advanced areas of study. Through observation and investigations in real-world contexts, our students will develop a sense of wonder and excitement about science and the world around them.

Practical Life

Outcomes:

- Students will care daily for their school environment.
- Students and teachers will work together to establish environmentally conscious practices within the school setting.
- Students will learn to prepare healthy meals, working cooperatively with each other.
- Students will how to use basic tools and survival skills

- Students will learn the importance of self-care and how this impacts the world around them.
- Students will work together to create a caring community by developing and demonstrating kindness and respect for all members of the community.

Curriculum: Skills focusing on care of self, each other, family, and the natural world are taught, with the goal that students become fully capable and responsible adults. Our youngest students will develop fine and gross motor skills, learning to dress, pour, sort, wash and dry dishes, and prepare simple foods, among other basic activities. As they mature, our students will also aid in cleaning and taking care of the school both inside and out, with an emphasis on being stewards of their community and their surroundings. Developing environmentally conscious practices within the school setting fosters a lifelong understanding of how to take care of and minimize one's negative impact on the natural world. Practical Life activities encourage independence, responsibility, self-discipline, self reliance, and gender equality. These activities also contribute to the development of concentration and cooperation, expand students' social and emotional education and growth, and help students to develop and practice responsible social skills. By establishing a school-wide atmosphere of care, kindness, and respect, our students will work together with teachers and families to create a safe and secure learning environment where differences can be recognized and valued, and diversity celebrated.

World Languages

Outcomes:

- Students will gain exposure to and proficiency in one or more languages, developing skills in speaking, writing and reading.
- Students will be able to communicate daily needs and wants in another language.
- Students will gain knowledge of other cultures.

Curriculum: Learning another language provides students with the ability to communicate with more people in our world. The opportunity to learn another language will be integrated into all of our classrooms in a way that is developmentally appropriate. Students will begin by learning the basic vocabulary of another language, and overtime our students will develop communication, reading and writing skills in this language. In addition to learning this new language, students will also learn about the cultures where this language is spoken.

Civics & Service

Outcomes:

- Students will demonstrate an understanding of the rights and responsibilities of citizenship, and the ability to apply their knowledge of local, state, and national government through the political process and citizen involvement.
- Students will learn to practice core values of kindness and consideration in the classroom, community, and home.
- Students will understand and appreciate diversity of all kinds and its impact on our school and our local as well as global communities.

- Students will understand, appreciate and participate in community service.
- Students will participate in community service projects that reinforce the importance of caring deeply for our environment and having compassion for others.

Curriculum: Service, kindness, and responsibility for others will play an important role at Heartwood Public Charter School. Our students will have many opportunities to volunteer both within the school community as well as in our local community, and will be supported and encouraged as they choose where they want to focus their service efforts. As they mature, our students will integrate concepts of citizenship and service learning throughout their entire curriculum. They will also be exposed to the workings of local government and what it means to be an active citizen in this democratic process. These experiences will then be explored and discussed further in the classroom in order to help our student to develop a sense of empathy, to appreciate all members of a society, and to understand the importance of involvement in one's community.

Technology

Outcomes:

- Students will learn basic with computer skills at a developmentally appropriate level.
- Students will understand how to use the internet as a tool for research and information collection, collaboration, and communication (when developmentally appropriate and necessary).
- Students will learn how to balance their use of technology with real world interaction.
- Students will learn how to balance research conducted on the internet with material gathered from other sources (fieldwork, interviews, books, etc).
- Students will learn the history and impact of technology on culture, the environment, society, etc.
- Students will learn how to manage, store, and present information with the use of the internet, spreadsheets, graphs, presentation software, word processing, etc.
- Students will be guided through the use of safe social media and internet practices, and will learn how to become safe and responsible digital citizens.

Curriculum: Our technology curriculum and the use of technology at Heartwood Public Charter School will be framed in a way that supports our beliefs on the subject. While we recognize that technology is an essential life-skill for being an active citizen today, we also believe that technology is simply a tool, and we plan to structure its use in a balanced and intentional way. While our younger students will not be exposed to much in the way of digital technologies, as our students mature, they will learn how to integrate technology into their studies. Along with learning methods to use technology for collaboration, communication, data storage and presentation, research, art/design, etc; our students will also learn how to be responsible and safe digital citizens. The use of digital technologies will be focused and limited, and will be used as tools to to aid our students' educational needs and development.

Visual & Performing Arts

Outcomes:

- Students will delve into the creative process using a variety of outlets, methods and materials.
- Students will practice creative expression and making meaning through their art (visual and performing).
- Students will explore art theories (ie. music theory, the elements of visual art and the principles of design).
- Students will be exposed to a variety of artworks, performances and artists (ie. visual artists, choreographers, dancers, playwrights, actors, storytellers, puppeteers) in a variety of cultures, time periods, and movements.
- Students will be given opportunities to exhibit their artwork and participate in performances.
- Students will learn to analyze, interpret and evaluate artworks and performances.

Curriculum: Using individual activities and collaborative projects, students will have opportunities to create and express themselves through the arts. Projects and study in all academic areas will incorporate artistic expression and creativity.

Physical Education & Health

Outcomes:

- Students will participate in a physical education program focused on building physical strength, coordination, flexibility and endurance.
- Students will study human body systems and functions and the requirements for promoting good health.
- Students will learn about human development in a developmentally appropriate approach promoting a healthy sense of self.
- Students will learn to participate as a member of a team through cooperative games and team sports.
- Emotional/mental health

Curriculum: To develop a well-rounded physical education experience for our students, we will utilize local resources and national programming. Our students will glean the value of teamwork and team building skills through cooperative games and team sports. The Health curriculum will explore the function of body systems, such as skeletal, circulatory, digestive, etc. and basic healthy practices, like proper nutrition, regular exercise, adequate rest and renewal practices. Our human development curriculum will promote balanced healthy lifestyles and relationships, and will provide students with developmentally appropriate opportunities to learn about and to discuss peer pressure, drugs, alcohol, sexuality and adolescent development.

(h) Achievements & Assessments

At Heartwood Public Charter School we believe that every child has an innate desire to learn, and that students are most successful when they are active participants with their own educational experience. In collaboration with our teachers and learning coordinator, our students will make choices about and be involved with their own educations. Our students will be directly involved with participating in the development of their own Individual Learning Plans. We believe this will result in successful, empowered, and confident students.

These Individualized Learning Plan will guide our informal student assessments, and we will also utilize additional means of formal and informal assessment, including objective and age-appropriate measures of literacy and numeracy skills—including spelling, reading, expository writing, history, geography, science and mathematics—to satisfy both national and state requirements, and to quantitatively measure each child’s progress. We will comply with 194-B:8, V, “At least annually, and near the end of each school year, a chartered public school shall evaluate the educational progress of each pupil, as specified in RSA 194-B:3 II(h). Such evaluation shall include, but not be limited, to the New Hampshire statewide education improvement and assessment program, as provided in RSA 193-C. The cost of the state assessment program shall be borne by the state.”

During the planning period, Heartwood Public Charter School will further develop and evaluate assessment tools, schedules and practices for our students:

- A Individualized Learning Plan will be created and updated. We envision our students participating in the creation of their individualized learning plans in developmentally appropriate ways. Our younger students will be less involved, though as students mature their role will become more significant in planning their course of study. These Individualized Learning Plans will acknowledge progress made, challenges faced, and develop a plan for how the school, family and student will work together. Assessments will be conducted when our students first join the school community to determine the best ways to reach them and identify their skill levels, especially, though not limited to, areas of reading and math. We will utilize research based and/or evidence based formative assessments at least three times a year.
- Daily Observations, checklists, and record keeping are tools we will use as part of our informal assessment process. This documentation, as well as student portfolios, will be made available to students and parents/guardians at any time upon request.
- Student Portfolios of current working knowledge will provide a powerful means of assessing their progress.
- Group Projects and Collaborative Presentations will be used to evaluate students’ skills (ie. working cooperatively, problem solving, developing effective leadership skills, sharing, coordinating tasks and communicating effectively).
- Progress Reports based on observation and linked to the individualized learning plan will be analyzed by teachers, students and families. Progress Reports that assess academic progress, personal growth and development will be issued three or four times per year.

- Family-School Conferences will be held at the beginning and the end of each academic year with teachers, students and their families to establish or review Individualized Learning Plans, goals and growth.
- We will administer NH-approved statewide assessments as well integrate into this schedule any state and national standardized testing requirements as determined by the law.

(i) High School Graduation Requirements

Not applicable

(j) Staffing Overview

To ensure that students at Heartwood Public Charter School are supported in their academic endeavors and personal growth, we will seek highly qualified, nurturing educators and staff who will treat them with dignity and respect. Our educators will serve as leaders, guides, and role models as they assume the responsibility of building cohesive collaborative classroom communities where our children will feel free to challenge themselves and grow as individuals and as part of a group. Our students will feel safe and supported as they are encouraged to learn and develop at their own pace as they work to reach their full potential.

It is important to us that all of our staff is trained in Place-based education methods as well as in the Positive Discipline Program techniques.

Head of School

Our Head of School will serve as the visionary leader for Heartwood Public Charter School, playing a vital role in our school's climate and culture. They will guide and empower both our teachers and students, within our supportive and encouraging school community.

Responsibilities of the Head of School will include but are not limited to:

- Orchestrate internal and external communications and public relations
- Lead our school's staff and provide opportunities for their professional development
- Manage our school's daily operations
- Oversee and implement the school's disciplinary policies and procedures
- Set the tone for our school's culture, climate, and safety
- Serve as an effective liaison with other educational institutions
- Serve as the Business manager for our school
- Fulfill required duties with state and federal agencies
- Model our values in visible daily actions
- Follow Charter School Law

Head of School Qualifications

- Meet required state and federal background checks
- Meet all NH regulations for eligibility and teacher certification, preferred
- Master's Degree from an accredited university, preferred
- Minimum of 5 years teaching and/or school administration experience, preferred
- 3+ years experience as a Business/Operations Manager, preferred
- Experience with administrative duties, preferred
- Experience with grant writing and management, preferred
- Experience with or willingness to learn more about:
 - Place-Based Education
 - Emergent Curriculum
 - Nature-based Curriculum
 - Differentiated Curriculum
 - Alternative educational frameworks in a public school setting
 - Positive discipline and positive behavior supports
- Such other qualifications as the Board of Trustees may find appropriate

Teachers

Our classrooms will be run by one (1) Lead Teacher and supported by one (1) Assistant Teacher in the lower grades. The upper grades will have one (1) Lead Teacher, and will share two (2) Assistant Teachers. Our Lead Teachers will preferably hold, at minimum, a 4-year Bachelor degree or equivalent experience. As per New Hampshire's charter school statute, RSA 194-B:14. IV, a minimum of 50% of our Lead Teachers will hold New Hampshire teaching certificates or have at least three years of teaching experience. They must understand and believe in Place-Based philosophies and be familiar with individualized observation and record keeping. They also must be able to adapt Place-Based methods and curriculum to the New Hampshire State Standards and vice versa. Heartwood Public Charter School teachers will be nurturing, reflective, and creative problem solvers who are committed to the school's Mission.

Teacher Responsibilities

- Nurture relationships with each student and family
- Work with the Learning Coordinator to develop curriculum
- Facilitate learning
- Maintain a safe, respectful, positive learning environment
- Partner with colleagues, administration, and families to meet the needs of students
- Observe and track student progress, keep records, and work with the learning coordinator to maintain individualized learning plans and to complete progress reports
- Conduct assessments
- Implement Individualized Education Plans
- Hold conferences with families
- Participate in professional development, including training in Place-based education
- Oversee classroom maintenance and hygiene
- Facilitate student discussions regarding guidelines for safety and appropriate behavior within the school environment and out in the community

- Act as a mandated reporter for suspicions of neglect, abuse, etc.
- Positively guide and provide feedback to assistant teacher while providing autonomy
- Model our values in visible daily actions
- Fulfill any other responsibilities deemed relevant and necessary to the position

Teacher Qualifications

- Meet required state and federal background checks
- Bachelor's Degree from an accredited university, preferred
- NH teaching license or certification, preferred
- 3 years teaching experience, preferred
- Experience with or willingness to learn more about:
 - Place-Based Education
 - Emergent Curriculum
 - Nature-based Curriculum
 - Differentiated Curriculum
 - Alternative educational frameworks in a public school setting
 - Positive discipline and positive behavior supports
- Competence in teaching, classroom management, and all related responsibilities
- Enthusiastic, creative, and loving authority with students
- Ability to work well with colleagues, administration, and families
- Ability to collaborate with local businesses, individuals, and community partners to plan and coordinate activities and learning experiences
- Certification in CPR and First Aid

Assistant Teachers

Our Assistant Teachers must demonstrate their ability to embrace the place-based, and nature-based education model and be expected to fully support Heartwood Public Charter School's mission.

Assistant Teacher Responsibilities

- Support the lead teacher and students
- Assist with facilitating learning
- Assist with record keeping and assessments
- Help maintain a safe, organized, clean environment
- Participate in professional development, including training in Place-based education
- Model our values in visible daily actions

Assistant Teacher Qualifications

- Meet required state and federal background checks
- Experience working with children, preferred
- Enthusiastic, creative, and loving authority with students
- Ability to work well with colleagues, administration and families

- Experience with or willingness to learn more about:
 - Place-Based Education
 - Emergent Curriculum
 - Nature-based Curriculum
 - Differentiated Curriculum
 - Alternative educational frameworks in a public school setting
 - Positive discipline and positive behavior supports
- Desire to further oneself and welcome positive guidance
- Ability to work autonomously under the guidance of the Lead Teacher

Learning Coordinator

The role of the Learning Coordinator is an integral position at Heartwood Public Charter School. This person will work closely with our teachers and is responsible for overseeing the integration and implementation of our Place-based education curriculum throughout the school. This person will also work one on one with our students and assist them with the development of their Individualized Learning Plans. The Learning Coordinator will work to develop relationships with our families, and will act as a liaison between our students' sending schools and Heartwood Public Charter School.

Learning Coordinator Responsibilities

- Work with our teachers to develop and implement curriculum
- Play a supporting role to our teachers
- Help to aid new students transitioning into our school, to include creating learning plans
- Collaborate with lower and upper elementary classroom teachers and assistants in facilitation of Individual Education Program requirements
- In conjunction with the teachers, carefully observe and keep records of each student's individual progression through the classroom, always being available to offer gentle guidance toward self directed learning
- Support accommodations as stated by a student's IEP
- Works with teachers to submit progress reports 4x/year
- Works to develop close and effective relationships with parents
- Follows the school's policies and procedures for student evaluation and record keeping, meeting all due dates as required
- Demonstrate a strong commitment to professional ethics.
- Demonstrate an understanding of and commitment to Place-based education
- Model our values in visible daily actions
- Demonstrate commitment to competent communications and conflict resolution efforts across the school community.
- Protect the privacy and confidentiality of each student.

Learning Coordinator Qualifications

- Meet required state and federal background checks

- Ability to oversee curriculum development and implementation
- Special Education certification, preferred
- Special Education experience required
- Ability to implement educational best practices in conjunction with Place-based education curriculum and NH State Standards.
- Ability to keep progress records on students
- Team-oriented with a collaborative approach to working with colleagues, Head of School, and parents.
- Strong written and verbal communication skills.
- Understanding of and appreciation for diversity including students with learning disabilities and those from diverse families and socio-economic situations
- An open mind and sense of humor
- Experience with or willingness to learn more about:
 - Place-Based Education
 - Emergent Curriculum
 - Nature-based Curriculum
 - Differentiated Curriculum
 - Alternative educational frameworks in a public school setting
 - Positive discipline and positive behavior supports

(k) Personnel Compensation Plan

Salary

Our School Administrator, Learning Coordinator, and Lead Teachers will be paid a salary. The salaries of these full time personnel shall be paid bi-weekly. Assistant Teachers, other personnel, consultants, or contracted employees, whether full-time or part-time, will be paid on an hourly rate as employees or as independent professionals based on negotiated rates.

Vacation

Heartwood Public Charter School will publish an annual calendar of holidays and vacations during which the School will officially be closed.

Paid Time Off (PTO)

Full-time salaried staff will receive ten (10) PTO days per school year (in addition to scheduled school calendar vacations), to be used in the year in which they are accrued. Part-time salaried employees will receive five (5) PTO days per year. For purposes of PTO for part-time salaried employees, one day will equal the number of hours in that employee's regularly scheduled work day.

Other Benefits

It is the goal of Heartwood Public Charter School to offer healthcare benefits all of its employees. Such benefits may be offered as a choice system with a specific annual election or

as a specific insurance plan provided by the School with an employee contribution. Board of Trustees policy and availability of specific benefit programs will determine the specific benefit type offered. Board of Trustees policy and the requirements of specific benefit programs will determine whether, and to what extent, part-time or non-salaried personnel will be eligible for benefits and at what percent of full-time equivalent allocation.

General Provisions

Heartwood Public Charter School will comply with all federal, state, and local laws and rules related to pre-employment screening, hiring, employment compensation and leave, and reserves the right to amend the above personnel provisions as necessary to comply with applicable laws and rules, and as otherwise necessary.

In accordance with RSA 189:13-a, Heartwood Public Charter School shall conduct school employee background checks on all individuals working within the school.

(I) Pupil Transportation Plan

As mentioned in Section D of this application, the site of Heartwood Public Charter School will be finalized during our initial planning period, giving us well over a year to do so. We will seek a centrally located site in Lancaster, NH both to accommodate the resources of the White Mountains Regional School District, and for ease of access for families traveling from other areas.

We are in the process of contacting the White Mountains Regional School District Superintendent of Schools, Dr. Marion Anastasia, and members of her team, to address the issue of transportation and to explore potential transport methods.

Heartwood Public Charter School will follow the guidelines of 194-B:2,V which states: "Pupils who reside in the school district in which the charter school is located shall be provided transportation to that school by the district on the same terms and conditions as provided for in RSA 189:6 and RSA 189:8 and that transportation is provided to pupils attending other public schools within that district. For the purposes of open enrollment, neither the sending nor the receiving school district shall be obligated to provide transportation services for pupils attending an open enrollment school outside the pupil's resident district." It is our expectation that students who attend the Heartwood Public Charter School and reside in the host district shall have the opportunity to ride district transportation.

Students attending the Heartwood Public Charter School who do not reside in the host district will be required to arrange for their own transportation. Given the very limited funding per student, and the lack of guarantee for any additional funding above the state allotment per student, students from outside of the host district must either request their assigned districts to transport them, or arrange for their own transportation. Heartwood Public Charter School will make every effort to support families as they explore transportation options and facilitate ride

sharing between families of students from outside the district through an online database or other means. We are committed to working with parents of out of district students, when needed, to help find solutions for transportation.

(m) Statement of Assurances Related to Non-Discrimination

Heartwood Public Charter School will celebrate diversity in all its forms. The School will not discriminate on the basis of race, color, religion, national or ethnic origin, age, gender, gender identity, sex, sexual orientation, disability, socio-economic, marital or veteran status, citizenship, or genetic information in the selection of students or staff or in the administration of the School or in any other way that is prohibited by law. The Board of Trustees will develop and adopt a policy of open acceptance and will create administrative procedures to address any discriminatory concerns.

(n) Special Education Coordination Method

Charter School Responsibility & Method of Coordinating with Student's Sending School District.

Heartwood Public Charter School will comply with all federal and state special education laws and rules applicable to New Hampshire charter schools.

Charter Public Schools & Special Education

As an open enrollment public school, Heartwood Charter School will accept applications from any child who is a New Hampshire resident. In accordance with New Hampshire law (RSA 194-B:8), Heartwood Public Charter School will not discriminate against any child with a disability as defined in RSA 186-C. Under New Hampshire's charter school statute, RSA 194-B:11, III, when a child with disabilities attends a chartered public school, all current options available to the parent and the school district are retained.

In order to ensure appropriate and adequate services will be provided for the students, Heartwood Public Charter School will partner with the Special Education Staff at the SAU and participate as part of the student's IEP team, and will make every effort to work with support services personnel such as Physical Therapist, Occupational Therapist, and Speech/Language Therapist. Individual student's teachers, in collaboration with our Learning Coordinator will be responsible for carrying out the classroom specific IEP goals, and the Head of School will provide oversight.

ED 1104.01, effective 6/28/08, sets forth the following sequence of the special education process:

1. Referral;
2. Evaluation;
3. Determination of eligibility;

4. Development and approval of the IEP;
5. Placement;
6. Ongoing monitoring of the IEP; and
7. Annual review of the IEP. 30

It is clear pursuant to RSA 194-B:11, III, that decision-making responsibility for the special education process for children with disabilities attending a public charter school remains with the child's sending school district. In addition, RSA 194-B:11, III provides that the sending school district remains responsible for the funding for children with disabilities attending a chartered public school. These important provisions allow the responsible sending district and Heartwood Public Charter School to cooperate creatively to meet a student's special education needs. The sending district will be required to provide the Heartwood Public Charter School with a complete copy of each student's IEP for implementation and monitoring purposes.

(o) Admission Procedures

We are committed to building a diverse community of learners who embrace our Place-based approach to educate, and recognize the unique journey that this opportunity both provides and requires. Admission to Heartwood Public Charter School shall be open to any student who resides in the State of New Hampshire and to choice Vermont towns/districts as applicable. Methods of admission shall not be designed, intended or used to discriminate or violate individual rights in any manner prohibited by law.

We will educate prospective families on our educational approach by providing literature and opportunities to learn about the school both formally and informally (see Information Dissemination, Section W). We are hopeful that our prospective families will be committed to our educational vision, as the success of our school hinges upon the the support of our community and family involvement.

Admission Procedures

Heartwood Public Charter School will follow the basic method of admissions that defines charter schools nationwide:

- Admission shall be blind.
- Should the number of applicants exceed capacity, students will be chosen by a lottery system, with a wait list developed from the lottery overflow.

At minimum, the admissions process will include the following:

1. Prospective students and their families will tour our school and be invited to attend an informational meeting that outlines and explains our educational approach and our school's expectations.
2. Application packets with information about the school, and its philosophy and expectations will be shared, along with student related policies. Interested families will then submit their application.

3. Applications will be reviewed for completeness.
4. Should applicants exceed the number of allotted slots, a blind lottery, organized by grade will be held. Those not accepted in the lottery will be placed on a waiting list in the order determined by the lottery.
5. All students receive notification. Those who have been placed on a wait list will be notified.
6. After the enrollment process is complete, Heartwood Public Charter School will hold meetings for admitted students and their families and provide an orientation for students and families.

The Board of Trustees of Heartwood Public Charter School will establish an Admissions Committee. Heartwood Public Charter School reserves the right to have the Admissions Committee further develop and amend the specific admissions process during the planning year.

Enrollment Provisions

- Heartwood Public Charter School will offer automatic re-enrollment to its students, provided they are in good standing (as decided by a team including the Learning Coordinator, Lead Teacher and Head of School). Families will have to provide a letter of intent to re-enroll by a stated date preceding the lottery, so there is clarity about available spaces.
- Heartwood Public Charter School will admit from the waitlist should space become available after the lottery.
- Siblings of children already enrolled at the School will receive preference.
- The Board of Trustees will reserve the right to give preference in enrollment to children of School Faculty as part of the employee benefits package.
- Children of the Founders of the Heartwood Public Charter School will receive priority for Placement, with a cap of 10 children, as a means of recognition of their time and contributions in establishing the school.

(p) Philosophy of Pupil Governance & Discipline

The primary goal of discipline at Heartwood Public Charter school is the development of self-discipline, which is achieved not through externally administered punishments and rewards, but through an all encompassing, fully integrated social emotional curriculum and the overarching expectations of respect, responsibility, and community. Teachers will be active models of Heartwood's core values of kindness, gratefulness, and respect. The school will be governed through a collaboration between students and educators, using the practices of Positive Discipline as developed by Alfred Adler and more recently advanced by Jane Nelson.

The foundation of self-discipline is the development of positive, trusting relationships with kind, respectful adults. The recognition and appreciation of individual temperaments, personalities, preferences, beliefs, communication styles, learning styles, motivations, strengths and

challenges, leadership styles, experiences, skills, and interests will be modeled by educators and administrators, embedded in daily conversations, and explicitly taught with the goal of building students' self-awareness and perspective taking. Heartwood Public Charter School educators and administrators will use their understanding of individuals to focus on determining the motivation behind negative behaviors, identifying lagging skills, implementing positive behavioral supports, and providing targeted social and emotional skill development as needed.

Beginning in kindergarten, students will participate in the governance and management of the classroom and school. Students will be guided by the teacher in how to care for the classroom and materials through modeling and instruction. Students will be given ownership of the classroom environment, with the expectations of individual responsibility, order, and cleanliness, forging student capability and appreciation of their contributions. Teachers and students will work collaboratively to develop reasonable classroom expectations that address physical and emotional safety, and universal respect. Students will contribute to the greater community through positive acts of service, building their sense of self and connection with others.

Daily class meetings, as outlined in *Positive Discipline* by Jane Nelson, will be held, giving students and educators the opportunity to identify, address and resolve challenges, including conflicts, mistakes, struggles, misunderstandings, and intentional harm. Students and educators will work together to problem solve then select and implement strategies to resolve these challenges.

In multi-grade classrooms, and through daily curriculum implementation, communication and leadership skills will develop as students progress academically and develop socially. Self discipline, self advocacy, governance, communication and conflict resolution will be inherent to the curriculum. Positive Discipline, which employs the use of logical consequences and involves students in developing a plan of action, will be implemented with the intent of building self aware, self disciplined, responsible citizens.

In accordance with Heartwood Public Charter Schools guiding value of respect for all, every student and adult should feel physically and emotionally safe at school. If problem solving plans developed and implemented through student teacher collaboration have not been effective, team meetings involving families will be held to seek alternative solutions.

Our Learning Coordinator will work to support teachers in addressing behavior concerns they are experiencing with students in their classrooms that have not been resolved within the class, in a manner that is respectful of the student and their family, and in keeping with our mission. Children with challenging behaviors will be treated with respect and compassion. When challenging behaviors are encountered, educators and administrators will work collaboratively with students and families to provide individualized interventions and positive behavior supports. This includes finding collaborative and proactive solutions for students, as presented by Dr. Ross Greene's Collaborative Problem Solving model (CPS). Collaborative Problem Solving (CPS) may be used to identify lagging skills and unsolved problems, then provide targeted

development of these skills after the student works with a supervising adult to develop and implement a realistic and mutually satisfactory plan of action.

(<https://www.livesinthebalance.org/about-cps>)

A detailed student governance and discipline procedure outline will be established by staff and the Board of Trustees in the planning phase of our charter. Prior to opening, Heartwood Public Charter School will develop policies regarding promoting school safety including: reporting of suspected abuse or neglect; sexual harassment, as detailed in Ed 303.01(j) and (k); RSA 193-F, pupil safety and violence prevention; RSA 126-U, and limiting the use of child restraint practices. Heartwood Public Charter School will also outline requirements for developmentally appropriate daily physical activity pursuant to Ed 310 and our policies on record retention.

(q) Administering Fiscal Accounts & Reporting

Heartwood Public Charter School will follow New Hampshire public school accounting guidelines and will put in place internal accounting controls necessary to safeguard its assets. The School will maintain accurate financial records in accordance with Generally Accepted Accounting Principles (GAAP) for non-profit corporations. An annual financial report will be provided with audit by an independent certified public accountant.

The Board of Trustees will appoint a Treasurer to provide the oversight necessary for monitoring the financial status of the School. The Treasurer shall report the financial status of the School to the Board of Trustees at least monthly. The Board of Trustees shall also adopt policies for the financial management of the school, including policies on conflicts of interest for members of the Board of Trustees, Administration, and Faculty. Accounting activities will consist primarily of the biweekly payroll paid to school personnel and the maintenance of an accounts payable system to track amounts due to vendors.

A general account will be set up for the administration of funds, and the Treasurer and named Trustees will have check-writing authority. Two signatures will be required on all checks. Each individual with check-writing authority will be covered by a fidelity bond in accordance with the guidelines of the New Hampshire Department of Revenue Administration.

Except for emergency purchases approved by the School's authorized personnel (up to a maximum to be established by the Board of Trustees), all expenditures and contracts will be handled through an encumbrance system of purchase orders for clear tracking of expenditures and status of account balances.

Heartwood Public Charter School will comply with all requirements specified in the law pertaining to reporting requirements (RSA 194-B:10, I-V). This list includes creation of the annual report, annual financial audit produced by an independent certified-accountant, program audit, and participation during the annual school budget process. Heartwood Public

Charter School will also comply with all requirements set forth in Ed 318.07 regarding the contents of its annual report including but not limited to:

- A general progress report
- An assessment and report of how the charter school is meeting its educational and financial goals, as identified in its mission statement,
- Changes, if any, in the organizational structure and make-up of the Board of Trustees,
- A report of enrollment statistics including but not limited to, attendance, per-class enrollment, graduation rates, and any occurrences of withdrawal,
- School calendar,
- Transportation services,
- Financial statement and balance sheet identifying the charter school's assets, liabilities, and fund balances or equities,
- Projections of income and expenses for the upcoming school year

The Board of Trustees will select an independent auditor annually to complete the required annual audit and report. The audit will address accounting practices and review the school's internal controls. The audit will be conducted in accordance with applicable generally accepted accounting principles. It is anticipated that the annual audit will be completed within six months of the close of the fiscal year. The Board of Trustees will review and respond to the audit report, if necessary, and include the audit results in its annual report.

(r) Annual Budget, Including All Sources of Funding

Please see the budget that appears in Appendix B.

The included budget reflects estimated expenses for our planning year, and for the subsequent 5 years of operation.

We have developed a list of our most likely and most important mission-driven plans and costs, recognizing that the budget as represented relies on awarded start-up funding. Our budget includes both expected sources of revenue related to the federal start-up grant, and the state per-pupil allotment based on our projected enrollment. We will start work to raise the additional funds necessary to support the budget once the charter has been granted. During our planning period we will also examine the feasibility of additional revenue sources, which we hope will bring income as well as positive exposure to the school.

As mentioned in the introductory section of this application, we have entered into this project with the full understanding that the state per-pupil allotment is rarely enough to support a New Hampshire independent charter school's full goals and mission and guarantee sustainability. We will offset this gap through a variety of means, including grant monies, fundraising, and potential donations. Strategic partnerships and other fundraising efforts will be very important. Rather than seek out a few high dollar investors, we hope to cultivate many committed

supporters from our community to help support the mission of Heartwood Public Charter School.

From the outset, Heartwood Public Charter School Founders, Trustees, Staff and families will understand the need to supplement the state-provided funds in order to deliver quality education. Contributions by those who join the School community will take many forms—time in the classroom, assistance in various areas dependent on expertise (computer support, construction, etc.), and some parents may consider financial contributions if they are able. All donations will be tax deductible to the extent permitted by law.

Once Heartwood Public Charter School has been established, the Board of Trustees will organize a fundraising committee. This committee’s mission will be to support the school’s economic viability. The committee will focus on securing the support of local, state, and national foundations and charitable organizations, as well as cultivating support from community members and businesses. The unique character of the school and the resource and value it brings to our local community will be highlighted in our fundraising efforts.

(s) School Calendar Arrangement

Heartwood Public Charter School will follow a 180-day school year in accordance with the RSA 194-B:8, III, and expects to follow the calendar of our host district in order to best coordinate transportation services. Any school-specific changes to the schedule will be monitored carefully to ensure that our students meet the required number of attendance hours.

It is expected that days will begin at approximately 8:00am and end at 2:30pm, though some flexibility may be required to meet our host district’s bus route schedule. Should transportation issues result in lost educational hours, we will address this loss and amend our students’ school hours.

(t) Evidence of Accurate Insurance Coverage

Pursuant to RSA 194-B:1, Heartwood Public Charter School will be a public school afforded the same protections as all other public schools under RSA 507(b), which provides for limited general liability for the charter school and its agents. The Board of Trustees will procure, and provide evidence of, adequate insurance coverage as required by the State, including but not limited to general liability for the School.

(u) Consultants

We are fortunate to have already identified and met with several advisors and consultants working with Place-Based Education, school administration, and local citizens and business owners. These professionals have rich experience, are excited about our school and concept, and are willing to share their wisdom and experience as we work to develop our school

program. While place-based learning methods are not a new concept, exciting curriculum and programs in the field are currently emerging. We look forward to consulting and collaborating with many of the field's experts.

Sarah Anderson, is the Field Coordinator at The Cottonwood School of Civics and Science, in Portland, OR. Sarah Anderson, was previously a 7th/8th teacher specializing in language arts and social studies, was originally lured to Oregon by its waterfalls. She spent most of her childhood exploring rivers and forests near her rural Vermont home- experiences which provided inspiration for a passion for nature and all things wild. After graduating with a degree in American Studies from Bard College in New York, Sarah served as an AmeriCorps volunteer for Metro Parks and Greenspaces in Portland. Since then, she has worked as a crew leader at an educational farm in Vermont, a Teacher Naturalist in the California Redwoods and a Middle School Humanities teacher at The Key School in Annapolis, Maryland. Sarah received a Masters of Education from Antioch New England Graduate School, where she specialized in integrated and place-based education. In addition to exploring the local neighborhoods and environs with her zany middle schoolers, Sarah enjoys knitting, hiking, pickling, reading good books, and climbing waterfalls.

Melissa Grella, PhD is the founder and executive director of Taproot Farm & Environmental Education Center. Melissa's life passion is connecting people to nature, sparked from her very first job as an intern with California Audubon. Melissa grew up in Jefferson and immediately left upon graduation to explore, grow, and learn. She returned to the north country on her last semester of graduate school with the Audubon Expedition Institute, a traveling program that changed her life and outlook on how we learn and educate. It was at that time that she completed her thesis, which explored the level of environmental education in 14 middle schools in Coos County. The idea for Taproot came as a result of her research.

Since that time, she has held a variety of positions that include trip leader, naturalist, and environmental educator at various nonprofits, classroom teacher at a public alternative high school program, director of a cross country ski center, director of a town recreation department, nature center director, college adjunct professor, and a founding faculty member and administrator at a private Waldorf school. Melissa's philosophy of education emphasizes developmentally appropriate learning that is holistic, phenomenological, ecological, grounded in place, experiential, and nurtures aesthetic experiences. In the words of David Orr, she believes that "all education is environmental education".

Melissa received her BS in Natural Resources from the University of Maine, an MA in Environmental Education from Lesley University's Audubon Expedition Institute program, and a PhD in Environmental Studies from Antioch University New England with her dissertation titled *Nurturing the Aesthetic: Learning to care for the environment in a Waldorf School*.

When not working on Taproot, Melissa enjoys spending time nordic skiing, gardening, camping, hiking, backpacking, long-distance swimming, biking, paddling, playing the guitar, and reading. She resides in Lancaster with her beloved husband, Kyle, and their velvety, silver cat, Grigio.

David Sobel, MEd received a BA from Williams College and an MEd from Antioch University in New England. He was co-founder of the Harrisville Children’s Center in Harrisville, New Hampshire, and has served as a publicly elected school board member in both Nelson and Harrisville, New Hampshire. He has served as a staff development and science curriculum consultant to schools in New Hampshire and Vermont and has been a guest speaker and workshop leader for a variety of school and environmental organizations. He serves on the editorial board of the Holistic Education Review and is the author of several books and articles on developmental psychology, place-based education and ecoliteracy.

Anne Stires, brings her academic training together with her love of life and the natural world at the school she founded, the Juniper Hill School, in Alna, Maine. There, along with like-minded colleagues, she shares her enthusiasm for learning through the lens of place. The Juniper Hill School’s “place” is her grandmother’s 1761 farm in Alna bordering the Sheepscot River. This farm has served as a consistent refuge and “garden of adventure” throughout Anne’s life. Now, it is where her students begin their immersion in the adventure of learning by studying the natural and human environments around them.

Anne has a bachelor’s degree in Biology and English from Hamilton College in New York and a master’s degree in Education from Antioch University New England. An affinity for nature and environmental education always brought her back to Maine. While pursuing her education, she worked at local marine and environmental stewardship programs: the Darling Marine Center, Chewonki Foundation and Tanglewood Learning Center. Anne also directed a Place-Based Education program for 25 schools on the midcoast region of Maine for the Quebec-Laborador Foundation Marine Program. As a classroom teacher, she taught at Sheepscot Valley Children’s House in Wiscasset and Boothbay Region Elementary School before starting her ideal, hands-on learning “place”: Juniper Hill. Anne is a prolific speaker and advocate on the topic of nature-based education. Most recently, Anne wrote a chapter of the new book Redleaf Press on the topic: "[Nature Preschools and Forest Kindergartens: The Handbook for Outdoor Learning](#)" by David Sobel (with Patti Ensel Bailie, Ken Finch, Erin K. Kenny, and Anne Stires). Juniper Hill School is also featured throughout the book. In addition to being the school founder and director, Anne teaches the Roots class, as well as graduate level courses at Antioch University.

(v) Philosophy of Parent Involvement

We believe that family involvement is essential for Heartwood Public Charter School to thrive, and that our students will be most successful when our teachers and families work together. We see parents/guardians as key participants in the building of the school community and program, and hope that a regular presence of our students’ families will be part of the landscape of Heartwood Public Charter School.

Heartwood Public Charter School will work to accommodate the different needs and situations of families, and will value and celebrate the variety of ways our families will be able to contribute to the education of their children and to our school. Ideally, parents/guardians will

participate in school activities as their schedules allow, and we will strongly encourage them to become involved and volunteer over the course of the school year. These volunteer hours may take many shapes and forms including supporting classroom activities, providing skills or services, organizing or facilitating school events or fundraisers, etc. Parents will also be a valued part of our Board of Trustees (see Governance, Section B) and our fundraising committee, and we consider them to be irreplaceable resources with regards to networking within the community for the success of our Place-based approach.

We also recognize the importance of family involvement in a child's education, and hope to provide workshops and informational sessions on topics of value to our families and the community. Additionally, we hope for the establishment of a parent organization to create an opportunity for support, discussions, problem solving and parent education.

Parents/guardians of students of Heartwood Public Charter School will receive regular reports on their children's academic and emotional growth (see Assessment, Section H). By design parents/guardians become involved and engaged in their children's life at school and their overall education. We will strive to ensure that both parents and their children are empowered to become advocates for their educational experience, and we will always encourage respectful and thoughtful two-way communication. We will offer a variety of means for this communication to take place (e.g. written feedback, surveys, and meetings).

Heartwood Public Charter School will be committed to the education and betterment of everyone in both our school and broader communities. We will seek to bring a variety of educational opportunities to the school, and aim to shape the school as a place where people from within and beyond the school community come together to engage, experience, and grow. Professional and family education will deepen the understanding of Place-Based philosophy, highlight issues faced by our students (e.g., the role of technology, issues of respect of others and self), and will promote our involvement with and growth of our community.

(w) Information Dissemination

Heartwood Public Charter School will employ many forms of outreach to attract and inform potential students and their families of the opportunity the school will provide. Because we will be the first elementary public charter school in the region, and the only Place-Based school in Northern New Hampshire, we will need to educate our community and potential families about not only Place-Based education and our school, but also public charter schools in general. It is extremely important to us that all members of our community are informed about Heartwood Public Charter School, and that the school is accessible to all people. Work in this area will begin as soon as the charter has been granted.

Utilizing literature, informational gatherings, social media, and other marketing platforms, we will introduce the Place-Based method and the Heartwood Public Charter School approach, mission, and goals. Working with community members, we will develop outreach materials and approaches appropriate for various audiences. We plan to advertise at a range of community locations, including doctor's offices, the library, our local food pantry, preschools, with social

service locations, etc. Once the School is in operation, we will offer tours and observation opportunities as well.

We will also create an informative website, among other online tools, to help students and their families learn about and assess the school and make an informed decision before submitting their application materials.

The Board of Trustees will form an enrollment committee and will partner with local service organizations to build our student body. Heartwood Public Charter School will establish relationships with members of the local School District as well as other districts, and with potential feeder schools (including but not limited to private pre-k/kindergarten programs in the state). We will do everything we can to recruit students without bias.

Once approved, Heartwood Public Charter School will hold community outreach events in Lancaster, NH and the surrounding communities. At these events we will be introducing families to the charter school model as well as the innovative approach that we will offer.

(x) A Global Hold-Harmless Clause

In accordance with RSA 194-B: 3, II(x), Heartwood Public Charter School, its successors and assigns, covenants and agrees at all times to indemnify and hold harmless any school district which sends its students to the charter school, and their school boards, officers, Trustees, agents, employees, all funding districts and sources, and their successors and assigns, (the "Indemnified Parties") from any and all claims, demands actions and causes of action, whether in law or in equity, and all damages, costs, losses, and expenses, including but not limited to reasonable attorneys' fees and legal costs, for any action or inaction of the charter school, its Board of Trustees, Head of Schools, officers, employees, agents, representatives, contractors, guests and invitees, or pupils. The School shall have no obligation to hold harmless the Indemnified Parties for any claims, damages, losses, or expenses resulting from the Indemnified Parties' own acts or omissions.

(y) Severability Provisions & Statement of Assurance

If any part of the charter contract is determined to be invalid or illegal by a court of competent jurisdiction, such invalidation or illegality shall not affect the remaining portions of the charter contract, which shall remain in full force and effect. Any provision of the charter school contract found by competent authority to be contrary to applicable law, rule, or regulation shall not be enforceable.

(z) Provision for Dissolution of the Charter

If Heartwood Public Charter School ceases operation, the Board of Trustees shall consult with an attorney and the Department of Education to assure that contractual and financial

obligations are met. Upon the dissolution of the School, the assets remaining after the payment of all its liabilities, and the return of any loaned items to rightful owners, shall be distributed to such organization or organizations operated exclusively for charitable or educational purposes that qualify as an exempt organization within the meaning of 501(c)(3) of the Internal Revenue code of 1986, or any corresponding section of any future federal tax code, or shall be distributed to the federal government, or to state or local government, for a public educational purpose.

