the frustrations of being a fully qualified teacher in one state but not having your credentials recognized in another.

I did not follow the traditional pathway to licensure. In August of 2004, I accepted a position teaching science at a public charter school in Boston. I had no classroom experience but a degree in the sciences and experience teaching for a number of environmental education programs and at a nationally ranked science museum.

I was hired by the school under a waiver with the expectation that I would secure my license within one year. By the start of my second year, I passed the Massachusetts Test for Educator Licensure (a literacy and communication basic skills test) as well as the middle school general science content test, and was issued a preliminary teaching license, the lowest of teaching licenses issued to individuals with a bachelor’s degree who pass the state exams.

In 2006 I began a state-approved educator preparation program designed for in-service charter school teachers. By the fall of 2008, I had a master’s degree, an initial teaching license, and endorsements in middle school general science, middle and high school biology, and middle and high school Earth and space science. In 2010, I was granted professional level licensure.

In 2011 my family and I considered moving to Minnesota. In researching the process of transferring my Massachusetts license, I discovered that at the time Minnesota

Certified teachers moving states are faced with wading through a swamp of information to find what is relevant to them, as well as considerable testing and licensing fees.”
would reciprocate professional level licenses from other states. In December of 2011 I had completed all the requirements to upgrade my credentials and I applied for my professional license.

Despite a reissue of “never received” paperwork, in a matter of weeks I was issued my professional educator’s license for middle and high school biology. Six months later I had my professional middle school general science and middle and high school Earth science license.

By 2013, I had gone from being a novice teacher with no training in the profession to having a master’s degree, the highest level Massachusetts teaching license, five content endorsements, and 10 years of teaching experience in Title I schools.

During the months waiting for my Massachusetts license, Minnesota changed its laws and would no longer reciprocate any licenses, of any levels, from any other state. To get a Minnesota teaching license, I had to take the Minnesota Teacher Licensure Examinations; a math, reading, and writing basic skills test; and a two-part pedagogy test; and in addition to the two-part general science, life science, and Earth science exams. I was instructed to forward all my documents to Minnesota and after paying the fee in September of 2013, about 18 months after I began the process, I was issued a middle school general science license.

When I inquired into the status of my high school license, I was informed that because my educator preparation program was for middle school, I would have to find a sponsoring college or university to evaluate my transcripts and lay out a path of further study to obtain the high school license, including a minimum of 200 hours of student teaching the very content I had been teaching full time for the past six years.

Frustrated at the prospect of returning to school, it was suggested I approach my graduate school and ask if it would endorse me for high school biology. As I taught high school biology for six years and held a professional license, the college certification officer agreed to sign the endorsement paperwork. After paying another fee, I added a high school life science endorsement to my middle school general science license. Despite having passed the Earth science MTLE, I never applied for the license.

The National Council for the Accreditation of Teacher Education (NCATE) interstate agreement on teacher licensure is not an agreement on license reciprocity but guidelines on how states could proceed in recognizing licenses from other states. Cautious to maintain its high educational standing, Minnesota opted to decline licenses from all other states.

The NCATE agreement gives the impression that states do reciprocate licenses from other states. Perhaps some states do reciprocate, but I just happened to move to one that did not. Certified teachers moving states are faced with wading through a swamp of information to find what is relevant to them, as well as considerable testing and licensing fees. My advice to teachers anticipating a move to a different state: be patient and persistent, start the process early, and be prepared for the cost in exam and licensing fees.

David J. Fassler II is a Minnesota and Massachusetts-licensed middle and high school science teacher. He has taught for charter schools, vocational-technical high schools, and International Baccalaureate World Schools. He currently teaches 6th-grade science at the South Saint Paul Secondary School in Minnesota where he earned an AAE Classroom Grant to provide model skeletons for his science classrooms. David makes his home with his wife and daughter in Mendota Heights, Minnesota.

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A
e is once again joining our nation’s teachers in welcoming National School Choice Week (NSCW) 2016 from January 24th to the 30th.

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AAE Is Proud of Our 42 Members at Kennesaw Charter Academy
Who Are Living the DREAM

It's no wonder the students in Kennesaw, Georgia at Kennesaw Charter Science and Math Academy (KCSMA) are full of smiles and laughter these days. Their school is hard at work bringing them the best opportunities it can to boost spirits and add fun to learning.

