

CASTL

Collaboration for Ambitious Science Teaching and Learning



Collaboration for Ambitious Science Teaching and Learning (CASTL) is a district-sponsored expansion of the work begun by the Partnership for Ambitious Science Teacher Leaders (PASTL) grant. The purpose of this document is to ensure that *new* interested teachers and their district sponsors understand the expectations and responsibilities of all parties in this collaboration. This document is not necessary for PASTL/AST Alumni who wish to participate in next school year's activities.

AMBITIOUS SCIENCE TEACHING is a set of instructional practices that support students of all racial, ethnic, class, and gender categories in understanding key subject matter ideas, participating in discourses of the discipline, and solving authentic problems related to real-world science phenomena. In short: This is what the *Next Generation Science Standards* looks like in practice!

The ambitious teacher is someone who works with students' ideas over time. What would you experience in classrooms where ambitious teaching was the focus? You would see and hear:

- Teachers anchoring their instruction in complex and puzzling natural events
- Students engaging in multiple rounds of creating and revising scientific models, explanations and evidence-based arguments
- Teachers using a variety of discourse strategies with students to get them to think deeply and to respond to each other's thinking
- Students prompting each other to engage in sense-making talk during investigations and other activities
- Students' ideas being represented publicly and worked on by the class
- Teachers using specialized tools and routines to support students who are not willing or able to participate without help
- Students speaking up about what information or experiences they need to move their thinking forward

~ from the AmbitiousScienceTeaching.org website

We are seeking teachers committed to:

- Engaging in issues of equity to support all students in learning science
- Adapting instruction in response to student ideas and experiences
- Collaborating in a regional network of teachers reflecting on rigorous and equitable instruction

If this interests you, please ensure the form on the back is signed by all appropriate parties, and submit a scan to the online application here:

[SURVEY](#)

Teacher Assurances

AMBITIOUS SCIENCE TEACHING is a process of collaborating and creating, of sharing and of supporting each other, and of continual growth and change. This is hard work, but it is rewarding work. AMBITIOUS SCIENCE TEACHING is *not* a collection of ready-to-go lessons and units for teachers to take back to their classrooms and implement. There are some beginnings to units that previous teachers have developed, but preparing them for use in your classroom takes time and care as you build the units for your own audience of students, or as you rebuild a unit to better align with the portions of NGSS that you are taking on at that time. As a teacher engaging in Ambitious Science Teaching, this kind of work requires willingness to engage, openness in practice, and intentional collaboration with colleagues. Teachers applying to CASTL agree to the following:

1. Participate in all three days of the “CASTL Summer Institute”; August 13-15, 2018.
2. Intentionally incorporate Ambitious Science Teaching practices into your classroom practice.
3. Collect student artifacts to critically reflect upon and rework at “Reflective Planning Days.”
4. Attend all three “Reflective Planning Days” during the 2018-19 school year.

Teacher Name (printed): _____

Teacher Signature: _____

Date Signed: _____

District Assurances

AMBITIOUS SCIENCE TEACHING is about the hard work of *engaging* and *supporting all* students in changing their thinking over time. AMBITIOUS SCIENCE TEACHING is *not* a collection of ready-to-go lessons and units for teachers to take back to their classrooms or to share with colleagues. There are some beginnings to units that previous teachers have developed and new teachers may choose to use, but implementing something like this takes time and care as a teacher builds the units for his/her own audience of students, or as he/she rebuilds a unit to better align with the portions of NGSS he/she is taking on at that time. As a district administrator supporting a teacher engaging in Ambitious Science Teaching with CASTL, you agree to:

1. Send teacher(s) who willingly volunteer to fully engage in this rigorous professional work and who are willing to fully engage in this rigorous professional learning.
2. Pay the \$300 fee to NWESD to cover program costs, lunches, and a copy of the book used in learning.
3. Provide compensation as appropriate per your district’s collective bargaining agreement for your teacher to attend the three days attending the “CASTL August Institute” August 13-15, 2018.
4. Provide substitute release time for your teacher to attend the three “Reflective Planning Days” during the 2018-19 school year.

Principal’s Name (printed)

District Contact Name (printed)

Principal’s Signature

District Contact Signature

Date Signed

Date Signed