(aa) Information Related to Conversion of a Public School

Not Applicable

(bb) Cessation of School

In the event that Heartwood Public Charter School shall have cause to cease operation, the Head of School will work with the Board of Trustees to develop a student transfer process and advise all parents/guardians, Staff and Faculty of the process to be followed. To complete each student's personal file, parents/guardians shall be asked to provide a statement of intent regarding their children's education, moving forward.

Heartwood Public Charter School will obtain parent/guardian permission for release of information in order to notify the new schools of the impending transfers. Heartwood Public Charter School Staff, Faculty and Board of Trustees will make every effort to be available for consultation, sharing students' portfolios, individualized learning plans and other relevant materials with the receiving school.

Each family will also receive notice by mail, in a timely fashion, advising them of the dissolution of the School and the plan for student transition. Heartwood Public Charter School will also help guide families toward options that may best match their needs and abilities academically, and if appropriate, geographically. And of course the School will ensure that the receiving schools have appropriate information to facilitate the students' transitions.

(cc) Proposed Contracts with Local Schools

Not Applicable

(dd) Proposed Accountability Plan

Heartwood Public Charter School will provide the New Hampshire State Department of Education with reports on our programs and progress annually. Utilizing a variety of assessment tools and data collected from our students, Faculty/Staff and parents/guardians, we will share information about our educational impact, parental involvement, outreach methodology and

an overall analysis of our goals. In addition, our annual reports will inform the Department about our student enrollment, financial operations and governance.

This reporting will address the following questions:

1. Is the School making progress toward achieving our Mission?
2. Is the School responsibly using public funds?
3. Is the School promoting student attainment of expected knowledge and skills?
4. Is the School sustainable?

Our accountability plan will be fully developed prior to the date of opening.

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Appendix A: Founding Board of Trustees Biographies

Ann Auger grew up just a few miles outside of Fryeburg, Maine. After graduating from Fryeburg Academy, she attended Plymouth State University, where she graduated Summa Cum Laude with her B.S. in Early Childhood Studies in 2010. During her time at PSU she served as the President of Kappa Delta Pi Honor Society, the Vice President of the Early Childhood Club, and received the award for Most Outstanding Early Childhood Studies Major.

Ann graduated from Champlain College in 2016 with her M.Ed in Early Childhood Education, and Certificate in Administration. She brings a wealth of experience and knowledge from both the public and private sectors of education. Ann has taught public school kindergarten, Head Start, as well as, public and private preschool. Most recently, she was the Executive Director and Lead Preschool Teacher at a small Non-Profit Preschool in Bartlett, NH.

Ann has lived in the North Country for the last 12 years. Currently she resides in Berlin, NH with her husband and daughter. She enjoys hiking, cross-country skiing, camping, reading by the woodstove, and spending time with her family.

In 2016 she began her own business, ECE Visions, and works as an Early Childhood Consultant. Ann holds several contracts in the North Country, most notably as the Early Childhood Initiative Coordinator for the Coös County Director Network, and as the North Country Coach for the State Early Learning Alliance of New Hampshire. She is passionate about her work and is committed to increasing the quality of early care and education across Coös County.

Bethany Bond is a mother, educator, farmer, and artist living in the Northeast Kingdom of Vermont. She earned a BA in Studio Art & Anthropology from the University of Vermont in 2002, and an MFA in Photography at the Savannah College of Art & Design in 2005, graduating Summa Cum Laude.

After grad school, she lived in the Burlington, VT area, working as a graphic, web, and exhibit designer. She was then offered a teaching position at a small university in the northern VT mountains, and was able to return to her roots living in the country. She currently teaches both analogue and digital photography, digital media, and web design at Johnson State College, and has taught at the Community College of Vermont for the past 9 years. She also teaches online at Southern New Hampshire University, and was invited to design curriculum with SNHU for their emerging Photography program in 2016.

Beyond her role as an educator, Bethany has been working with plants and farming for the last ten years. She has raised dairy goats, chickens, and honeybees, and for three growing seasons was an owner/farmer at Blooming Field Farm in the North Country. This small, diverse, vegetable farm's mission was to provide healthy and affordable food for the local community. In this role she managed a Community Supported Agriculture program and contributed food and time to The Lunchbox, a Green Mountain Farm to Table market program which provides free healthy meals for local children. She also managed the farm office at Zack Woods Herb

Farm for 2 years, and currently manages the Vermont Herb Growers Cooperative, a farming coop founded to provide a single, reliable source of high-quality, organically certified herbs from small-scale diversified farms in Vermont.

Bethany also uses her digital and artistic skills to create affordable websites, photography, and marketing materials for farmers and herbalists, and her work has been published in newspapers, magazines, and books. She loves both working with the land and using technology to create efficient systems and beautiful designs, and has found that working with both students and farmers for the past decade has taught her much about working with the earth and people. This, along with being a parent, has nurtured her already strong tendency toward idealism, and has fueled her passion to be a good steward of the earth and to contribute towards positive and sustainable growth and change.

Lyn Schmucker decided in the second grade that she wanted to be a teacher, when she became a student of Mrs. Alice Wilkinson—a teacher that recognized, encouraged and valued her skills and talents. She began working with children as a caregiver at the age of 12 and never stopped. After earning her BS in Early Childhood Special Education from the University of Maine at Farmington, while working part time in a child care program and fulfilling several internships, her work with children continued. She was sequentially employed as a nanny, substitute teacher, and paraeducator before moving to the Boston area where she took a position as a preschool teacher and day care coordinator, and was later promoted to Assistant Director.

While in Boston, Lyn began a Master's Degree in Early Childhood Development and Education at Wheelock College, which she completed less than a month before the birth of her first child. As part of her degree she worked as an intern in a K/1 classroom in Hanover, NH, under the guidance of the skilled Chantel Orlen. After six years at home with her children, she formally returned to early education as the Director and lead teacher of Sunnybrook Montessori School in Lancaster, NH, where she attended preschool herself, and continues to learn from and love her work with young children and their families.

Upon returning to her childhood home in Maidstone, VT to raise her family, Lyn dreamed of starting a charter school that would incorporate nature, freedom of choice, a strong social/emotional curriculum, self-reliance, taking initiative, and developing responsibility. When invited to join the founding committee of Heartwood Public Charter School, she discovered a group of likeminded educators wanting an alternate public choice for local families. Lyn believes that Heartwood will provide the opportunities for children to learn about themselves, while learning about the world around them, that will guide them to be mindful, conscientious community members.

Courtney Vashaw, M.Ed., CAGS, is a mother, educator, activist, artist, and lifelong resident of the North Country of NH. She received her undergraduate degrees in Sociology and English, with a focus on Educational Policy and Law and disparity in educational opportunities from the University of NH. Upon graduation, she continued at UNH and went on to pursue her M.Ed. in Secondary English Teaching. After eight years teaching English and Social Sciences in public and

private schools around the North Country, she pursued and earned her CAGS in Curriculum Administration/Principal Certification at Plymouth State University. She spent the following seven years as an assistant principal, principal, data and grants coordinator at Profile School where she focused on school culture development, social capital development, and personalized learning.

While taking time off from working full-time to recover from cancer, she was able to enroll her preschool son at the Sunnybrook Montessori School, thus learning about the beauty of Montessori education. This unexpected gift has helped shift her perspective on education.

She is proud to be the acting president of the Sunnybrook Montessori Board. Additionally, she is an active participant and Board member of the Upstage Players in Littleton, NH, works as a freelance writer and editor, and does community development work with the town of Whitefield. She has recently designed and taught curriculum for at-risk youth, served on countless panels about education in the North Country, and is currently teaching Middle School Humanities at the Waterford School in Waterford, VT.

Stacey Zemla, is a mother, an artist, a dreamer and a native of Lancaster, who recently returned back home to raise her family and is happy to call Coös county her home.

Prior to settling down in her hometown, she studied fine arts at the Maine College of Art, where she earned her BFA in Graphic Design. After college, Stacey served as an AmeriCorps volunteer with University of VT extension, where she spent two years designing and implementing science and technology curriculum for youth-at-risk in the Northeast Kingdom of VT; it was during this time that she realized her love for teaching and decided to go back to school.

In 2005, Stacey enrolled in the Visual Arts Education program at Tufts University, where she earned her MAT and fulfilled her practicum in Boston area schools. Over the years, Stacey has taught and worked with youth in a range of ages and a variety of contexts: she's been a coach, a counselor, a teacher, a nanny and an instructor. Stacey holds certifications to teach art in both MA and NH, and she fondly remembers teaching art to middle school students for several years.

Stacey is grateful to be staying at home to care for her young children. She serves on the Sunnybrook Montessori School board, where her eldest child is currently enrolled. She makes time to practice her art whenever she can and works as a freelance graphic designer.

Appendix B: Expenditure Budget

Heartwood Public Charter School Projected Enrollment								
Grade								
	Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5		
K	0	12	12	12	12	12	12	
1	0	12	12	12	12	12	12	
2	0	12	12	12	12	12	12	
3	0	12	12	12	12	12	12	
4	0	0	12	12	12	12	12	
5	0	0	12	12	12	12	12	
6	0	0	0	12	12	12	12	
7							12	
8							12	
Total Projected Enrollment		48	72	84	108	108	108	
Teaching Staff								
	Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5		
Teachers	3	3	4	5	6	6	6	
Aides	3	3	4	4	5	5	5	
Total Projected Teachers	6	6	8	9	11	11	11	
Income								
	Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5		
State Revenue - Per Pupil Income	\$0.00	\$307,200.00	\$472,800.00	\$555,600.00	\$721,200.00	\$721,200.00	\$721,200.00	
Projected FRL Population 10%	\$0.00	\$5,100.00	\$6,800.00	\$10,200.00	\$11,900.00	\$15,300.00	\$15,300.00	
Projected Federal Startup Funds \$450,000	\$250,000.00	\$100,000.00	\$100,000.00	\$0.00	\$0.00	\$0.00	\$0.00	
Fundraising	\$20,000.00	\$20,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	
Total Projected Income	\$270,000.00	\$432,300.00	\$594,600.00	\$580,800.00	\$748,100.00	\$751,500.00	\$751,500.00	
Expenses								
FUNC	Object	INSTRUCTION GENERAL	Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
1000	110	Salaries - Teachers	\$7,500.00	\$114,000.00	\$152,000.00	\$190,000.00	\$228,000.00	\$228,000.00
	111	Salaries - Teachers Assistants (\$12/hr)	\$3,750.00	\$45,360.00	\$60,480.00	\$60,480.00	\$75,600.00	\$75,600.00
	110	Salaries, Learning Coordinator	\$18,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00
	200	Teachers/Aids benefits	\$0.00	\$28,800.00	\$38,400.00	\$43,200.00	\$52,800.00	\$52,800.00
	240	Staff Development	\$5,000.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
2410	200	FICA - Teachers	\$900.00	\$15,052.80	\$20,070.40	\$23,494.40	\$28,512.00	\$28,512.00
	260	Workers Compensation	\$405.00	\$6,773.76	\$9,031.68	\$10,572.48	\$12,830.40	\$12,830.40
	320	Consultants/Contracted Support	\$20,000.00	\$15,000.00	\$10,000.00	\$8,000.00	\$8,000.00	\$8,000.00
	580	Instructional Travel	\$1,000.00	\$1,800.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
	610	Supplies and Instructional Materials	\$10,000.00	\$15,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00
	641	Textbooks, Other Media & Core Instruction	\$2,000.00	\$5,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00
	734	Computer, Software, Licenses	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
	730	Office Furniture & Equipment	\$4,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
	734	Computers and Communication Equipment	\$7,000.00	\$8,000.00	\$9,000.00	\$10,000.00	\$12,000.00	\$12,000.00
		SUBTOTAL	\$81,555.00	\$300,286.56	\$379,482.08	\$426,246.88	\$498,242.40	\$498,242.40
2130	HEATH SERVICES		Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
2134	610	Supplies, Health	\$400.00	\$450.00	\$500.00	\$550.00	\$650.00	\$650.00
		SUBTOTAL	\$400.00	\$450.00	\$500.00	\$550.00	\$650.00	\$650.00
2222	LIBRARY & MEDIA SERVICES		Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
2222	641	Books, Library	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
		SUBTOTAL	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
2225	PURCHASED PROFESSIONAL/TECHNICAL SERVICES		Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
2225	110	Contract Services, IT	\$1,000.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
2225	610	Computer Supplies	\$2,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
2225	731	Computer Equipment	\$3,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
		SUBTOTAL	\$6,000.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
2410	ADMINISTRATION		Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
2410	110	School Director Salary	\$37,500.00	\$50,000.00	\$52,000.00	\$54,000.00	\$56,000.00	\$58,000.00
2410	210	Director Benefits	\$3,600.00	\$4,800.00	\$4,800.00	\$4,800.00	\$4,800.00	\$4,800.00
2410	220	FICA - School Director	\$3,288.00	\$4,384.00	\$4,544.00	\$4,700.00	\$4,856.00	\$5,012.00
2318	330	Legal Services	\$2,500.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
2317	331	Auditors	\$0.00	\$3,000.00	\$3,500.00	\$4,000.00	\$5,000.00	\$5,000.00
2319	332	Accountant	\$500.00	\$550.00	\$600.00	\$650.00	\$700.00	\$700.00
2410	534	Postage	\$500.00	\$500.00	\$600.00	\$700.00	\$900.00	\$900.00
2410	540	Advertising & Program Material Dissemination	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
2410	550	Printing	\$600.00	\$600.00	\$500.00	\$500.00	\$500.00	\$500.00
2410	340	Network Cabling & Set-up, Security	\$2,000.00	\$2,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
2410	739	Other Equipment	\$2,500.00	\$2,500.00	\$700.00	\$700.00	\$700.00	\$700.00
2319	500	Other Purchased Services:Background Checks	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
		SUBTOTAL	\$54,688.00	\$72,034.00	\$71,944.00	\$75,450.00	\$79,100.00	\$81,100.00
2600	OPERATIONAL AND MAINTENANCE OF FACILITIES		Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
2620	423	Trash removal, Ploving, Grounds, Etc.	\$1,000.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
2620	430	Cleaning Service	\$0.00	\$1,200.00	\$1,320.00	\$1,440.00	\$1,560.00	\$1,680.00
2620	440	Rental (for a reasonable period of time in preparation for the school's opening)	\$15,000.00	\$17,000.00	\$19,000.00	\$21,000.00	\$25,000.00	\$25,000.00
2620	450	Building Repairs and Renovations (For necessary maintenance, repair, or upkeep of buildings and equipment that neither add to the permanent value of the property nor appreciably prolong its life, but merely keep it in an efficient operating condition)	\$15,000.00	\$4,000.00	\$5,000.00	\$4,000.00	\$5,000.00	\$1,000.00
	460	Classroom Furniture	\$10,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
	620	Heat	\$3,000.00	\$6,000.00	\$6,500.00	\$7,000.00	\$7,500.00	\$7,500.00
	622	Electricity	\$600.00	\$1,200.00	\$1,440.00	\$1,800.00	\$2,400.00	\$2,400.00
2700	520	Property Liability Insurance	\$0.00	\$10,000.00	\$11,000.00	\$12,000.00	\$14,000.00	\$14,000.00
	530	Phone & Internet	\$360.00	\$720.00	\$720.00	\$720.00	\$720.00	\$720.00
		SUBTOTAL	\$44,960.00	\$46,620.00	\$51,480.00	\$54,460.00	\$62,680.00	\$58,800.00
Total Projected Income			Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
Total Projected Income			\$270,000.00	\$432,300.00	\$594,600.00	\$580,800.00	\$748,100.00	\$751,500.00
Total Projected Expenses			Pre-Operations	Year 1	Year 2	Year 3	Year 4	Year 5
Total Projected Expenses			\$197,601.00	\$431,890.56	\$515,906.08	\$569,206.88	\$653,172.40	\$651,292.40
Total Left			\$72,397.00	\$409.44	\$78,693.92	\$11,593.12	\$94,927.60	\$100,207.60
Total Left w/ balance transferred from year before			\$72,806.44	\$151,500.36	\$163,093.48	\$258,021.08	\$358,228.68	

Appendix C: Sample Head of School Description

Summary: Opening in the fall of 2019 with a Kindergarten, mixed grade classroom with 1st and 2nd grade, and a 3rd grade classroom, Heartwood Public Charter School is a publicly-funded Place-based Charter elementary school in Lancaster, New Hampshire. In the years to come our school will expand until we reach full operation, serving up to 108 students grades K through 8.

Location: Lancaster is a rural community in the Northern White Mountains of NH and considered the gateway to the Great North Woods Region of the state. Lancaster is known for its outdoor recreation (snowmobiling, hiking, and cross country skiing), and the natural beauty of the region, as well as its quaint Main Street and up-and-coming small businesses. Lancaster is now also home to the region's first alternative education model charter school! With so much excitement and anticipation, Heartwood Public Charter School looks forward to tapping into the area's rich and diverse cultural framework as we build our student population and establish strong community connections.

Position Opening/Description:

Heartwood Public Charter School is seeking a Head of School to serve as its philosophical and instructional leader. The ideal candidate will have a passionate commitment to providing place-based education hold a minimum a Bachelor's degree and have experience as a leader in an established school. Additionally, our ideal candidate will demonstrate an understanding of charter school law.

Knowledge of:

- Alternative educational frameworks in private and public school settings
- Charter school law is preferred
- Place-based education experience

Essential Functions:

- Provide Leadership to our school community
- Nurture a school culture consistent with our Place/nature based pedagogy
- Staff supervision and budget management

Working Conditions/Environment:

- Office and classroom environments both indoors and outdoors
- School yard and playgrounds
- Our community and natural spaces

Title: Head of School

Immediate Supervisor: Heartwood Public Charter School Board of Trustees

Additional Qualifications:

- Strong advocate for alternative public education.
- Outdoor experience or willingness to work in an outdoor classroom.
- Administrator/Principal certification and/or experience is highly desirable
- Strong leadership skills
- Experience/Involvement in creating an organization and monitoring sustainability
- Proven experience with staff supervision and budget management
- Highly self-motivated
- Strong written and verbal communication skills

Appendix D: Friends of the Charter

We have identified the following friends of Heartwood Public Charter School who have agreed to volunteer or advise in their areas of expertise. These people are volunteers, won't cost the school money, and will pass background checks if necessary. We are also very fortunate to have several educators among our Founding Trustees. As we work to get established, we will continue to formalize relationships with professionals and institutions in our community, in hopes that these partnerships will provide meaningful contributions to our students, educators and curriculum.

Melissa Grella, the founder and director of Taproot Farm & Environmental Education Center.

Peter Powell, a local realtor, who is invested in revitalizing our community.

Marissa Rexford, an advocate for varied educational opportunities and parent of a potential student.

Jay Riff, a local lawyer.

Zeanny Egea, a Spanish language teacher.

Herb Randall, an advocate for varied educational opportunities.

Christine Forest, a special education teacher.

Steve Zemla, an architectural engineer, who can assist us with plans for our future facilities.

Susan Vigne, an educator and an advocate for varied educational opportunities

Gerry Tobin, a retired Montessori teacher and potential board member.

David Sobel, an inspirational educator and author who has advised us.

Sarah Anderson, is another inspirational educator and author who has provided us with guidance.

Anne Stires, is the director and founder of the Juniper Hill School and possible consultant for incorporating risk into our curriculum.

Alfie-Eden Kerr, Program Administrator at Mountain Village Charter School in Plymouth, NH.

Lyndon State College, a potential student teacher collaborating resource.

Plymouth State College, a potential student teacher collaborating resource.

Taproot Farm & Environmental Education Center, a like minded organization interested in collaboration.

Juniper Hill School, a Place-based private school to connect with and learn from.

Southwest Charter School, a Place-based charter school to connect with and learn from.

Antioch University, a resource for Place-based teacher and staff training.

Fiddleheads Charter School, a Place-based charter school to connect with and learn from.

Jaime Schmidt and family, advocates for varied educational opportunities and a potential Heartwood family.

Heartwood Public Charter School

Charter School Approval: State Board Criteria for Review.

The State Board shall review the application for completeness to ensure that each of the statutory requirements of RSA 194-B:3, II has been met.

	Element	Comments
	Ability to File	This requirement appears to be satisfied.
	Name of School	This requirement appears to be satisfied.
a	Educational mission.	This requirement appears to be satisfied.
b	Governance and organizational structure and plan.	This requirement appears to be satisfied.
c	Methods by which trustees and their terms are determined.	This requirement is likely not satisfied.
d	General description and proposed or potential location of facilities to be used, if such information is available.	This requirement appears to be satisfied.
e	Maximum number, grade or age levels, and, as applicable, other information about pupils to be served.	This requirement appears to be satisfied.
f	Curriculum.	This requirement appears to be satisfied.
g	Academic and other learning goals and objectives.	This requirement appears to be satisfied.
h	Achievement tests to be used to measure pupil academic and other goal achievement including, but not limited to, objective and age-appropriate measures of literacy and numeracy skills, including spelling, reading, expository writing, history, geography, science, and mathematics.	This requirement does not appear to be satisfied.
i	For schools offering high school grade levels, graduation requirements sufficient to ensure that the school has provided an adequate education for its pupils.	N/A
j	Staffing overview, including qualifications sought for professionals and paraprofessionals.	This requirement does not appear to be satisfied.
k	Personnel compensation plan, including provisions for leaves and other benefits, if any.	This requirement is likely satisfied.
l	Pupil transportation plan, including reasonable provision from the charter school's own resources for transportation of pupils residing outside the district in which the charter school is physically located.	This requirement is likely satisfied.
m	Statement of assurances related to nondiscrimination according to relevant state and federal laws.	This requirement appears to be satisfied.
n	Method of coordinating with a pupil's local education agency (LEA) responsible for matters pertaining to any required special education programs or services including method of compliance with all federal and state laws pertaining to educationally disabled pupils.	This requirement does not appear to be satisfied.
o	Admission procedures.	This requirement appears to be satisfied.

Heartwood Public Charter School

p	Philosophy of pupil governance and discipline, and age-appropriate due process procedures to be used for disciplinary matters including suspension and expulsion.	This requirement does not appear to be satisfied.
q	Method of administering fiscal accounts and reporting, including a provision requiring fiscal audits and reports performed by an independent certified public accountant.	This requirement is only partially satisfied.
r	Annual budget, including all sources of funding.	This requirement does not appear to be satisfied.
s	School calendar arrangement and the number and duration of days pupils are to be served pursuant to RSA 194-B:8, III.	This requirement appears to be satisfied.
t	Provision for providing continuing evidence of adequate insurance coverage.	This requirement appears to be satisfied.
u	Identity of consultants to be used for various services, if known.	This requirement does not appear to be satisfied.
v	Philosophy of parent involvement and related plans and procedures.	This requirement appears to be satisfied.
w	A plan to develop and disseminate information to assist parents and pupils with decision-making about their choice of school.	This requirement appears to be satisfied.
x	A global hold-harmless clause which states: The charter school, its successors and assigns, covenants and agrees at all times to indemnify and hold harmless the (school district), any other school district which sends its students to the charter school, and their school boards, officers, directors, agents, employees, all funding districts and sources, and their successors and assigns, (the "indemnified parties") from any and all claims, demands, actions and causes of action, whether in law or in equity, and all damages, costs, losses, and expenses, including but not limited to reasonable attorneys' fees and legal costs, for any action or inaction of the charter school, its board, officers, employees, agents, representatives, contractors, guests and invitees, or pupils.	This requirement appears to be satisfied.
y	Severability provisions and statement of assurance that any provision of the charter school contract found by competent authority to be contrary to applicable law, rule, or regulation shall not be enforceable.	This requirement appears to be satisfied.
z	Provision for dissolution of the charter school including disposition of its assets or amendment of its program plan.	This requirement appears to be satisfied.
aa	In the case of the conversion of a public school to a charter conversion school, provision for alternative arrangements for pupils who choose not to attend and teachers who choose not to teach at the charter school.	N/A
bb	A plan for the education of the school's pupils	This requirement appears to be satisfied.

Heartwood Public Charter School

	after the charter school may cease operation.	
cc	<p>In addition to an application, each charter school applicant, in consultation with the local school board, shall prepare a proposed contract. The contract shall include, but shall not be limited to, the following elements:</p> <ul style="list-style-type: none"> (1) Purpose. (2) Written policies. (3) Authority of trustees. (4) Reporting, fiscal accounting and fiscal audits to be performed by a certified public accountant. (5) Contract agreements. (6) Indemnification. (7) Secular orientation. (8) Non-discrimination. (9) Health and safety. (10) Enrollment. (11) Attendance. (12) Availability of services. (13) Assessment of pupils. (14) Tuition and funding. (15) Property ownership. (16) Records. (17) Severability in accordance with subparagraph (y) above. (18) Assignment of contract. (19) Insurance. (20) Revocation. (21) Amendment. (22) Renewal. (23) Entire agreement. (24) Location, which shall be identified prior to submission to the legislative body. 	N/A
dd	Proposed accountability plan	This requirement appears to be satisfied.

To be filled out by Reviewer – not by Applicant

**NEW HAMPSHIRE DEPARTMENT OF EDUCATION
CHARTER SCHOOL EVALUATION SCORING GUIDE FOR
PROPOSED CHARTER SCHOOL APPLICATIONS**

Application requirements: No greater than 50 pages (excluding cover letter and appendices) and at least 11-point font. Applications must include a table of contents with corresponding page numbers.

The evaluation scoring guide provides the application reviewers with a means of determining the quality of the charter school application. It may also be used by charter school developers to guide writing their application, along with the Charter School Application Guidelines used for the legal review conducted by an Attorney. Application reviewers shall objectively review the application using the following scoring criteria, based on a 100-point scale:

NAME OF PROPOSED CHARTER SCHOOL:						
Topic - Mission and vision statements						
The mission statement clearly defines the core purpose and key values of the school in a few concise sentences. A school’s mission statement provides the foundation for the entire application. The vision statement describes what the school hopes to be in the future. The mission statement is how the school intends to make that vision a reality. The mission and vision statements should be meaningful, clear, and easy to understand.						
Criterion #1	The mission and vision statements express a clear, focused and compelling purpose for the school that is attainable and supports student achievement.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	10	Rating	
Topic – Governance and organizational structure						
Governance is extremely important to the success of a charter school. Oftentimes, the founding members will transition into the school’s governing board. The application should describe the process to appoint/elect the initial board members, the decision-making process, term limits, and an organizational plan that outlines roles and responsibilities of the board members and school administration in order to successfully implement the school’s program.						
Criterion #2	The founding members have a wide-range of experience and qualifications to implement and oversee a successful public charter school. There is a clear description of the policies and procedures by which the governing board will operate, as well as their roles and responsibilities.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	10	Rating	

Topic – General description of school facilities and students to be served

One of the major tasks to opening a public charter school is finding a suitable facility. It is not required to have a formal facility agreement during the application process; however, viable options should be explained to include a target location, reasonable plan for space requirements and assurance that the school facility will be adequate for the projected student enrollment and future growth.

Criterion #3 A description of the school facility is provided and includes sufficient detail to indicate that priorities will focus on a facility that is appropriate based on the target location, students to be served, and future growth.

Comments:

Supporting factors can be found on page(s):			Maximum Score	8	Rating	
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Topic – Curriculum

A charter school application should include a description of the school’s educational program, student performance standards and curriculum that meets or exceeds content area standards that will enable each student to achieve academic success. Current research for selecting a particular curriculum should be included in the application.

Criterion #4 A clearly defined, research-based curriculum is being proposed with the potential to increase student achievement, and that is aligned with the New Hampshire Curriculum Frameworks/Common Core State Standards.

Comments:

Supporting factors can be found on page(s):			Maximum Score	8	Rating	
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Topic – Academic and other learning goals and objectives/Assessment

Academic goals should be clear, specific and measureable to reflect the school’s mission and vision statements. The application should give a description of well-defined and realistic strategies for improving student achievement and closing achievement gaps.

Criterion #5 In the application, there are clearly defined high and attainable educational goals. There are strategies and achievement tests in place that will be used to measure each student’s progress toward meeting the goals of the school.

Comments:

Supporting factors can be found on page(s):			Maximum Score	8	Rating	
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Topic – Staffing overview and benefits compensation plan, if any						
The application should include an overview of school staffing to include qualifications, job responsibilities and benefits to be offered for particular positions, i.e., administration, teachers, aides.						
Criterion #6	Adequate description is provided on staff member qualifications and job responsibilities. A benefits compensation plan is outlined in the application.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	8	Rating	
Topic – Pupil transportation plan						
Description of the school’s transportation plan to include reasonable provision from the charter’s own resources for transportation of students residing outside the district where the charter school is located.						
Criterion #7	Student transportation needs are considered and adequate plans are in place to address those needs. In the application, there is acceptance that the charter school will take responsibility for any additional costs surrounding transportation.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	8	Rating	
Topic – Serving students with special needs						
A plan must be in place to identify and meet the needs of all students enrolled at the school. A description should be provided on how the school will: (1) ensure students with disabilities will have an equal opportunity to attend the charter school; (2) work collaboratively with the resident school district and parents/guardians to determine the appropriate placement for each student with a disability based on the student’s needs; and, (3) ensure appropriate services will be provided for students enrolled in the charter school.						
Criterion #8	Strategies are in place to meet individual student needs and to ensure that the appropriate services will be provided in compliance with state and federal requirements.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	8	Rating	

Topic – Admission procedures						
Description of a student recruiting plan, including strategies for reaching the school’s targeted population. Description of the school’s registration policies and procedures including enrollment timeline and lottery process.						
Criterion #9	The school’s enrollment policies and procedures are clearly described. The enrollment and lottery processes are fair and equitable and reflects compliance with applicable laws.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	8	Rating	
Topic – Student discipline, suspension and expulsion						
Description of the school’s proposed policies and due process procedures for student discipline, suspension, or expulsion that meets applicable law.						
Criterion # 10	Adequate description is given of the school’s proposed policies and due process procedures to address discipline, suspension, and expulsion.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	8	Rating	
Topic – Budget and financial management						
A five-year operating budget, that includes the start-up budget, to contain revenue projections, expenses and anticipated fund balances based upon the projected student enrollment. A detailed budget narrative and fundraising plan should also be provided. Description of who will manage the school finances and how financial resources will be properly managed.						
Criterion # 11	The budget is based on realistic revenue and expenses for a five-year period; the budget narrative is based on valid assumptions. There is a clear description of how the school finances will be managed along with an internal process to safeguard finances.					
Comments:						
Supporting factors can be found on page(s):			Maximum Score	8	Rating	

Topic – Parent and community involvement/Dissemination of information

The application should demonstrate the expectations and plans for ongoing parent and community involvement. Communication and networking with the entire community and surrounding school districts is a priority in developing the school and beyond. Charter school developers need to provide adequate notice to the community about the possibility of a new charter school. ****Letters of support, from business and community leaders, elected officials, and/or local school districts, are strongly encouraged****

Criterion #12	The school's purpose and expectations for parent and community involvement are clearly defined in the application. A plan is in place to develop and disseminate material to the community about the implementation and action steps of the school.
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Comments:

Supporting factors can be found on page(s):			Maximum Score	8	Rating	
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SCORE TOTAL:					
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OVERALL ASSESSMENT - This section gives the application reviewers an opportunity to provide general feedback about the overall impression of the charter school application:

Reviewed by:		Date:	
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Heartwood Public Charter School

(1) MISSION AND VISION STATEMENTS

Pages: 1-5 (intro, a)

Rating: 7/10

A charter school is supposed to have a 'clear, focused, and compelling purpose' for its existence. The stated goal of 'creating an additional public school option' for children who live in a particular area doesn't meet this standard. Nor does the stated goal of 'preventing our youth from leaving the state'.

The description of the benefits of Place-Based Education (PBE) are too abstract and generic to easily see how they differ from the benefits of any competently-delivered public education. But this seems to be a problem with the application process itself, which would, I think, be better if it encouraged applicants to focus on what is *different* about what they're trying to do. Otherwise, it often ends up sounding like the school's purpose is to 'do what other schools already do, except, you know, better'.

The closest they come to mentioning an interesting difference is saying that they will have 'mixed-grade classrooms'. But the more they say about that, the more it sounds like the *real* goal here is to have a Montessori school that will be paid for by tax dollars.

(2) GOVERNANCE AND ORGANIZATIONAL STRUCTURE

Pages: 5-8 (b,c)

Rating: 10/10

This seems pretty generic.

(3) GENERAL DESCRIPTION OF SCHOOL FACILITIES AND STUDENTS TO BE SERVED

Pages: 8-11 (d,e)

Rating: 5/8

They say they've found a location that meets their needs, but the only needs they mention are that 8000 square feet should be enough to accommodate 90 students, plus staff and administration. It would be nice to have more details.

They will have 6 classrooms for grades K-8. They have 'strategically devised a system that alternates between single grade and mixed grade classrooms to best accommodate for the developmental needs of our students'. The classrooms are supposed to be 'student self-directed', which makes it sound like they're not really classrooms at all, but something more like communal spaces. Again, more details would be nice.

They expect to get kids who have been at Montessori preschools and kindergartens, which raises the question: Why wouldn't the parents of those kids just continue with Montessori? Because, they say, 'only a small percentage of New Hampshire families have the resources necessary to send their children to private Montessori programs'. In addition, they say that they will have a Learning Coordinator to ensure that students from traditional public schools are 'helped into the Montessori approach'.

These are some of the things that make me suspect that the unstated purpose of the school is to basically offer a Montessori education that parents won't have to pay for.

(4) CURRICULUM

Pages: 11-17 (f)

Rating: 6/8

They begin by saying:

The overarching philosophy of Heartwood Public Charter School is to create a community of learners that are deeply involved in developing a sense of place.

When I think about the things that we want, and need, children to be learning in school, I'm not sure whether 'developing a sense of place' would even be on the list, let alone given star billing.

Later, they seem to be saying that they would like to use local concerns as a way to give specific grounding to general topics like mathematics and history. Which is a nice idea... but one that public schools have been doing since the middle of the last century, when I attended them. So I'm not sure what to make of this emphasis on 'place'.

They reinforce the notion that their 'classrooms' will not really be classrooms at all, but more like common study areas. ('Teachers do not stand at the front of the class expecting that everyone will be or can be learning the same thing at the same time.') Which raises the question of why they are dividing things into 'classrooms', multi-grade or otherwise, in the first place. What purpose does it serve?

One might think at first that the purpose is to facilitate 'older children helping to teach the younger children', but if that's the case, why segregate students so that they will be with students who are only a *little* older or younger? A 7th grader could get a lot from helping a 2nd grader, but their classroom structure seems to prohibit this.

The idea of an 'emergent curriculum' is interesting, but raises a question: What if a child's interests lead him in directions that diverge from the wishes of the Department of Education? Do you respect the child's wishes, or the Department's?

There are lots of fashionable pedagogical terms -- 'inquiry', 'constructivist', 'project based' -- being tossed around, but very little explanation of how they will use these ideas differently from the other schools that claim to use them... which is basically *all* schools.

(5) ACADEMIC AND OTHER LEARNING GOALS AND OBJECTIVE/ASSESSMENTS

Pages: 17-24 (g,h,i)

Rating: 6/8

They alternate between completely generic ('students will read at grade level' under 'Language Arts') and bafflingly generic ('students will achieve a developmentally appropriate comprehension of time and its passage' under 'History').

Interestingly, students in upper grades 'will study tectonic plate movement through experimentation'. Strictly speaking, I'm not even sure this is possible (unless what they mean is 'modeling' instead of 'experimentation'). I'd be curious to hear more about it, though!

Students will be required to learn a foreign language. That's a good idea. But if every child is learning the language that interests him, at his own pace, it's not clear how this is going to work, since opportunities for conversation in foreign languages would be very limited.

On the whole, there's a lot about goals here, and very little about assessment, apart from the standard 'we will comply with the law'. For a goal like 'Students will be exposed to music from various cultures and time periods', it's not clear that any assessment is needed, beyond establishing that a student was present during some kind of presentation. At the other extreme, for a goal like 'Students will develop a developmentally appropriate core understanding of the relationships between time, people, and history', exactly how would you assess something like that?

In short, it feels like there's a lot of hand-waving going on here.

(6) STAFFING OVERVIEW AND BENEFITS COMPENSATION PLAN

Pages: 24-27 (j,k)

Rating: 8/8

Summary: 'We will follow the law.'

(7) PUPIL TRANSPORTATION PLAN

Pages: 27-28 (l)

Rating: 8/8

Summary: 'We will follow the law.'

Other than that, they don't really have a plan, other than to be 'centrally located', to make it easy to cooperate with other school districts that are already moving kids around in buses.

(8) SERVING STUDENTS WITH SPECIAL NEEDS

Pages: 28-29 (m,n)

Rating: 8/8

Summary: 'We will follow the law.'

One thing I do wonder about is: Their emphasis on 'nature-based education' presumably means kids will be out in the wilderness a significant portion of the time. How does this mesh with the admission of students with severe mobility problems? Suppose a kid in a wheelchair wins the admission lottery, and his 'class' is going to climb a hill so they can camp at the top. Does he stay behind? Or does the rest of the class have to camp somewhere accessible to him?

(9) ADMISSION PROCEDURES

Pages: 29-30 (o)

Rating: 8/8

Pretty generic description of an admission process, except for this:

Children of the Founders of the Heartwood Public Charter School will receive priority for Placement, within a reasonable ratio of the student body, as a means of recognition of their sweat equity in establishing the School.

Is 'equity', sweat or otherwise, something you can have in a *public* charter school?

(10) STUDENT DISCIPLINE, SUSPENSION, AND EXPULSION

Pages: 31 (p)

Rating: 6/8

Summary: 'We're thinking about this. Mostly, we're hoping that the students will be so well-behaved that no problems will occur.'

(11) BUDGET AND FINANCIAL MANAGEMENT

Pages: 31-33 (q,r)

Rating: n/a

I'm not really qualified to judge any of this. If there is a default rating, that's what should be applied here.

As with other sections, they mostly seem to be saying they will follow the law.

(12) PARENT AND COMMUNITY INVOLVEMENT/DISSEMINATION OF INFORMATION

Pages: 34-36 (v,w)

Rating: 8/8

Pretty standard.

Interestingly, they will 'request' of parents that 'they be ambassadors for [the school] and that they volunteer approximately 40 hours of labor over the course of the school year'. It doesn't say what will happen to parents who demur, or fail to follow through.

OVERALL ASSESSMENT

My overall impression is that they want to create a Montessori school, at state expense, but without calling it that.

For what it's worth, there are a lot of typographical errors in the application. None are severe enough to keep the reader from understanding what is being said, but if you're promising to create a school that upholds high academic standards, you ought to be eating your own dog food, so to speak.

To be filled out by Reviewer – not by Applicant

NEW HAMPSHIRE DEPARTMENT OF EDUCATION
 CHARTER SCHOOL EVALUATION SCORING GUIDE FOR
 PROPOSED CHARTER SCHOOL APPLICATIONS

Application requirements: No greater than 50 pages (excluding cover letter and appendices) and at least 11-point font. Applications must include a table of contents with corresponding page numbers.

The evaluation scoring guide provides the application reviewers with a means of determining the quality of the charter school application. It may also be used by charter school developers to guide writing their application, along with the Charter School Application Guidelines used for the legal review conducted by an Attorney. Application reviewers shall objectively review the application using the following scoring criteria, based on a 100-point scale:

NAME OF PROPOSED CHARTER SCHOOL:						
Heartwood Public Charter School						
Topic - Mission and vision statements						
The mission statement clearly defines the core purpose and key values of the school in a few concise sentences. A school's mission statement provides the foundation for the entire application. The vision statement describes what the school hopes to be in the future. The mission statement is how the school intends to make that vision a reality. The mission and vision statements should be meaningful, clear, and easy to understand.						
Criterion #1	The mission and vision statements express a clear, focused and compelling purpose for the school that is attainable and supports student achievement.					
Comments: clear, focused, compelling, attainable - good/great						
Supporting factors can be found on page(s):	1-4		Maximum Score	10	Rating	10
Topic – Governance and organizational structure						
Governance is extremely important to the success of a charter school. Oftentimes, the founding members will transition into the school's governing board. The application should describe the process to appoint/elect the initial board members, the decision-making process, term limits, and an organizational plan that outlines roles and responsibilities of the board members and school administration in order to successfully implement the school's program.						
Criterion #2	The founding members have a wide-range of experience and qualifications to implement and oversee a successful public charter school. There is a clear description of the policies and procedures by which the governing board will operate, as well as their roles and responsibilities.					
Comments: well-qualified board clearly articulated principles of governance - good/great						
Supporting factors can be found on page(s):	5-6, 39		Maximum Score	10	Rating	10

Topic – General description of school facilities and students to be served

One of the major tasks to opening a public charter school is finding a suitable facility. It is not required to have a formal facility agreement during the application process; however, viable options should be explained to include a target location, reasonable plan for space requirements and assurance that the school facility will be adequate for the projected student enrollment and future growth.

Criterion #3 A description of the school facility is provided and includes sufficient detail to indicate that priorities will focus on a facility that is appropriate based on the target location, students to be served, and future growth.

Comments: very limited info here on actual proposed location. needs are clearly expressed, ... - okay

Supporting factors can be found on page(s):	8-10		Maximum Score	8	Rating	6
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Topic – Curriculum

A charter school application should include a description of the school's educational program, student performance standards and curriculum that meets or exceeds content area standards that will enable each student to achieve academic success. Current research for selecting a particular curriculum should be included in the application.

Criterion #4 A clearly defined, research-based curriculum is being proposed with the potential to increase student achievement, and that is aligned with the New Hampshire Curriculum Frameworks/Common Core State Standards.

Comments: child-centered, active learning multi-age, constructivist. (I like it but don't see ref's to NH/CCSS) - good

Supporting factors can be found on page(s):	11-17		Maximum Score	8	Rating	7/8
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Topic – Academic and other learning goals and objectives/Assessment

Academic goals should be clear, specific and measurable to reflect the school's mission and vision statements. The application should give a description of well-defined and realistic strategies for improving student achievement and closing achievement gaps.

Criterion #5 In the application, there are clearly defined high and attainable educational goals. There are strategies and achievement tests in place that will be used to measure each student's progress toward meeting the goals of the school.

Comments: (NH/CCSS referenced here) clearly defined goals/outcomes assessment section is brief - good

Supporting factors can be found on page(s):	17-		Maximum Score	8	Rating	7/8
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Topic – Staffing overview and benefits compensation plan, if any						
The application should include an overview of school staffing to include qualifications, job responsibilities and benefits to be offered for particular positions, i.e., administration, teachers, aides.						
Criterion #6	Adequate description is provided on staff member qualifications and job responsibilities. A benefits compensation plan is outlined in the application.					
Comments:	clear / concise - good					
Supporting factors can be found on page(s):	24-27		Maximum Score	8	Rating	7
Topic – Pupil transportation plan						
Description of the school's transportation plan to include reasonable provision from the charter's own resources for transportation of students residing outside the district where the charter school is located.						
Criterion #7	Student transportation needs are considered and adequate plans are in place to address those needs. In the application, there is acceptance that the charter school will take responsibility for any additional costs surrounding transportation.					
Comments:	In process of working this out ... ok.					
Supporting factors can be found on page(s):	27		Maximum Score	8	Rating	6
Topic – Serving students with special needs						
A plan must be in place to identify and meet the needs of all students enrolled at the school. A description should be provided on how the school will: (1) ensure students with disabilities will have an equal opportunity to attend the charter school; (2) work collaboratively with the resident school district and parents/guardians to determine the appropriate placement for each student with a disability based on the student's needs; and, (3) ensure appropriate services will be provided for students enrolled in the charter school.						
Criterion #8	Strategies are in place to meet individual student needs and to ensure that the appropriate services will be provided in compliance with state and federal requirements.					
Comments:	brief, dep references statutes - okay / good					
Supporting factors can be found on page(s):	28-29		Maximum Score	8	Rating	7

20

Topic – Admission procedures
 Description of a student recruiting plan, including strategies for reaching the school's targeted population. Description of the school's registration policies and procedures including enrollment timeline and lottery process.

Criterion #9 The school's enrollment policies and procedures are clearly described. The enrollment and lottery processes are fair and equitable and reflects compliance with applicable laws.

Comments: *ok - pretty typical*

Supporting factors can be found on page(s):	<i>29</i>		Maximum Score	8	Rating	<i>8</i>
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Topic – Student discipline, suspension and expulsion
 Description of the school's proposed policies and due process procedures for student discipline, suspension, or expulsion that meets applicable law.

Criterion # 10 Adequate description is given of the school's proposed policies and due process procedures to address discipline, suspension, and expulsion.

Comments: *will be developed by board / faculty - great*

Supporting factors can be found on page(s):	<i>31-</i>		Maximum Score	8	Rating	<i>8</i>
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Topic – Budget and financial management
 A five-year operating budget, that includes the start-up budget, to contain revenue projections, expenses and anticipated fund balances based upon the projected student enrollment. A detailed budget narrative and fundraising plan should also be provided. Description of who will manage the school finances and how financial resources will be properly managed.

Criterion # 11 The budget is based on realistic revenue and expenses for a five-year period; the budget narrative is based on valid assumptions. There is a clear description of how the school finances will be managed along with an internal process to safeguard finances.

Comments: *looks good*

Supporting factors can be found on page(s):	<i>32, 43</i>		Maximum Score	8	Rating	<i>8</i>
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24

Topic – Parent and community involvement/Dissemination of information

The application should demonstrate the expectations and plans for ongoing parent and community involvement. Communication and networking with the entire community and surrounding school districts is a priority in developing the school and beyond. Charter school developers need to provide adequate notice to the community about the possibility of a new charter school. ****Letters of support, from business and community leaders, elected officials, and/or local school districts, are strongly encouraged****

Criterion #12	The school's purpose and expectations for parent and community involvement are clearly defined in the application. A plan is in place to develop and disseminate material to the community about the implementation and action steps of the school.
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Comments: very community - focused
not terribly spec.

Supporting factors can be found on page(s):	34-36	Maximum Score	8	Rating	8
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SCORE TOTAL: 93

OVERALL ASSESSMENT - This section gives the application reviewers an opportunity to provide general feedback about the overall impression of the charter school application:

Very impressed by founders, philosophy, and curriculum.
logistics ~~was~~ are in-development and are pretty "by the books." I think this is fine - I'm confident the founders can get it done.
I would like to know more about the proposed location.
overall, very good.

Reviewed by:

Date:

2/12/2018

Updated: April 23, 2012



**Bernstein, Shur,
Sawyer & Nelson, P.A.**
Jefferson Mill Building
670 North Commercial Street
Suite 108
PO Box 1120
Manchester, NH 03105-1120

Memorandum

T (603) 623 - 8700
F (603) 623 - 7775

To: Lori Kincaid

From: Talesha L. Saint-Marc

Date: December 29, 2017

Re: Legal Review of the Charter School Application of the Heartwood Public Charter School

1. Application filing formalities (Ed. 318.08(c) – (g)): The application cover sheet does not include an alternate telephone number, which is required by Ed. 318.08 (f)(6). Additionally, although the cover letter includes the projected student enrollment broken out for 5 years, see Ed. 318.08(f)(10), there appears to be a discrepancy. In 2019, the school will enroll K, 1-2 grades, and in 2020, it would enroll 4th grade. Third grade is omitted from the table. Otherwise, the applicant satisfied Ed. 318.08(c) – (g) as the applicant provided: 1- a table of contents and properly numbered pages; and 2- the required certification of authority.

2. Ability to file: This requirement appears to be satisfied. The Heartwood Foundation is a New Hampshire non-profit corporation, organized for charitable and educational purposes. Its principal purpose is “[t]o support increased educational opportunities for all students of the North Country” The corporation, which was organized in May 2017, is in good standing.

3. Name of school: This requirement appears to be satisfied. RSA 194-B:5 requires that the school’s name include the words “chartered public school.” Although the school’s name does not contain the exact phrase referenced in the statute, the name, “Heartwood Public Charter School,” substantially complies with the statute’s requirement.

4. Ed 318.08(i): This requirement may not be satisfied as the application does not include clear expectations of the total number of teachers and the average teacher/student ratio for the first five years of the school.

5. Ed. 318.08(j)(1) – (7):

- i. This subsection is satisfied.
- ii. This subsection is not satisfied, as the applicant failed to provide a policy setting forth the guidelines for the optional contracting of services or a statement as to why this option is declined by the school.
- iii. This subsection is satisfied.
- iv. This subsection is satisfied.
- v. This subsection is likely not applicable.
- vi. This subsection is satisfied.
- vii. This subsection is satisfied.

RSA 194-B:3, II (a) – (bb) and (dd)

6. Educational mission (§ a): This requirement appears to be satisfied. The school's mission is clear and focused, and it is supported by a detailed vision, which presents attainable goals for student achievement.

7. Governance and organizational structure and plan (§ b): This requirement appears to be satisfied. The school will be governed by a Board of Trustees, and the Board will work with the Head of School to carry out the school's mission.

8. Methods by which trustees and their terms are determined (§ c): This is likely not satisfied. Although the application identifies the initial trustees, the method for selecting replacement and/or new trustees, and how their terms are determined, it does not address the length of terms beyond the first year.

9. General description and proposed or potential location of facilities to be used (§ d): This requirement appears to be satisfied. Although the applicant has not found a location for the school, the application specifically describes the type of facility necessary to carry out the school's mission and goals.

10. Maximum number, grade or age levels (§ e): This requirement appears to be satisfied, as it identifies the maximum number of children, the grade levels to be served, and the anticipated classroom composition.

11. Curriculum that meets or exceeds state standards in the subject areas offered (§ f): This requirement appears to be satisfied. The application provides a description of the Place-Based curriculum the school intends to adopt, and notes how it will achieve its

goals in each area. The curriculum is consistent with the school's mission and appears to align with New Hampshire's educational standards.

12. Academic and other learning goals and objectives (§ g): This requirement appears to be satisfied. The application proposes specific measurable goals that reflect the school's mission and vision.

13. Achievement tests (§ h): This requirement may not be satisfied. Although the application states that students will be assessed, with the exception of statewide testing, the application does not identify how it will actually assess students.

14. Graduation requirements (§ i): This section is not applicable as the school serves elementary and middle school students.

15. Staffing overview (§ j): This requirement is not satisfied. The statute requires a staffing overview, including qualifications for professionals and paraprofessionals. The application does not provide qualifications for assistant teachers and the learning coordinator. Finally, although the statute does not require the applicant to list qualifications for volunteers, the application would be stronger if the applicant identified the areas of expertise of the individuals listed in the Friends of the Charter section.

16. Personnel compensation plan (§ k): This requirement may be satisfied. The applicant should clarify whether teachers receive five personal days in addition to ten PTO days. Additionally, the section entitled "Other Benefits" is vague, however, the vagueness will likely resolve during the planning year.

17. Pupil transportation plan (§ l): This requirement may be satisfied. The statute requires that the application include "reasonable provision from the . . . school's own resources for transportation of pupils residing outside the district[.]" Although the application recognizes that the school may attract students from different districts, the application states only that the school "will make every effort to support families as the [sic] explore transportation options . . ." Application at p. 28. This language is likely not sufficient to satisfy the statute's mandate that the school utilize its own resources for the transport of out-of-district students.

18. Statement of assurances related to nondiscrimination (§ m): This requirement appears to be satisfied; however, the school should include the following protected categories in its statement of nondiscrimination: citizenship and genetic information.

19. Method of coordinating with a pupil's local education agency (LEA) responsible for matters pertaining to any required special education programs or services (§ n): This requirement does not appear to be satisfied. For the most part, the applicant merely recites relevant statutory language. The application does not describe: (1) the method of coordinating with an LEA to provide required special education programs; (2) how the school will work collaboratively with parents to determine the appropriate

placement for students; or (3) how the school will ensure appropriate services will be provided for students enrolled in the school.

20. Admission procedures (§ o): This requirement appears to be satisfied. The application describes the school's enrollment policies and procedures, and the lottery process is fair and equitable. One minor concern with this section is that the school requires prospective students and their families to attend at least one informational meeting. See Application at pp. 29-30. Because the school is an open enrollment charter school, it likely cannot deny admission merely because a student and his/her parent or guardian did not attend an information section. Rather than stating families are "required" to attend, the school should modify the language to "strongly encouraged," or language to that effect. Another minor concern is that although the application provides that children of founders will receive priority for admission, there is no established cap. Rather, the application merely states that these students will be admitted within a "reasonable ratio of the student body." Clarification on this would be helpful.

21. Philosophy of pupil governance and discipline (§ p): This requirement is not satisfied. The application states that governance and disciplinary procedures will be developed; however, the application does not provide an adequate description of the school's proposed disciplinary policies, or its due process procedures to address discipline, suspension, and expulsion.

22. Method of administering fiscal accounts and reporting (§ q): This requirement is only partially satisfied. The school is prepared to fulfill all reporting requirements, and therefore, this portion of the statute is satisfied. The application, however, does not satisfy the remaining requirements of this section of the statute. Although there is a general broad description of how the school's finances will be managed, there is no mention of the appropriate checks and balances regarding fiscal accounts.

23. Annual budget (§ r): This requirement is not satisfied. Although this section meets the statutory requirement by providing a 5-year budget, the budget does not appear to be based on realistic revenue and expenses. For instance, the budget only includes revenue from a projected federal startup grant and the state per pupil contribution. There is no line item for projected parent/community contributions. Next, the budget appears to have underfunded or unaccounted for items. For instance, the school will have a learning coordinator, but there is no line item for this individual's salary. To the extent that the learning coordinator is included in the teachers or support staff line item, it appears that the expense is underfunded. (Note: The application notes the budget is in Appendix C, but it is in Appendix B.)

24. School calendar (§ s): This requirement appears to be satisfied. The school intends to provide a 180-day school year. The school intends to start at 8:00, but notes that transportation issues with the district's buses may require flexibility.

25. Provision for providing continuing evidence of adequate insurance coverage (§ t): This requirement appears to be satisfied.

26. Identity of consultants to be used for various services (§ u): This requirement is not satisfied. The application states that “a variety of contract support services” will be utilized, Application at p. 34, but the services are not identified and there is no description of the qualifications or certifications of unidentified consultants.

27. Philosophy of parent involvement and related plans and procedures (§ v): This requirement appears to be satisfied. The school’s purpose and expectations for parent and community involvement is clearly defined. One concern, however, is that parents will be required to provide 40 volunteer hours to the school. The school may need to be flexible on this requirement, as high volunteer requirements may be unrealistic for working parents.

28. A plan to develop and disseminate information (§ w): This requirement appears to be satisfied. The school has a comprehensive plan to disseminate material to the community about the school and its method of educating children.

29. A global hold-harmless clause (§ x): This requirement appears to be satisfied; however, this section should include “directors” in the list of indemnified parties.

30. Severability provisions (§ y): This requirement appears to be satisfied. The application acknowledges that if provisions of the charter agreement are determined to be unenforceable or invalid, such provisions are severed from the remainder of the agreement and will not be enforced.

31. Provision for dissolution of the chartered public school (§ z): This requirement appears to be satisfied. After the satisfaction of contractual and financial obligations, the application provides for the return of all borrowed assets and the donation of any remaining assets.

32. Section (aa) is not applicable.

33. A plan for the education of the school’s pupils after the chartered public school may cease operation (§ bb): This requirement appears to be satisfied. The application identifies the steps the school will take to assist in the smooth transition of its students to other schools.

34. Section (cc) is not applicable.

35. Outline of proposed accountability plan (§ dd): This requirement appears to be satisfied. The application details the expectations for evaluating the school’s program and notes that a full accountability plan will be developed prior to the date of opening.

November 7, 2017

Hello,

I am writing to you today to show my support for Heartwood Public Charter School. My name is Jaime Schmidt, a mother of elementary school aged children and a member of the community here in Lancaster, New Hampshire. I believe Heartwood would incredibly benefit Lancaster and its surrounding communities and am writing to express my full support. I have worked closely with a majority of the foundation members for many years as I am an active member in my community. I completely support these members as they have the passion to bring children and community focused curriculum to a public charter school.

Heartwood Public Charter School will greatly benefit the North Country with its place-based learning model. The North Country is made up of many small, community oriented towns, but those community oriented people in those towns are aging. We need our children to be aware of how to interact with people in the community, with people in different communities and how to take care of and utilize their surrounding environment to continue to grow and preserve it.

My other hope in starting Heartwood is that it will help to keep our class sizes smaller. We have unfortunately lost a couple public schools here in the North Country making it harder to keep the small class sizes that people seem to desire. My children's classes continue to add more children to their already large class size every year limiting the time the teachers can have with them.

Heartwood will create opportunity for families to send their children to an alternative type of school that may work better for their children's learning style. I know from my own two children, not all children learn identically or at the same pace. More educational options will help reach all children, so we can make a better effort to get children, who may not do as well in a typical public school environment, become excited about learning. These teachers and parents, that are part of the Heartwood Foundation, know this and have greatly researched and studied this. Ann Auger and Lyn Schmucker have offered my husband and I plenty of literature to read over the years and have helped my husband and I understand our children's development and have provided strategies for us to work with our children that have helped immensely. The Heartwood Foundation members know, through many years of experience, children need to play outside, socialize, and experience the world by asking questions and are giving our community children this opportunity through the Heartwood Public Charter School.

I eagerly anticipate the opening of Heartwood as it will greatly benefit our community and help children and their families to become more active in their communities and to spark interest in education. I hope you thoughtfully consider supporting Heartwood as I do.

With deepest regards,

A handwritten signature in cursive script, appearing to read 'Jaime Schmidt', with a long horizontal flourish extending to the right.

Jaime Schmidt and Family

February 17, 2018

To Whom It May Concern:

My name is Marissa Rexford and my husband and I are residents of Lancaster, NH. We are both working professionals in the healthcare field, as well as parents to our almost five-year-old son. Education plays a crucial role in the development of children and for us it hits close to home with the upbringing of our one and only child. Please allow this letter to serve as a show of my full support for The Heartwood Foundation.

Our son will be entering his Kindergarten year this fall and presumably 1st grade in the fall of 2019. He is currently enrolled in a private Montessori School Program where he is receiving fantastic building blocks that are helping bring him to the entrance of his primary schooling. There is a certain fear in our hearts about the traditional public school curriculum that everyone is taught because it isn't personalized education. You sit in the classroom and read from textbooks or listen to lectures; you don't get out and learn. The Heartwood Foundation's vision for the Heartwood Public Charter School to be a place-based model of education and showing students how to get personal and actually connect with their community, and beyond is so important in today's society. The gap of dis-connect with society has done nothing but increase over the last few decades, as my eyes see it day to day. Children go in to school and come out of school not knowing how to integrate into society or with each other for that matter; whether they are heading to college, to their first job or back to live at their parent's house; there's a certain disconnect and it makes you wonder where the void is. I feel that school takes a key position in this. Yes, it also has to do with home-life, but school makes up a good portion of a child's day and what they're exposed to.

A vitally important aspect of the proposed Heartwood Foundation's education model is experiential learning. Instead of just learning everything from a textbook, to actually have a hands-on opportunity to learn on-site is invaluable. Giving the students some control in how and what they learn, I believe, will help them foster new ideas and reach new heights of learning that they never thought possible. This model of teaching will result in confident, enriched, determined individuals who want to be a part of their society and community and who will be equipped with the ability and desire to give back.

The thought of the prospect of the Heartwood Public Charter School being open in the fall of 2019 gives me great hope, joy and excitement when I think about our son and his future. I truly hope the decision is made to grant The Heartwood Foundation the tools it needs to move forward with this project. I'm extremely confident in its founders as the group is made up of a very unique handful of women who have an enormous amount of knowledge, education, compassion and talent dispersed between them which, in turn, makes for a very strong and solid basis for this ever-important project.

Thank you for your consideration of my support for The Heartwood Foundation (The Heartwood Public Charter School).

Respectfully,

Marissa Rexford

Readopt with amendment Ed 1128, effective 3-24-17 (Doc #12141), to read as follows:

PART Ed 1128 SPECIAL EDUCATION AID

Ed 1128.01 Definitions.

(a) “Special education aid” means financial assistance for special education costs distributed under RSA 186-C:18, III to a responsible school district.

(b) “Contributed funds” means funds contributed to defray the cost of a special education and by any party or agency other than the LEA.

(c) “Direct costs” means those costs which can be identified specifically with the provision of special education and related services, as included in a child’s IEP.

(d) “Emergency assistance” means funds appropriated for special education costs as provided in 186-C:18, III.

(e) “Indirect costs” means those costs which have been incurred for common or joint objectives and which cannot be identified with the provision of special education and related services as included in a particular child’s IEP.

(f) “Responsible school district” means a school district which is responsible for a child with a disability for whom the costs of special education exceed the formula established by RSA 186-C:18, III.

Ed 1128.02 Reimbursement. A responsible school district shall be reimbursed for special education aid if the requirements of this section are met:

(a) The special education costs for which the district is seeking payment shall exceed the statutory threshold established by RSA 186-C:18, III;

(b) Each child with a disability for whom the responsible district is seeking special education aid reimbursement shall be:

(1) Enrolled in an approved special education program that:

a. Provides FAPE; and

b. Meets the requirements established in:

1. Ed 1128.02;
2. Ed 1128.03;
3. Ed 1128.05; or
4. Ed 1117; or

(2) In a placement for which a hearing officer, pursuant to Ed 1123, orders the responsible school district to reimburse parents in accordance with 34 CFR 300.148;

(c) The responsible school district shall report evaluation, placement, and eligible cost data for a child with a disability for special education aid in accordance with Ed 1128.07; and

(d) The information entered into NHSEIS under Ed 1128.04 shall be [~~verified~~] **certified** on the “Superintendent’s Verification of SPECIAL EDUCATION AID” form completed, signed and dated by an individual authorized to make application for special education aid on behalf of the responsible school district. ***The form shall certify the following information: “During the Fiscal Year, the total expenses entered above were incurred by the school district for services provided to the Special Education students who were eligible for Special Education Aid. The cost to the district for fulfilling each student’s Individual Education Program (IEP) during Fiscal Year has exceeded 3-1/2 times the estimated state average expenditure per pupil for the school year preceding the year of distribution. The district is only requesting reimbursement for costs paid by local funds. No reimbursement is being requested for personnel or services paid by IDEA federal funds. Detailed accounting will be maintained by the school district and will include the invoices, as well as checks and payment vouchers on which the payments were made.”*** The [~~verification~~] **certification** form shall be submitted to the department no later than 4:30 p.m. on August 15 or, if August 15 falls on a weekend, no later than 4:30 p.m. on the next business day.

Ed 1128.03 Limitations on Reimbursement. A responsible school district shall:

- (a) Be eligible for reimbursement only for those direct costs which are included in the IEP of a child with a disability, and which qualify as special education and related services; and
- (b) Not be reimbursed for:
 - (1) Costs which exceed rates established by Ed 1129 for tuition, instruction, room and board, and related services; or
 - (2) Indirect costs.

Ed 1128.04 Application for Special Education Aid. To apply for the special education aid, a responsible school district shall:

- (a) Enter the following program information into the NHSEIS database system ***for the current reporting year***:
 - (1) Instructional costs;
 - (2) Room and board costs;
 - (3) Tuition costs;
 - (4) Costs for related services, for which the department has approved a rate under Ed 1129, including:
 - a. Counseling, both individual and group;
 - b. Occupational therapy, both individual and group;
 - c. Physical therapy, both individual and group; and
 - d. Speech pathology, both individual and group;
 - (5) Costs for related services for which the department had not approved a rate under Ed 1129, provided such services are included in the IEP of the child with a disability;
 - (6) Transportation costs;

- (7) Exceptional costs, including diagnostic costs for services defined under Ed 1107; and
 - (8) Any contributed funds; and
- (b) Send supporting documentation to the department for:
- (1) Transportation costs under (a)(6) above in excess of \$5,000;
 - (2) Exceptional costs under (a)(7);
 - (3) Instruction, room and board, and tuition costs from out-of-state facilities, if applicable;
 - (4) Instructional costs from public programs; and
 - (5) All related services when no rate is set.

Ed 1128.05 Calculation of Cost of Special Education. The cost of special education for a particular child with a disability shall equal the costs entered into NHSEIS under Ed 1128.04(a)(1) – (7), less contributed funds entered into NHSEIS under Ed 1128.04(a)(8).

Ed 1128.06 Emergency Assistance.

- (a) Emergency assistance shall be available pursuant to RSA 186-C 18, III.
- (b) When a responsible school district applies for emergency assistance, it shall:
 - (1) Enter information into NHSEIS as provided in Ed 1128.04(a); and
 - (2) Supply supporting documentation as provided in Ed 1128.04(b).
- (c) An application for emergency assistance for the school year in progress shall be submitted to the department by a responsible school district no later than 4:30 p.m. on the first Friday of May.
- (d) On applications for emergency assistance, a responsible school district shall document that:
 - (1) The district could not have anticipated the need of this child with a disability for a comprehensive special educational program;
 - (2) The district is experiencing a financial crisis and could not, through line item budget transfers or other financial management techniques, appropriate the funds necessary to provide this child with a disability with FAPE; and
 - (3) There are no other sources of financial support available to assist the district with the funding of this placement.
- (e) If a responsible school district receives emergency assistance funds for certain children with a disability, it shall not receive special education for these same children.

Ed 1128.07 Proration. Pursuant to RSA 186-C:18, IX, when a child with a disability transfers from one responsible school district to another during the school year, the following shall apply to the proration of special education aid and emergency assistance among responsible districts:

- (a) Each district shall be reimbursed for only each school day on which the child was a resident of the district; and

(b) Each district shall file separate application forms.

Ed 1128.08 State Aid For In-District Programs.

(a) For the purposes of this section, “supplemental costs” means the difference between the district’s average per pupil cost and the cost of education for the child with a disability.

(b) A liable school district shall be reimbursed for the development or maintenance of an in-district special education program, under this paragraph, if the following requirements are met:

(1) The costs for which the district is seeking reimbursement shall establish or support a school district-based program for a child with disabilities who was in an out-of-district placement in the previous school year as required in RSA 186-C:18, XI;

(2) The in-district program shall be approved pursuant to the provisions of Ed 1126.02;

(3) The child for whom the district is seeking reimbursement shall have been placed in the in-district program pursuant to the provisions of Ed 1111.02;

(4) The child for whom the district shall be seeking reimbursement *shall be* ~~[is]~~ receiving a FAPE;

(5) The liable school district shall report eligible cost data for a child with a disability pursuant to Ed 1128.04, (a), (1) through (5) and in accordance with Ed 1128.07, if applicable;

(6) The information entered into NHSEIS under Ed 1128.04 shall be ~~[verified]~~ *certified* on the “Superintendent’s Verification of SPECIAL EDUCATION AID” form signed and dated by an individual authorized to make application for state aid on behalf of the liable school district;

(7) The verification form shall be submitted to the department no later than 4:30 p.m. on August 15 or, if August 15 falls on a weekend, no later than 4:30 p.m. on the next business day; and

(8) Payment to the school district, under this paragraph, shall be on or before January 1.

(c) Limitations on reimbursement shall be as follows:

(1) A liable school district shall be eligible for reimbursement under this paragraph only for children with disabilities whose placement has changed from an out-of-district placement to an in-district program developed or maintained by the responsible school district, and only for:

a. The direct costs that are included in the IEP in accordance with (b) (5) above; and

b. The direct costs that qualify as special education and related services, that allow the student with disabilities to be educated in the local school district program;

(2) A liable school district shall not be reimbursed for:

a. Costs which exceed rates established by Ed 1129 for tuition, instruction, and related services;

b. Indirect costs; or

c. Contributed funds;

(3) The reimbursement amount the school district shall receive shall be the greater of:

a. The supplemental costs incurred by the school district to educate the child in the in-district program; or

b. The amount the school district received for the child in the last year of the out-of-district program, prior to placing the student in the in-district program, under this paragraph; and

(4) The reimbursement under (c) (3) above shall be made for 3 years, as follows:

a. Reimbursement under (c) (3) a. above the supplemental amount for all 3 years; or

b. Reimbursement under (c) (3) b. above:

1. In year one, 70 percent of the total amount in (c) (3) b. above;

2. In year 2, 50 percent of the total amount in (c) (3) b. above; and,

3. In year 3, 30 percent of the total amount in (c) (3) above.

(d) Funds distributed under RSA 186-C:18, XI shall be:

(1) Made in accordance with the provisions of (b) above;

(2) Prorated in accordance with RSA 186-C:18, III (a), if insufficient funds are appropriated; and

(3) Used to assist school districts in meeting special education aid costs in their special education programs to the extent that they are not used to fund the program set out in RSA 186-C:18, XI.

RULE	STATUTE
Ed 1128.01-1128.07	RSA 186-C:18
Ed 1128.08	RSA 186-C:18, XI(b)

Readopt with amendment Ed 403.03, effective 6-15-13 (Doc. #10360), to read as follows:

Ed 403.03 Annual Reports.

(a) Each nonpublic school shall ~~file~~ **complete** a Form “A3N – General Statistics of Nonpublic Schools” revised 5/2018, as described in this section with statistics as of the last day of school of the year of filing. The form shall be ~~filed with the department~~ **completed online** at <https://my.doe.nh.gov/myNHDOE/Login/Login.aspx> by July 15

Edit: A date or edition for the form is required by RSA 541-A:19-b. Also, include the form name in quotes.

~~New Hampshire Department of Education
Division of Program Support, Bureau of Data Management
101 Pleasant Street
Concord NH 03301-3860~~

(b) On Form “A3N – General Statistics of Nonpublic Schools” revised 5/2018, the nonpublic school shall provide the following information for each nonpublic school:

- (1) The name of the nonpublic school, if not provided on the form by the department;
- (2) The name, telephone number, and e-mail address of the contact person;
- ~~(3) The administrator’s signature;~~
- (43) The number of students by grade registered during the year;
- ~~(54) Student progress table by grade;~~
- (65) The total number of high school graduates by gender; and
- ~~(76) The number of dropouts from grades 9-12.~~

Unclear: The version of the form available to the public on the Dept. website does not require these.

(c) Each nonpublic school shall file a Form A12C as described in this section with statistics as of October 1 of the reporting year. The form shall be ~~filed with the department~~ **completed online** at <https://my.doe.nh.gov/myNHDOE/Login/Login.aspx> by October 15 of each year. ~~to the following~~ address:

~~New Hampshire Department of Education
Division of Program Support, Bureau of Data Management
101 Pleasant Street
Concord NH 03301-3860~~

Edit: date or edition, and title in quotes

(d) On Form A12C the nonpublic school shall provide the following information for each nonpublic school:

- (1) The name of the nonpublic school;
- (2) The name and telephone number of the contact person;
- ~~(3) The administrator’s signature;~~
- (43) The telephone number and ~~fax number~~ of the school;

Unclear: This is required by the form.

Edit: space

- (54) The e-mail address and website address of the school, if applicable; and
- (65) The number of students enrolled on October 1 by grade divided into male and female.

(e) The nonpublic school shall provide the number of full following staff categories divided into male and female:

Unclear: The version of the form available to the public on the Dept. website does not mention these.

- (1) Preschool teachers;
- (2) Kindergarten teachers;
- (3) Regular education classroom teachers;
- (4) Special education classroom teachers;
- (5) Regular instructional aides; and
- (6) Special education aides.

Unclear: The version of the form available to the public on the Dept. website does not require all of these, and it has no requirement for splitting the categories into male and female.

Readopt with amendment Ed 405.01, effective 6-15-13 (Doc. #10360), to read as follows:

Ed 405.01 Identification of Recognized Agencies for Program Approval.

(a) ~~The New England Association of Schools and Colleges (NEASC) shall be the recognized accrediting agency.~~

— (b) ~~Other~~ Accrediting agencies that want to be considered for recognition shall be identified in one of the following ways:

- (1) An accrediting agency may directly request recognition;
- (2) A school seeking program approval may request recognition of an accrediting agency; or
- (3) A member of the NSAC may request recognition of an accrediting agency.

(eb) Applicants seeking approval from the state board as an agency recognized by the department for program approval shall:

(1) **Make application** for recognition to the **state** department **with** a letter of intent and the following:

Edit: "Apply"

Edit: "by submitting"

Edit: Delete.

- a. A brief history of the agency;
- b. A statement as to the scope of operations, indicating whether it is a regional, national or state agency;
- c. A definition of the purpose, character and scope of its activities as described in its charter or by-laws and written standards for accreditation or recognition;
- d. The agency's organization including its governance and administrative structures, a description of its ownership and control and type of legal organization, including but not limited to tax-exempt or proprietary;
- e. Financial information including its fee structure, current operating statement and most recent independent certified opinion audit;

Edit: comma

Edit: "the"

Edit: comma

f. A description of procedures used in the evaluation of schools by the agency including documentation that a school shall be required to provide, ~~whether there is~~ **which shall include** a visit to verify the written documentation, and who participates in school visitations;

g. Definitions of levels of recognition or accreditation status and written procedures for providing due process in granting, denying, continuing or revoking accredited or recognized status; and

Edit: comma

h. Frequency of evaluation of schools for continued accreditation or recognition; and

(2) Submit documentation of the agency's accreditation by a recognized accrediting agency.

(~~d~~c) Agencies seeking program approval shall have a process for reviewing nonpublic school programs which, at a minimum, evaluates the adequacy for ensuring the well-being of students enrolled based on the following criteria:

(1) School mission statement and educational philosophy;

(2) Governance;

(3) School facilities;

(4) School health and safety programs;

(5) Curriculum;

(6) Staff qualifications;

(7) Admissions process;

Edit: "for"

(8) Graduation requirements high schools only;

(9) Process for assessing student performance;

(10) Financial management;

(11) Student support services;

(12) Co-curricular activities;

(13) Parent involvement;

(14) School and community relations; and

(15) Residential life if applicable.

(~~e~~d) The NSAC shall review applications for program approval. If the NSAC finds that the application meets the requirements of Ed 405.01(b) and Ed 405.01(c) it shall recommend the agency to the state board for recognition.

Edit: comma

(~~f~~e) The state board shall review the NSAC recommendation and take one of the following actions:

(1) Upon finding that the application meets the requirements of Ed 405.01(b) and Ed 405.01(c) the state board shall identify the applicant as a recognized agency for program approval;

Edit: Delete.

(2) Disapprove the application if, in the opinion of a majority of state Edit: "or" rs one or more of the following conditions exist:

Edit: Delete.

- a. Additional information has been received which indicates that the applicant is not eligible to be a recognized agency for program approval;
- b. The information submitted by the applicant as required in Ed 405.01(b) *and Ed 405.01(c)* is determined by the state board to be incomplete, inaccurate, or false;
- c. The NSAC misapplied a statute or administrative rule in making its recommendation; or
- d. The NSAC did not follow proper procedures in reviewing the application.

(gf) The department shall publish the list of recognized agencies for program approval at least annually.

(hg) An agency may at any time submit written notification to the department that it does not wish to be recognized. Upon receipt of such a request the department shall remove the agency's name from the list of recognized agencies and shall notify all schools that have previously been granted program approval through accreditation by the withdrawing agency.

(ih) Program approval status for any school previously accredited by an agency whose name has been withdrawn from the list of recognized accrediting agencies shall remain in effect until the date of expiration of the most recent approval by the state board.

(ji) The NSAC shall review those agencies previously recognized for program approval every 10 years and make one of the following approval recommendations to the state board:

- (1) Full approval for a period of 10 years, if the NSAC finds that the agency meets the requirements of *Ed 405.01(b) and Ed 405.01(c)*;
- (2) Conditional approval for a period of 2 to 3 years when deficiencies are found that are not serious enough to warrant non-approval, but are serious enough to warrant attention and review; or
- (3) Non-approval.

Unclear: What action does the Board take after the recommendation in (i)? Does it follow the process in (e) above?

(kj) Previously recognized agencies shall be reviewed by the NSAC prior to the expiration of the most recent approval when information becomes known to the NSAC which indicates:

- (1) The agency may no longer be meeting the requirements of Ed 405.01(c); or
- (2) The agency has acted in an unfair or unlawful manner in conducting accreditations.

(k) Agencies that have been recognized for program approval may request to be removed from the list of recognized agencies.

Edit: "might"

Edit: "Readopt with amendment Ed 407.01, effective 6-15-13 (Doc. #10360), to read as follows:"

PART Ed 407 RETENTION OF STUDENT RECORDS

Ed 407.01 Student Records.

(a) Each non-public school shall permanently maintain individual student records that include:

Edit: space

(1) Pupil registers as required by RSA 189:27-a that include the following information:

- a. Name;
- b. Sex;
- c. Date of birth;
- d. Place of birth;
- e. Town of legal residence; and
- f. Parent/guardian contact information;

(2) Transcripts of academic performance; and

(3) Record of award of high school diploma including the date of award.

Unclear: What criteria and procedure apply to this approval?

(b) In the event of a school closing or termination of operations, the school shall notify the department where student records shall be maintained permanently, or the school shall deposit these records with the department or a location approved by the department.

(c) Records shall be maintained in a format determined by the school. ~~A hard copy of pupil registers shall be maintained as required by RSA 189:27-b.~~

Unclear and Legis. Intent: As the deleted sentence states, a hard copy is required by statute. Deleting this makes the rule unclear and conflicts with RSA 189:27-b.

Readopt with amendment Ed 403.03, effective 6-15-13 (Doc. #10360), to read as follows:

Ed 403.03 Annual Reports.

(a) Each nonpublic school shall ~~file~~ ***complete and submit “General Statistics of Nonpublic Schools”***, a Form A3N, revised 04/2018, as described in this section with statistics as of the last day of school of the year of filing. The form shall be ~~filed with the department~~ ***completed online at <https://my.doe.nh.gov/myNHDOE/Login/Login.aspx>*** by July 15 of each year. ~~to the following address:~~

New Hampshire Department of Education
Division of Program Support, Bureau of Data Management
101 Pleasant Street
Concord NH 03301-3860

~~(b) On Form “A3N – General Statistics of Nonpublic Schools” revised 5/2018, the nonpublic school shall provide the following information for each nonpublic school:~~

- ~~(1) The name of the nonpublic school, if not provided on the form by the department;~~
- ~~(2) The name, telephone number, and e-mail address of the contact person;~~
- ~~(3) The administrator’s signature;~~
- ~~(4) The number of students by grade registered during the year;~~
- ~~(5) Student progress table by grade;~~
- ~~(6) The total number of high school graduates by gender; and~~
- ~~(7) The number of dropouts from grades 9-12.~~

(eb) Each nonpublic school shall ~~file~~ ***complete and submit “Private Fall Enrollments and Staffing”***, a Form A12C, ***revised 07/2018***, as described in this section with statistics as of October 1 of the reporting year. The form shall be ~~filed with the department~~ ***completed and submitted online at <https://my.doe.nh.gov/myNHDOE/Login/Login.aspx>*** by October 15 of each year. ~~to the following address:~~

New Hampshire Department of Education
Division of Program Support, Bureau of Data Management
101 Pleasant Street
Concord NH 03301-3860

~~(d) On Form A12C, the nonpublic school shall provide the following information for each nonpublic school:~~

- ~~(1) The name of the nonpublic school;~~
- ~~(2) The name and telephone number of the contact person;~~
- ~~(3) The administrator’s signature;~~
- ~~(4) The telephone number and fax number of the school;~~

- ~~(54) The e-mail address and website address of the school, if applicable; and~~
- ~~(65) The number of students enrolled on October 1 by grade divided into male and female.~~

~~— (e) The nonpublic school shall provide the number of full-time equivalent (FTE) positions for the following staff categories divided into male and female:~~

- ~~(1) Preschool teachers;~~
- ~~(2) Kindergarten teachers;~~
- ~~(3) Regular education classroom teachers;~~
- ~~(4) Special education classroom teachers;~~
- ~~(5) Regular instructional aides; and~~
- ~~(6) Special education aides.~~

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~~(a) The New England Association of Schools and Colleges (NEASC) shall be the recognized accrediting agency.~~

~~— (b) Other Accrediting agencies that want to be considered for recognition shall be identified in one of the following ways:~~

- ~~(1) An accrediting agency may directly request recognition;~~
- ~~(2) A school seeking program approval may request recognition of an accrediting agency; or~~
- ~~(3) A member of the NSAC may request recognition of an accrediting agency.~~

~~(eb) Applicants seeking approval from the state board as an agency recognized by the department for program approval shall:~~

- ~~(1) Make application **Apply** for recognition to the state department ~~with~~ **by submitting** a letter of intent and the following:~~
 - ~~a. A brief history of the agency;~~
 - ~~b. A statement as to the scope of operations, indicating whether it is a regional, national, or state agency;~~
 - ~~c. A definition of the purpose, character, and scope of its activities as described in its charter or by-laws and written standards for accreditation or recognition;~~
 - ~~d. The agency's organization including its governance and administrative structures, a description of its ownership and control and **the** type of legal organization, including but not limited to tax-exempt or proprietary;~~

e. Financial information including its fee structure, current operating statement, and most recent independent certified opinion audit;

f. A description of procedures used in the evaluation of schools by the agency including documentation that a school shall be required to provide, ~~whether there is~~ **which shall include** a visit to verify the written documentation, and who participates in school visitations;

g. Definitions of levels of recognition or accreditation status and written procedures for providing due process in granting, denying, continuing, or revoking accredited or recognized status; and

h. Frequency of evaluation of schools for continued accreditation or recognition; and

(2) Submit documentation of the agency's accreditation by a recognized accrediting agency.

(~~d~~c) Agencies seeking program approval shall have a process for reviewing nonpublic school programs which, at a minimum, evaluates the adequacy for ensuring the well-being of students enrolled based on the following criteria:

(1) School mission statement and educational philosophy;

(2) Governance;

(3) School facilities;

(4) School health and safety programs;

(5) Curriculum;

(6) Staff qualifications;

(7) Admissions process;

(8) Graduation requirements *for* high schools only;

(9) Process for assessing student performance;

(10) Financial management;

(11) Student support services;

(12) Co-curricular activities;

(13) Parent involvement;

(14) School and community relations; and

(15) Residential life if applicable.

(~~e~~d) The NSAC shall review applications for program approval. If the NSAC finds that the application meets the requirements of Ed 405.01(b) and Ed 405.01(c), it shall recommend the agency to the state board for recognition.

(~~fe~~) The ~~state~~ board shall review the NSAC recommendation, *pursuant to*, and take one of the following actions:

- (1) Upon finding that the application meets the requirements of Ed 405.01(b) and Ed 405.01(c) the ~~state~~ board shall identify the applicant as a recognized agency for program approval;
- (2) Disapprove the application if, in the opinion of a majority of ~~state~~ board members one or more of the following conditions exist:
 - a. Additional information has been received which indicates that the applicant is not eligible to be a recognized agency for program approval;
 - b. The information submitted by the applicant as required in Ed 405.01(b) *and Ed 405.01(c)* is determined by the state board to be incomplete, inaccurate, or false;
 - c. The NSAC misapplied a statute or administrative rule in making its recommendation;
or
 - d. The NSAC did not follow proper procedures in reviewing the application.

(~~gf~~) The department shall publish the list of recognized agencies for program approval at least annually.

(~~hg~~) An agency may at any time submit written notification to the department that it does not wish to be recognized. Upon receipt of such a request the department shall remove the agency's name from the list of recognized agencies and shall notify all schools that have previously been granted program approval through accreditation by the withdrawing agency.

(~~ih~~) Program approval status for any school previously accredited by an agency whose name has been withdrawn from the list of recognized accrediting agencies shall remain in effect until the date of expiration of the most recent approval by the state board.

(~~ji~~) The NSAC shall review those agencies previously recognized for program approval every 10 years and make one of the following approval recommendations to the ~~state~~ board:

- (1) Full approval for a period of 10 years, if the NSAC finds that the agency meets the requirements of *Ed 405.01(b) and* Ed 405.01(c);
- (2) Conditional approval for a period of 2 to 3 years when deficiencies are found that are not serious enough to warrant non-approval, but are serious enough to warrant attention and review; or
- (3) Non-approval.

(~~kj~~) Previously recognized agencies shall be reviewed by the NSAC prior to the expiration of the most recent approval when information becomes known to the NSAC which indicates:

- (1) The agency ~~may~~ *might* no longer be meeting the requirements of Ed 405.01(c); or
- (2) The agency has acted in an unfair or unlawful manner in conducting accreditations.

- (k) Agencies that have been recognized for program approval may request to be removed from the list of recognized agencies.

Readopt with amendment Ed 405.01, effective 6-15-13 (Doc. #10360), to read as follows:

PART Ed 407 RETENTION OF STUDENT RECORDS

Ed 407.01 Student Records.

- (a) Each non-public school shall permanently maintain individual student records that include:

(b)

- (1) Pupil registers as required by RSA 189:27-a that include the following information:

- a. Name;
- b. Sex;
- c. Date of birth;
- d. Place of birth;
- e. Town of legal residence; and
- f. Parent/guardian contact information;

- (2) Transcripts of academic performance; and

- (3) Record of award of high school diploma including the date of award.

(b) In the event of a school closing or termination of operations, the school shall notify the department where student records shall be maintained permanently, or the school shall deposit these records with the department. ~~or a location approved by the department.~~

(c) Records shall be maintained in a format determined by the school. ~~A hard copy of pupil registers shall be maintained as required by RSA 189:27 b.~~

NEW HAMPSHIRE DEPARTMENT OF EDUCATION
DIVISION OF EDUCATION ANALYTICS AND RESOURCES
OFFICE OF NONPUBLIC SCHOOLS
101 PLEASANT STREET CONCORD, NH 03301-3852
Tel. 271-3749 Fax 271-8709

Instructions for the General Fall Report for Nonpublic Schools (A 12C) for the school year 2018-2019

How to complete the Form A 12C:

1. The fall enrollments are to be taken **as of October 1, 2018**.
2. In the rows provided for reporting elementary and secondary special education classes, please enter the number of students who spend the majority of their time in a multi-grade level class containing only special education students. The Ungraded elementary and secondary categories are for reporting students who are part of a class to which a grade cannot be assigned with a focus other than special education. Do not duplicate students already counted in a specific grade.
3. The teacher and aide count is divided into elementary and secondary. **Please include only grades 9-12 in the secondary school column.** You are asked to report staff in full-time equivalents. The definition of "full-time equivalency" is the amount of time required to perform an assignment stated as a proportion of a full-time position. It is computed by dividing the number of work hours for an individual by the number of full-time hours for that position (e.g., 0.5 for a teacher who works half-time).
4. **NEW!** Out of the enrollments reported, please indicate the number of students that are New Hampshire residents per [RSA 193:12 II](#).

Questions? Please contact Jane Levesque at Jane.Levesque@doe.nh.gov or 271-3749.

INSTRUCTIONS FOR COMPLETING FORM A 3N GENERAL STATISTICS OF NONPUBLIC SCHOOLS

General Instructions

- Form A 3N, General Statistics of Nonpublic Schools, must be completed through the Education Statistics System (ESS) in MyNHDOE at the following link: <https://my.doe.nh.gov/myNHDOE/Login/Login.aspx> by June 30. The submission of this form is mandatory for all approved nonpublic schools pursuant to [RSA 194:31](#).
- If you are a school that operates year round, please record only the activity for the period of September 1 through June 30.
- No home-schooled students should be reported on the A3 N.

STUDENT REGISTRATION TABLE - Total Number of Students Registered During the Year – Report by grade any student that enrolled in your school over the course of the school year, even if the student withdrew mid-year. If a student advances or is demoted a grade mid-year, please report that student under the grade completed at the end of the school year.

STUDENT PROGRESS TABLE – Report by grade under “promoted” the students that completed all the requirements needed to advance to the next grade level in the upcoming school year. Report them under the grade they have completed, not the grade they will be advancing to. Report by grade under “not promoted” the students that failed to complete all the requirements needed to advance to the next grade level (*even if they plan on attending summer classes*). Do not report students who withdrew from your school before the end of the school year.

Total High School Graduates/Completers – Report by gender the number of students that were issued a standard diploma, a non-standard diploma, or a certificate of attendance. Please do not include post graduates in this count.

Dropouts – Withdrawal code W20 - W29 only are withdrawal codes for students who drop out of school from grades 9 through 12 only. Schools may wish to assign specific reasons to these codes for internal use. For state reporting purposes, all W20s should be collapsed into one category and reported in this box.

If you need assistance completing this form, please contact Jane Levesque at 271-3749 or Jane.Levesque@doe.nh.gov.

GENERAL STATISTICS OF NONPUBLIC SCHOOLS, 2017-2018

Please complete this form on-line in the Education Statistics System in MyNHDOE by June 30, 2018:

<https://my.doe.nh.gov/myNHDOE/Login/Login.aspx>

STUDENT REGISTRATION TABLE

Total Number of Students Registered During the Year - This number should include any student that came to your school over the course of the school year, even if the student withdrew mid-year.

	Pre Sch	KDG	READI NESS	1	2	3	4	5	6	7	8	SPED ELEM	UNGR ELEM	9	10	11	12	SPED SEC	UNGR SEC	PG	TOTALS		
Male																							
Female																							
Total																							

STUDENT PROGRESS TABLE

Total Number of Students Promoted/Not Promoted at the end of the School Year - This number should include only the students who were in your school at the end of the year.

	Pre Sch	KDG	READI NESS	1	2	3	4	5	6	7	8	SPED ELEM	UNGR ELEM	9	10	11	12	SPED SEC	UNGR SEC	PG	TOTALS			
Promoted																								
Not Promoted																								

Total high school graduates/completers:

Male	Female

Dropouts (Withdrawal codes W20-29 only):

Secondary (9-12)

Please Contact Jane Levesque at 603-271-3749 or Jane.Levesque@doe.nh.gov if you have questions or need access to the data collection.

NEW HAMPSHIRE DEPARTMENT OF EDUCATION
 DIVISION OF EDUCATION ANALYTICS AND RESOURCES
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 101 PLEASANT STREET CONCORD, NH 03301-3852
 Tel. 271-3749 Fax 271-8709

GENERAL FALL REPORT OF NONPUBLIC SCHOOLS 2018- 2019
PART A. FALL ENROLLMENTS AS OF OCTOBER 1, 2018

GRADE	Male	Female	GRAND TOTAL
PRE SCH			
K			
READINESS			
1			
2			
3			
4			
5			
6			
7			
8			
Spec Ed Elem*			
Un Gr Elem			
Total Elem			
9			
10			
11			
12			
Spec Ed Sec*			
Un Gr Sec			
PG			
Total High			
Total			
Total NH Resident Students			

PART B. STAFFING REPORT - OCTOBER 1, 2018

Teaching Personnel

1. Number of classroom teachers (FTE*)
2. Number of instructional aides (FTE*)

Elementary P-8	Secondary 9-12

* FTE - Please report all staff in Full Time Equivalents rounded to the nearest tenth

* Spec Ed Elem and Spec Ed Sec: Report the number of students who spend the majority of their time in a multi-grade level class containing only special education students. Do not duplicate students already counted in a specific grade.

Readopt with amendment Ed 513.01, effective 9-11-14 (Doc. #10667), to read as follows:

Ed 513.01 Basic Academic Skills and Subject Area Assessment.

(a) Except as described in paragraph (b), each candidate seeking initial teacher certification under one of the alternatives listed in Ed 505 shall pass a nationally recognized test of academic proficiency required by paragraph (d).

(b) A candidate for initial certification in a career and technical education (CTE) specialty area under Ed 505.04 or Ed 505.05 may substitute the following in lieu of a nationally recognized test of academic proficiency required by paragraph (d):

(1) Three years of full time experience in the area for which certification is sought; and

(2) Current industry-recognized credential approved by the department in a published list of accepted credentials and appropriate to the CTE area in which certification is sought.

(c) Each candidate seeking teacher certification in any one of the major areas of concentration in which the state board has established a passing score shall pass a subject assessment test.

(d) The test used for the purposes of the basic academic skills assessment under (a) shall be a basic competency test, such as, but not limited to, the Praxis Core Academic Skills for Educators administered by Educational Testing Service, intended to measure the test taker's basic academic skills in the areas of reading, writing, and mathematics. In the area of reading, such a test shall measure reading comprehension and require the test taker to analyze content in a reading selection. In the area of writing, such a test shall measure ability to use grammar and language effectively and to communicate effectively in writing. In the area of mathematics, such a test shall measure a test taker's understanding of key mathematical concepts and ability for problem-solving, reasoning, and estimating.

(e) The test used for the purposes of the subject assessment under (b) shall be a basic subject assessment test, such as, but not limited to, the subject area assessments administered by Educational Testing Service or Pearson Education, intended to measure the test taker's knowledge of the specific subject area of concentration in which the test taker seeks certification for a beginning teacher.

(f) The board shall assign the following qualifying scores following validation studies conducted in accordance with Ed 513.02, after considering recommendations of the validation studies and qualifying scores set by other states:

(1) Qualifying scores on each of the 3 Praxis Core Academic Skills for Educators assessments, namely, reading, writing, and mathematics;

(2) Performance at or above the fiftieth percentile on a nationally recognized test in the areas of reading, writing, and mathematics such as, but not limited to, the SAT, GRE, or ACT; or

(3) Qualifying scores on each of the subject assessments in (c).

(g) Candidates shall be responsible for the actual cost of all assessments.

(h) A candidate may take a basic academic skills assessment or the subject area assessment as often as they are administered until the candidate passes the assessment.

RULE	STATUTE
Ed 513.01	RSA 21-N:9, II(s)

Readopt with amendment Ed 507.25, effective 5/14/2010 (Doc #9715), to read as follows:

Ed 507.25 Mathematics Teacher; General Requirements.

(a) To be certified as a-mathematics teacher, the candidate shall:

- (1) Have at least a bachelor's degree;
- (2) Obtain certification through one of the alternatives in Ed 505.01 – Ed 505.05;
- (3) Meet the requirements of (c) below; and
- (4) Meet the requirements of either Ed 507.26, Ed 507.27, or both.

(b) For candidates seeking certification through an alternative 3, 4 or 5 pathway, pursuant to Ed 505.03, Ed 505.04, or Ed 505.05, the department of education shall assess the skills, competencies, and knowledge of candidates for certification as mathematics teachers by reviewing evidence, such as, but not limited to, college course work, documented professional experience, letters of recommendation, professional development hours or CEUs (continuing education unit), and artifacts of professional practice.

(c) A candidate for certification as a mathematics teacher shall have skills, competencies, and knowledge in the following areas:

- (1) In the area of knowledge of pedagogy, the candidate shall have the ability to:
 - a. Plan and conduct units and lessons, appropriate for the grade range, and which:
 1. Enable students to construct new concepts through active participation in mathematical modeling, investigations, and problem- solving;
 2. Include multiple explanations and representations, including, but not limited to informal and formal arguments or proofs;
 3. Incorporate literacy strategies that assist students in reading and understanding mathematics;
 4. Provide opportunities for students to use written, oral, and other creative expressions to demonstrate their understanding of mathematical concepts to a variety of audiences;
 5. Emphasize connections within and between mathematics and other disciplines;
 6. Select and use instructional tools, including, but not limited to, manipulatives and physical models, drawings, virtual environments, spreadsheets, presentation tools, and mathematics-specific technologies such as graphing tools and interactive geometry software, computer algebra systems, and statistical packages;

7. Make sound decisions about when instructional tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools; and

8. Model and develop the following 8 standards of mathematical practices:

- (i) Make sense of problems and persevere in solving them;
- (ii) Reason abstractly and quantitatively;
- (iii) Construct viable arguments and critique the reasoning of others;
- (iv) Model with mathematics;
- (v) Use appropriate tools strategically;
- (vi) Attend to precision;
- (vii) Look for and make use of structure; and
- (viii) Look for an express regularity in repeated reasoning;

b. Apply an understanding of learning theories and equitable teaching practices to the teaching of mathematics appropriate for students within the grade range which articulate:

- 1. Why conceptual knowledge of mathematics is needed in conjunction with the teaching of procedures or algorithms; and
- 2. Foundations of pedagogical knowledge, effective and equitable mathematics teaching practices, and positive and productive dispositions toward teaching mathematics to support students' sense making, understanding, and reasoning; and

c. Plan and conduct a variety of assessments and evaluations appropriate for the grade range that:

- 1. Diagnose students' preconceptions, misconceptions, and understandings of mathematics and continuously monitor students' understandings; and
- 2. Evaluate procedural and conceptual understanding, and interpret students' mathematical processes and communication skills.

(2) In the area of knowledge of mathematical processes and habits of mind, the candidate shall have the ability to:

- a. Use problem-solving to investigate and understand increasingly complex mathematical content, including, but not limited to, the ability to:

1. Apply and adapt a problem-solving process using a variety of heuristics or strategies to solve problems that arise in mathematics and other contexts;
 2. Use problem-solving to develop one's own mathematical knowledge;
 3. Reflect upon one's own and others' solutions and the problem-solving process; and
 4. Refine problem-solving strategies, as needed;
- b. Use mathematical reasoning and proof, including, but not limited to, the ability to:
1. Develop and evaluate mathematical conjectures;
 2. Construct and evaluate proofs and logical arguments to verify conjectures;
 3. Select and use various types of reasoning and methods of proof; and
 4. Demonstrate the capacity to articulate an understanding of how reasoning and proof are integral components of mathematics;
- c. Communicate an understanding of mathematics, including, but not limited to, the ability to:
1. Demonstrate the capacity to communicate clearly about mathematics and mathematics education in both written and oral forms using accurate and appropriate mathematical language and notation;
 2. Interpret and explain mathematical ideas acquired through reading mathematics in professional publications; and
 3. Analyze and assess the mathematical thinking and strategies of others;
- d. Create and use representations, including, but not limited to, the ability to:
1. Illustrate learning progression from concrete to abstract representations;
 2. Articulate how the use of formal language and notation increases in importance as mathematical concepts are developed in the mathematics curriculum;
 3. Select, apply, and translate among mathematical representations to investigate mathematical concepts and solve mathematical problems; and
 4. Develop and use models to explain mathematical concepts;
- e. Recognize, explore, and develop mathematical connections, both within mathematics and across disciplines, including, but not limited to, the ability to:
1. Provide examples of how mathematics is practiced in various fields; and

2. Build mathematical understanding by showing how ideas build on one another across grade levels to form a coherent discipline; and

f. Develop additional habits of the mind related to mathematics, including, but not limited to, the ability to:

1. Learn mathematics independently;
2. Exhibit a curiosity for mathematics;
3. Recognize that learning from mistakes is an essential component when working mathematically;
4. Recognize the power and value of estimation and mental computation when working mathematically;
5. Understand the value and power of strategic use of technology when solving mathematical problems;
6. Recognize that mathematics is the language of science and nature; and
7. Recognize that mathematics is a tool for quantitative reasoning;

(3) In the area of knowledge of the learner, including developmental and environmental characteristics appropriate for the grade range, the candidate shall have the ability to:

a. Demonstrate appropriate strategies for supporting students to:

1. Move from concrete to abstract representations of mathematical concepts; and
2. Connect conceptual and procedural knowledge;

b. Communicate understanding of mathematics anxiety, including signs of it, issues related to it, and supporting students to respond to and overcome it;

c. Recognize that attitudes about mathematics can change across a lifespan and therefore teachers need to address the affective domain; and

d. Demonstrate knowledge of how exceptional students learn mathematics and strategies to use with exceptional students;

(4) In the area of number and operations, the candidate shall have the ability to:

a. Demonstrate a capacity to use models to explore and explain relationships, including magnitude, among fractions, decimals, percents, ratios, and proportions;

b. Apply, explain, and justify concepts in number and number theory;

- c. Demonstrate computational proficiency and fluency, including the use of a variety of algorithms, estimation strategies, and mental mathematics techniques to judge the reasonableness of answers or approximate solutions;
- d. Demonstrate knowledge of concepts and applications of limits and infinity;
- e. Demonstrate a capacity to apply the concepts of proportional reasoning;
- f. Demonstrate a capacity to make sense of large and small numbers and use scientific notation in mathematical and scientific modeling;
- g. Demonstrate a capacity to use physical materials and models to explore and explain the operations and properties of real and complex numbers with extensions to matrices and vectors; and
- h. Demonstrate a capacity to apply the concepts of exponents, including integer and rational, through modeling and applications;

(5) In the area of geometry and measurement, the candidate shall have the ability to:

- a. Build and manipulate representations of 2-and 3-dimensional objects and perceive an object from different perspectives;
- b. Analyze properties of and relationships among geometric shapes and structures;
- c. Apply transformations with connections to congruency and similarity;
- d. Demonstrate knowledge of non-Euclidean geometries;
- e. Connect the ideas of algebra and geometry through the use of coordinate geometry, graphing, vectors, and motion geometry;
- f. Recognize measurement attributes and their effect on the choice of appropriate tools and units;
- g. Apply strategies, techniques, tools, and formulas to determine measurements and their application in a variety of contexts;
- h. Employ estimation as a way of understanding measurement processes and units;
- i. Complete error analysis through determination of the reliability of numbers obtained from measurement;
- j. Understand and apply measurement conversion strategies;
- k. Apply geometric ideas and tools relating to the Pythagorean theorem, similar triangles, and trigonometry to solve problems;

- l. Use constructions, models, and dynamic geometric software to explore geometric relationships;
 - m. Derive and explain formulas found in Euclidean geometry; and
 - n. Construct proofs using the axioms of Euclidean and non-Euclidean geometries;
- (6) In the area of functions and algebra, the candidate shall have the ability to:
- a. Model and analyze change and rates of change in various contexts;
 - b. Use mathematical models to understand, represent, and communicate quantitative relationships, including, but not limited to equality, equations, inequalities, and proportional relationships;
 - c. Explore, analyze, and generalize a wide variety of patterns and functions using multiple representations including, but not limited to, tables, graphs, written word, and symbolic rules;
 - d. Represent information and solve problems using matrices;
 - e. Use graphing utilities and other technological tools to represent, explain, and explore algebraic ideas including functions, equations, and expressions;
 - f. Generalize patterns and functions using recursive and explicit representations;
 - g. Articulate the meaning of functions and their inverse relationships, both formally and informally, with the use of concrete materials and graphing utilities; and
 - h. Understand and compare the properties of classes of functions and their inverses, including exponential, polynomial, rational, step, absolute value, root, logarithmic, and periodic, including trigonometric;
- (7) In the area of data, statistics, and probability, the candidate shall have the ability to:
- a. Design investigations, collect data, display data in a variety of ways, and interpret data representations including bivariate data, conditional probability and geometric probability;
 - b. Use appropriate methods to estimate population characteristics, test conjectured relationships among variables, and analyze data;
 - c. Use appropriate statistical methods and technology to analyze data and describe shape, spread, and center;
 - d. Use both descriptive and inferential statistics to analyze data, make predictions, test hypotheses, and make decisions;

- e. Apply probability concepts in identifying odds, fair games, mathematical expectation, and invalid conclusions;
 - f. Judge the validity of a statistical argument, including evaluating the sample from which the statistics were developed and identify misuses of statistics;
 - g. Determine and compare experimental, theoretical, and conditional probabilities; and
 - h. Use statistical models to explore the connections between statistics and probability including correlation, regression, and analysis of variance;
- (8) In the area of calculus, the candidate shall have the ability to:
- a. Use mathematical modeling and the concepts of calculus to represent and solve problems from real-world contexts;
 - b. Use technology to explore and represent fundamental concepts of calculus; and
 - d. Understand and describe the connection of calculus to middle and high school mathematics topics;
- (9) In the area of discrete mathematics, the candidate shall have the ability to:
- a. Apply the fundamental ideas of discrete mathematics in the formulation and solution of problems arising from real-world situations; and
 - b. Use technology to solve problems involving the use of discrete structures; and
- (10) In the area of history of mathematics, demonstrate a knowledge of the historical development of numbers and number systems, measurement and measurement systems, geometry, including non-euclidean geometry, algebra, probability and statistics, calculus, and discrete mathematics.

Adopt Ed 507.26 to read as follows:

Ed 507.26 Mathematics Teacher – Middle Level.

- (a) To be certified as a middle level mathematics teacher, the candidate shall:
- (1) Obtain certification to teach upper level elementary mathematics through algebra I or integrated I through one of the alternatives in Ed 505.01-Ed 505.05; and
 - (2) Meet the requirements of Ed 507.25 and Ed 507.26(c) below.
- (b) For candidates seeking certification through an alternative 3, 4 or 5 pathway, pursuant to Ed 505.03, Ed 505.04, or Ed 505.05, the department of education shall assess the skills, competencies, and knowledge of candidates for certification as teachers in middle level mathematics by reviewing evidence, such as, but not limited to, college course work, documented professional experience, letters of recommendation, professional development hours or CEUs, and artifacts of professional practice.

(c) A candidate for certification as a middle level mathematics teacher for grades 5-8 shall have skills, competencies, and knowledge in the following areas:

- (1) In the area of number and number operations the candidate shall have the ability to:
 - a. Represent, use, and apply introductory concepts and properties of complex numbers;
 - b. Identify and illustrate the mathematics that underlies the procedures and operations involving real numbers and their subsets; and
 - c. Explain the distinctions among real numbers and their subsets with connection to field axioms;
- (2) In the area of functions and algebra the candidate shall have the ability to:
 - a. Understand, identify, and apply arithmetic and geometric sequences; and
 - b. Represent and analyze group and field properties of real numbers and other mathematical structures;
- (3) In the area of calculus the candidate shall have the ability to demonstrate an understanding of calculus concepts including limits, continuity, differentiation, and integration; and
- (4) In the area of discrete mathematics demonstrate a conceptual understanding of the fundamental ideas of discrete mathematics, including, but not limited to:
 - a. Finite graphs;
 - b. Trees;
 - c. Networks;
 - d. Propositional logic; and
 - e. Combinatorics.

Readopt with amendment Ed 507.26, effective 5/14/2010 (Doc #9715), and renumber as Ed 507.27, and renumber the existing Ed 507.27 through Ed 507.54 as Ed 507.28 through Ed 507.55 so that Ed 507.27 reads as follows:

Ed 507.27 Mathematics Teacher – Upper Level

- (a) To be certified as an upper level mathematics teacher, the candidate shall:
 - (1) Obtain certification to teach pre-algebra through advanced placement math courses through one of the alternatives in Ed 505.01-Ed 505.05; and

(2) Meet the requirements of Ed 507.25 and Ed 507.27(c) below.

(b) For candidates seeking certification through an alternative 3, 4 or 5 pathway, pursuant to Ed 505.03, Ed 505.04, or Ed 505.05, the department of education shall assess the skills, competencies, and knowledge of candidates for certification as teachers in upper level mathematics by reviewing evidence, such as, but not limited to, college course work, documented professional experience, letters of recommendation, professional development hours or CEUs, and artifacts of professional practice.

(c) A candidate for certification as an upper level mathematics teacher shall have skills, competencies, and knowledge as follows:

(1) In the area of number and operations, the candidate shall have the ability to identify and illustrate the mathematics underlying the theory of groups, rings, and fields and the relationships among them;

(2) In the area of functions and algebra, the candidate shall have the ability to:

a. Understand and apply major concepts of:

1. Linear algebra, including vector spaces and matrices; and
2. Abstract algebra, including groups, rings, and fields;

b. Connect major concepts of linear and abstract algebra to the complex number system and other mathematical structures; and

c. Understand, identify, and apply arithmetic and geometric sequences, including partial sums of infinite arithmetic and geometric sequences, with connections to linear and exponential functions;

(3) In the area of calculus, the candidate shall have the ability to:

a. Demonstrate a conceptual understanding of and procedural facility with basic calculus concepts including limits, continuity, differentiation, and integration; and

b. Demonstrate an understanding of the basic concepts of multivariable calculus; and

(4) In the subject area of discrete mathematics, the candidate shall demonstrate a conceptual understanding of, and procedural facilitation of, the knowledge of the basic elements of discrete mathematics, including but not limited to:

1. Graph theory;
2. Propositional logic;
3. Mathematical induction;
4. Recurrence relations;

- 5. Finite differences;
- 6. Linear programming; and
- 7. Combinatorics.

Readopt with amendment Ed 612.17, effective 5/14/2010 (Doc #9715), to read as follows:

Ed 612.17 Mathematics – Middle Level.

(a) The middle level mathematics program shall provide the candidate with the skills, competencies, and knowledge gained through a combination of academic and supervised field-based experiences as required in Ed 507.25 and Ed 507.26.

Readopt with amendment Ed 612.18, effective 5/14/2010 (Doc #9715), to read as follows:

Ed 612.18 Mathematics – Upper Level.

(a) The upper level mathematics program shall provide the teaching candidate with the skills, competencies, and knowledge gained through a combination of academic and supervised field-based experiences as required in Ed 507.25 and Ed 507.27.

Appendix I

Rule	Statute
Ed 507.25 - Ed 507.26	RSA 186:8, III- IV, RSA 186:11,X(a), RSA 21-N:9,II(s)
Ed 507.27 (formerly Ed 507.26)	RSA 186:8, III- IV, RSA 186:11,X(a), RSA 21-N:9,II(s)
Ed 612.17 – Ed 612.18	RSA 186:8, IV; RSA 186:11, X(c)

Social Studies Standards

- Strategic Leadership Team—25 members (teachers, administrators, higher education representatives, teachers' union, professional standards board, charter schools, private schools)

Resources used: NH Social Studies Curriculum Frameworks, C3 Standards, Massachusetts Public Comment Draft Curriculum Frameworks, Engage NY Standards

Subcommittee Writing/Drafting

- Work divided into self-selected content-specific subcommittees to revise standards.
 1. World History
 2. US/NH History
 3. Civics and Government
 4. Economics
 5. Geography

Upcoming Meetings

July 23, 8:30-10:30

August 6, 4:00-6:00

September 10, 4:00-6:00

September 24, 4:00-6:00

*All meetings will be held in Londergan Hall,
NH DOE*

Process

- Draft standards will be presented to the State Board of Education and the Professional Standards Board (dates TBD)
- Draft standards will be posted on the NH DOE website for public comment (dates TBD)
- Draft standards will be presented at regional listening tours
- Adoption by State Board will be followed by technical assistance and training to districts

Summary of Outreach

Introduction

Outreach in efforts to expand computer science (CS) education has been ongoing. Outreach has included:

- Rationale for K-12 CS Education
- Plan to expand K-12 CS Education (state-level)
- Specific implementation strategies, including curriculum and professional development options (district and school-level)
- Providing information about state and federal grant programs that support CS education.
- Providing information about specific policies, including: educator certification; academic standards; program standards

Outreach has always been a conversation with stakeholders, and throughout the process the feedback that has been received has informed subsequent work.

Outreach Overview

2016 - 2017 Presentations / discussions at educator association board meetings.

- NHSTA - science educators
- NHSTE - technology in education
- NHTM - teachers of mathematics
- CSTA-NH - computer science teachers

2016 - 2017 Presentations / discussions in groups with business representation

- PETAC - Pre-engineering and technology advisory committee
- NHHTC - NH High Technology Council
- NHBIA - NH Business and Industry Association
- NHCBE - NH Coalition for Business and Education

2016 - 2017 Presentations at professional educator conferences and other events

- NH Science Teachers Association Annual Conference
- NH Christa McAuliffe Technology Conference
- Southwest NH Educators Conference
- NH STEM Educators Summit
- NH Charter Schools Best Practices Conference
- NH Educators Summer Summit

See also:

- Connecting with national colleagues for best practices [[link to events](#)]
- Presentations at NH professional conferences [[link to events](#)]

Outreach Timeline

Nov 2016	CS4NH Launch Summit, UNH Manchester In partnership with NH Department of Education UNH Leitzel Center, STEM Teachers Collaborative UNH Manchester, STEM Discovery Lab (over 100 in attendance)
Dec 2016 - Mar 2017	Professional Standards Board Computer Science Subcommittee meetings to develop certification rules [minutes]
August 2017	Presentations of plans to NH State Board of Education CS Standards Development Plan [link] CS Education State Plan [link]
Fall 2017	CS Standards Development Begins
Sept 2017 - Apr 2018	Standards Revision Team (SRT) meets to develop NH Computer Science standards [minutes]
Sept 2017	CS4NH North Summit, North Country Education Services (approx. 80)
Oct 2017	NH CS Standards Drafted 1 released Sent to: professional educator associations Posted to: https://www.education.nh.gov/instruction/computer-science/ With virtual feedback form
Nov 2017	Computer Science certification adopted by NH State Board of Education Effective 11/14/2017 Guidance sent to NH Principals and Administrators by Bureau of Credentialing

- May 2018 NH CS Standards Draft 2 released
Outreach for Draft 2, CS policy tour sent to:
 administrators, principles, technology directors,
 professional associations, CS4NH, PETAC
Posted to: <https://www.education.nh.gov/instruction/computer-science/>
 With virtual feedback form
- May - June 2018 CS Education Policy Outreach Tour (over 100)
- Tuesday, May 29: Plymouth State University
 - Wednesday, May 30: University of New Hampshire, Durham
 - Thursday, May 31: University of New Hampshire, Manchester.
 - Wednesday, June 6: Keene State College, Keene.
 - Thursday, June 7: NHDOE, Concord.
- June 18, 2018 Standards reviewed at CS4NH meeting.
 Includes rep. from NH High Tech Council (NHHTC).
Standards reviewed at PETAC meeting.
 Includes rep. from NH Business / Industry Association (NHBIA).
- June 2018 Reviewed by NH High Technology Council (NHHTC)
 workforce development committee
- June 2018 CS Policy Presented to NH School Administrators Association (NHSAA)

Summary of Feedback

Feedback has been continuously incorporated into all reports and presentations. Very commonly received feedback is addressed in the Standards - both by addressing favorable feedback and making recommendations to take advantage of those opportunities, and by addressing critical feedback and how to avoid possible risks.

Rationale - the need for CS

Favorable feedback:

- Educators comment on the ubiquity and importance of technology, and how it is very important to impart students with modern technological skills and knowledge. This is supported by the data.
- Many educators report that their schools are already incorporating CS, including coding. (For an example of the reach of a single popular curriculum provider, Code.org, please view [Code.org in NH](#))

Critical feedback:

- Fit into K-12 schedule (see below / program planning)
- Too much "screen time" (see below / pedagogical approaches)
- Lack of development of interpersonal skills (see below / pedagogical approaches)

Responses / adjustments:

- The NH CS Standards includes limited information regarding rationale for K-12 CS education. The "Vision" does include some information. However, the SRT decided to leave out detailed rationale information and focus on CS program planning in part 1.
- More detailed rationale information has been presented:
 - to the NH Legislature when considering HB 1674, and
 - to the NH State Board of Education NH when considering CS rules
 - To educators and others when presenting on CS education.
-

Program Planning

Favorable feedback:

- Comments on the number of tools and resources available
- Comments on student interest - excellent programs are growing very fast.
- Admins - "This is great! How do I start planning?"
- Teachers - "This is great! How do I get my certification?"

Critical feedback:

- Concern for technology education taking time away from other subjects, especially humanities.
- Concerns with scheduling - how to fit CS into an overcrowded schedule.
- Concerns with teaching capacity - where to find CS teachers, how to prepare them, etc.
-

Responses / adjustments:

- CS should be incorporated into the curriculum carefully, and the "fit" of CS is carefully considered in the Standards.
 - Schools have existing technology time that can be strengthened by including more CS.
 - CS, like math, can be incorporated thoughtfully into other subject areas, but this should never detract from the core content in the other area. Interdisciplinary learning is encouraged.
 - There is no plan to lower program standards in other areas to make room for CS. This is an update of our technology standards.

Pedagogical Approaches

Favorable feedback:

- Computer science is an opportunity to expand problem and project-based learning.
- Computer science is an opportunity for interdisciplinary learning.

Critical feedback:

- Concern for students getting too much "screen time."
- Concerns that students are not adequately developing interpersonal skills.
- Students should have unstructured time to explore concepts of computer science.

Responses / adjustments:

- Concerns regarding screen time are real and need to be addressed across the curriculum. Here are a few responses:
 - Computer science concepts can be developed without using computers (CS unplugged). This is referenced in the Standards.
 - Educators should prioritize use of technology rather than using it extensively in every subject area. CS should be a priority area when using technology.
- Interpersonal skills can and should be developed in CS programs. Communication and collaboration, both using digital tools and in-person, are critical. The Standards include a recommendation to explicitly develop these skills.

Content standards: Skills and Knowledge

- Favorable feedback:
 - Overall feedback is that the standards are very thorough and rigorous.
- Critical comments
 - Be sure to emphasize the role of data and analytics. (this comment from Business / Industry meeting conducted by PETAC)
 - Questions concerning developmentally appropriateness
 - We should emphasize that students should be able to advance according to where they are developmentally - instruction and even curriculum should be differentiated to meet students' unique needs.
- Response:
 - Data and analysis is a core component of NH CS Standards. The NH Department of Education will emphasize that area when presenting on computer science and forming professional development partnerships.
 - Important notes on rigor and developmental appropriateness:

- Initially the standards may be difficult for all students to achieve, especially in the higher grades, if the lower grade programs are not well-developed.
- Over time, as districts develop stronger K-12 programs, the standards will be easier to achieve. The standard review cycle should be sufficient to determine if future changes are necessary.
- Academic standards are meant to be challenging and rigorous, and also attainable for all students. There can be a range of demonstrated ability. Not all students will progress beyond level 3A standards. Many students may go above and beyond even the level 3B standards.

Additional statement on content standards (skills and knowledge)

The content standards (part 2 of NH CS Standards) are derived from the K-12 CS Framework and the CSTA K-12 Standards. These national documents were developed concurrently by leading CS educators and other professionals across the US, including in NH. One of the Framework writers, Alfred Thompson, was also a member of NH's Standards Revision Team (SRT). The Framework and CSTA Standards underwent an extensive review process, including a review that was conducted by NH's CSTA chapter.

The SRT subcommittees reviewed each standard and made changes that were determined to be appropriate, these were then reviewed by the full SRT. The changes made were technical and did not fundamentally alter the expected skills and knowledge. As a result, NH's CS Standards are still aligned with many curriculum resources available.

Specific feedback regarding the age- and grade-band standards is still being received and addressed by SRT. This feedback has been mostly provided by CS educators and professionals, is technical in nature, and does not fundamentally alter the skills and knowledge that are part of the Standards.



New Hampshire Computer Science Standards

Rev. 2018

Key Supporting NH Organizations



Key Supporting National Organizations



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Acknowledgements

The 2018 NH K-12 Computer Science Standards is the result of the hard work of numerous individuals across the country and state. Work in NH has been informed and supported by many national-level associations, alliances and non-profit organizations, including the Computer Science Teachers Association ([CSTA](#)), Expanding Computing Education Pathways ([ECEP](#)) Alliance, [CSforAll](#) Coalition, and [Code.org](#).

Many important stakeholders, including numerous educators in NH, have participated in national-level leadership to advance K-12 Computer Science education. The development of the Standards, and the associated work of providing support to organizations who play a role in implementing the Standards, has been and will continue to be carried out by countless stakeholders across the state.

We would like to recognize the following organizations, who are providing leadership in advancing K-12 Computer Science in NH: The [CS4NH](#) Alliance, NH High Technology Council ([NHHTC](#)), NH Charitable Foundation ([NHCF](#)), University System of NH ([USNH](#)), Community College System of NH ([CCSNH](#)), NH Society for Technology in Education ([NHSTE](#)), and NH Computer Science Teachers Association ([NH-CSTA](#)).

To see individuals in the NH Computer Science Standards revision team, and CS4NH Alliance steering committee members, who contributed significantly to the development and review of these standards, please see the appendices.

Foreword

[Governor's Foreword?]

[Commissioner's Foreword]

Vision: Computer Science for All Students in New Hampshire

“Computer science and the technologies it enables now lie at the heart of our economy, our daily lives, and scientific enterprise. [...] To be a well-educated citizen as we move toward an ever-more computing-intensive world and to be prepared for the jobs of the 21st Century, students must have a deeper understanding of the fundamentals of computer science.” [ACM]

In order to be an informed, engaged, and productive citizen in our State and our Nation, it is imperative that students learn the fundamental skills and knowledge of computer science.

Computer science and computing technologies affect us socially, politically, and economically.

- Computer science is changing how we interact with our environment and with one another.
- Computer science is changing how we interact with our political leaders and institutions.
- Computer science is disrupting every industry, creating new industries, and driving new scientific and engineering breakthroughs.

The NH K-12 Computer Science Standards will guide educators as they seek to respond to these changes. They will specify clear learning objectives for students and will serve as a resource for local development and/or adoption of curriculum, instructional materials, and performance assessments.

The standards will help empower educators and students, in order to:

- “critically engage in public discussion on computer science topics;
- “develop as learners, users, and creators of computer science knowledge and artifacts;
- “better understand the role of computing in the world around them; and
- “learn, perform, and express themselves in other subjects and interests.” [K12CS]

About the Standards

Overview of Standards Development

Committee Formation: In August 2017, a rationale and plan was presented to the NH State Board of Education for the development of academic standards for Computer Science. An application for membership was widely distributed and a voluntary committee was formed. This committee was composed of various educator stakeholders, including: primary educators, secondary educators, K-12 administrators, and higher education faculty.

Background Research: After conducting background research, the committee unanimously elected to build our standards using the recently released [K-12 Computer Science Framework](#) and the Computer Science Teachers Association (CSTA) [K-12 Computer Science Standards](#) as primary sources. The initial development and review of these national-level documents involved many important stakeholders, including several in NH.

Draft One development: The committee determined the structure of the Standards and established subcommittees: Editorial, Primary Education, Secondary Education. This first draft of the standards, which included only organizational structure and primary source materials, was released for public review in October 2017.

Draft Two development: The subcommittees performed detailed reviews of source documents and other references, including a standard-by-standard review of the CSTA K-12 Computer Science Standards, and produced original content (Introduction, Background, Implementation Guidance, and Appendices) and recommendations to the full committee. The committee determined that the CSTA Standards are appropriate for NH's purposes and recommended to adopt them with minimal modification.

Draft Two public input: Draft 2 will be released publicly in May 2018. It will be distributed electronically with a feedback survey, and presented in a statewide listening tour. It will be reviewed by the CS4NH Advisory committee, the Pre-Engineering and Technology Advisory Council (PETAC), and by members of the NH State Board of Education. It will be reviewed by boards of several of NH's professional educator associations.

State Board approval: Barring any unforeseen setbacks, approval for NH's K-12 Computer Science Standards will be requested in Summer 2018.

Objectives for Standards

The following objectives were central to the standards development, and should also be considered when implementing the standards. Adapted from [K12CS].

- **Objective 1: Rigor**
 - Establish and articulate the appropriate level of rigor in computer science to prepare all students for success in college and careers.
- **Objective 2: Focus / Manageability**
 - Prioritize the concepts and skills that should be acquired by students. A sharpened focus helps ensure that the knowledge and skills students are expected to learn are important and manageable in any given grade or course.
- **Objective 3: Specificity / Clarity**
 - Specify what is computer science, and distinguish between computer science and other uses of computers in a K-12 setting.
 - Provide sufficient detail to convey the level of performance expected without being overly prescriptive.
- **Objective 4: Equity / Diversity / Accessibility**
 - Allow for engagement by all students and allow for flexibility in how students may demonstrate proficiency. The standards are based on the belief that all students, regardless of race, gender, socioeconomic class, or disability, when given appropriate support, can learn all of the concepts and practices described herein.
- **Objective 5: Coherence / Progression**
 - Organized as progressions that support student learning of content and practices over multiple grades.
 - Convey a unified vision of the discipline, establishing connections among the major areas of study and showing a meaningful progression of content across grade levels and grade spans.
- **Objective 6: Measurability**
 - Objective and measurable. Focus on the results, rather than the processes of teaching and learning.
- **Objective 7: Integration of Practices and Concepts**
 - Integrate the computer science practices with the concept statements. Students learn by doing.
- **Objective 8: Connections to Other Disciplines**
 - Make intentional connections between computer science and other disciplines, so that students can understand how computer science affects their world.
 - Promote more coherent education experiences for students.

Background Information

Computer Science Overview

“As the foundation for all computing, computer science is defined as “the study of computers and algorithmic processes, including their principles, their hardware and software designs, their applications, and their impact on society” [Tucker et. al., cited in K12CS]

<p>Computer Science (CS) includes five core concept areas:</p> <ul style="list-style-type: none"> ● computing systems, ● networks and the Internet, ● data and analysis, ● algorithms and programming, and ● impacts of computing. 	<p>In addition, Computational Thinking (CT), includes core practices of:</p> <ul style="list-style-type: none"> ● recognizing and defining computational problems ● developing and using abstractions ● creating computational artifacts ● testing and refining computational artifacts
--	--

Computer Science in Context

Information and communication technologies (ICT) in schools

Computer science should not be conflated with other aspects and uses of computer technology in schools, including:

- **“Computer literacy [i.e. Digital Literacy, ICT Literacy]** refers to the general use of computers and programs, such as productivity software. Previously mentioned examples include performing an Internet search and creating a digital presentation.
- **“Educational technology** applies computer literacy to school subjects. For example, students in an English class can use a web-based application to collaboratively create, edit, and store an essay online.
- **“Digital citizenship** refers to the appropriate and responsible use of technology, such as choosing an appropriate password and keeping it secure.
- **“Information technology** often overlaps with computer science but is mainly focused on industrial applications of computer science, such as installing and operating software rather than creating it. Information technology professionals often have a background in computer science.” [k12cs]

CS and STEM

"Because CS is an active and applied field of Science, Technology, Engineering and Math (STEM) learning that allows students to engage in hands-on, real-world interaction with key math, science, and engineering principles, it gives students opportunities to be creators - not just consumers - in the digital economy..." [CSforALL]

CS and Math

Computer science and computation are fundamentally mathematical. Computing is built on mathematical principles including formal logic. Computing can be used to perform arithmetic and logical operations. Combining these operations allow computing to be used in the diverse ways we see today.

CS and Science

Science includes the systematic study of the structure and behavior of the physical and natural world through observation and experiment, and a systematically organized body of knowledge on a particular subject. Computer science includes the study of computation and algorithmic processes, which don't necessarily need to be implemented in machinery. For example, physical, chemical, and biological processes can all be explored in terms of computation, without necessarily involving any human-built computing devices. Computer science is a systematic study, and computer scientists have compiled a vast body of knowledge in this area.

CS and Computer Modeling and Simulation

The term computational science refers to the use of computational tools and methods in science and engineering, such as modeling and simulation. Computer science informs the development of these tools. In practice, computational sciences involve both computer scientists and specialists in the other areas working together.

CS and Engineering

Engineering is concerned with the analysis, design, implementation, and use of engines, machines, structures, processes, etc. Engineered structures and processes can be physical (e.g., mechanical, chemical, biological, etc.), but they can also be virtual (e.g., computer software).

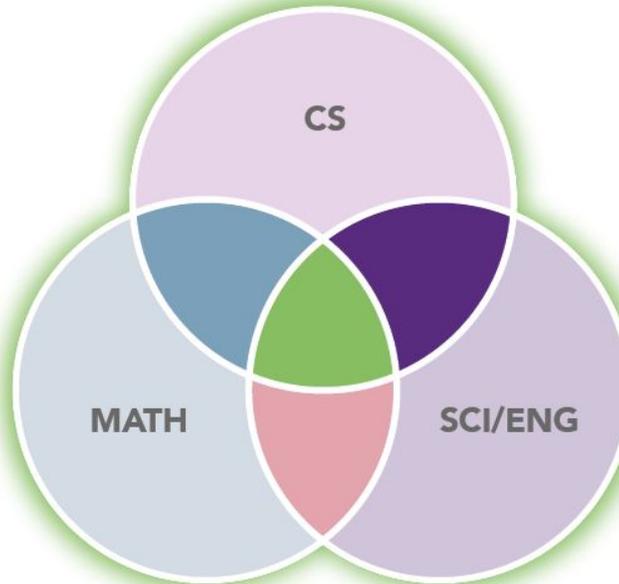
Computer scientists work out computer hardware, software, and network designs. Engineers turn those designs into working devices and systems. Engineers also often encounter unexpected results, which can then be taken into consideration by the scientists to inform developing theories.

See below for relationships between CS, Science, Engineering, and Math practices. (Image source [K12CS]).

RELATIONSHIPS BETWEEN COMPUTER SCIENCE, SCIENCE AND ENGINEERING, AND MATH PRACTICES

CS + Math

- **Develop and use abstractions**
 - M2. Reason abstractly and quantitatively
 - M7. Look for and make use of structure
 - M8. Look for and express regularity in repeated reasoning
 - CS4. Developing and Using Abstractions
- **Use tools when collaborating**
 - M5. Use appropriate tools strategically
 - CS2. Collaborating Around Computing
- **Communicate precisely**
 - M6. Attend to precision
 - CS7. Communicating About Computing



CS + Sci/Eng

- **Communicate with data**
 - S4. Analyze and interpret data
 - CS7. Communicating About Computing
- **Create artifacts**
 - S3. Plan and carry out investigations
 - S6. Construct explanations and design solutions
 - CS4. Developing and Using Abstractions
 - CS5. Creating Computational Artifacts
 - CS6. Testing and Refining Computational Artifacts

CS + Math + Sci/Eng

- **Model**
 - S2. Develop and use models
 - M4. Model with mathematics
 - CS4. Developing and Using Abstractions
 - CS6. Testing and Refining Computational Artifacts
- **Define problems**
 - S1. Ask questions and define problems
 - M1. Make sense of problems and persevere in solving them
 - CS3. Recognizing and Defining Computational Problems
- **Use computational thinking**
 - S5. Use mathematics and computational thinking
 - CS3. Recognizing and Defining Computational Problems
 - CS4. Developing and Using Abstractions
 - CS5. Creating Computational Artifacts
- **Communicate rationale**
 - S7. Engage in argument from evidence
 - S8. Obtain, evaluate, and communicate information
 - M3. Construct viable arguments and critique the reasoning of others
 - CS7. Communicating About Computing

* Computer science practices also overlap with practices in other domains, including English language arts. For example, CS1. *Fostering an Inclusive Computing Culture* and CS2. *Collaborating Around Computing* overlap with E7. *Come to understand other perspectives and cultures through reading, listening, and collaborations.*

CS and Career & Technical Education (CTE)

Computer science is sometimes also confused with Career & Technical Education (CTE) clusters and pathways. The **Information Technology cluster in CTE** includes the following pathways:

- Network Systems Pathway
- Information Support & Services Pathway
- Web & Digital Communications Pathway
- Programming & Software Development Pathway

While the above are examples of CS pathways, the K-12 CS concepts and practices expressed in this Standards are foundational skills and knowledge that are important for all students in order to be informed and productive citizens in the 21st century. They are applicable not just in the information technology occupations / pathways above, but also virtually every other cluster.

Here are a few notable examples:

- **Engineering / Manufacturing.** Advanced manufacturing is distinguished by the use of technology such as robotics and automation, digital modeling and simulation, etc.
- **Health science.** One-third of all practitioners / technical occupations in healthcare are technical (technologists and technicians).
- **Business management and finance.** These sectors are being transformed by technology, notably the use of analytics - the systematic computational analysis of data or statistics.

Students who are interested in focusing on the design and development of computer hardware and software systems and networks are encouraged to consider CTE programs in Engineering and/or Information and Communication Technologies. Students who are interested in applying these technologies in other areas might consider other programs.

Program Implementation

Key Considerations

Leadership and Administration

Establish a STEM / Computer Science advisory board. This group could include teachers, administrators, school board members, parents, members of the business / industry community, and other community members. A well-composed group will be in a good position to make recommendations regarding STEM / Computer Science curriculum planning and implementation.

Establish implementation team(s). This is a group of educators within a school who will do the implementation work necessary to establish and strengthen robust K-12 computer science programs. A teacher or administrator can't go it alone - it requires vertical integration.

Educator certification. At the primary level, schools should seek to employ a digital learning specialist (i.e. technology integrator) and/or a computer science educator. At the secondary level, schools should seek to employ at least one certified Computer Science teacher.

Course classification. Courses that are clearly computer science, as specified in these standards, should be classified as such in Educator Information Systems (EIS). Computer science should be recognized as a content area and reflected in your department names.

Curriculum and Professional Learning

Seek out standards-aligned resources and take advantage of professional development.

Teachers in the early grades are tasked with helping their students develop in a great breadth of disciplines and may be unfamiliar or uncomfortable with CS and/or technology in general. In secondary grades, schools might want to “convert” an educator from one subject area to CS. Utilizing comprehensive curriculum aligned with the CS standards and participating in professional development can help address these challenges.

(See also Appendix: Teaching & Learning Resources)

Incorporate and/or integrate CS into your current schedule and curricula. While you may want to make schedule changes to accommodate expanded CS offerings, this may not be necessary. We distinguish incorporation and integration as follows:

- **Incorporate** - add or strengthen dedicated CS content in time that is already a part of the schedule, such as Technology / Engineering education, or Library / Media education.
- **Integrate** - integrate CS content into the teaching and learning of content in other related areas, especially in STEM, but also in the Arts, Humanities and other areas.

Instruction and Assessment

Use inquiry and make meaningful experiences with your students. Give students time and space to pursue CS projects that are related to their personal interests, including unstructured learning time. Help students learn how to learn. Connect CS content to social and cultural contexts and what's happening in their community. These practices can help students be empowered in their learning, and develop critical-thinking and creativity.

Use project-based and problem-based learning. CS naturally lends itself to project-based and problem-based learning. Project-based learning allows students to take time to develop and refine a product. Problem-based learning begins by identifying a specific problem to solve and designing and implementing solutions. Recognize the importance of both process and product.

Help students develop communication and collaboration skills. Students should collaborate via group projects. Communication and collaboration skills should be explicitly developed - don't expect them to "just know." Students should develop technical communication and presentation skills. Encourage students to reflect upon what they've learned and created.

Consider lessons and resources that do not require computers. Many fundamental CS concepts can be explored without even using a computer (e.g. CS Unplugged). Even in programming, algorithms can and should be worked out on paper or whiteboards using flowcharts and pseudocode. Don't be too dependent on online resources and tools - have a backup plan in case there are network problems.

Use a variety of assessment methods. Use continuous formative assessment to gather data that you can use to adapt and personalize your student's learning experience. Let students demonstrate their knowledge in a variety of ways to they can show their strengths. For example, portfolios, presentations, connect with inquiry / PBL (above). Encourage peer-to-peer feedback. Stress that CS is an iterative process and they can learn from their mistakes to improve their work. When CS is integrated in the school curriculum, students can use CS to demonstrate their knowledge in other subject areas (e.g. by creating an app).

Extended Learning Opportunities

Provide unstructured time for students to explore CS. Giving students unstructured time with programming tools will promote creativity and establish confidence in applying their CS knowledge. Facilitators do not need to be CS experts, but they should be aware of resources and tools that students can use to learn.

Sign up for expos and competitions. These programs can greatly help students develop presentation, collaboration skills, and more. They also allow students to interact with peers at other schools.

Work with your community. Encourage your students to get entrepreneurial. They can find clients in the community and work with them to design and develop a solution to a real problem. Find community members who want to give back and give them an opportunity to work with your students.

Program Progressions / Pathways

A strong K-12 CS district or school offers students time dedicated specifically to CS education, organized in a coherent progression, and also integrates CS with other areas.

(See also Appendix: Teaching & Learning Resources)

Primary (approx. K-6)

As we prepare our youngest learners for the demands of tomorrow, we need to acknowledge the role that computer science can play in their acquisition of 21st century skills. When elementary students are required to engage in computational thinking and solve real-world problems using technology, they are honing their ability to think critically, be creative, collaborate, and communicate. These skills, along with basic technological and digital literacy, are increasingly desired by their future teachers and employers.

Teaching computer science at the elementary level provides a solid foundation for students to build upon prior knowledge and experience real-world application of technology skills. However, establishing a pathway for achieving computer science standards can be a challenge due to barriers like scheduling and staffing. In contrast to middle and high schools, where computer science can be taught as a standalone course, elementary schools are more likely to require a flexible approach when it comes to implementing a computer science curriculum in grades K through 5.

Incorporate and/or integrate CS.

- Scenario A: Incorporate CS units as part of a library or technology “special” or “related arts” class.
- Scenario B: Integrate CS to design lessons that support both content area curriculum and CS concepts.

Utilize play-based learning in early childhood education

Children develop social and emotional skills through playful interactions with peers and adults, and research continually shows these interactions can have significant impacts on children’s learning and development. These strong affective, behavioral, and cognitive competencies provide the foundation for successful learning and development.



"Powerful Ideas" in Early Childhood CS Education

1. Social and emotional learning.
2. Patterns
3. Problem-solving
4. Representation
5. Sequencing

For more information, please visit "Computer Science in Early Childhood Education."
[K12CS]

Secondary (approx. 7-12)

First secondary-level courses in CS should take a big-picture view of computer science, addressing each of the core content areas and practices. As students advance, they should have opportunities to explore in depth more specific areas of CS.

The recommendations below are intended as a menu of options that schools can explore and implement in an appropriate timeline. They are intended to be organized in a logical implementation order, but schools will consider their own needs and capacity.

Ensure students have exposure to CS each year of middle-school. It is recommended that students are enrolled in at least 1 computer science course, or a technology / engineering course that strongly incorporates computer science, per academic year.

Some typical configurations include:

- Scenario A: Year-long course, ~45 min., once per week.
- Scenario B: Semester course, ~90 min., once per week.
- Scenario C: Trimester course, ~60 min., once per week.

In an ideal situation, students will have daily exposure to CS and Engineering throughout each year of middle-school.

Ensure all HS students take at least one CS course. We recommend that all students take a ½ credit CS course in high school to fulfill their Technology requirement for graduation. This course should address each of the strands of the standards and relate CS to real-world applications.

Develop a Core CS Progression. Students with little prior exposure to computer science should take a ½ credit introductory course, as described above. Students with more experience may be able to begin HS at a higher level.

CS Progression Overview

- Introductory CS - described above.
- Intermediate CS - also addresses each of the core content areas. May include more mathematical / technical components.

Develop CS electives. Elective courses allow students to explore specific domains of computer science in greater depth. Implementation teams should consider what prerequisites may be appropriate for elective courses in CS - we don't necessarily recommend requiring the above progression before taking electives.

(See also Appendices: Examples of CS Electives for HS)

Integrate CS and develop interdisciplinary courses. We recommend that CS educators work with educators in other content areas, and professionals in other fields, to develop interdisciplinary and career connections. Integration and interdisciplinary programs of studies blur the boundaries between the disciplines.

- **Integration** refers to the inclusion of content from one content area into a course that is primarily addresses content in another area.
- **Interdisciplinary courses** combine content from one or more subject areas. Such courses should allow students to apply credit earned to either (or any) of the applicable subjects.

(See also Appendices: Interdisciplinary & Career Connections)

Leverage Career & Technical Education (CTE) programs. As previously stated, all industries are impacted by computing technology. Students will find foundational computer science knowledge and skills to be useful in a number of CTE specialty areas, including, but not limited to:

- Information and Communication Technologies
- Engineering and Manufacturing
- Health Science
- Business Management and Finance

(See also Appendices: Interdisciplinary & Career Connections.)

Appendices

Appendix A: Writers, Reviewers, & References

Standards Revision Team

The following members participated in development team meetings and/or subcommittee work.

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CS4NH Alliance advisory Committee

The following are the members of the CS4NH Alliance advisory committee.

David Benedetto	Director of STEM Education	NH Department of Education
Judy Burrows	Director of Student Aid	NH Charitable Foundation
William Church	Executive Director	White Mountain Science, Inc.
Matt Cookson	Executive Director	NH High Technology Council
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Mihaela Sabin	Computer Science Professor, Chair of Department of Engineering and Applied Sciences	University of NH, Manchester
Terry Wolf	Vice Chair, Education Committee	NH House of Representatives

Key References

NH DOE Planning Documents	<ul style="list-style-type: none"> • NH CS Standards Plan • NH CS State Plan
National Framework and Standards	<ul style="list-style-type: none"> • 2017 CSTA K-12 Standards. • K-12 CS Framework. • ISTE Standards for Students.
CS Education Data	<ul style="list-style-type: none"> • State-of-the-States Landscape Report on CS Education • Google-Gallup CS Polls
Computing Occupation Data	<ul style="list-style-type: none"> • US Bureau of Labor Statistics. STEM Occupations: Past, Present, and Future. • Change the Equation. The Hidden Half.

Glossary

- Please refer to <https://k12cs.org/glossary/>

Works cited

- [ACM]. Association of Computing Machinery, Computer Science Teachers Association (2010). *Running on Empty: The Failure to Teach Computer Science in the Digital Age.*
- [K12CS]. K-12 CS Coalition (2016). *K-12 Computer Science Framework.*
- [CSforALL]. US Department of Education. Office of Innovation and Improvement. Computer Science for All Proposal. Retrieved from LINK. [\[Link to innovation.ed.gov\]](#)

Appendix B: Useful Resources and Examples

Teaching and Learning Resources

The resources provided here are examples and are not formally endorsed by the NH Department of Education. Educators are strongly encouraged to discover and evaluate resources regularly. (See also: [CS4NH Resource List](#).)

Primary

Resources include but are not limited to: [Code.org CS Fundamentals](#), [Project Lead the Way](#), [Kodable](#), [ScratchEd](#), [Tynker](#), [CSFirst with Google](#), [CodeMonkey](#), and [Khan Academy](#).

Secondary / Middle-Lower High School (approx 7-10 grade range)

Examples of curriculum that are appropriate for the 7-10 grade range:

- [Exploring Computer Science \(ECS\)](#)
- [Harvey Mudd MyCS](#)
- [Code.org CS Discoveries \(CSD\)](#)

Secondary / High School

- [Computer Science Principles](#) (intermediate level - can be AP or non-AP)
- [AP Computer Science A](#) (elective - algorithms & programming)

Secondary / Interdisciplinary

- [Bootstrap Algebra](#)
- [Bootstrap Data Science](#)
- [Bootstrap Computational Physics](#)

CS Electives for HS

Computing Systems / Networks & the Internet (See also: Career & Technical Education)	<ul style="list-style-type: none"> • Digital Electronics • Physical Computing • Cybersecurity
Algorithms & Programming (See also: Mathematics)	<ul style="list-style-type: none"> • Computer Programming • Data Structures • Object-Oriented Programming
Data & Analysis (See also: Mathematics)	<ul style="list-style-type: none"> • Data Science

Impacts of Computing (See also: Social Studies, Business, Career & Technical Education)	<ul style="list-style-type: none"> ● Computing Career Exploration ● Computer Science / Entrepreneurship ● Development and Social Impacts of Information & Communication Technologies ● Emerging Trends in Technology
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Connections to Other Disciplines and Careers

Mathematics	
Arithmetic & Logic	<ul style="list-style-type: none"> ● Recognizing patterns ● Using number systems and representations ● Arithmetic and logical operations ● Developing algorithms ● Developing abstractions
Algebra	<ul style="list-style-type: none"> ● Variables, expressions, and statements ● Functions
Geometry	<ul style="list-style-type: none"> ● Using and creating computer programs to create geometric patterns and shapes
Data & Statistics	<ul style="list-style-type: none"> ● Representing phenomena numerically and digitally ● Using and creating computer simulations ● Using and creating computer programs to process, analyze, and visualize data.

Sciences & Engineering	
Earth & Space Sciences	<ul style="list-style-type: none"> ● Geographic information systems (GIS) ● Agriculture and natural resource management
Physical Sciences	<ul style="list-style-type: none"> ● Mechanics and robotics
Life Sciences	<ul style="list-style-type: none"> ● Modeling and simulation - biological systems ● Bioinformatics ● Biomimicry
Engineering, Technology, & Applications of Science	<ul style="list-style-type: none"> ● Electrical and computer engineering ● Software engineering ● Computational design and modeling for engineering

Visual Arts, Media Arts & Design	
Media Arts & Interactive arts (See also: Career & Technical Education)	<ul style="list-style-type: none"> ● Audio/video production ● Artbotics ● Video games
Visual Arts & Design	<ul style="list-style-type: none"> ● Computational design

Humanities & Social Sciences	
English Language Arts & World Languages	<ul style="list-style-type: none"> ● Formal vs. natural languages ● Syntax and semantics ● Natural language processing ● Computer translation
Social Studies	<ul style="list-style-type: none"> ● Development and impact of information & communication technologies ● Data and analytics in social sciences
Fine Arts & Performing Arts	<ul style="list-style-type: none"> ● Computing for creative expression ● Technology design / engineering for performing arts ● Data and analytics for sports
Health & Wellness	<ul style="list-style-type: none"> ● Technology use and impact on physical and mental health and wellness ● Measuring and using biometrics. ● Kinesiology and robotics

Career & Technical Education (CTE)	
CTE Clusters	Examples of Computing
STE(A)M: <ul style="list-style-type: none"> ● Agriculture, Food & Natural Resources ● Architecture & Construction ● Arts, A/V Technology & Communications ● Information Technology ● Health Science ● Manufacturing ● Science, Technology, Engineering & Mathematics 	<ul style="list-style-type: none"> ● Geographic Information Systems (GIS) ● Healthcare analytics ● Automated manufacturing / robotics
Business: <ul style="list-style-type: none"> ● Business Management & Administration ● Finance ● Hospitality & Tourism ● Marketing ● Transportation, Distribution & Logistics 	<ul style="list-style-type: none"> ● Business analytics for marketing, logistics, etc. ● Financial modeling and automation
Human Services: <ul style="list-style-type: none"> ● Education & Training ● Government & Public Administration ● Human Services ● Law, Public Safety, Corrections & Security 	<ul style="list-style-type: none"> ● Educational technology ● Social media ● Cybersecurity, digital forensics

Part 2: Standards

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Preface

Connections to Computer Science Teachers Association (CSTA) Standards and K-12 CS Framework.

NH's Computer Science Standards are aligned with the [CSTA K-12 Computer Science Standards](#) and [K-12 CS Framework](#).

Third-party resources that are aligned with these national standards are also aligned with NH's standards.

Ages and grades

The age ranges and grade bands given below are approximate. Student learning should be personalized so that each student is gaining skills and knowledge in a developmentally appropriate manner.

Core K-12 Standards	Level 1A	Ages 5-7	Grades K-2	Play-based learning
	Level 1B	Ages 8-11	Grades 3-5	Primarily blocks-based programming tools
	Level 2	Ages 11-14	Grades 6-8	Transition to text-based programming tools
	Level 3A	Ages 14-16	Grades 9-10	Meets Technology graduation requirement
Electives	Level 3B	Ages 16-18	Grades 11-12	High school electives for students who wish to pursue study of computer science beyond the core for all students.

Concepts and practices

Within each age / grade band, the standards are organized by concepts, and reference the practices.

Concepts	Practices	
1. Computing Systems 2. Networks and the Internet 3. Data and Analysis 4. Algorithms and Programming 5. Impacts of Computing	1. Fostering an Inclusive Computing Culture 2. Collaborating Around Computing 3. Recognizing and Defining Computational Problems	4. Developing and Using Abstractions 5. Creating Computational Artifacts 6. Testing and Refining Computational Artifacts 7. Communicating About Computing

Level 1A Standards

Computing Systems

1A-CS-01	<p>Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</p> <p><i>People use computing devices to perform a variety of tasks accurately and quickly. Students should be able to select the appropriate app/program to use for tasks they are required to complete. For example, if students are asked to draw a picture, they should be able to open and use a drawing app/program to complete this task, or if they are asked to create a presentation, they should be able to open and use presentation software. In addition, with teacher guidance, students should compare and discuss preferences for software with the same primary functionality. Students could compare different web browsers or word processing, presentation, or drawing programs.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture: 1.1</p>
1A-CS-02	<p>Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).</p> <p><i>A computing system is composed of hardware and software. Hardware consists of physical components. Students should be able to identify and describe the function of external hardware, such as desktop computers, laptop computers, tablet devices, monitors, keyboards, mice, and printers.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

1A-CS-03	<p>Describe basic hardware and software problems using accurate terminology.</p> <p><i>Problems with computing systems have different causes. Students at this level do not need to understand those causes, but they should be able to communicate a problem with accurate terminology (e.g., when an app or program is not working as expected, a device will not turn on, the sound does not work, etc.). Ideally, students would be able to use simple troubleshooting strategies, including turning a device off and on to reboot it, closing and reopening an app, turning on speakers, or plugging in headphones. These are, however, not specified in the standard, because these problems may not occur.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts, Communicating About Computing: 6.2, 7.2</p>
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Networks & the Internet

1A-NI-04	<p>Explain what passwords are and why we use them, and use strong passwords to protect devices and information from unauthorized access.</p> <p><i>Learning to protect one's device or information from unwanted use by others is an essential first step in learning about cybersecurity. Students are not required to use multiple strong passwords. They should appropriately use and protect the passwords they are required to use.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>
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Data & Analysis

1A-DA-05	<p>Store, copy, search, retrieve, modify, and delete information using a computing device and define the information stored as data.</p> <p><i>All information stored and processed by a computing device is referred to as data. Data can be images, text documents, audio files, software programs or apps, video files, etc. As students use software to complete tasks on a computing device, they will be manipulating data.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.2</p>
1A-DA-06	<p>Collect and present the same data in various visual formats.</p> <p><i>The collection and use of data about the world around them is a routine part of life and influences how people live. Students could collect data on the weather, such as sunny days versus rainy days, the temperature at the beginning of the school day and end of the school day, or the inches of rain over the course of a storm. Students could count the number of pieces of each color of candy in a bag of candy, such as Skittles or M&Ms. Students could create surveys of things that interest them, such as favorite foods, pets, or TV shows, and collect answers to their surveys from their peers and others. The data collected could then be organized into two or more visualizations, such as a bar graph, pie chart, or pictograph.</i></p> <p>Practice(s): Communicating About Computing, Developing and Using Abstractions: 7.1, 4.4</p>

1A-DA-07	<p>Identify and describe patterns in data visualizations, such as charts or graphs, to make predictions.</p> <p><i>Data can be used to make inferences or predictions about the world. Students could analyze a graph or pie chart of the colors in a bag of candy or the averages for colors in multiple bags of candy, identify the patterns for which colors are most and least represented, and then make a prediction as to which colors will have most and least in a new bag of candy. Students could analyze graphs of temperatures taken at the beginning of the school day and end of the school day, identify the patterns of when temperatures rise and fall, and predict if they think the temperature will rise or fall at a particular time of the day, based on the pattern observed.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
<h2>Algorithms & Programming</h2>	
1A-AP-08	<p>Model daily processes by creating and following algorithms (sets of step-by-step instructions) to complete tasks.</p> <p><i>Composition is the combination of smaller tasks into more complex tasks. Students could create and follow algorithms for making simple foods, brushing their teeth, getting ready for school, participating in clean-up time.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>
1A-AP-09	<p>Model the way programs store and manipulate data by using numbers or other symbols to represent information.</p> <p><i>Information in the real world can be represented in computer programs. Students could use thumbs up/down as representations of yes/no, use arrows when writing algorithms to represent direction, or encode and decode words using numbers, pictographs, or other symbols to represent letters or words.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>
1A-AP-10	<p>Develop programs with sequences and simple loops, to express ideas or address a problem.</p> <p><i>Programming is used as a tool to create products that reflect a wide range of interests. Control structures specify the order in which instructions are executed within a program. Sequences are the order of instructions in a program. For example, if dialogue is not sequenced correctly when programming a simple animated story, the story will not make sense. If the commands to program a robot are not in the correct order, the robot will not complete the task desired. Loops allow for the repetition of a sequence of code multiple times. For example, in a program to show the life cycle of a butterfly, a loop could be combined with move commands to allow continual but controlled movement of the character.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>
1A-AP-11	<p>Decompose (break down) the steps needed to solve a problem into a precise sequence of instructions.</p> <p><i>Decomposition is the act of breaking down tasks into simpler tasks. Students could break down the steps needed to make a peanut butter and jelly sandwich, to brush their teeth, to draw a shape, to move a character across the screen, or to solve a level of a coding app.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.2</p>

1A-AP-12	<p>Develop plans that describe a program’s sequence of events, goals, and expected outcomes.</p> <p><i>Creating a plan for what a program will do clarifies the steps that will be needed to create a program and can be used to check if a program is correct. Students could create a planning document, such as a story map, a storyboard, or a sequential graphic organizer, to illustrate what their program will do. Students at this stage may complete the planning process with help from their teachers.</i></p> <p>Practice(s): Creating Computational Artifacts, Communicating About Computing: 5.1, 7.2</p>
1A-AP-13	<p>Give attribution when using the ideas and creations of others while developing programs.</p> <p><i>Using computers comes with a level of responsibility. Students should credit artifacts that were created by others, such as pictures, music, and code. Credit could be given orally, if presenting their work to the class, or in writing or orally, if sharing work on a class blog or website. Proper attribution at this stage does not require a formal citation, such as in a bibliography or works cited document.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>
1A-AP-14	<p>Debug (identify and fix) errors in an algorithm or program that includes sequences and simple loops.</p> <p><i>Algorithms or programs may not always work correctly. Students should be able to use various strategies, such as changing the sequence of the steps, following the algorithm in a step-by-step manner, or trial and error to fix problems in algorithms and programs.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.2</p>
1A-AP-15	<p>Using correct terminology, describe steps taken and choices made during the iterative process of program development.</p> <p><i>At this stage, students should be able to talk or write about the goals and expected outcomes of the programs they create and the choices that they made when creating programs. This could be done using coding journals, discussions with a teacher, class presentations, or blogs.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

Impacts of Computing

1A-IC-16	<p>Compare how people live and work before and after the implementation or adoption of new computing technology.</p> <p><i>Computing technology has positively and negatively changed the way people live and work. In the past, if students wanted to read about a topic, they needed access to a library to find a book about it. Today, students can view and read information on the Internet about a topic or they can download e-books about it directly to a device. Such information may be available in more than one language and could be read to a student, allowing for great accessibility.</i></p> <p>Practice(s): Communicating About Computing: 7</p>
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1A-IC-17	<p>Work respectfully and responsibly with others online.</p> <p><i>Online communication facilitates positive interactions, such as sharing ideas with many people, but the public and anonymous nature of online communication also allows intimidating and inappropriate behavior in the form of cyberbullying. Students could share their work on blogs or in other collaborative spaces online, taking care to avoid sharing information that is inappropriate or that could personally identify them to others. Students could provide feedback to others on their work in a kind and respectful manner and could tell an adult if others are sharing things they should not share or are treating others in an unkind or disrespectful manner on online collaborative spaces.</i></p> <p>Practice(s): Collaborating Around Computing: 2.1</p>
1A-IC-18	<p>Keep login information private, and log off of devices appropriately.</p> <p><i>People use computing technology in ways that can help or hurt themselves or others. Harmful behaviors, such as sharing private information and leaving public devices logged in should be recognized and avoided.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>

Level 1B Standards

Computing Systems

1B-CS-01	<p>Describe how internal and external parts of computing devices function to form a system.</p> <p><i>Computing devices often depend on other devices or components. For example, a robot depends on a physically attached light sensor to detect changes in brightness, whereas the light sensor depends on the robot for power. Keyboard input or a mouse click could cause an action to happen or information to be displayed on a screen; this could only happen because the computer has a processor to evaluate what is happening externally and produce corresponding responses. Students should describe how devices and components interact using correct terminology.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
1B-CS-02	<p>Model how computer hardware and software work together as a system to accomplish tasks.</p> <p><i>In order for a person to accomplish tasks with a computer, both hardware and software are needed. At this stage, a model should only include the basic elements of a computer system, such as input, output, processor, sensors, and storage. Students could draw a model on paper or in a drawing program, program an animation to demonstrate it, or demonstrate it by acting this out in some way.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>

1B-CS-03	<p>Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.</p> <p><i>Although computing systems may vary, common troubleshooting strategies can be used on all of them. Students should be able to identify solutions to problems such as the device not responding, no power, no network, app crashing, no sound, or password entry not working. Should errors occur at school, the goal would be that students would use various strategies, such as rebooting the device, checking for power, checking network availability, closing and reopening an app, making sure speakers are turned on or headphones are plugged in, and making sure that the caps lock key is not on, to solve these problems, when possible.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.2</p>
<h2>Networks & the Internet</h2>	
1B-NI-04	<p>Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.</p> <p><i>Information is sent and received over physical or wireless paths. It is broken down into smaller pieces called packets, which are sent independently and reassembled at the destination. Students should demonstrate their understanding of this flow of information by, for instance, drawing a model of the way packets are transmitted, programming an animation to show how packets are transmitted, or demonstrating this through an unplugged activity which has them act it out in some way.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>
1B-NI-05	<p>Discuss real-world cybersecurity problems and how personal information can be protected.</p> <p><i>Just as we protect our personal property offline, we also need to protect our devices and the information stored on them. Information can be protected using various security measures. These measures can be physical and/or digital. Students could discuss or use a journaling or blogging activity to explain, orally or in writing, about topics that relate to personal cybersecurity issues. Discussion topics could be based on current events related to cybersecurity or topics that are applicable to students, such as the necessity of backing up data to guard against loss, how to create strong passwords and the importance of not sharing passwords, or why we should install and keep anti-virus software updated to protect data and systems.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.1</p>
<h2>Data & Analysis</h2>	
1B-DA-06	<p>Organize and present collected data visually to highlight relationships and support a claim.</p> <p><i>Raw data has little meaning on its own. Data is often sorted or grouped to provide additional clarity. Organizing data can make interpreting and communicating it to others easier. Data points can be clustered by a number of commonalities. The same data could be manipulated in different ways to emphasize particular aspects or parts of the data set. For example, a data set of sports teams could be sorted by wins,</i></p>

	<p><i>points scored, or points allowed, and a data set of weather information could be sorted by high temperatures, low temperatures, or precipitation.</i></p> <p>Practice(s): Communicating About Computing: 7.1</p>
1B-DA-07	<p>Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate an idea.</p> <p><i>The accuracy of data analysis is related to how realistically data is represented. Inferences or predictions based on data are less likely to be accurate if the data is not sufficient or if the data is incorrect in some way. Students should be able to refer to data when communicating an idea. For example, in order to explore the relationship between speed, time, and distance, students could operate a robot at uniform speed, and at increasing time intervals to predict how far the robot travels at that speed. In order to make an accurate prediction, one or two attempts of differing times would not be enough. The robot may also collect temperature data from a sensor, but that data would not be relevant for the task. Students must also make accurate measurements of the distance the robot travels in order to develop a valid prediction. Students could record the temperature at noon each day as a basis to show that temperatures are higher in certain months of the year. If temperatures are not recorded on non-school days or are recorded incorrectly or at different times of the day, the data would be incomplete and the ideas being communicated could be inaccurate. Students may also record the day of the week on which the data was collected, but this would have no relevance to whether temperatures are higher or lower. In order to have sufficient and accurate data on which to communicate the idea, students might want to use data provided by a governmental weather agency.</i></p> <p>Practice(s): Communicating About Computing: 7.1</p>
<h2>Algorithms & Programming</h2>	
1B-AP-08	<p>Compare and refine multiple algorithms for the same task and determine which is the most appropriate.</p> <p><i>Different algorithms can achieve the same result, though sometimes one algorithm might be most appropriate for a specific situation. Students should be able to look at different ways to solve the same task and decide which would be the best solution. For example, students could use a map and plan multiple algorithms to get from one point to another. They could look at routes suggested by mapping software and change the route to something that would be better, based on which route is shortest or fastest or would avoid a problem. Students might compare algorithms that describe how to get ready for school. Another example might be to write different algorithms to draw a regular polygon and determine which algorithm would be the easiest to modify or repurpose to draw a different polygon.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts, Recognizing and Defining Computational Problems: 6.3, 3.3</p>
1B-AP-09	<p>Create programs that use variables to store and modify data.</p> <p><i>Variables are used to store and modify data. At this level, understanding how to use variables is sufficient. For example, students may use mathematical operations to add to the score of a game or subtract from the number of lives available in a game. The use of a variable as a countdown timer is another example.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>

1B-AP-10	<p>Create programs that include sequences, events, loops, and conditionals.</p> <p><i>Control structures specify the order (sequence) in which instructions are executed within a program and can be combined to support the creation of more complex programs. Events allow portions of a program to run based on a specific action. For example, students could write a program to explain the water cycle and when a specific component is clicked (event), the program would show information about that part of the water cycle. Conditionals allow for the execution of a portion of code in a program when a certain condition is true. For example, students could write a math game that asks multiplication fact questions and then uses a conditional to check whether or not the answer that was entered is correct. Loops allow for the repetition of a sequence of code multiple times. For example, in a program that produces an animation about a famous historical character, students could use a loop to have the character walk across the screen as they introduce themselves.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>
1B-AP-11	<p>Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process.</p> <p><i>Decomposition is the act of breaking down tasks into simpler tasks. For example, students could create an animation by separating a story into different scenes. For each scene, they would select a background, place characters, and program actions.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.2</p>
1B-AP-12	<p>Modify, remix, or incorporate portions of an existing program into one's own work, to develop something new or add more advanced features.</p> <p><i>Programs can be broken down into smaller parts, which can be incorporated into new or existing programs. For example, students could modify prewritten code from a single-player game to create a two-player game with slightly different rules, remix and add another scene to an animated story, use code to make a ball bounce from another program in a new basketball game, or modify an image created by another student.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.3</p>
1B-AP-13	<p>Use an iterative process to plan the development of a program by including others' perspectives and considering user preferences.</p> <p><i>Planning is an important part of the iterative process of program development. Students outline key features, time and resource constraints, and user expectations. Students should document the plan as, for example, a storyboard, flowchart, pseudocode, or story map.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture, Creating Computational Artifacts: 1.1, 5.1</p>

1B-AP-14	<p>Observe intellectual property rights and give appropriate attribution when creating or remixing programs.</p> <p><i>Intellectual property rights can vary by country but copyright laws give the creator of a work a set of rights that prevents others from copying the work and using it in ways that they may not like. Students should identify instances of remixing, when ideas are borrowed and iterated upon, and credit the original creator. Students should also consider common licenses that place limitations or restrictions on the use of computational artifacts, such as images and music downloaded from the Internet. At this stage, attribution should be written in the format required by the teacher and should always be included on any programs shared online.</i></p> <p>Practice(s): Creating Computational Artifacts, Communicating About Computing: 5.2, 7.3</p>
1B-AP-15	<p>Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended.</p> <p><i>As students develop programs they should continuously test those programs to see that they do what was expected and fix (debug), any errors. Students should also be able to successfully debug simple errors in programs created by others.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.1, 6.2</p>
1B-AP-16	<p>Take on varying roles, with teacher guidance, when collaborating with peers during the design, implementation, and review stages of program development.</p> <p><i>Collaborative computing is the process of performing a computational task by working in pairs or on teams. Because it involves asking for the contributions and feedback of others, effective collaboration can lead to better outcomes than working independently. Students should take turns in different roles during program development, such as note taker, facilitator, program tester, or “driver” of the computer.</i></p> <p>Practice(s): Collaborating Around Computing: 2.2</p>
1B-AP-17	<p>Describe choices made during program development using code comments, presentations, and demonstrations.</p> <p><i>People communicate about their code to help others understand and use their programs. Another purpose of communicating one's design choices is to show an understanding of one's work. These explanations could manifest themselves as in-line code comments for collaborators and assessors, or as part of a summative presentation, such as a code walk-through or coding journal.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

Impacts of Computing

1B-IC-18	<p>Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.</p> <p><i>New computing technology is created and existing technologies are modified for many reasons, including to increase their benefits, decrease their risks, and meet societal needs. Students, with guidance from their teacher, should discuss topics that relate to the history of technology and the changes in the world due to technology. Topics could be based on current news content, such as robotics, wireless Internet, mobile computing devices, GPS systems, wearable computing, or how social media has influenced social and political changes.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.1</p>
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1B-IC-19	<p>Brainstorm ways to improve the accessibility and usability of technology products for the diverse needs and wants of users.</p> <p><i>The development and modification of computing technology are driven by people’s needs and wants and can affect groups differently. Anticipating the needs and wants of diverse end users requires students to purposefully consider potential perspectives of users with different backgrounds, ability levels, points of view, and disabilities. For example, students may consider using both speech and text when they wish to convey information in a game. They may also wish to vary the types of programs they create, knowing that not everyone shares their own tastes.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture: 1.2</p>
1B-IC-20	<p>Seek diverse perspectives for the purpose of improving computational artifacts.</p> <p><i>Computing provides the possibility for collaboration and sharing of ideas and allows the benefit of diverse perspectives. For example, students could seek feedback from other groups in their class or students at another grade level. Or, with guidance from their teacher, they could use video conferencing tools or other online collaborative spaces, such as blogs, wikis, forums, or website comments, to gather feedback from individuals and groups about programming projects.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture: 1.1</p>
1B-IC-21	<p>Use public domain or creative commons media, and refrain from copying or using material created by others without permission.</p> <p><i>Ethical complications arise from the opportunities provided by computing. The ease of sending and receiving copies of media on the Internet, such as video, photos, and music, creates the opportunity for unauthorized use, such as online piracy, and disregard of copyrights. Students should consider the licenses on computational artifacts that they wish to use. For example, the license on a downloaded image or audio file may have restrictions that prohibit modification, require attribution, or prohibit use entirely.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>

Level 2 Standards

Computing Systems

2-CS-01	<p>Recommend improvements to the design of computing devices, based on an analysis of how users interact with the devices.</p> <p><i>The study of human–computer interaction (HCI) can improve the design of devices, including both hardware and software. Students should make recommendations for existing devices (e.g., a laptop, phone, or tablet) or design their own components or interface (e.g., create their own controllers). Teachers can guide students to consider usability through several lenses, including accessibility, ergonomics, and learnability. For example, assistive devices provide capabilities such as scanning written information and converting it to speech.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.3</p>
2-CS-02	<p>Design projects that combine hardware and software components to collect and exchange data.</p> <p><i>Collecting and exchanging data involves input, output, storage, and processing. When possible, students should select the hardware and software components for their project designs by considering factors such as functionality, cost, size, speed, accessibility, and aesthetics. For example, components for a mobile app could include accelerometer, GPS, and speech recognition. The choice of a device that connects wirelessly through a Bluetooth connection versus a physical USB connection involves a tradeoff between mobility and the need for an additional power source for the wireless device.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.1</p>
2-CS-03	<p>Systematically identify and fix problems with computing devices and their components.</p> <p><i>Since a computing device may interact with interconnected devices within a system, problems may not be due to the specific computing device itself but to devices connected to it. Just as pilots use checklists to troubleshoot problems with aircraft systems, students should use a similar, structured process to troubleshoot problems with computing systems and ensure that potential solutions are not overlooked. Examples of troubleshooting strategies include following a troubleshooting flow diagram, making changes to software to see if hardware will work, checking connections and settings, and swapping in working components.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.2</p>
<h2>Networks & the Internet</h2>	
2-NI-04	<p>Model the role of protocols in transmitting data across networks and the Internet.</p> <p><i>Protocols are rules that define how messages between computers are sent. They determine how quickly and securely information is transmitted across networks and the Internet, as well as how to handle errors in transmission. Students should model how data is sent using protocols to choose the fastest path, to deal with missing information, and to deliver sensitive data securely. For example, students could devise a plan for resending lost information or for interpreting a picture that has missing pieces. The priority at this grade level is understanding the purpose of protocols and how they enable secure and errorless communication. Knowledge of the details of how specific protocols work is not expected.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>

2-NI-05	<p>Explain how physical and digital security measures protect electronic information.</p> <p><i>Information that is stored online is vulnerable to unwanted access. Examples of physical security measures to protect data include keeping passwords hidden, locking doors, making backup copies on external storage devices, and erasing a storage device before it is reused. Examples of digital security measures include secure router admin passwords, firewalls that limit access to private networks, and the use of a protocol such as HTTPS to ensure secure data transmission.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
2-NI-06	<p>Apply multiple methods of encryption to model the secure transmission of information.</p> <p><i>Encryption can be as simple as letter substitution or as complicated as modern methods used to secure networks and the Internet. Students should encode and decode messages using a variety of encryption methods, and they should understand the different levels of complexity used to hide or secure information. For example, students could secure messages using methods such as Caesar cyphers or steganography (i.e., hiding messages inside a picture or other data). They can also model more complicated methods, such as public key encryption, through unplugged activities.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>
<h2>Data & Analysis</h2>	
2-DA-07	<p>Represent data using multiple encoding schemes.</p> <p><i>Data representations occur at multiple levels of abstraction, from the physical storage of bits to the arrangement of information into organized formats (e.g., tables). Students should represent the same data in multiple ways. For example, students could represent the same color using binary, RGB values, hex codes (low-level representations), as well as forms understandable by people, including words, symbols, and digital displays of the color (high-level representations).</i></p> <p>Practice(s): Developing and Using Abstractions: 4</p>
2-DA-08	<p>Collect data using computational tools and transform the data to make it more useful and reliable.</p> <p><i>As students continue to build on their ability to organize and present data visually to support a claim, they will need to understand when and how to transform data for this purpose. Students should transform data to remove errors, highlight or expose relationships, and/or make it easier for computers to process. The cleaning of data is an important transformation for ensuring consistent format and reducing noise and errors (e.g., removing irrelevant responses in a survey). An example of a transformation that highlights a relationship is representing males and females as percentages of a whole instead of as individual counts.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.3</p>

2-DA-09	<p>Refine computational models based on the data they have generated.</p> <p><i>A model may be a programmed simulation of events or a representation of how various data is related. In order to refine a model, students need to consider which data points are relevant, how data points relate to each other, and if the data is accurate. For example, students may make a prediction about how far a ball will travel based on a table of data related to the height and angle of a track. The students could then test and refine their model by comparing predicted versus actual results and considering whether other factors are relevant (e.g., size and mass of the ball). Additionally, students could refine game mechanics based on test outcomes in order to make the game more balanced or fair.</i></p> <p>Practice(s): Creating Computational Artifacts, Developing and Using Abstractions: 5.3, 4.4</p>
<h2>Algorithms & Programming</h2>	
2-AP-10	<p>Use flowcharts and/or pseudocode to address complex problems as algorithms.</p> <p><i>Complex problems are problems that would be difficult for students to solve computationally. Students should use pseudocode and/or flowcharts to organize and sequence an algorithm that addresses a complex problem, even though they may not actually program the solutions. For example, students might express an algorithm that produces a recommendation for purchasing sneakers based on inputs such as size, colors, brand, comfort, and cost. Testing the algorithm with a wide range of inputs and users allows students to refine their recommendation algorithm and to identify other inputs they may have initially excluded.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4, 4.1</p>
2-AP-11	<p>Create clearly named variables that represent different data types and perform operations on their values.</p> <p><i>A variable is like a container with a name, in which the contents may change, but the name (identifier) does not. When planning and developing programs, students should decide when and how to declare and name new variables. Students should use naming conventions to improve program readability. Examples of operations include adding points to the score, combining user input with words to make a sentence, changing the size of a picture, or adding a name to a list of people.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.1, 5.2</p>
2-AP-12	<p>Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.</p> <p><i>Control structures can be combined in many ways. Nested loops are loops placed within loops. Compound conditionals combine two or more conditions in a logical relationship (e.g., using AND, OR, and NOT), and nesting conditionals within one another allows the result of one conditional to lead to another. For example, when programming an interactive story, students could use a compound conditional within a loop to unlock a door only if a character has a key AND is touching the door.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.1, 5.2</p>

2-AP-13	<p>Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.</p> <p><i>Students should break down problems into subproblems, which can be further broken down to smaller parts. Decomposition facilitates aspects of program development by allowing students to focus on one piece at a time (e.g., getting input from the user, processing the data, and displaying the result to the user). Decomposition also enables different students to work on different parts at the same time. For example, animations can be decomposed into multiple scenes, which can be developed independently.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.2</p>
2-AP-14	<p>Create procedures with parameters to organize code and make it easier to reuse.</p> <p><i>Students should create procedures and/or functions that are used multiple times within a program to repeat groups of instructions. These procedures can be generalized by defining parameters that create different outputs for a wide range of inputs. For example, a procedure to draw a circle involves many instructions, but all of them can be invoked with one instruction, such as “drawCircle.” By adding a radius parameter, the user can easily draw circles of different sizes.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1, 4.3</p>
2-AP-15	<p>Seek and incorporate feedback from team members and users to refine a solution that meets user needs.</p> <p><i>Development teams that employ user-centered design create solutions (e.g., programs and devices) that can have a large societal impact, such as an app that allows people with speech difficulties to translate hard-to-understand pronunciation into understandable language. Students should begin to seek diverse perspectives throughout the design process to improve their computational artifacts. Considerations of the end-user may include usability, accessibility, age-appropriate content, respectful language, user perspective, pronoun use, color contrast, and ease of use.</i></p> <p>Practice(s): Collaborating Around Computing, Fostering an Inclusive Computing Culture: 2.3, 1.1</p>
2-AP-16	<p>Incorporate existing code, media, and libraries into original programs, and give attribution.</p> <p><i>Building on the work of others enables students to produce more interesting and powerful creations. Students should use portions of code, algorithms, and/or digital media in their own programs and websites. At this level, they may also import libraries and connect to web application program interfaces (APIs). For example, when creating a side-scrolling game, students may incorporate portions of code that create a realistic jump movement from another person's game, and they may also import Creative Commons-licensed images to use in the background. Students should give attribution to the original creators to acknowledge their contributions.</i></p> <p>Practice(s): Developing and Using Abstractions, Creating Computational Artifacts, Communicating About Computing: 4.2, 5.2, 7.3</p>
2-AP-17	<p>Systematically test and refine programs using a range of test cases.</p> <p><i>Use cases and test cases are created and analyzed to better meet the needs of users and to evaluate whether programs function as intended. At this level, testing should become a deliberate process that is more iterative, systematic, and proactive than at lower levels. Students should begin to test programs by considering potential errors, such as what will happen if a user enters invalid input (e.g., negative numbers and 0 instead of positive numbers).</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.1</p>

2-AP-18	<p>Distribute tasks and maintain a project timeline when collaboratively developing computational artifacts.</p> <p><i>Collaboration is a common and crucial practice in programming development. Often, many individuals and groups work on the interdependent parts of a project together. Students should assume pre-defined roles within their teams and manage the project workflow using structured timelines. With teacher guidance, they will begin to create collective goals, expectations, and equitable workloads. For example, students may divide the design stage of a game into planning the storyboard, flowchart, and different parts of the game mechanics. They can then distribute tasks and roles among members of the team and assign deadlines.</i></p> <p>Practice(s): Collaborating Around Computing: 2.2</p>
2-AP-19	<p>Document programs in order to make them easier to follow, test, and debug.</p> <p><i>Documentation allows creators and others to more easily use and understand a program. Students should provide documentation for end users that explains their artifacts and how they function. For example, students could provide a project overview and clear user instructions. They should also incorporate comments in their product and communicate their process using design documents, flowcharts, and presentations.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
<h2>Impacts of Computing</h2>	
2-IC-20	<p>Compare tradeoffs associated with computing technologies that affect people's everyday activities and career options.</p> <p><i>Advancements in computer technology are neither wholly positive nor negative. However, the ways that people use computing technologies have tradeoffs. Students should consider current events related to broad ideas, including privacy, communication, and automation. For example, driverless cars can increase convenience and reduce accidents, but they are also susceptible to hacking. The emerging industry will reduce the number of taxi and shared-ride drivers, but will create more software engineering and cybersecurity jobs.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
2-IC-21	<p>Discuss issues of bias and accessibility in the design of existing technologies.</p> <p><i>Students should test and discuss the usability of various technology tools (e.g., apps, games, and devices) with the teacher's guidance. For example, facial recognition software that works better for lighter skin tones was likely developed with a homogeneous testing group and could be improved by sampling a more diverse population. When discussing accessibility, students may notice that allowing a user to change font sizes and colors will not only make an interface usable for people with low vision but also benefits users in various situations, such as in bright daylight or a dark room.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture: 1.2</p>

2-IC-22	<p>Collaborate with many contributors through strategies such as crowdsourcing or surveys when creating a computational artifact.</p> <p><i>Crowdsourcing is gathering services, ideas, or content from a large group of people, especially from the online community. It can be done at the local level (e.g., classroom or school) or global level (e.g., age-appropriate online communities, like Scratch and Minecraft). For example, a group of students could combine animations to create a digital community mosaic. They could also solicit feedback from many people through use of online communities and electronic surveys.</i></p> <p>Practice(s): Collaborating Around Computing, Creating Computational Artifacts: 2.4, 5.2</p>
2-IC-23	<p>Describe tradeoffs between allowing information to be public and keeping information private and secure.</p> <p><i>Sharing information online can help establish, maintain, and strengthen connections between people. For example, it allows artists and designers to display their talents and reach a broad audience. However, security attacks often start with personal information that is publicly available online. Social engineering is based on tricking people into revealing sensitive information and can be thwarted by being wary of attacks, such as phishing and spoofing.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

Level 3A Standards

Computing Systems

3A-CS-01	<p>Explain how abstractions hide the underlying implementation details of computing systems embedded in everyday objects.</p> <p><i>Computing devices are often integrated with other systems, including biological, mechanical, and social systems. A medical device can be embedded inside a person to monitor and regulate his or her health, a hearing aid (a type of assistive device) can filter out certain frequencies and magnify others, a monitoring device installed in a motor vehicle can track a person's driving patterns and habits, and a facial recognition device can be integrated into a security system to identify a person. The creation of integrated or embedded systems is not an expectation at this level. Students might select an embedded device such as a car stereo, identify the types of data (radio station presets, volume level) and procedures (increase volume, store/recall saved station, mute) it includes, and explain how the implementation details are hidden from the user.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
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3A-CS-02	<p>Compare levels of abstraction and interactions between application software, system software, and hardware layers.</p> <p><i>At its most basic level, a computer is composed of physical hardware and electrical impulses. Multiple layers of software are built upon the hardware and interact with the layers above and below them to reduce complexity. System software manages a computing device's resources so that software can interact with hardware. For example, text editing software interacts with the operating system to receive input from the keyboard, convert the input to bits for storage, and interpret the bits as readable text to display on the monitor. System software is used on many different types of devices, such as smart TVs, assistive devices, virtual components, cloud components, and drones. For example, students may explore the progression from voltage to binary signal to logic gates to adders and so on. Knowledge of specific, advanced terms for computer architecture, such as BIOS, kernel, or bus, is not expected at this level.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
3A-CS-03	<p>Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.</p> <p><i>Troubleshooting complex problems involves the use of multiple sources when researching, evaluating, and implementing potential solutions. Troubleshooting also relies on experience, such as when people recognize that a problem is similar to one they have seen before or adapt solutions that have worked in the past. Examples of complex troubleshooting strategies include resolving connectivity problems, adjusting system configurations and settings, ensuring hardware and software compatibility, and transferring data from one device to another. Students could create a flow chart, a job aid for a help desk employee, or an expert system.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.2</p>
<h2>Networks & the Internet</h2>	
3A-NI-04	<p>Evaluate the scalability and reliability of networks, by describing the relationship between routers, switches, servers, topology, and addressing.</p> <p><i>Each device is assigned an address that uniquely identifies it on the network. Routers function by comparing IP addresses to determine the pathways packets should take to reach their destination. Switches function by comparing MAC addresses to determine which computers or network segments will receive frames. Students could use online network simulators to experiment with these factors.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
3A-NI-05	<p>Give examples to illustrate how sensitive data can be affected by malware and other attacks.</p> <p><i>Network security depends on a combination of hardware, software, and practices that control access to data and systems. The needs of users and the sensitivity of data determine the level of security implemented. Potential security problems, such as denial-of-service attacks, ransomware, viruses, worms, spyware, and phishing, present threats to sensitive data. Students might reflect on case studies or current events in which governments or organizations experienced data leaks or data loss as a result of these types of attacks.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

3A-NI-06	<p>Recommend security measures to address various scenarios based on factors such as efficiency, feasibility, and ethical impacts.</p> <p><i>Security measures may include physical security tokens, two-factor authentication, and biometric verification. Potential security problems, such as denial-of-service attacks, ransomware, viruses, worms, spyware, and phishing, exemplify why sensitive data should be securely stored and transmitted. The timely and reliable access to data and information services by authorized users, referred to as availability, is ensured through adequate bandwidth, backups, and other measures. Students should systematically evaluate the feasibility of using computational tools to solve given problems or subproblems, such as through a cost-benefit analysis. Eventually, students should include more factors in their evaluations, such as how efficiency affects feasibility or whether a proposed approach raises ethical concerns.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.3</p>
3A-NI-07	<p>Compare various security measures, considering tradeoffs between the usability and security of a computing system.</p> <p><i>Security measures may include physical security tokens, two-factor authentication, and biometric verification, but choosing security measures involves tradeoffs between the usability and security of the system. The needs of users and the sensitivity of data determine the level of security implemented. Students might discuss computer security policies in place at the local level that present a tradeoff between usability and security, such as a web filter that prevents access to many educational sites but keeps the campus network safe.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.3</p>
3A-NI-08	<p>Explain tradeoffs when selecting and implementing cybersecurity recommendations.</p> <p><i>Network security depends on a combination of hardware, software, and practices that control access to data and systems. The needs of users and the sensitivity of data determine the level of security implemented. Every security measure involves tradeoffs between the accessibility and security of the system. Students should be able to describe, justify, and document choices they make using terminology appropriate for the intended audience and purpose. Students could debate issues from the perspective of diverse audiences, including individuals, corporations, privacy advocates, security experts, and government.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
<h2>Data & Analysis</h2>	
3A-DA-09	<p>Translate between different bit representations of real-world phenomena, such as characters, numbers, and images.</p> <p><i>For example, convert hexadecimal color codes to decimal percentages, ASCII/Unicode representation, and logic gates.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>

3A-DA-10	<p>Evaluate the tradeoffs in how data elements are organized and where data is stored.</p> <p><i>People make choices about how data elements are organized and where data is stored. These choices affect cost, speed, reliability, accessibility, privacy, and integrity. Students should evaluate whether a chosen solution is most appropriate for a particular problem. Students might consider the cost, speed, reliability, accessibility, privacy, and integrity tradeoffs between storing photo data on a mobile device versus in the cloud.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.3</p>
3A-DA-11	<p>Create interactive data visualizations using software tools to help others better understand real-world phenomena.</p> <p><i>People transform, generalize, simplify, and present large data sets in different ways to influence how other people interpret and understand the underlying information. Examples include visualization, aggregation, rearrangement, and application of mathematical operations. People use software tools or programming to create powerful, interactive data visualizations and perform a range of mathematical operations to transform and analyze data. Students should model phenomena as systems, with rules governing the interactions within the system and evaluate these models against real-world observations. For example, flocking behaviors, queueing, or life cycles. Google Fusion Tables can provide access to data visualization online.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>
3A-DA-12	<p>Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.</p> <p><i>Computational models make predictions about processes or phenomenon based on selected data and features. The amount, quality, and diversity of data and the features chosen can affect the quality of a model and ability to understand a system. Predictions or inferences are tested to validate models. Students should model phenomena as systems, with rules governing the interactions within the system. Students should analyze and evaluate these models against real-world observations. For example, students might create a simple producer–consumer ecosystem model using a programming tool. Eventually, they could progress to creating more complex and realistic interactions between species, such as predation, competition, or symbiosis, and evaluate the model based on data gathered from nature.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>

Algorithms & Programming

3A-AP-13	<p>Create prototypes that use algorithms to solve computational problems by leveraging prior student knowledge and personal interests.</p> <p><i>A prototype is a computational artifact that demonstrates the core functionality of a product or process. Prototypes are useful for getting early feedback in the design process, and can yield insight into the feasibility of a product. The process of developing computational artifacts embraces both creative expression and the exploration of ideas to create prototypes and solve computational problems. Students create artifacts that are personally relevant or beneficial to their community and beyond. Students should develop artifacts in response to a task or a computational problem that demonstrate the performance, reusability, and ease of implementation of an algorithm.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>
3A-AP-14	<p>Use lists to simplify solutions, generalizing computational problems instead of repeatedly using simple variables.</p> <p><i>Students should be able to identify common features in multiple segments of code and substitute a single segment that uses lists (arrays) to account for the differences.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
3A-AP-15	<p>Justify the selection of specific control structures when tradeoffs involve implementation, readability, and program performance, and explain the benefits and drawbacks of choices made.</p> <p><i>Implementation includes the choice of programming language, which affects the time and effort required to create a program. Readability refers to how clear the program is to other programmers and can be improved through documentation. The discussion of performance is limited to a theoretical understanding of execution time and storage requirements; a quantitative analysis is not expected. Control structures at this level may include conditional statements, loops, event handlers, and recursion. For example, students might compare the readability and program performance of iterative and recursive implementations of procedures that calculate the Fibonacci sequence.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 5.2</p>
3A-AP-16	<p>Design and iteratively develop computational artifacts for practical intent, personal expression, or to address a societal issue by using events to initiate instructions.</p> <p><i>In this context, relevant computational artifacts include programs, mobile apps, or web apps. Events can be user-initiated, such as a button press, or system-initiated, such as a timer firing. At previous levels, students have learned to create and call procedures. Here, students design procedures that are called by events. Students might create a mobile app that updates a list of nearby points of interest when the device detects that its location has been changed.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>

3A-AP-17	<p>Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.</p> <p><i>At this level, students should decompose complex problems into manageable subproblems that could potentially be solved with programs or procedures that already exist. For example, students could create an app to solve a community problem by connecting to an online database through an application programming interface (API).</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.2</p>
3A-AP-18	<p>Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs.</p> <p><i>Computational artifacts can be created by combining and modifying existing artifacts or by developing new artifacts. Examples of computational artifacts include programs, simulations, visualizations, digital animations, robotic systems, and apps. Complex programs are designed as systems of interacting modules, each with a specific role, coordinating for a common overall purpose. Modules allow for better management of complex tasks. The focus at this level is understanding a program as a system with relationships between modules. The choice of implementation, such as programming language or paradigm, may vary. Students could incorporate computer vision libraries to increase the capabilities of a robot or leverage open-source JavaScript libraries to expand the functionality of a web application.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>
3A-AP-19	<p>Systematically design and develop programs for broad audiences by incorporating feedback from users.</p> <p><i>Examples of programs could include games, utilities, and mobile applications. Students at lower levels collect feedback and revise programs. At this level, students should do so through a systematic process that includes feedback from broad audiences. Students might create a user satisfaction survey and brainstorm distribution methods that could yield feedback from a diverse audience, documenting the process they took to incorporate selected feedback in product revisions.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.1</p>
3A-AP-20	<p>Evaluate licenses that limit or restrict use of computational artifacts when using resources such as libraries.</p> <p><i>Examples of software licenses include copyright, freeware, and the many open-source licensing schemes. At previous levels, students adhered to licensing schemes. At this level, they should consider licensing implications for their own work, especially when incorporating libraries and other resources. Students might consider two software libraries that address a similar need, justifying their choice based on the library that has the least restrictive license.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>

3A-AP-21	<p>Evaluate and refine computational artifacts to make them more usable and accessible.</p> <p><i>Testing and refinement is the deliberate and iterative process of improving a computational artifact. This process includes debugging (identifying and fixing errors) and comparing actual outcomes to intended outcomes. Students should respond to the changing needs and expectations of end users and improve the performance, reliability, usability, and accessibility of artifacts. For example, students could incorporate feedback from a variety of end users to help guide the size and placement of menus and buttons in a user interface.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.3</p>
3A-AP-22	<p>Design and develop computational artifacts working in team roles using collaborative tools.</p> <p><i>Collaborative tools could be as complex as source code version control system or as simple as a collaborative word processor. Team roles in pair programming are driver and navigator but could be more specialized in larger teams. As programs grow more complex, the choice of resources that aid program development becomes increasingly important and should be made by the students. Students might work as a team to develop a mobile application that addresses a problem relevant to the school or community, selecting appropriate tools to establish and manage the project timeline; design, share, and revise graphical user interface elements; and track planned, in-progress, and completed components.</i></p> <p>Practice(s): Collaborating Around Computing: 2.4</p>
3A-AP-23	<p>Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.</p> <p><i>Complex programs are designed as systems of interacting modules, each with a specific role, coordinating for a common overall purpose. These modules can be procedures within a program; combinations of data and procedures; or independent, but interrelated, programs. The development of complex programs is aided by resources such as libraries and tools to edit and manage parts of the program.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
<h2>Impacts of Computing</h2>	
3A-IC-24	<p>Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.</p> <p><i>Computing may improve, harm, or maintain practices. Equity deficits, such as minimal exposure to computing, access to education, and training opportunities, are related to larger, systemic problems in society. Students should be able to evaluate the accessibility of a product to a broad group of end users, such as people who lack access to broadband or who have various disabilities. Students should also begin to identify potential bias during the design process to maximize accessibility in product design.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture: 1.2</p>

3A-IC-25	<p>Test and refine computational artifacts to reduce bias and equity deficits.</p> <p><i>Biases could include incorrect assumptions developers have made about their user base. Equity deficits include minimal exposure to computing, access to education, and training opportunities. Students should begin to identify potential bias during the design process to maximize accessibility in product design and become aware of professionally accepted accessibility standards to evaluate computational artifacts for accessibility.</i></p> <p>Practice(s): Fostering an Inclusive Computing Culture: 1.2</p>
3A-IC-26	<p>Demonstrate ways a given algorithm applies to problems across disciplines.</p> <p><i>Computation can share features with disciplines such as art and music by algorithmically translating human intention into an artifact. Students should be able to identify real-world problems that span multiple disciplines, such as increasing bike safety with new helmet technology, and that can be solved computationally.</i></p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.1</p>
3A-IC-27	<p>Use tools and methods for collaboration on a project to increase connectivity of people in different cultures and career fields.</p> <p><i>Many aspects of society, especially careers, have been affected by the degree of communication afforded by computing. The increased connectivity between people in different cultures and in different career fields has changed the nature and content of many careers. Students should explore different collaborative tools and methods used to solicit input from team members, classmates, and others, such as participation in online forums or local communities. For example, students could compare ways different social media tools could help a team become more cohesive.</i></p> <p>Practice(s): Collaborating Around Computing: 2.4</p>
3A-IC-28	<p>Explain the beneficial and harmful effects that intellectual property laws can have on innovation.</p> <p><i>Laws govern many aspects of computing, such as privacy, data, property, information, and identity. These laws can have beneficial and harmful effects, such as expediting or delaying advancements in computing and protecting or infringing upon people's rights. International differences in laws and ethics have implications for computing. For examples, laws that mandate the blocking of some file-sharing websites may reduce online piracy but can restrict the right to access information. Firewalls can be used to block harmful viruses and malware but can also be used for media censorship. Students should be aware of intellectual property laws and be able to explain how they are used to protect the interests of innovators and how patent trolls abuse the laws for financial gain.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>

3A-IC-29	<p>Explain the privacy concerns related to the collection and generation of data through automated processes that may not be evident to users.</p> <p><i>Data can be collected and aggregated across millions of people, even when they are not actively engaging with or physically near the data collection devices. This automated and nonevident collection can raise privacy concerns, such as social media sites mining an account even when the user is not online. Other examples include surveillance video used in a store to track customers for security or information about purchase habits or the monitoring of road traffic to change signals in real time to improve road efficiency without drivers being aware. Methods and devices for collecting data can differ by the amount of storage required, level of detail collected, and sampling rates.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
3A-IC-30	<p>Evaluate the social and economic implications of privacy in the context of safety, law, or ethics.</p> <p><i>Laws govern many aspects of computing, such as privacy, data, property, information, and identity. International differences in laws and ethics have implications for computing. Students might review case studies or current events which present an ethical dilemma when an individual's right to privacy is at odds with the safety, security, or wellbeing of a community.</i></p> <p>Practice(s): Communicating About Computing: 7.3</p>

Level 3B Standards

Computing Systems

3B-CS-01	<p>Categorize the roles of operating system software.</p> <p><i>Examples of roles could include memory management, data storage/retrieval, processes management, and access control.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
3B-CS-02	<p>Illustrate ways computing systems implement logic, input, and output through hardware components.</p> <p><i>Examples of components could include logic gates and IO pins.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

Networks & the Internet

3B-NI-03	<p>Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).</p> <p><i>Recommend use of free online network simulators to explore how these issues impact network functionality.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
3B-NI-04	<p>Compare ways software developers protect devices and information from unauthorized access.</p> <p><i>Examples of security concerns to consider: encryption and authentication strategies, secure coding, and safeguarding keys.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
<h2>Data & Analysis</h2>	
3B-DA-05	<p>Use data analysis tools and techniques to identify patterns in data representing complex systems.</p> <p><i>For example, identify trends in a dataset representing social media interactions, movie reviews, or shopping patterns.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
3B-DA-06	<p>Select data collection tools and techniques to generate data sets that support a claim or communicate information.</p> <p>Practice(s): Communicating About Computing: 7.2</p>
3B-DA-07	<p>Evaluate the ability of models and simulations to test and support the refinement of hypotheses.</p> <p>Practice(s): Developing and Using Abstractions: 4.4</p>
<h2>Algorithms & Programming</h2>	
3B-AP-08	<p>Describe how artificial intelligence drives many software and physical systems.</p> <p><i>Examples include digital ad delivery, self-driving cars, and credit card fraud detection.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
3B-AP-09	<p>Implement an artificial intelligence algorithm to play a game against a human opponent or solve a problem.</p> <p><i>Games do not have to be complex. Simple guessing games, Tic-Tac-Toe, or simple robot commands will be sufficient.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.3</p>

3B-AP-10	<p>Use and adapt classic algorithms to solve computational problems.</p> <p><i>Examples could include sorting and searching.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.2</p>
3B-AP-11	<p>Evaluate algorithms in terms of their efficiency, correctness, and clarity.</p> <p><i>Examples could include sorting and searching.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.2</p>
3B-AP-12	<p>Compare and contrast fundamental data structures and their uses.</p> <p><i>Examples could include strings, lists, arrays, stacks, and queues.</i></p> <p>Practice(s): Developing and Using Abstractions: 4.2</p>
3B-AP-13	<p>Illustrate the flow of execution of a recursive algorithm.</p> <p>Practice(s): Recognizing and Defining Computational Problems: 3.2</p>
3B-AP-14	<p>Construct solutions to problems using student-created components, such as procedures, modules and/or objects.</p> <p><i>Object-oriented programming is optional at this level. Problems can be assigned or student-selected.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>
3B-AP-15	<p>Analyze a large-scale computational problem and identify generalizable patterns that can be applied to a solution.</p> <p><i>As students encounter complex, real-world problems that span multiple disciplines or social systems, they should decompose complex problems into manageable subproblems that could potentially be solved with programs or procedures that already exist. For example, students could create an app to solve a community problem by connecting to an online database through an application programming interface (API).</i></p> <p>Practice(s): Developing and Using Abstractions: 4.1</p>
3B-AP-16	<p>Demonstrate code reuse by creating programming solutions using libraries and APIs.</p> <p><i>Libraries and APIs can be student-created or common graphics libraries or maps APIs, for example.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.3</p>
3B-AP-17	<p>Plan and develop programs for broad audiences using a software life cycle process.</p> <p><i>Processes could include agile, spiral, or waterfall.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.1</p>

3B-AP-18	<p>Explain security issues that might lead to compromised computer programs.</p> <p><i>For example, common issues include lack of bounds checking, poor input validation, and circular references.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>
3B-AP-19	<p>Develop programs for multiple computing platforms.</p> <p><i>Example platforms could include: computer desktop, web, or mobile.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.2</p>
3B-AP-20	<p>Use version control systems, integrated development environments (IDEs), and collaborative tools and practices (code documentation) in a group software project.</p> <p><i>Group software projects can be assigned or student-selected.</i></p> <p>Practice(s): Collaborating Around Computing: 2.4</p>
3B-AP-21	<p>Develop and use a series of test cases to verify that a program performs according to its design specifications.</p> <p><i>At this level, students are expected to select their own test cases.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.1</p>
3B-AP-22	<p>Modify an existing program to add additional functionality and discuss intended and unintended implications (e.g., breaking other functionality).</p> <p><i>For instance, changes made to a method or function signature could break invocations of that method elsewhere in a system.</i></p> <p>Practice(s): Creating Computational Artifacts: 5.3</p>
3B-AP-23	<p>Evaluate key qualities of a program through a process such as a code review.</p> <p><i>Examples of qualities could include correctness, usability, readability, efficiency, portability and scalability.</i></p> <p>Practice(s): Testing and Refining Computational Artifacts: 6.3</p>
3B-AP-24	<p>Compare multiple programming languages and discuss how their features make them suitable for solving different types of problems.</p> <p><i>Examples of features include blocks versus text, indentation versus curly braces, and high-level versus low-level.</i></p> <p>Practice(s): Communicating About Computing: 7.2</p>

Impacts of Computing

3B-IC-25	Evaluate computational artifacts to maximize their beneficial effects and minimize harmful effects on society. Practice(s): Testing and Refining Computational Artifacts, Fostering an Inclusive Computing Culture: 6.1, 1.2
3B-IC-26	Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society. Practice(s): Fostering an Inclusive Computing Culture: 1.2
3B-IC-27	Predict how computational innovations that have revolutionized aspects of our culture might evolve. <i>Areas to consider might include education, healthcare, art/entertainment, and energy.</i> Practice(s): Communicating About Computing: 7.2
3B-IC-28	Debate laws and regulations that impact the development and use of software. Practice(s): Recognizing and Defining Computational Problems, Communicating About Computing: 3.3, 7.3

Department of Education Rulemaking Process

STEP	DESCRIPTION	PROCESS TIME	Estimated Time
Rule Revision – Stakeholders and Professional Standards Board (PSB)	Rules are opened based on a number of factors including an upcoming expiration date or a new law that requires a new rule.	Open-ended time frame or a time frame determined by the expiration date of an existing rule or the effective date of a new law.	Open-ended
Initial Proposal to Board of Education (BOE)	Rules cannot enter the rulemaking process without approval by the Board of Education. If the Board approves the proposal, a public hearing is scheduled for two months later. If the board does not approve, the rule must go back to the stakeholders for more revision.	Depending on when the next board meeting is scheduled, this process could take a month or up to two months for the rule to be placed on the Board’s next agenda.	8 weeks
Initial Proposal to Legislative Budget Assistant (LBA)	The DOE needs to request a Fiscal Impact Statement (FIS) from the LBA in order to continue the rulemaking process. Agencies are required to identify the fiscal impact of any rule for revision or adoption. The LBA determines the FIS based on information provided by the department.	Turnover time from the LBA is 10 business days from the date of submission.	2 weeks
Initial Proposal to Office of Legislative Services (OLS) to be published in rulemaking register	The DOE must submit a rulemaking notice form, a copy of the FIS and a copy of the rule text to OLS for publishing in the rulemaking register.	Rulemaking registers are published every Thursday afternoon. Rulemaking notice forms must be submitted by 4pm on the Thursday of the week before the publication. Therefore, this process can take up to a week depending on when the FIS is received from the LBA.	1 week
Public Hearing Scheduled, posted and announced	Public hearing dates and times are posted on the DOE website, published in the rulemaking register and sent to a list of stakeholders per RSA 541-A:6, III	This is completed within two days of receiving the rulemaking register.	2 days
Public Hearing	The Board holds the public hearing at the board room at the DOE at the scheduled date and time.	One day.	1 day
Public Comment	Written public comment deadline cannot be less than 5 business days from the date of the hearing. Written public comment is submitted to the agency contact listed in the rulemaking register.	The DOE allows 8-10 business days from the date of the public hearing for submission of written public comment	2 weeks

Department of Education Rulemaking Process

<p>Final Proposal to BOE</p>	<p>After the deadline of the public comment, DOE staff prepares a final proposal that considers public comment and incorporates edits from OLS staff attorneys for the Joint Legislative Committee on Administrative Rules (JLCAR). The final proposal is placed on the next available BOE agenda for approval.</p>	<p>2 weeks to one month to be revised and placed on the next BOE agenda.</p>	<p>4 weeks</p>
<p>Final Proposal to OLS/JLCAR</p>	<p>If the board approves the final proposal it is submitted to OLS to be heard at the next JLCAR (legislative oversight committee) hearing.</p>	<p>The DOE has a maximum of 150 days from the date the rule was published in the rulemaking register to submit the final proposal to OLS, unless an extension is requested giving an additional 30 days. Final proposals must be submitted to OLS no later than 14 days prior to a regularly scheduled JLCAR meeting.</p>	<p>4 weeks</p>
<p>Final Proposal to BOE for adoption</p>	<p>If JLCAR approves the final proposal, the DOE staff submits the final proposal back to the Board at their next scheduled meeting for adoption.</p>	<p>Depending on the date of the JLCAR meeting, this process could take about a month.</p>	<p>4 weeks</p>
<p>Adoption</p>	<p>If the board adopts the rule, the rule becomes effective at midnight the day after the rule is filed with OLS. DOE staff must submit the rule in its final form to OLS with a letter stating that the rule has not been changed since it was reviewed and approved by JLCAR.</p>	<p>One day. The rule is published in its adopted form on the DOE website.</p>	<p>1 day</p>
<p>Certification</p>	<p>A rule is in effect at midnight on the day it is submitted to OLS, which happens no later than the day after the board voted to adopt. The rule still needs to be certified for grammar and editorial changes.</p>	<p>The DOE has 120 days from the day of adoption to certify the rule. DOE staff does not take more than one week to complete this process under typical circumstances. The rule does not get published on the OLS website until it is certified.</p>	<p>N/A</p>

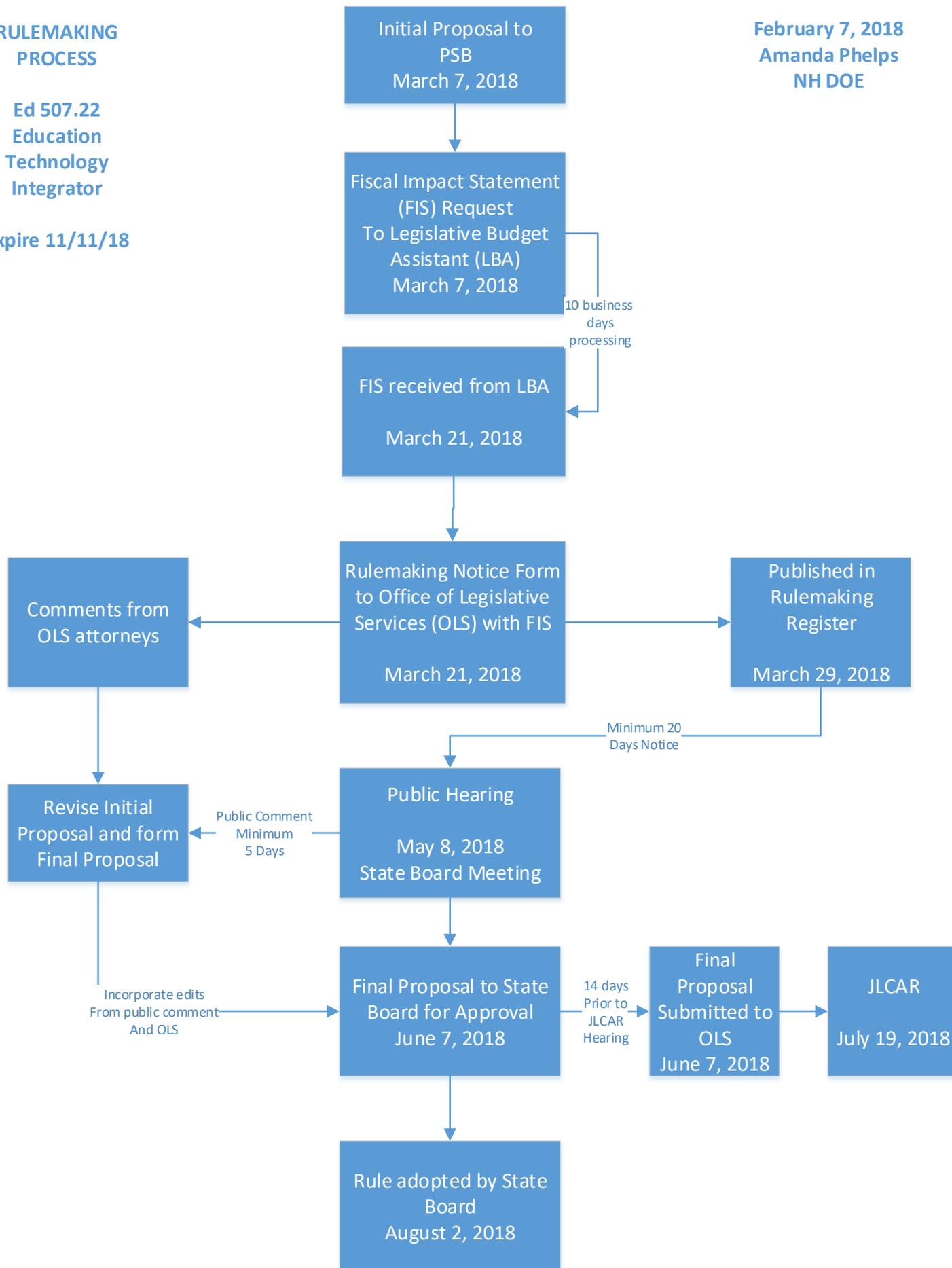
Total: 6-9 months

Total estimated process time for a regular rulemaking process is 6-9 months. There can be delays which can add months to the process time because of pre-scheduled meeting dates.

**RULEMAKING
PROCESS**

**February 7, 2018
Amanda Phelps
NH DOE**

**Ed 507.22
Education
Technology
Integrator
Expire 11/11/18**



**NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT
101 Pleasant Street, Concord, NH 03301-3860**

**PROFESSIONAL STANDARDS BOARD
Membership 2018-2019 School Year**

I. Teachers and Education Specialists

Joanne Goetzler	Science Teacher, Coe Brown-Northwood Academy	2015-2018*
Katrina Hall	Mathematics Teacher, Hollis Brookline	2016-2019
Joann Misra	Special Educator, Windham	2016-2019
David Webster	Science Teacher, Lincoln	2015-2018*
Irv Richardson	Coordinator for Public Education and School Support, NEA-NH	2016-2019
Janine Casavant	Social Studies Teacher, Pembroke	2017-2020
Jack Grube	Retired CTE Director, Londonderry	2017-2020
Anne Wallace	Math Teacher, Hampstead	2017-2020
Christine Oskar- Poisson	English Teacher/Professor, New England College	2017-2020

II. Higher Education and Education Administration

VACANT	<i>Six Applicants to Review</i>	2018-2021
Kirk Beitler	Superintendent, SAU 73, Gilford	2016-2019
Cynthia Lucero	Professor of Education & Coordinator of Field Experience, NHTI	2015-2018*
R. Page Tompkins	Executive Director & Faculty, Upper Valley Educators Institute, Lebanon	2015-2018*
Lisa Witte	Superintendent, SAU 93, Monadnock	2016-2019
Kimberley Yarlott	Principal, Reeds Ferry School, Merrimack	2016-2019
Christie Sweeney	Associate Professor, Plymouth State University, Plymouth	2017-2020
Vince Connelly	Associate Professor, University of New Hampshire	2017-2020
Joe Crawford	Director, NEXT Charter School, Derry	2017-2020

III. Qualified Lay Persons

Kenneth Gorrell	Owner, Franchise Owner, Northfield	2017-2020
VACANT		2017-2020

IV. Director, Division of Program Support

Amanda Phelps
Designee

*Applied for 2nd term. PSB recommends their continued service.

6-29-2018

New Hampshire State Board of Education,

It has been my privilege to serve as a member of the Professional Standards Board for the previous three years. I have found the PSB to be a very stimulating and educational opportunity that has provided me a deeper understanding of the NH Board of Education, the stakeholders of the NH education community, and the educator credentialing process.

My participation in the revision process for the science credentialing standards was a rewarding experience. I look forward to a second term during which I will serve as a co-chair with PSB member Anne Wallace for 507.11 and Ed 612.04.

Yours,
Joanne Goelzer

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Joanne Goelzer

WORK ADDRESS: Coe-Brown Northwood Academy 907 First NH Tpk Northwood, NH 03261

(please include position/title)

LENGTH OF SERVICE: 29 years

WORK TELEPHONE: 603-942-5531

WORK EMAIL: jgoelzer@coebrown.org

HOME ADDRESS:

[REDACTED]

HOME TELEPHONE:

[REDACTED]

PERSONAL EMAIL:

[REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: _____



DATE: 6-29-2018 _____

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

Joanne Goelzer

Experience:

Coe Brown Northwood Academy

1989 to present

Science Educator

Subjects Taught: Earth and Space Science, Biology, Chemistry, Physical Science, Tech Physics

University of New Hampshire

June 2017 - July 2017

Project SMART Marine & Environmental Program

Education:

New Mexico Institute of Mining and Technology

1983 - 1986

Geology

University of New Hampshire

1987 - 1989

Earth Science Education, B.A.

University of New Hampshire

2014- 2017

Educational Studies, M.Ed.

Certification Area:

Earth Science Education

Committees:

2015 to Present

PSB Member

2014 to Present

New Hampshire Science Teachers' Association (NHSTA) Board of Directors

2015 to Present

NHSTA Executive Board Member and Officer

2015 to Present

Co-Chair of the NHSTA Elementary Summer Science Institute

Board of Directors

2004 to 2014
Oyster River Otters Swim Team
Board of Directors

Publications:

Journeys in Film Curriculum Guide for National Geographic's *One Strange Rock*
Author of Lesson 3: *The Soil is Alive: The Gaia Hypothesis*
<https://journeysinfilm.org/films/one-strange-rock/>

References:

David Smith, Headmaster Coe-Brown Northwood Academy 603-942-5531

Joel Kutylowski, Biology Teacher Coe-Brown Northwood Academy 603-942-5531

Greg Samuel, Chemistry Teacher Coe-Brown Northwood Academy 603-942-5531

Dr. Art Hammon, NASA and JPL, Science Educator (Retired) arthammon@hotmail.com

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: David L. Webster Jr.

WORK ADDRESS: Lin-Wood High School, Lincoln NH 03251,
(please include position/title) Science Teacher and Department Chair

LENGTH OF SERVICE: 20Yrs

WORK TELEPHONE: 603-745-2214

WORK EMAIL: dwebster@lin-wood.org

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: David L. Webster Jr. Digitally signed by David L. Webster Jr.
Date: 2018.05.21 13:52:25 -04'00' **DATE:** 05-21-2018

Please submit the completed application form **POSTMARKED** by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

David L. Webster Jr.

Home: [REDACTED]
E-mail: w:dwelbster@lin-wood.org

Cell: [REDACTED]
w: [REDACTED]

Education and Certifications:

- M.S. Science Education, August 15, 20 2015
Plymouth State University Plymouth, NH.
- B.S. Biology, Option: NH Teacher Certification, Biology (1320)
Plymouth State University Plymouth, NH.
- HQT Physics, HOUSSE Process SAU 68, November 10, 2004
- National Institutes of Health (NIH) Office of Extramural Research Certification Number 1588569
Protecting Human Research Participants
- College Board AP Biology Certified Teacher

Work Experience:

Science Teacher, Lin-Wood High School. Lincoln, NH. Sept. 1999 - Present

Courses Taught: AP/Advanced Biology, Biology 9.1 & 9.2, Physics 11.1 & 11.2, CSI: Lin-Wood Forensic Scene Investigations, Computer Programming, STEM, and Area 51 (Science of the Strange)

- Science Department Head (2006 to present)
- Technology Committee
- STEM Coordinator
- Science Curriculum Coordinator
- Granite State Challenge Coach
- Team Leader
- Boys of Summer Advisor
- Summer School Coordinator/Teacher
- Game Club Advisor
- Science NECAP Coordinator
- Vex Robotics Club Coordinator

Running Start Teacher, Lakes Region Community College, 379 Belmont Road, Laconia, NH Sept. 2015 - Present

- LSCI 1480, General Biology 1
- This college-level course covers the principles of cell biology, including cellular physiology, cellular metabolism, molecular biology, biochemistry and genetics.

Teaching Lecturer, Plymouth State University, 17 High St, Plymouth, NH 03264 Sept. 2015 - Present

- NS 5700.01 & BI-4330, Science Teaching Methods Middle and High School
This graduate-level course covers the topics: The Nature of Science and Scientific Inquiry, 21st Century Learners, Curriculum Design, and Implementation, Competency Based Education, Professional Development Standards and Alignment (NH Frameworks, the Common Core, and the Next Generation Science Standards), Assessments (diagnostic, formative and summative), the Teaching Practice – Observations and Reflections and STEM related course work.

NEA-NH Field Consultant, NEA-NH North Country Region. Gorham, NH. Sept. 2004 - Present
Collective Bargaining Agreement preparation and negotiation, Labor Relations and Regulations

Science/Math Teacher, Berlin Public High School. Berlin, NH. Sept. 1998 - June 1999

Courses Taught: Fall: Gr. 10 Biology, Gr. 9-12 General Math, and Gr. 9 Physical Science. Spring: Gr. 9 Biology, Gr. 9-12 Pre-Tech. Algebra, Gr. 11&12 Adv. Biology, Gr. 11&12 Ecology

- Member of New Hampshire State Testing Committee, New Hampshire Frameworks Alignment Team
- Member Reaccreditation Team

David L. Webster Jr.

Home: [REDACTED]
E-mail: w:dwebster@lin-wood.org

Cell: [REDACTED]
w: [REDACTED]

Work Experience Continued:

Naturalist, NH Fish and Game Department Warren & Twin Mt. NH Seasonal May 1998 - Sept.2009

- Designed and implemented environmental and outdoor programs centered on aquaculture practices for varied ages.
- Authored the State Educational Science Curriculum "Fish for the Future, The Hatchery".
- Other duties included care and maintenance of fish species and raceways, stocking Atlantic salmon and various trout species, breeding, and daily feedings.

Environmental Education Coordinator, Town of Waterville, NH Sept. 1997 - May 1998

- Designed and implemented environmental and outdoor programs for varied ages.
- Designer and Curator of the Curious George Environmental Learning Center.

Teachers' Assistant, Plymouth State College Natural Science Department, NH Sept. 1995- June 1997

- Prepare and proctor science labs.

Environmental Education Specialist, Fossil Butte National Monument, WY. Seasonal 1990 - 1994

- Designed and implemented environmental and outdoor programs centered on the paleo-environment and the existing northern desert.
- Ranger duties; Visitor Interpretation, Patrols, Raptor and Ungulate Surveys.

Professional Activities:

- NHDOE Robotics Education Development Fund Recipient (2017)
- Authored, and implemented K-12 Science Curriculum aligned with Next Generation Science Standards
- Next Generation Science Standards Professional Development Coordinator
- NH Department of Education, The Professional Standards Board, Member 2016-2018
The Professional Standards Board is authorized by statute RSA 186:60 to advise the State Board of Education regarding professional growth, certification, and governance of the education profession in New Hampshire.
- NH Department of Education, 2014 Minimum Standards(ED.306) Committee, Member 2012-2014
- New Hampshire Science Teacher Association Board Member
- National Science Teacher Association Member
- National Association of Biology Teachers Member
- Authored the State Educational Science Curriculum: Fish for the Future, The Hatchery
- Eisenhower Grant Recipient (2005)
- AP Biology Coordinator
- NSTA Workshop Presenter Earth System Science Education Alliance, April 2004
 - National Science Teacher Association, Atlanta, Georgia
- Director: Pemigewasset Valley Trout Unlimited
- Boy Scouts of America (Eagle Scout), Merit Badge Councilor
- SAU 48, Campton NH, School Board Member 2008-2010

References Available Upon Request:

David L. Webster Jr.

Home: [REDACTED]
E-mail: w:dwebster@lin-wood.org

Cell: [REDACTED]
w: [REDACTED]

A statement describing why you wish to serve on the professional standards board:

I wish to serve on the Professional Standards Board for a consecutive term. I believe in fostering a strong working relationship with our State, local and school community to facilitate integration of rules and initiatives designed to enhance the school environment. I am an advocate for the (usually under-represented) small schools and North Country schools and provide a unique prospective and knowledge regarding these school communities. Thank you for the continued opportunity to volunteer as a teacher representative on the Professional Standards Board.

Dave Webster Jr.

RECEIVED

MAY 22 2018

STATE DEPARTMENT
OF EDUCATION

Cynthia Lucero
[REDACTED]
[REDACTED]

May 21, 2018

Drew Cline, Chairman
New Hampshire State Board of Education
101 Pleasant Street
Concord, New Hampshire 03301

Dear Drew Cline, Chairman:

I have enclosed my application and required documents for serving a second term on the New Hampshire Professional Standards Board. If you should require any additional information, do not hesitate to let me know.

Sincerely,


Cynthia Lucero

Enclosures (3)

Application
PSB Statement
Curriculum Vitae

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP
(Please type or print)

NAME: Cynthia Lucero

WORK ADDRESS: Professor of Education/Clinical Coordinator - NHTI 31 College Dr. Concord, NH 03301
(please include position/title)

LENGTH OF SERVICE: 20 years total in education

WORK TELEPHONE: (603) 271-6484

WORK EMAIL: clucero@ccsnh.edu

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: _____

DATE: _____



5/21/18

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

Cynthia Lucero

clucero@ccsnh.edu

Education

- 2010 – Present **Northeastern University** Boston, Massachusetts
Doctoral Candidate for Doctor of Education
ABD - All but Dissertation, Anticipated Defense - 2018
Dissertation Topic, *Innovative Practices of Assessing Dispositions of Educator Candidates*
- 1998 - 2000 **Notre Dame College** Manchester, New Hampshire
Masters in Education
New Hampshire Certifications - Learning Disabilities K-12 *current
Emotional Disturbance K-12 *current
- 1994 - 1998 **Notre Dame College** Manchester, New Hampshire
Bachelors of Science
New Hampshire Certifications - Elementary Education K-8 *current
General Special Education K-12 *current

Professional Experience

- 2004 – present **New Hampshire Technical Institute** Concord, New Hampshire
Professor of Education/ Clinical Coordinator
-Coordinate/Supervise all field experience placements in k-12 school settings
-Advisor for “Education Club” – NEA Student Chapter
Instruct students in the following courses:
ED 101 – Introduction to Exceptionalities
ED 104 – Foundations of Education
ED 200 – Supporting Students with Challenging Behaviors
ED 212 – Design of Instruction
ED 220 – Field Experience in Education
- 2005 – 2012 **University of New Hampshire** Manchester, New Hampshire
Adjunct Faculty/ Education Department
Instruct students in the following courses:
EDUC 785/885 Educational Assessment (both undergraduate and graduate levels)
EDUC 751/851 – Educating Exceptional Learners (both undergraduate and graduate levels)
EDUC 900 – Graduate Internship and Seminar
- 2007 – 2011 **Saint Anselm College** Manchester, New Hampshire
Field Placement Coordinator/Teaching Faculty
-Coordinate all field experience placements with both public and parochial schools
-Advisor for “Education Society” – NEA Student Chapter
-Instruct students in the following courses:
ED 130 Principles of Teaching and Learning
ED 322 Equity, Inclusion, and Diversity in Education
ED 340 Curriculum and Assessment in Teaching
ED 432 Supervised Student Teaching
SEFE Coordinator (Sophomore Early Field Experience)
- 2001 - 2005 **West Running Brook Middle School** Derry, New Hampshire
Assistant Principal
-Building level Special Education Coordinator and the Local Education Agency Representative
-Building level Section 504 Coordinator
-Supervised and evaluated teachers and support staff

West Running Brook Middle School

Derry, New Hampshire

Team Coordinator

- Created schedules for 112 eight grade students
- Facilitated a daily team meeting discussing topics such as; curriculum, special education, and parent/student concerns
- Consulted with team disciplinary concerns

1998 - 2001

West Running Brook Middle School

Derry, New Hampshire

Special Education Facilitator

- Facilitated learning for special education students by supporting them in the general education setting or with specialized instruction
- Worked on a team creating and implementing Individualized Education Plans
- Evaluated students to identify various educational disabilities
- Completed accurate state and district paperwork

Professional Presentations

2008 Present – Spring and Fall NEA Conferences

Topics including:

*“Supporting Students with Challenging Behaviors”**“How to Read an IEP – What it all Means”**“Special Education Process and Procedures”**“Special Education Law for the Paraprofessional”**“Accommodations and Modifications: What They Are and How to Make Them”**“The Common Core”**“RTI and the Role of the Paraprofessional”**“What is a Section 504 Plan and the Paraprofessional’s Role?”*

-2014 Goshen-Lempster Cooperative School, Lempster, NH

“Supporting Special Educators in the General Education Environment”

-2013 Western Region Conference of NEA-NH

“Collaboration between Paraprofessionals, Special Educators and General Educators”

-2012 NACCTEP Conference

“A Post-Baccalaureate ESOL Certification Program; Fostering Community Partnerships for Authentic Teaching and Learning”

-2012 Chesterfield School, Chesterfield, NH

“Paraprofessional Roles and Responsibilities for Special Education”

-2011 Chesterfield School, Chesterfield, NH

“The Art of Teaming: General and Special Educators”

-2011 Northeast Regional Conference

*“Paraprofessional Roles and Responsibilities for Special Education”**“What About Inclusion”**“New Hampshire Special Education Rules and Regulations”*

-2010 Somersworth Middle School

“Education and Collaboration = Success”

-2010 Rundlett Middle School, Concord, NH

“Collaboration, Facilitation, and Cooperation: A Paraprofessionals Guide to Special Education”

-2010 Epsom Central School

“The Role of the Paraprofessional in the General Education Classroom”

-2010 Manchester Christian Church

“Best Practices in Dealing with Children of All Abilities”

-2009 NHTI – Concord’s Community College Presenter

“Current Issues in Education”

-2008 New Hampshire Department of Education Panel Presenter

*“Who Gets Hired? Becoming a New Hampshire Educator”***Professional Memberships**

- Association for Supervision and Curriculum Development
- Council for Exceptional Children
 - Council for Children with Behavioral Disorders
 - Division for Learning Disabilities
 - Division for Research
- American Association of University Professors

- National Education Association
- New Hampshire Learning Disabilities Association

Professional Service

- New Hampshire Department of Education Professional Standards Board
- New Hampshire Department of Education, Education Surrogate Volunteer
- NHTI Curriculum Committee
- NHTI Judicial Committee
- IHE Network 2012- present
- NHTI Advisory Board

Request for second term on Professional Standards Board

Cynthia Lucero
Professor of Education
May 21, 2018

A statement describing why I wish to serve on the Professional Standards Board.

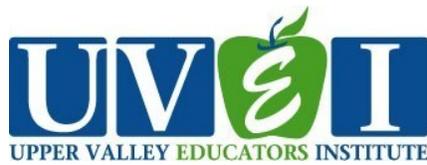
It has been an honor and privilege to have served on the Professional Standards Board for the past three years. During that time, I have been given multiple opportunities to work collaboratively with my Professional Standard Board co-members on various committees. My committee work has included reviewing/revising standards for Speech-Language Specialist and serving on the original Ethics committee. I am currently the co-chair of the sub-committee looking at all the General Special Education Standards, including all the advanced endorsements. Through this work I am also the New Hampshire representative for the CEEDAR (Collaboration for Effective Educator Development, Accountability and Reform) work surrounding Goal #3. Goal #3 is to *“Review, refine, and make recommendations for any revisions in initial special education certification and advanced certifications to support all students within a multi-tiered system of support aligning Ed 500s and Ed 600s.”* Additionally, I also serve on the subcommittee that is looking at the revision of all five Alternative certification pathways in the state.

This work through the Professional Standards board has been challenging and deeply rewarding. As you can see from the list of the current sub-committee work, there is still much to accomplish. If chosen for a second term on the Professional Standards Board, I commit to continuing this work, supporting the goals of the Department of Education, and representing students of New Hampshire. For the past 20 years, I have been able to hold multiple positions in k-12 and now higher education. I look forward to what the next 20 years has in store for me and the state.

Respectfully Submitted,



Cynthia Lucero



June 6, 2018

Drew Cline, Chair
New Hampshire State Board of Education
101 Pleasant Street
Concord, NH 03301

Re: Application for Continued Membership on the New Hampshire Professional Standards Board

Dear Mr. Cline,

Please accept this cover letter as my application for continued membership on the New Hampshire Professional Standards Board. My full Curriculum Vitae is attached. I believe I have more to contribute and much to gain by continuing my service on the Professional Standards Board.

Thank you for your consideration, and please do not hesitate to contact me if you would like any additional information about me, my background, or my interest in continuing to serve on the board.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Page Tompkins', written in a cursive style.

R Page Tompkins, Ed.D.
Executive Director & Faculty

PAGE TOMPKINS, Ed.D.

194 DARTMOUTH COLLEGE HWY, LEBANON, NH
EMAIL: PTOMPKINS@UVEI.EDU • PHONE: (415) 336-3390

EDUCATION

2007-2011	University of California Berkeley	Berkeley, CA
	<i>Doctor of Education, Leadership for Educational Equity Program</i>	
2002-2003	San Francisco State University	San Francisco, CA
	<i>Teaching Credential, Single Subject Social Science</i>	
1999-2002	San Francisco State University	San Francisco, CA
	<i>Master of Arts in Education, Concentration: Youth Development and Community Based Education</i>	
1990-1994	University of California Los Angeles	Los Angeles, CA
	<i>Bachelor of Arts in Sociology, Concentration: Political Sociology</i>	

EXPERIENCE

2013-present	Upper Valley Educators Institute	Lebanon, NH
	<i>Executive Director & Faculty Member</i>	
	<ul style="list-style-type: none">▪ Led an innovative graduate school of education providing experiential, clinically intensive, performance based teacher and educational leadership programs leading to licensure and advanced degrees.▪ Worked in area public schools, independent schools, colleges and universities to enhance the quality of education in the New Hampshire and Vermont region.▪ Directly supervised candidate teachers and school leaders in clinical settings.▪ Provided leadership on all aspects of program and organizational development including supervising faculty, staff and coaches; leading faculty professional development; fiscal management; fundraising; board development; school and community partnerships; program and curriculum development; and relationships with state and federal agencies.▪ Engaged in collaborative research both within and between institution, with a focus on practical and applied research.	
2005-2013	Reach Institute for School Leadership	Bay Area, CA
	<i>Executive Director, Founder, & Faculty Member</i>	
	<ul style="list-style-type: none">▪ Initiated educator development organization serving more than 250 educators, in partnership with a consortium of 48 schools and districts, in teacher credential and instructional leader preparation programs.▪ Created innovative processes for integrated cohort based professional development incorporating coaching and job embedded learning, dialogical seminars, and online collaborative learning. Shepherded program through design, consortium creation, accreditation and program improvement processes.▪ Instructed integrated seminar/practicum/online courses in teaching methods, teaching as leadership, teaching for equity, special education, beyond discipline, educational psychology, healthy youth development, instructional coaching, coaching for equity & universal access, instructional program alignment, fostering communities of practice, teacher learning and action research.▪ Provided direct leadership coaching and steering committee coordination and leadership to 48 public schools from across the Bay Area to support whole school improvement; personal, interpersonal, and professional effectiveness; and accreditation and charter renewal processes. Directed a four-year, federally funded design study focused on measuring, rewarding, and fostering effective teaching and leadership.▪ Provided leadership on all aspects of program and organizational development including supervising faculty, staff and site based coaches; faculty professional development; fiscal management; fundraising; board development; school and community partnerships; program and curriculum development; and relationships with state and federal agencies.	

2011-2013

University of California, Berkeley

Berkeley, CA

Lecturer

- Taught courses in design development dissertation preparation, using research literature to understand and solve problems of practice, and research literature discourse practices in the Leadership for Educational Equity (LEEP) doctoral program.
- Taught courses in school supervision and organizational policy & teachers' work to Masters of Arts and Administrative Services Credential candidates in the highly regarded Principal Leadership Institute.
- Participated in course design, program development, and program evaluation as member of faculty teams.

2001-2006

Alternatives In Action High School

Alameda, CA

Principal, Founder & Teacher

- Founded a youth designed public high school, serving primarily previously unsuccessful students, based on the principles of youth ownership, personalization, and engagement; academic rigor; experiential learning with a social action orientation; and going-to-college expectations.
- Presided over ongoing improvement in student achievement as measured by the Academic Performance Index, college admissions, attendance rates, student presentations of learning and evaluations of community impact projects.
- Taught college preparatory classes in integrated humanities, US history, government, economics, sociology, sociology of contemporary urban social issues, sociology of education, ethnic studies, youth leadership and advisory courses.
- Provided leadership on all aspects of program and organizational development including instructional leadership, staff supervision, curriculum development, fundraising & fiscal management, recruitment, board development, community partnerships and accreditation.

1999-2001

Our Schools

San Francisco, CA

Executive Director & Teacher

- Developed and implemented educational partnerships with 5 Bay Area public schools to enhance their academic programs with social action experiential education projects.
- Developed and taught a social action based language arts curriculum implemented in partnership with language arts departments.
- Managed all aspects of the organization including staff, Board of Directors, fund development, and fiscal management.

1994-1998

Outward Bound South Africa

South Africa

Program Director

- Developed and implemented innovative experiential education programs for youth and adults who suffered under apartheid.
- Developed and maintained partnerships with government agencies, schools and universities, businesses, philanthropists, and non-government organizations.
- Managed 25 staff members, over \$1 million in assets and an annual budget of \$300,000.

LICENSURE

2016

New Hampshire State Board of Education

New Hampshire

Educator license, endorsements: Superintendent, Principal, Curriculum Administrator, Social Studies Teacher (5-12)

COMMUNITY INVOLVEMENT

2017-Present **Youth In Action** **Hanover, NH**

Member, Board of Directors

- Provided governance oversight to community based non-profit dedicated to inspiring young people to engage in community service

2016-Present **Norwich Department of Recreation** **Norwich, VT**

Member, Recreation Council

- Co-developed the principles, vision and values for recreation programs in the town of Norwich
- Provided advice and assistance to the Norwich Department of Recreation on recreation programs

2013 **Tuck School of Education, Dartmouth College** **Hanover, NH**

Reviewer, Education Leadership at Tuck

- Evaluated and provided feedback to the Tuck faculty on the Tuck Executive Education program for educational leaders.
- Advised on the efficacy of the program for principal and leadership development as well as its potential for development into a degree and licensure program.

2009-2013 **Hanna Ranch Elementary School** **Hercules, CA**

Member, School Site Council

- Reviewed and analyzed student achievement data to support goal setting and continuous improvement.
- Gathered input from community members regarding the school.
- Developed academic plan and school site budget, monitored implementation.

2008 **No on Proposition 8 Campaign** **Berkeley, CA**

Local Organizer

- Organized fundraising campaign and volunteer actions including phone banks, marches and voter mobilizations.
- Spoke to churches and volunteer gatherings to mobilize opposition.

2007-2008 **City of Hercules Education Commission** **Hercules, CA**

Commissioner

- Advised the city council and city staff on education policy.
- Liaised with local school leaders to mobilize community support for schools.
- Liaised with school board and school district officials.

2003-present **University of California Office of the President** **Oakland, CA**

Member, Support and Assistance Cadre

- Assisted project-based, alternative, and non-traditional high schools in developing and aligning curriculum to meet the University of California and California State University system admissions requirements.
- Supported 25 schools to seek and receive approval for college preparatory curricula.

2001-2013 **Bay Area Wilderness Training, Earth Island Institute** **San Francisco, CA**

Member, Board of Directors/ Advisory Council

- Provided fiscal, legal, strategic and programmatic oversight and advice to non-profit program dedicated to getting young people outdoors.

2002-2013 **Western Association of Schools and Colleges** **Belmont, CA**

Accreditation Visiting Committee Member

- Served on 12 visiting committees accrediting primarily non-traditional high schools in California.

PRESENTATIONS & PUBLICATIONS

- In Press** **Teacher Education Quarterly**
- Reagan, E. M., Terrell, D. G., Rogers, A., Schram, T., Tompkins, P., Ward, C., . . . McHale, G. Performance assessment for teacher candidate learning: A localized policy context.
- 2018** **Implementing and Analyzing Performance Assessments in Teacher Education, Information Age Publishing** **Charlotte, NC**
- Terrell, D. G., McCurdy, K., Birch, M., Schram, T., & Tompkins, P. Chapter 8: Forcing me to reflect: Preservice and novice teachers' reflective thinking in varied school contexts. In J. Many & R. Bhatnagar (Eds.), *Implementing and analyzing performance assessments in teacher education*.
- April 2017** **New Hampshire Journal of Education** **Plymouth, NH**
- Tompkins, P. & Ward, C. (2017) Six elements for effective instructional coaching: Supporting teacher learning for the complexity of teaching in the twenty-first century
- April, 2016** **Paper Presented at New England Educational Research Organization** **Portsmouth, NH**
- Emergent integration: Coach roles in bridging coursework and fieldwork in effective, clinically focused teacher certification programs
- April, 2016** **Paper Presented at American Educational Research Association** **Washington, DC**
- A localized policy framework: A statewide collaboration toward teacher candidate performance assessment
- May, 2014** **New England Educational Research Organization** **West Dover, VT**
- "We make the road by walking": Embracing Share Accountability Through Statewide Collaboration Among Educator Preparation Programs
- April, 2013** **California Council for Teacher Educators** **San Jose, CA**
- Innovations in Teacher Leadership
- April, 2013** **American Educational Research Association** **San Francisco, CA**
- Incentives for Good Schools: Charting the Course of Design Iterations
- November, 2012** **University Council for Educational Administration** **Denver, CO**
- Incentives for Good Schools: A Design Development Research and Intervention Project
- October, 2012** **California Council for Teacher Educators** **San Diego, CA**
- Alternative Models for Clinical Practice
- March, 2012** **UC Berkeley, School of Social Work** **Berkeley, CA**
- Social Work & Schools: Youth Development, Teachers, and the Organization of Schools
- August, 2011** **Teacher Incentive Fund Meeting** **Washington DC**
- Breaking New Ground: Principal Evaluation and Observation
- June, 2011** **University of California Berkeley** **Berkeley, CA**
- Mentor and intern boundary practices: Integrating theory and practice in effective alternative certification programs

AREAS OF EXPERTISE & RESEARCH INTERESTS

- Teacher learning and professional development
- Alternative and innovative approaches to educator licensure, especially clinically intensive and performance-based approaches
- Schools as organizations & workplaces
- School improvement
- Design development research
- Community based organizations and non-profit management
- Youth development
- Experiential and project-based learning, linked learning, and 21st century skills

**Currently no vacancies in Teachers & Education Specialists.
Only two reappointments above and one application below .**

**NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT**

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Lois-Jean Stevens
WORK ADDRESS: Prospect Mt. High School, SAU 301
(please include position/title) Director of Special Services
242 Suncook Valley Rd
Aiton, NH 03809
LENGTH OF SERVICE: 4yrs
WORK TELEPHONE: 603-875-3800 ex 3144
WORK EMAIL: lstevens@pmhschool.com
HOME ADDRESS: [REDACTED]
HOME TELEPHONE: [REDACTED]
PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE:  **DATE:** 5/21/18

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

Lois-Jean Stevens, M.Ed.

lstevens@pmhschool.com

EDUCATION

APRIL 2018, SOUTHERN NEW HAMPSHIRE UNIVERSITY, HOOKSETT, NH
CAGS-EDUCATIONAL LEADERSHIP PROGRAM IN PROGRESS

May 2007, Plymouth State University, Plymouth, NH
M.Ed. Educational Leadership, Special Education Admin
Suma cum Laude/National Honor Society/Dean's List

June 2001, Notre Dame College, Manchester, NH
BA Science Early Childhood Development
Suma cum Laude/National Honor Society/Dean's List

WORK EXPERIENCE

2014-Present, Director of Special Services
Prospect Mountain High School

Supervise the special education program /staff involved, Section 504 Coordinator and currently the Title 1 project manager. Supervise the operation of the schools to support student achievement, administration of special education, court liaison and related services programs. Financially responsible for creating and managing student services budget, writing grants and responsible for the evaluation and hiring of staff related to student services department.

2012-2014, Director of Student Services
Pittsfield School District

Supervise the student services program and staff involved including: special education, 504, ESOL, and Nursing. Supervise the operation of the schools to support student achievement, administration of special education and related services programs. Financially responsible for creating and managing student services budget, writing grants and responsible for the evaluation and hiring of staff related to student services department.

2007-2012, Coordinator of Student Services
Pittsfield School District

Assist in supervision of student services programs and support staff involved. Assist in the effective operation of the schools to support student achievement, general administration of special education and related services programs and make recommendations relative to special education and related services programs.

2000-2007, Special Education Teacher/Case Manager
Pittsfield Middle High School

Provided students with special education services in and out of the classroom and worked collaboratively with faculty to support students in their classroom. Assisted the Director of Student Services in the supervision of educational assistants. Maintained legal documentation of services in a timely manner and holding mandated meetings. Communicated effectively with students, staff and parents.

EDUCATIONAL EXPERIENCES

NHSAA Granite State Leadership Academy	2017-present
NH DOE Special Education Mentor	2016-present
Title 1	2015-present
Section 504 NH DOE plan development	2015-present
NHTI IMPACCT Advisory	2017-present
Council for Exceptional Children (CEC)	2009-present
Curriculum Instruction Advisory	2014-present
Full Day Kindergarten Task Force	2014
Student Success Through Competency Task Force	2012-2013
Nellie Mae Steering Committee	2010-2014
Safe Route to School Committee	2009-2011
Special Education Director Academy	2007
Pittsfield Strategic Planning Committee (State IEP computer based system)	2007
NHEAIP-Alt Portfolio Scoring	Summers 2001-2006
Technology Mentor	2004-2006
Co-Coordinator of Advisory Program	2004-2006
Attendance Review Board/committee	2002-2014
School Wide Data/ Assessment Committee	2000-2014

LICENSES AND CERTIFICATES

Principal	
Special Education Administration	
K-12 General special education	
K-3 elementary education	
Early childhood special education (Birth-8)	
Highly Qualified English	
Highly Qualified Mathematics	
Crisis prevention institute (CPI)	2011-2015
Emergency Medical Technician-basic	1995-2011

GRANT WORK

Title 1 Grant
Pre School/IDEA Grant
Focus Monitoring Grant
Medicaid Infrastructure Grant
Sanderson Grant
Diversion Grant
Rural and Low Income Grant
Nellie Mae Grant

OTHER

Court Liaison Prospect Mountain High School
Unified Sports Assistant Coach

Lois-Jean Stevens, M.Ed.

[REDACTED]
lstevens@pmhschool.com
[REDACTED]

REFERENCES

J Fitzpatrick
Principal, Prospect Mountain High School
242 Suncook Valley Rd
Alton, NH 03809
603-875-3800

Tobi Chassie
Director of Student Services , Pittsfield School District
23 Oneida Street
Pittsfield , NH 03263
603-435-6701

It would be a great honor and educational privilege to serve on the Professionals Standards Board of Education for the State of New Hampshire. During the past year, I had the opportunity to attend one of your sessions and get an understanding of what the board does. I believe I could be a valuable member with my special education experience.

A handwritten signature in blue ink, appearing to be "Lafayette", with a long horizontal flourish extending to the right.

Start of six applications to fill one vacancy in Higher Education & Education Administration.

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Gale Adams-Davis

WORK ADDRESS: Principal Waterville Valley Elementary School
11 Noon Peak Road
Waterville Valley, NH 03215

(please include position/title)

LENGTH OF SERVICE: 2 years

WORK TELEPHONE: (603) 236-4700

WORK EMAIL: gadams-davis@pemibaker.org

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: Gale Adams-Davis Digitally signed by Gale Adams-Davis
DN: cn=Gale Adams-Davis, o=Waterville Valley
Elementary, ou=Waterville Valley Elementary SAU 48,
email=gadams-davis@pemibaker.org, c=US
Date: 2018.05.21 10:13:40 -0400 **DATE:** May 21, 2018

Please submit the completed application form **POSTMARKED** by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

May 18, 2018

Dear Amanda,

Having most recently served on the NHDOE Code of Ethics and Conduct policy committee has helped me realize how much I enjoy being involved with education at the state level. I feel that my contributions to this committee were strong and I could offer a different perspective since I have been an educator in several different geographic locations. Therefore, I am applying to be on the Professional Standards Board for the State of New Hampshire because I feel like it would be a great opportunity to serve my profession, learn more about policy at the state level, and expand my connections throughout the state. I am including my resume that details the last few years I have been in New Hampshire as well as some teaching experience prior.

I am proud to be an educator and take that responsibility very seriously. I want to be a part of the Professional Standards Board to bring my knowledge and gain more knowledge in regards to setting and implementing standards. I am willing to put the necessary time in and have the support of my Superintendent to apply for this position.

As an educator and a life-long learner I strive to push myself and stretch in other directions to broaden my perspective and knowledge. That is probably why I went to Germany with my three children to teach for four year from 200-2004. It is also why I went to Greece last summer to work in refugee camps with Syrian Refugees. I am now at a place in my career where I feel that I can expand my service and knowledge to other realms.

Please feel free to contact me with any questions you might have. I look forward to hearing from you.

Regards,

Gale Adams-Davis

Waterville Valley Elementary Principal

Gadams-davis@pemibaker.org

603 254-5824

Gale Adams-Davis

Waterville Valley Elementary School
11 Noon Peak Road
Waterville Valley, NH 03215

603 236-4700

Objective

Serve on the New Hampshire Professional Standards of Education Board

Qualifications

Administrator for 7 years in New Hampshire
Served on the NHDOE Code of Ethics and Conduct Committee 2017-2018
Served on the Idaho State Math Standards Committee 2009-2011

Work History

Waterville Valley Elementary Principal k-8 Waterville Valley, NH July 2016-present
Linwood Public School Assistant Principal/ Elementary Director Lincoln, NH 2011-2016
Post Falls School District Post Falls, Idaho 5th grade teacher 2004-2011
John F. Kennedy School Berlin, Germany 5th and 6th grade teacher 200-2004

Education

University of Idaho Master Education Leadership 2006
Montana State University Bachelor of Science Elementary k-8 Special Education k-12 1983

Certificates

K-8, Administrator, K-12 Special Education
States I hold certification in: Idaho, Washington, New Hampshire

Awards- Honors

Blue Ribbon School 2014
School has been a recipient of grants and honors for coding and technology 2017-2018
Outstanding Teacher of Year Post Falls School District Post Falls, Idaho 2006
Outstanding Program Post Falls School District Post Falls, Idaho 2010

References

Mark Halloran Superintendent SAU 48 603 536 2154
Robert Nelson former principal at Linwood Public School 603 348 7848
Nicole Heimark Office of School Board Members Association Concord 603 228 -2061

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Marion Anastasia, Ed.D, Superintendent, SAU#36

WORK ADDRESS: 14 King Square, Whitefield, NH 03598

(please include position/title)

LENGTH OF SERVICE: 3 years

WORK TELEPHONE: (603) 837-9363

WORK EMAIL: manastasia@sau36.org

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: Marion Anastasia **DATE:** May 2, 2018

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.



White Mountains Regional School District

14 King Square, Whitefield, NH 03598 Tel: (603) 837-9363 Fax: (603) 837-2326
www.sau36.org

Marion Anastasia, Ed.D Superintendent

Carroll

Dalton

Jefferson

Lancaster

Whitefield

May 2, 2018

Dear NH Department of Education Professional Standards Board,

As you can see from my curriculum vitae, I have been involved in many educational professional organizations during my 30+ years in Vermont. I have found that participating in state-wide committees allowed me to network with colleagues and understand the 'big picture' of state initiatives, goals, and projects.

Given that I am new to New Hampshire, I have been working to understand the laws and 'the New Hampshire Way'! Other than joining the Executive Board for North Country Educational Services (NCES), I am not on any state-wide committees or projects.

I've had years of experience working with the Vermont Regional Standards Board for Educators. Although the VT and NH programs can't be compared, I think I can be an asset to the Board. I am a team-player, listener, and learner.

I believe this will give me an opportunity to meet educational professionals state-wide, and make life-long contacts that will benefit SAU #36.

Please consider my application to be a member of your board.

Best,

A handwritten signature in blue ink that reads "Marion Anastasia".

Marion Anastasia

CURRICULUM VITAE

Marion Anastasia, Ed.D.



EDUCATION

Vermont Superintendent's Academy: 2014-15

Doctor of Education: The University of Vermont: Educational Leadership and Policy Studies; January 2009
Dissertation: *Assessment for Learning: Transformation of Teachers' Practices Enacted in Classrooms and Teacher Learning Communities.*

Vermont Schools Leadership Program (VSLP) Class of 2005; Snelling Center for Government

Certificate of Advanced Graduate Studies in Education (C.A.G.S)
Southern New Hampshire University, 2004

Master of Education: St. Michael's College, 1995; Consulting Teacher/Learning Specialist
Research Thesis: *Ecological Perspectives in the Education of Emotionally/Behaviorally Disturbed Students*

Bachelor of Science: Lyndon State College, 1978: Elementary and Special Education; Recreation Therapy

SPECIALIZED QUALIFICATIONS

NAESP: The National Principal Mentor Training & Certification Program: June 2014
'Keeping Learning on Track®' Formative Assessment 'Trainer for Trainers': 2009; Educational Testing Services (ETS), Princeton, NJ and The Vermont Agency of Education
Reading Recovery Certification: 1995; Trinity College, Burlington, VT and the Northeast Literacy Consortium

PROFESSIONAL LICENSURE

3-91 VT Principal-Level II (6/30/21)
3-86 VT Director of Special Education-Level II (6/30/21)
12-85 VT Consulting Teacher/Learning Specialist-Level II (6/30/21)
1-00 VT Elementary Education-Level II (6/30/21)
3-90 VT Superintendent-Level I (6/30/2016)
93- VT Curriculum Director-Level 1 (6/30/16)
0001 NH Superintendent-Experienced Educators Certificate (6/30/2019)
0003 NH Principal- Experienced Educators Certificate (6/30/2019)

PROFESSIONAL EXPERIENCE

2015-Present: Superintendent; White Mountains Regional School District- SAU#36, Whitefield, NH.

2011-12, 2012-13, 13-14, 14- 15: Principal; East Montpelier Elementary School, East Montpelier, VT.
Primary responsibilities: Through a system of ongoing supervision and evaluation of all instructional programs

and personnel; ensures adherence to curriculum standards and instructional best practices, leading to improved student and teacher learning. Also, responsible for fiscal accountability and overall structural design of programs. Moreover, The East Montpelier Elementary School is presently undergoing an 8.1 million dollar renovation with 100% occupancy.

2010-2011: Interim Coordinator of Early Education Programs: Orange East Supervisory Union, Bradford, VT

Coordinate and supervise the early childhood programs within the Orange East Supervisory Union. Responsibilities include: coordination and management of state, local and federal funding sources; alignment of curriculum, instruction and assessment with Vermont Early Learning Standards (VELS); ensure preschool partnership programs are in compliance with Act 62; collaborate with OESU elementary school principals; supervision and professional development of the OESU early education teachers; and participation in the OESU Leadership Team.

2010-Present: Instructor: Southern New Hampshire University-Field Based Education Master's Degree Program. Leadership Courses: EDGR 640: *Dimensions in Leadership*; EDGR 645: *Organizations and Challenges in Leadership*

1983 – 2010: The St. Johnsbury School District, St. Johnsbury, VT

Administrative Positions: 2003-2010

2006 -2010: Principal, The St. Johnsbury School (700 students in grades PK-8 and 120 staff members)

As an instructional leader for the SJS, my responsibilities included setting and sustaining a shared vision for the school community. This included continual analysis of individual student and school-wide data to drive instructional, assessment and curriculum decisions; creating a comprehensive balanced assessment system; instituting a standards-based reporting system; crafting structures for professional learning; modeling and supporting shared leadership that enabled improvement for students and adults; providing a safe and caring learning environment; performing daily classroom walk-throughs, engaging parents and community members as school partners; ensuring equitable instruction for students and insisted upon high expectations for all children in a socio-economic diverse community.

My responsibilities included creating and being accountable for the regular education budget, K-8; the CFP budget that involved strategies addressing professional development/ intervention programs/regular education staffing; and the Title One Pass-Through budget which funded the School Wide Improvement and Action Plans and the commissioner's required actions.

My proudest accomplishment while principal was the school-wide implementation of the 'Keeping Learning on Track'® formative assessment program. Over five years, all teachers were formally trained to implement formative assessment strategies and techniques in their classrooms coupled with monthly teacher- learning communities facilitated by teacher- leaders. To that end, transformation included the beliefs and attitudes about how students learn, systemic support, motivation, classroom culture, shared leadership and teachers' pedagogical practices.

2003-06: Associate/Assistant Principal, The St. Johnsbury School

Assisted the Principal/Superintendent with the responsibilities included in the overall instructional leadership of the SJS. In addition, implemented and supervised a school-wide behavior management system (Olweus Bullying Prevention) in collaboration with the school's climate team; continual analysis of student and school data; and coordinated the school-wide assessment system. Also, co-authored and awarded the State Comprehensive School Reform (CSR) grant. Responsibilities included researching, introducing and implementing daily walk-throughs to inform system and classroom level instructional reform.

2002-03: The St. Johnsbury School Assessment Coordinator, Reading Recovery Teacher, Professional Developer: Grades PK-8

Coordinate the implementation of all local, common, benchmark and state assessments. Develop a comprehensive, balanced assessment plan and analyze student performance across grade levels over time. Assist administration in development of annual action plan. Use assessment information in planning and implementation of professional development activities. Collaborate in the development of grants. Consult with curriculum committees on the alignment of curriculum with VT standards and the appropriate use of assessments across all curriculum areas. Teach daily Reading Recovery lessons and provide literacy support to students and teachers in grades 1-4.

2000-02: Reading Excellence Act (REA) Coordinator, Literacy Support Provider/Professional Developer/Reading Recovery Teacher: Grades Prekindergarten through 8

Built capacity for a balanced literacy system based on scientifically based research data by creating and supporting professional learning communities. Provided the organization and management system for the implementation of a balanced literacy approach. Reported REA assessments to the Vermont Department of Education and administered the \$265,000.00 budget. Provided literacy professional development to teachers in grades K-4 and daily instruction to students. Facilitated the coordination of the REA grant with school, families and the community.

1996-00: Reading Recovery Teacher/Title One Teacher

Grades K-5

Delivered explicit Reading Recovery lessons to individual students, taught literacy lessons to students in grades Kindergarten through 5.

1993-96: Reading Recovery Teacher and Consulting Teacher/Learning Specialist

Delivered explicit Reading Recovery lessons to individual students. Special Education instruction and case management responsibilities Birth (Part H) to Grade 5

1992-3: Co- Special Education Coordinator

Coordinated services in six elementary schools: Supervised professional and paraprofessional staff, performed all comprehensive evaluations, liaison with interagencies and participated in monthly regional special education coordinator's meetings.

1990-92: Special Education Assessment Coordinator

Grades K-5, coordinated services in six elementary schools, administered all comprehensive evaluations. Liaison with interagencies.

1987-90: Resource Room Teacher

Grades K-5, provided direct instruction, facilitated inclusion model for self-contained special education students into mainstream classrooms.

1983-87: Teacher of the Handicapped

Living Arts Center, direct services to multi handicapped teens.

PROFESSIONAL PRESENTATIONS & PUBLICATIONS

National Publications:

- *"Think Time: Formative Assessment Empowers Teachers to Try New Practices"* Egan, T., (ETS), Cobb, B., Anastasia, M. National Staff Development Association: JSD Fall 2009, Volume 30, No 4

- **“What Does it Take to Support Teacher Learning?”** Anastasia, M., Cobb., B. Presented at the annual meeting of the CCSSO National Conference on Student Assessment, Los Angeles, CA, June 2009.
- **“Transformation of Teachers’ Practices Enacted in Classroom and Teacher Learning Communities”** Anastasia, M., Presented at the National Staff Development Council, St. Louis, Mo, December 2009 with Cobb, B.
- **Winter 2011:** Side bar contribution to **“Transformation Assessment II: Applying the Process”** Popham, J.; ASCD publication

National Presentations:

- **National Staff Development Council:** St. Louis, MO; December 2009: *Questioning Strategies*
- **National Conference on Student Assessment; Council of Chief State School Officers:** Los Angeles, CA; June 2009 *“Daily Formative Assessment Practices”*

Local Presentations:

- **April 2008:** Presenter: Vermont Department of Education Network Meeting: Comprehensive Local Assessment System, On-Going Professional Development, Formative Assessment, and Teacher Learning Communities
- **June 2007:** VT. Department of Education: Leadership Summit

CONSULTING

2010-2012: Keeping Learning on Track® formative assessment professional school-wide training, principal walk-through training and para-educator training to support Keeping Learning on Track formative assessment practices in classrooms.

October 2008: Princeton, NJ: Educational Testing Services (ETS), Dylan Wiliam, Steve Chappius; Keeping Learning on Track® Formative Assessment Program updates and revisions.

October 2002: Grand Isle Supervisory Union, VT (K-4) 3-Day Teacher Professional Development Classroom modeling, book leveling, discussion groups

June 2002: Highgate School, VT (K-8) 2- Day Teacher Professional Development

Balanced literacy framework, management, comprehension strategies, book leveling, vocabulary development

June 2002: Isle La Motte School, VT (K-6) 1- Day Teacher Professional Development

Comprehension and vocabulary strategies (K-8)

GRANTS - Authored and Awarded

2010-11: Early Education Initiative Grant (\$30,000)

2009-2010: Bernie Sanders Earmark Grant: Project- Based Learning Saturday School for at Risk Middle Level Learners (\$35,000).

2008-2010: Fresh Fruit and Vegetable Grant (\$55,000)

2005: Co-Authored 21st Century Community Learning Grant – \$450,000 (\$150,000/ yr. for 3 years)

2004-08: Olweus Bullying Prevention Grant (10,000.00)

2003- 2006: Co-Authored Comprehensive School Reform Grant (\$180,000)

2000: Co-Authored Reading Excellence Act (REA) Award (\$265,000)

1999-02: Professional Standards Board operational grants

1996: Success by Six Grant

1995: Welcome Baby Packets

PROFESSIONAL ACTIVITIES AND AFFILIATIONS

2009-2015: Regional Standards Board for Vermont Administrators

Present since 2009: Phi Delta Kappa International

Present since 2008: Journal of Staff Development

Present since 2003: Vermont Principal's Association (VPA)
Present since 2003: National Association for Elementary Principals (NAESP)
Present since 1998: International Reading Association (IRA)
Present since 1999: Association for Supervision and Curriculum Development (ASCD)
1994-2003: Reading Recovery Council of North America (RRCNA)
2003-2006: Rotary International Club
1996-99: Northeast Kingdom Youth Services Board Member
1999-2002: Chair, St. Johnsbury Professional Standards Board: Developed Plan of Operation
1996: Chair, St. Johnsbury School Teachers' Association Negotiating Team
Rotary International Club 2003-2006
Northeast Kingdom Youth Services Board Member: 1996-99

ADDITIONAL PROFESSIONAL DEVELOPMENT

Present: 2013-2014- National Principal Mentoring Certification Program NAESP & the VT VPA
Summer 2006: Formative Assessment Pilot Project (FAPP): Vermont Department of Education, Educational Testing Service & Dr. Dylan Wiliam.
Spring/Summer 2004: Instructor of Record, Lyndon State College: Paraprofessional HQ
2004-05: Life Space Crisis Intervention Certification
2002-04: Vermont Leadership Academy
2003,4,5: B.E.S.T. Summer Institutes
Best Practices in Teaching Mathematics – VISMT
Training of Trainers Series: Comprehension, Fluency and Vocabulary - Vermont Reads Institute
The Human Side of Change – VT Standards and Assessment Consortium
Guided Reading Summer Institute – Lesley College
Responsive Classroom Workshop
Developmental Reading Assessment (DRA) Updates and Calibrations
Reading Recovery Continuing Contacts and Summer Institutes
School Development Institute
Dimensions of Learning

REFERENCES

- Raymond Proulx, Ed.D., Vermont Schools Consultant, Ed.D. Advisor, UVM Professor (802) 644-8830
- Jeremy Ross, M.Ed., St. Johnsbury School Teachers' Association President on behalf of the SJS Staff (802) 748-8616
- Otho Thompson, M.Ed., Middle Level Consultant (802) 244-7768
- Brian Hurlbert, M.Ed., Teacher-Leader, 4th Grade Teacher, SJS (802) 454-1332
- Teresa M. Egan, M.Ed. Senior Developer, Learning and Teaching Research Center, Educational Testing Services (ETS), Princeton, NJ (609) 921-9000
- Beth Cobb, M.Ed., Superintendent, Orange East Supervisory Union (802) 626-9378, (802) 222-5216
- Leslie Ercole, M.Ed., Mathematics Teacher- Leader and Middle Level Teacher, The St. Johnsbury School (802) 748-2833
- Ken Page, M.Ed., Executive Director, Vermont Principal's Association, Montpelier, VT 802-229-0547
- David Baker, (Former St. Johnsbury School District Superintendent), Superintendent Windsor South East SU (802)-674-2144

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Pam Harland

WORK ADDRESS: Faculty, Plymouth State University, Educational Leadership, 17 High St. Plymouth NH 03264

(please include position/title)

LENGTH OF SERVICE: 2 years

WORK TELEPHONE: (603) 254-3866

WORK EMAIL: pcharland@plymouth.edu

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: 5/4/2018 Pamela Harland Digitally signed by Pamela Harland
Date: 2018.05.04 10:41:11 -04'00' **DATE:** _____

Please submit the completed application form **POSTMARKED** by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

Pamela Colburn Harland

I wish to serve on the Professional Standards Board because of my experience and perspective as a collaborator. Collaboration requires leadership from everyone on the team. It means having tough conversations, staying curious, and actively listening. I recently served on the 2018 Education Technology Integrator Professional Standards Review Committee. Collaborating with this team was a rewarding and enlightening experience.

I volunteered to serve on the committee as a pre-service educator of future technology integrators because I had recently completed my report to the International Society for Technology in Education (ISTE) for national recognition of our program at Plymouth State University. I aligned my curriculum using the ISTE standards and the NH professional standards, developed assessments for candidates in the program to prove competence in each area, and created detailed rubrics in order to clearly show instructors and candidates whether or not the work had met those standards. This work was a two year process and I was concerned that major changes at the state level could void some of the work I had done. I joined the committee in protection mode wanting to protect the work I had already done. However, through the leadership of Kimberly Yarlott and the open participation of several active and passionate practicing technology integrators from across the state, we agreed that we needed to move forward fearlessly and focus on the future rather than protect the past work that had been done. As a truly collaborative committee, we made great changes to the technology integrator professional standards which will serve our schools well in the coming years. The work was

difficult and challenging, but it was worth it. Collaboration is tough, but it produces something more valuable than one individual could ever do alone.

Before coming to work at Plymouth State, I had worked in NH public schools for nearly twenty years as a school librarian and technology integrator. These positions allowed me to work closely with educators from across all of the disciplines as an instructional leader, coach, and mostly a collaborator. I am now in a position to teach future school librarians and technology integrators how to be instructional leaders and collaborative partners in their schools. I would like to serve on the Professional Standards Board in order to share my passion and optimism for public education. In this capacity, I hope to be more involved in the professional growth of all educators in the state of NH and continue to make a positive impact on our schools.

Pamela Colburn Harland

Education:

Ed.D. Educational Leadership, anticipated 2019. Plymouth State University.

Dissertation: An Investigation into the Leadership Behaviors of School Librarians: A Qualitative Study

M.S. Library and Information Science, 1994. Drexel University.

Honors: Beta Phi Mu, Graduate Assistantship, NHLA Scholarship

Studied business research/competitive intelligence, systems analysis, project management, database design.

B.A. English, 1990. University of New Hampshire.

Honors: University Scholarship and Dean's List.

Studied English Literature, especially Old English and *Beowulf*.

Relevant Experience:

Program Coordinator and Faculty

Educational Leadership Department, Plymouth State University, Plymouth, NH. 2016- current.

Coordinate the Library Media Specialist and Educational Technology Integrator certification programs, teach classes, oversee practicums, advise over 100 students in both programs.

- Teach Masters and CAGS level courses: Theories of Learning and Cognitive Development, Integrating Technology in Higher Education, Leadership & Management, Cataloging & Curation, ePortfolio Development and Assessment
- Supervise Practicums in Library Media and Internships in Technology Integration
- Received National Recognition from AASL for the revised School Library Media program
- Serve as the Academic Technology Institute Ambassador for the Educational Leadership Department.

Graduate Teaching Lecturer

Educational Leadership, Plymouth State University, Plymouth, NH. 2013-2016.

Teach graduate classes in the Library Media Specialist and Educational Technology Integrator certification programs.

School Library Director

Sanborn Regional School District, Kingston, NH. 2011- 2016.

Established a user-centered approach to information literacy by transforming a traditional school library district into a resource rich Learning Commons.

- Instruct students and faculty on information technology integration as well as effective and ethical online research skills
- Oversee elementary, middle school, and high school library programs throughout the district
- Establish an interactive online presence for students and faculty using Joomla, digital image sharing, Turnitin, Screenr, Slack, Twitter, and LibGuides
- Manage several projects including large workshop implementation, NEASC accreditation team, information literacy initiatives, and PD on competency based learning, access to complex texts, preparing students for college-level research, and information technology integration
- Supervise library staff, student workers, a multi-faceted budget, the physical facilities, licensing and contract negotiations, collection development, as well as the school archives.

School Librarian

Plymouth Regional High School, Plymouth, NH. 2006-2011.

Developed a user-centered Learning Commons in which students and faculty research and collaborate using a variety of resources and tools.

- Instructed students and faculty on effective online research skills
- Created a positive culture of readers which lead to an increase in test scores
- Lead the SAU Librarian team through automation projects, NEASC accreditation, policy expansion, collection development (print and online) and curriculum planning
- Managed library staff, student workers, a multi-faceted budget, the physical facilities, licensing and contract negotiations, as well as the school archives
- Redesigned the library website and establish an interactive web presence including blogs, wikis, social networking, digital image sharing, and LibGuides using WordPress, and Java.

School Librarian

Hampton Academy, Hampton, NH. 2000-2006.

Provided a shared environment in which faculty and students became effective users of information.

- Automated the district libraries and established an online presence for resource sharing
- Integrated information technology through collaboration and professional development.

Technical Services Librarian

Research Department, Federal Reserve Bank of Boston, Boston, MA. 1994-2000.

Managed all technical aspects of busy economics research library.

- Created publications on the information gathering aspects of economics research
- Developed the Research Department's website and administered the integrated library systems.

Recent Publications:

Harland, P. (2017). Future forward administration. *School Library Connection*.

Harland, P. (2017). Future forward collections. *School Library Connection*.

Harland, P. (2017). Future forward: Using evidence to bring your program into the future. *School Library Connection*.

Harland, P. (2016). Future forward: Librarians as leaders. *School Library Connection*.

Harland, P. (2016). Future forward: The evolving role of the school librarian. *School Library Connection*.

Harland, P. (2015). [The competency-based school librarian](#)" CompetencyWorks.org.

Harland, P. (2014). guest editor. "The learning spaces issue" *Knowledge Quest*.

Harland, P. (2011). [The Learning Commons: Seven Simple Steps to Transform Your Library](#). Santa Barbara, CA :

Libraries Unlimited/ABC-CLIO.

Harland, P. (2011). Taking the lead: Towards a learning commons. *School Library Monthly*.

Harland, P. (2011). Toward a learning common: Where learners are central. *Teacher Librarian*.

Harland, P. (2010). The kindle learning commons. *Library Media Connection*: 50-51.

Harland, P. (2010). High school book club – now with kindles! *Teacher Librarian*: 57-59.

Harland, P. (2009). Library 2.0 in Plymouth, NH: How one library uses web 2.0 tools to enhance services to students &

staff. *Library Media Connection*: 57-58.

Certifications:

Library Media Specialist (0036) and Education Technology Integrator (0350)

NH EdID# 66251 Originally Issued: 9/1/2000 Expires: 6/30/2021

CITI Program:

Conflicts of Interest: Expires: 11/26/2020

IRB Members Basic/Refresher: Expires: 11/27/2019

Social, Behavioral & Education Sciences Responsible Code of Research: Expires 11/26/2020

Awards:

[NH Excellence In Education Award](#): School Librarian of the Year, 2010.

[NH School Library Media Association](#): Intellectual Freedom Award, 2009.

Professional Leadership:

Region 1 Director, [American Association of School Librarians Board of Directors](#), 2015-current.

Education Technology Integrator Professional Standards Review Committee Member, NH Department of Education, 2017-2018.

Founder, [Let the Librarians Lead initiative](#), 2015-current.

Project Fellow, [ISKME School Librarians Advancing STEM Project](#), 2015-2016.

President, [New Hampshire School Library Media Association](#), 2013- 2015.

Member, American Association of School Librarians' "**National School Library Program of the Year Committee**," 2013-2014.

Member, American Association of School Librarians' "**Repurposing and Managing the Brands Task Force**," 2012-2014.

Volunteer Coordinator and Librarian, [Christa McAuliffe Technology Conference Steering Committee](#), 2011-current.

Member, [ABC-CLIO Library Advisory Board](#) 2012-2014.

Member, [Beta Phi Mu](#), 1994-current.

Member, [ALA & AASL](#), 2001-current.

National Presentations:

"Librarian Leadership" (keynote) Québec School Librarians Network Symposium, March 2017.

"ESSA for School Librarians" Rhode Island School Library Association, January 2017.

"The Learning Commons: Blueprint for the Future Ready Library" (spotlight speaker) [CMTC](#), Manchester NH, November 2016.

"Let the Librarians Lead" (keynote) [Maryland Association of School Librarians Annual Conference](#), Hagerstown MD, October 2016.

“Librarians Building Cultures of Inquiry and Literacy in STEM” [American Library Association Annual Conference](#),

Orlando FL, June 2016.

“Library Space Redesign” [SELCO](#), MN, May 2016.

“Any Way You Want It: LibGuides as a School Library Website” NHSLMA Annual Conference, NH, May 2016.

“Are Your Students Research Ready? Preparing Students for the Next Level of Research” Northern Virginia Catholic

Library Association, Herndon, VA, March 2016.

“Straight Outta Britannica: The Real Story Behind Biographical Research” Britannica Webinar, September 2015.

“Revitalize Your Library Space to Enhance Your Library Program” [Bureau of Education & Research](#), nationwide,

2014-ongoing full-day seminars.

“Are Your Students Research Ready?” [EDCO](#), Bedford MA, July 2015.

“Transforming School Libraries” [Washington County Public Schools](#), Hagerstown MD, June 2015.

“Featured Speaker” [MassCUE](#), Foxborough MA, Oct. 2014.

“Sink or Swim: Will Your Students Rise to the Challenge of College-Level Research?” (co-presentation with Elaine Allard)

American Association of School Libraries Conference, Hartford CT, Nov. 2013.

“Library Spaces in the Learning Commons” [L'Association des bibliothécaires du Québec Library Association](#),

Montreal QC, May 2013.

“Towards a Learning Commons” **American Library Association Midwinter Conference/New England School Library**

Leadership Conference, Boston MA, Jan. 2010.

Professional References:

Dr. Christie Sweeney

Educational Leadership, MSC #23

Plymouth State University

Phone: (603) 535-3096

E-mail: clsweeney@plymouth.edu

Dr. Linda Carrier

Educational Leadership, MSC #23

Plymouth State University

Phone: (603) 535-2101

E-mail: lcarrier@plymouth.edu

Principal Brian Stack

Sanborn Regional High School

Kingston, NH

Phone: (603) 642-3341

E-mail: bstack@sau17.org

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP
(Please type or print)

NAME: Julie S. Heon, Ed.D.

WORK ADDRESS: District Curriculum Coordinator, SAU 63, 192 Forest Road, Lyndeborough, NH 03082
(please include position/title)

LENGTH OF SERVICE: 1 yr (30+ yrs educator)

WORK TELEPHONE: 603-732-9273

WORK EMAIL: j.heon@sau63.org

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: Julie S. Heon Digitally signed by Julie S. Heon
DN: cn=Julie S. Heon, o=SAU 63, ou=Wilton-
Lyndeborough Cooperative School District,
email=j.heon@sau63.org, c=US
Date: 2018.05.24 09:33:31 -0400 DATE: _____

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

***Wilton-Lyndeborough Cooperative School District-SAU #63
District Curriculum Coordinator***

Julie S. Heon, Ed. D.
192 Forest Road Lyndeborough, NH 03082
603-732-9273

June 25, 2018

Re: Application for Membership, Professional Standards Board

Please accept my application for the Professional Standards Board as a certified educator in good standing, an experienced teacher, school administrator, and district administrator.

It is my desire to serve on the PSB in order to help guide the standards by which educators in the State of New Hampshire earn and maintain certification. I have worked closely with student teachers, interns, alternative certification candidates, beginning educators, and experienced educators. I have a strong dedication to my profession as well as the desire to be involved in developing and monitoring the standards of our profession in New Hampshire.

Please find my enclosed resume. I would like to emphasize that I have experience working with student teachers and interns, beginning teachers, and alternative certification candidates. I also have coordinated professional development and recertification of professional staff and paraeducators. Through these experiences I have developed a strong sense of the current standards and a context for future change. Collaboration is very important to me and I have a great deal of experience collaborating with teachers, administrators, and community members in various forums. I would like to bring these experiences to the work of the Professional Standards Board.

I appreciate your consideration and look forward to working with the members of the Board if accepted.

Sincerely,


Julie S. Heon, Ed.D

INSTRUCTIONAL LEADER ... COLLABORATOR... PROBLEM SOLVER

Experienced district administrator and life-long educator focused on improving student achievement through effective curriculum, instructional practices, and technology integration, supporting educator leadership, and values staff and community input, with a Doctor of Education degree in educational leadership.

CERTIFICATION

State of New Hampshire: Superintendent / Principal / Social Studies Teacher

EDUCATION

Doctor of Education, Walden University; Administrator Leadership for Teaching and Learning, 2011
Doctoral Study: Evaluation of a High School Reading Intervention Program

Certificate of Advanced Graduate Study, University of New Hampshire; Administration and Supervision, 1994

Master of Education, University of New Hampshire; Administration and Supervision, 1990

Bachelor of Arts, History, University of New Hampshire; summa cum laude, Phi Beta Kappa

SUMMARY OF QUALIFICATIONS

Experience and knowledge:

- | | | |
|--|------------------------------------|--|
| * Curriculum development and evaluation | * Effective communication | * Strategic plan development |
| * Personnel leadership and supervision | * Performance-based assessment | * Policy development |
| * Community relations | * Data analysis | * Goal setting |
| * Problem solving | * Grant development and management | * Summative and formative student assessment |
| * Student support programming/Multi-tier system of support/RTI | * Budget development | * Organizational planning |
| Professional learning | * Growth mindset | * Contract negotiations |
| | * Facilities management | * Effective instructional practices |
| | * Goal setting | |

PROFESSIONAL EXPERIENCE

- District Curriculum Coordinator:** Wilton-Lyndeborough School District (PK-12), SAU 63; 1 year
- ❖ Facilitate the development, revision, implementation and ongoing evaluation of district curriculum K-12 in all subject areas
 - ❖ Coordinate mentoring program
 - ❖ Coordinate professional development
 - ❖ Manage federal projects – grant development and management
 - ❖ Collaborate with school administrators
 - ❖ Provide professional development of curriculum development, assessment practices, and instruction
 - ❖ Co-chair of regional curriculum, instruction, and assessment group
 - ❖ Coordinate district standardized assessments and data analysis
 - ❖ Supervision and evaluation of staff

District Director of Curriculum and Instruction: Litchfield School District (PK-12), SAU 27

- ❖ Facilitated the development, revision, implementation and ongoing evaluation of district curriculum K-12 in all subject areas
- ❖ Coordinated mentoring and instructional coaching
- ❖ Supervised certification renewal and alternative certification for all staff
- ❖ Data analysis, including SBAC, NWEA - Measures of Academic Progress, Response to Intervention/Multi-tier System of Support
- ❖ Coordinated the planning and implementation of district professional development
- ❖ Chair Professional Learning Committee, curriculum committees, Program Evaluation and Review Committee, policy development committees
- ❖ Manage federal projects – grant development and management

Director of Curriculum and Instruction: Pembroke Academy (9-12), SAU 53

- ❖ Collaborative member of SAU leadership team
- ❖ Developed and allocated budget for curriculum, instruction, assessment, and professional development accounts; assisted with budgets for other departments
- ❖ Facilitated SAU wide curriculum development with seven sending schools
- ❖ Chair SAU Professional Development Committee and master plan development
- ❖ Professional development and supervision of research-based instructional strategies
- ❖ Data analysis, including NECAP and NWEA Measures of Academic Progress, Response to Intervention
- ❖ Facilitated application completion, visitation schedule and student demonstrations for successful Secondary School of Excellence award

Principal: McClelland Elementary School (K-5), SAU 54

- ❖ Developed and facilitated school improvement initiatives such as literacy focus, math instruction, faculty study groups, assessment analysis, student enrichment, service learning, and character education
- ❖ Provided instructional leadership and growth-oriented supervision of 80 faculty and staff members
- ❖ Budget development and management for school with 500 students
- ❖ Collaborative member of district leadership team

Assistant Principal: Epping Middle-High School (6-12); North Hampton School (K-8)

Teacher, Team Leader: Oyster River Middle School (5-8); Spaulding High School

PROFESSIONAL HONORS, AWARDS, PRESENTATIONS

Haaland Award, for educational research
Who's Who Among America's Teachers, student nominated

Presentations for National ASCD Conference, NH Administrators Association, New England League of Middle Schools, NH Principals Association, Learning Forward NH, numerous schools and districts:

- | | | |
|--------------------------------|-------------------------------------|--|
| ➤ Organizational Communication | ➤ Growth-oriented Supervision | ➤ Competency-based Education |
| ➤ Curriculum Development | ➤ Literacy Interventions | ➤ Freshman Transition Programming |
| ➤ Performance Assessment | ➤ Professional Learning Communities | ➤ Six Analytical Traits of Writing |
| ➤ Response to Intervention | ➤ Change Process | ➤ Providing for Individual Differences |
| ➤ Assessment for Learning | ➤ Project-based Learning | |

REFERENCES

Mr. Bryan Lane
Superintendent
SAU 63
603-732-9170
b.lane@sau63.org

Dr. Bryan Cochrane
Superintendent
SAU 86
603-435-1510 ext. 400
bcochrane@mybes.org

Mr. Timothy O'Connell
Principal
Florence Rideout Elem.
603-654-6714
t.oconnell@sau63.org

Mr. Kirk Beitler
Superintendent
SAU 73
(603) 527-9215
kbeitler@sau73.org

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Beth McClure

WORK ADDRESS: Principal, Strong Foundations Charter School
715 Riverwood Dr., Pembroke, NH 03275
(please include position/title)

LENGTH OF SERVICE: 11 years

WORK TELEPHONE: 603-225-2715

WORK EMAIL: bmcclure@sfnh.org

HOME ADDRESS: [REDACTED]

HOME TELEPHONE: [REDACTED]

PERSONAL EMAIL: [REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE: Beth McClure DATE: May 1, 2018

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.



715 Riverwood Drive Pembroke NH 03275

Phone: (603) 225-2715 Fax: (603) 225-2738

Drew Cline, Chairman
Professional Standards Board
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

May 1, 2018

Dear Mr. Cline,

I am writing to express my interest in serving a three-year term on the Professional Standards Board. My experience in Educational Administration as well as a Reading and Writing Specialist would allow me to contribute to the professional discussion at the five annual meetings. I am also committed to completing the additional tasks required outside of the meetings in order to be a contributing member of the board.

Sincerely,

Beth McClure, M.Ed.

Experience

- Principal and Co-Founder: Strong Foundations Charter School, Pembroke, NH Jun. 2007-Present
- Reading and Writing Specialist for the New Hampshire Department of Education per RSA 200: 58-63 Mar. 2017-June 2017
- Orton-Gillingham Trainer Jun. 2008-Present
 - Manchester, Merrimack Valley, Gilford, and Timberlane School Districts
 - Annual OG training to benefit the NH Branch of the International Dyslexia Association
 - Annual staff training for Strong Foundations Charter School
- Special Educator, Reading and Writing Specialist Sep. 1994-Jun. 2007
 - Manchester School District, Gilmanton School District, Barnstead School District, Pembroke School District, New Hampshire Technical Institute
- Educational Consultant and Training: Differentiating Instruction Feb. 2006-Jul. 2006
 - Gilmanton School District, Winnisquam School District
- Teacher: Burnham Brook School, Canterbury, NH Jan. 1988-Jun. 1994
 - Classroom Teacher: Math, Science, Social Studies, Writing
 - Special Educator: Reading, Writing, Assessment, IEP Development

University Experience

- Rivier University, Nashua, NH: Adjunct Faculty Graduate Division Jun. 1993-May 1995
 - Taught courses in Assessment, Reading, and Learning Disabilities

Certifications

State of New Hampshire Experienced Educator Certifications: Learning Disabilities, Reading and Writing Specialist, Elementary Education, General Special Education, Principal, Special Education Administrator

Academy of Orton-Gillingham Practitioners and Educators: Fellow Certification

Education

Enrolled in Ed.D Program **Rivier University, Nashua, NH:** Leadership and Learning. Expected date of completion: August 2018.

M.Ed. with Honors **Rivier University, Nashua, NH:** Administration.

M.Ed. with Honors **Notre Dame College, Manchester, NH:** Learning and Language Disabilities.

B.S. with Honors **Colorado State University, Ft. Collins, CO:** Liberal Arts.

Publications/Selected Presentations

- *The Structure of the English Language: Why, When, and How to Teach It.* Mar. 2016
Keynote Presenter for the NH Montessori Association Spring Symposium
- *Brain Plasticity and Reading Achievement in Response to Intervention.* Spring 2014
New Hampshire Branch of the International Dyslexia Association Newsletter
- *Brain Plasticity and Reading.* Professional Development for Strong Feb. 2014
Foundations Charter School
- *Special Education Basics for Teachers.* Professional Development for Jan. 2014
Strong Foundations Charter School
- *Differentiating Instruction.* Professional Development for Gilmanton Feb. 2006-Jul. 2006
Elementary School and Winnisquam Middle School

Appointments and Board Service

- Appointed to the Commission to Study Issues Relating to Students Receiving Special Education Services While Attending a Chartered Public School (est. by HB 126) Sep. 2015-Oct. 2016
- Board Member, NH Branch of the International Dyslexia Association 2005-2014
 - President: 2007-2008
 - Secretary: 2008-2009
 - Treasurer: 2009-2014
 - Advisory Committee (2014-Present)
- Board Member, Academy of Orton-Gillingham Practitioners and Educators 2015-Present
 - Executive Committee: 2016-Present
 - President: 2018-Present
- Board Member, The Alliance for Accreditation and Certification: An organization concerned with the accreditation of multisensory language education courses and certification of trainees 2016-Present
 - Treasurer: 2017-Present
- Board Member, Strong Foundations Elementary School, Inc. 2006-Present
 - President: 2006-2010
 - Treasurer: 2010-2012
 - Secretary: 2012-Present
- New Hampshire Public Charter School Association 2009-2016
 - Treasurer: 2010-2013; 2015-2016
- Board Member, NH Alliance for Public Charter Schools 2016-Present
 - Treasurer

Affiliations/Memberships

- Association for Supervision and Curriculum Development (ASCD) 2007-Present
- International Dyslexia Association (IDA) 1991-Present
- Academy of Orton-Gillingham Practitioners and Educators (AOGPE) 1993-Present

Professional References:

Sheila Costello, M.S.

Past President of the Academy of Orton-Gillingham Practitioners and Educators

2 Laurens Street, Unit 2B

Charleston, SC 29401

843-693-5686

sheilacostello56@gmail.com

Rebecca Nelson-Avery

Special Education Case Manager, Strong Foundations Charter School

11 Haig Street

Manchester, NH 03012

(603)785-3154

rnelsonavery@sfnh.org

Colleen Sliva, M.S.

Principal, Spaulding Youth Center

72 Spaulding Road

Northfield, NH 03276

(603) 286-8901

csliva@spauldingyouthcenter.org

Matora Fiorey, Ph.D.

Director, Surry Village Charter School

449 Route 12A

Surry, NH 03431

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matora@surryvillagecharterschool.org

NEW HAMPSHIRE STATE DEPARTMENT OF EDUCATION
DIVISION OF PROGRAM SUPPORT

PROFESSIONAL STANDARDS BOARD

APPLICATION FOR MEMBERSHIP

(Please type or print)

NAME: Daniel T. Tanguay

WORK ADDRESS: 33 S. Commercial Street, Manchester, NH 03101; Associate Dean of Faculty and Programs, Education
(please include position/title)

LENGTH OF SERVICE: 3yrs 9mths

WORK TELEPHONE: (603) 314-7636

WORK EMAIL: d.tanguay@snhu.edu

HOME ADDRESS:

[REDACTED]

HOME TELEPHONE:

[REDACTED]

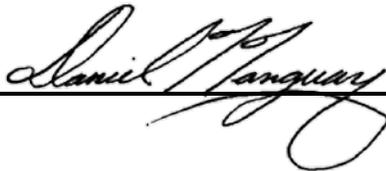
PERSONAL EMAIL:

[REDACTED]

Please attach:

1. A resume that includes educational preparation, location(s) and date(s); area(s) of certification; professional experiences; honor and awards; and contact information for 3 professional references
2. A statement describing why you wish to serve on the professional standards board

SIGNATURE:



DATE:

05/29/2018

Please submit the completed application form POSTMARKED by June 30, 2018 to:

Drew Cline, Chairman, New Hampshire State Board of Education, 101 Pleasant Street, Concord, NH 03301 or email it to credentialing.docs@doe.nh.gov.

DANIEL T. TANGUAY, PH.D.

Daytime: (603) 314-7636

Evening: [REDACTED]

E-mail: d.tanguay73@snhu.edu

May 29, 2018

Drew Cline, Chairman
New Hampshire State Board of Education
101 Pleasant Street, Concord, NH 03301

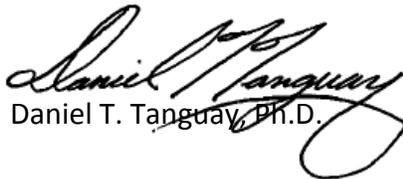
Dear Chairman Cline,

I am writing to express interest in becoming a member of Professional Standards Board (PSB). Previously as the Education Director for Granite State High School, Corrections Special School District (CSSD), I was an appointed member of State Advisory Committee on the Education of Students/Children with Disabilities (SAC). During my appointment, I had the privilege of working with various educators, parents, and students with the intent to provide informative feedback and recommendations to the Governor and Commissioner of Education on various special education related matters, especially proposed legislation. Additionally, during my tenure at Education Director, I was able to assist Ms. Ginny Clifford, from the NH Department of Education, on a regular basis with the review of various school districts' professional development master plans. Now, as the Associate Dean of Faculty and Programs for Education [online] at Southern New Hampshire University, I would like to use my previous and current knowledge of teacher education to become involved with state committee work once again, especially as it relates to educator professional growth and certification.

In my current role as Associate Dean, I oversee the online Master of Education in Curriculum and Instruction, along with five concentrations (Educational Leadership, Dyslexia Studies, Reading Specialist, Special Education, and Technology Integration). Additionally, I work closely with the School of Education in the oversight of the Master of Education programs for initial certification and endorsement seeking students. With these current duties in mind, becoming a member of the PSB will provide me the opportunity to share my knowledge of what I am experiencing from the online student perspective, as well as, increase my knowledge in what is needed to enhance the student learning experience in our programs. In other words, I feel, becoming a member will be a win-win for the both of us.

I thank you for the opportunity to apply and look forward to hearing back from you.

Respectfully,


Daniel T. Tanguay, Ph.D.

DANIEL T. TANGUAY, PH.D.

EDUCATION

Doctor of Philosophy Specialization in Leadership in Educational Administration Capella University, Minneapolis, MN	2014
<i>Dissertation Title: Correctional Education and the Reduction of Recidivism: A Quantitative study of Offenders' Educational Attainment and Success Upon Re-entry into Society.</i>	
Master of Science in Organizational Leadership Southern New Hampshire University, Manchester, NH	2004
Master of Business Administration Southern New Hampshire University, Manchester, NH	2003
Bachelor of Science in Mathematics Education Plymouth State College, Plymouth, NH	1998

HIGHER EDUCATION ADMINISTRATIVE EXPERIENCES

Associate Dean of Faculty and Program for Education COCE, Southern NH University, Manchester, NH	Aug 2015 to Present
<ul style="list-style-type: none">◆ The Associate Dean serves as a full-time member of the university's College of Online and Continuing Education (COCE) and is responsible for supporting student success by ensuring the quality of the programs, courses, and faculty within his respective areas of responsibility.◆ Analyze Education program and course quality, identifying areas of improvement and implement corrective action◆ Lead curriculum development for higher education program and courses, in collaboration with the course development team◆ Responsible for driving student success within Education programs and courses through the analysis and application of data◆ Interact with School of Education and other departments to resolve student, faculty, and curricular issues◆ Support accreditation efforts through the development of required documents and data◆ Providing oversight, coaching, and coordination of faculty and team leads	

Assistant Dean for Education**Aug 2014 to Aug 2015**

COCE, Southern NH University, Manchester, NH

- ◆ The Assistant Dean in Education provides operational oversight and coordination for designated courses within the College for Online and Continuing Education (COCE).
- ◆ Primary responsibilities are to work at the course level to identify and help underperforming students, ensure faculty meet expectations, and analyze course quality.
- ◆ Lead curriculum development for higher education program and courses, in collaboration with the course development team
- ◆ Evaluates the success of courses and students and works closely with the executive director.
- ◆ Uses data that focuses on student proficiency, outcomes and persistence to drive decision making and continuous improvement.
- ◆ Manages adjunct faculty team leads who each work with approximately 25 adjunct faculty members.
- ◆ Responsible for overseeing the hiring, the evaluation and the termination of adjunct faculty, faculty facilitators, and team leads.

SECONDARY ADMINISTRATIVE EXPERIENCES**Education Director****Feb 2008 to Aug 2014**

Granite State High School, Concord NH

- ◆ As a certified Principal, provided leadership of correctional high school as defined by RSA 194:60 and accredited by the Interagency Agreement between the NH Department of Education and the NH Department of Corrections.
- ◆ Developed program curricula to align with state standards, while address identified student needs.
- ◆ Evaluated all curriculum and instruction data to identify and address the various learning needs of students and increase student achievement overall.
- ◆ Assessed and refined the special education process to ensure the appropriate development and implementation of Individualized Education Plans occurs as needed for compliance with the NH Department of Education regulation.
- ◆ Collected data, prepares reports, and disseminates information necessary to maintain educational programs and special education services per state and federal regulations.
- ◆ Recruited, interviewed, and recommended the hiring of educational personnel as well as being responsible for the orientation of new hires on organizational goals, policies, and procedures, to make them cognizant of departmental rules.
- ◆ Provided supervision, evaluation, and professional growth and development, of all educational staff members per the Department of Education certification and school district standards.
- ◆ Prepared the biennial budget to meet educational needs, and monitors expenditure of funds to ensure maximum utility of scarce resources.
- ◆ Applied for grants to enlarge the capability of the Education Department to deliver programs.

Freshmen Academy Headmaster**2006 to Feb 2008**

Nashua High School North, Nashua, NH

- ◆ Responsible for oversight of the 505 freshmen students, which consisted of regular contact with parents, students, and teachers to ensure educational and developmental needs were met.
- ◆ Management of disciplinary sanctions of high school students, as based on behavior and situations.
- ◆ Interviewing and hiring of teaching and administrative staff, as well as recommending continued renewal or non-renewal of teacher employment.
- ◆ Supervision and evaluation of newly hired and veteran staff on pedagogy and curriculum development.
- ◆ Collaborated in the development of school safety plan and annual budget.

TEACHING EXPERIENCES**Adjunct Faculty****January 2015 to Present**

COCE, Southern NH University, Manchester, NH

- ◆ Create and post weekly announcements, lead discussions, grade assignments, and provide consistent and informative feedback to students in EDU-515: Educator as Leader online course.
- ◆ Prepared and implemented syllabi and lesson plans, led discussions, graded assignments, as well as, provided consistent and informative feedback to students in OL-125: Human Relations in Administration and OL-326: Social Environment of Business hybrid courses.

Mathematics Teacher**2003 to 2006**

Central High School, Manchester, NH

Courses taught: *Intro to Math, Algebra I, Geometry & Algebra II*

- ◆ Taught 25-30 high school students in 5 courses per school year through the implementation of mathematics curriculum that was aligned with NH Department of Education Frameworks.
- ◆ Collaborated in development of mathematics curriculum for the NEASAC accreditation process.
- ◆ Member of the Smaller Learning Communities Committee for the planning and development of Smaller Learning Communities Grant proposal.

Mathematics Teacher**2002 to 2003**

Nashua High School South, Nashua, NH

Courses taught: *Applied Algebra, Honors Algebra II & Pre-Calculus*

- ◆ Taught 25-30 high school students in 5 courses per school year through the implementation of mathematics curriculum that was aligned with NH Department of Education Standards.
- ◆ Incorporated the use of various Microsoft programs and other technology-based resources within the mathematics curriculum.

Mathematics Head Teacher**2000 to 2002**

Granite State High School, Concord, NH

Courses taught: *Basic Algebra, Pre-Algebra, Algebra, Geometry & Algebra II*

- ◆ Taught 10-20 high school students in 4 courses per school year through the implementation of mathematics curriculum that was aligned with NH Department of Education Standards.
- ◆ Introduced science and technology within mathematics courses, using graphing calculators, computers, science and mathematical software, and general physics principles.
- ◆ Managed coordination, placement, and grant funding of post-secondary offerings through New England College.

Mathematics Teacher**1998 to 2000**

Trinity High School, Manchester, N.H.

Courses taught: *Algebra I, Honors Algebra I, Geometry, Algebra II and Advanced Math*

- ◆ Taught 20-25 high school students in 5 courses per school year through the implementation of mathematics curriculum that was aligned with NH Department of Education Standards.☐
- ◆ Developed mathematics curriculum to meet re-accreditation standards for the NH Department of Education.
- ◆ Co-designer of a teacher workshop on the various uses of graphing calculators within the curriculum for the Diocese of Manchester teaching personnel.

CERTIFICATIONS

Principal (0003; EEC)

Expires June 2019

Mathematics Education 7-12 (1100; EEC)

Expires June 2019

Certified Professional Coach (ICF Approved)

Expires August 2018**PROFESSIONAL ASSOCIATIONS**

Advisory Board Member, Corrections Special School District

2014-2017

Advisory Board Member, Merrimack County House of Corrections

2014-2015

Appointed Member, State Advisory Council for Children with Disabilities

2008-2014

Councilor, SEIU-Chapter

2009-2011**REFERENCES**

Melissa Donovan

Associate Dean of Faculty, Mathematics

Southern New Hampshire University

603-314-1401/m.donovan@snhu.edu

Cathy Stavenger

Associate Dean, School of Education

Southern New Hampshire University

603-629-4675 ext. 2484/c.stavenger@snhu.edu

Jan Wyatt, Ph.D
Senior Executive Director, Nursing, Health Professions, Business and Education
Southern New Hampshire University
603-314-3477/j.wyatt@snhu.edu