With the help of former NFL veterans Julius Williams, Brandon Lang, and two-time Super Bowl champ Anthony Smith, KCSMA has introduced a mentoring program that is pioneering the way schools reach out to students, and AAE thought you should know about it! That's why we went directly to Principal Kay Frey to tell us about how this inspiring new program came about as well as the impact it's having on Kennesaw students. Here's what she had to say...

It all started when Coach Ken Woods, who mentors students at KCSMA, met the players at a youth football camp. After talking with them, Ken thought their vision for youth in the Metro-Atlanta area were very similar to the goals and vision of KCSMA, so he brokered a meeting with program administrators of their DREAM program that led to a growing and evolving partnership. He also enlisted the help of Jason Traster, an AAE member and father of three, to provide support and insight as an administrator.

Initial planning began with a 6 week introduction to the players. Every day starts with one hour of leadership, mentoring, and discussions about making good choices, followed by an hour of football drills and games. DREAM has hosted a Family Fitness Day with KCSMA twice this year, in which families from our school and the community are invited to come to our gym for friendly competition, relays, and obstacle courses. The day ends in a kickball game between players, faculty, parents, community members, and students.

DREAM attends schoolwide events like Meet-and-Greets and the County Fair, providing invaluable interaction with parents and students alike. They bring in speakers from the professional sports community and even participate in our ever popular Pie-in-the-Face contest!

Having such positive role models in their lives has had a huge impact on our students. It’s been so influential for them to have examples of local members of the community with real-life issues and average upbringings, living their commitment to helping young people make better choices by spending their time with them...by sharing their stories! Students see them as bigger than life at first, then get to know them as caring, real-life men who got where they are through hard work, learning from mistakes, and never giving up. The biggest advantage of this program is that it helps to create future leaders who value integrity, honesty, and responsibility in themselves and others—no matter how much money they make or how well known they are.

As far as I know, we are the only school in the area doing this. We're so lucky to have revolutionary teachers like Ken and Jason helping to put together such a powerful program for our students.

Although the school is known for science and math (and is currently working towards obtaining STEM certification from the state), preparing students to be strong and respected members of their community is a goal for which our staff and administration strive.
Innovation as it relates to authentic learning and goal setting for the future, career and college preparation, and the importance of perseverance, imagination, teamwork, and kindness in everyday life is an overarching theme in all we do. We accomplish this by focusing on real-life problem-solving as it relates to science, engineering, conflict resolution as well as other social and technological issues.

Moving forward, KCS is eager to incorporate a more blended approach to music and sports by exploring movement, body, and mind and the vital connection between them. We’re excited about moving in this direction with our NFL partnership, and are even more excited about what the future holds! Recently we met with a well-known music producer to try and integrate more music into KCSMA curriculum. We also hope to create the biggest outdoor learning classroom in the district within the next few years, and we want to partner with educational and business organizations to provide expanded opportunities for students at KCSMA in career pathways.

Know an innovative school or teacher doing great things like KCSMA? Tell us about it and we may feature them in an upcoming edition of Education Matters! Email us at editor@aaeteachers.org.

AAE Teacher Survey of the Month

What’s the best gift teachers can get during the holidays?

Take the survey at tinyurl.com/December15Survey today and be entered to win an AAE Prize Pack just for letting us know.

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Innovation can’t be tested or graded—but it can be built up.

Innovation is a trait that I desperately want to instill in my students, and many teachers I talk to seem to share that goal. In the current climate of high stakes testing, state standards, and prescribed learning outcomes, it can be incredibly difficult to foster an atmosphere of innovation and creativity that inspires students. But, rest assured, it is possible.

Here, I outline eight basic principles for the “Innovative Classroom,” around which I designed a middle school course called Physical Computing. Some of the projects and tools are specific to that course, but I think the fundamental ideas could be applied to almost any course at any level.

1. Give students a problem that is both interesting and authentic. There is no such thing as a problem that is going to be interesting to every kid. This means that a project has to be flexible enough for students to tailor it to their own interests. It also means that teachers need to take the time to learn about their students’ interests. Authenticity comes from using real tools to tackle problems that don’t have their answers printed at the back of the book. Ideal projects dictate some general parameters and tools but leave the specific problem definition up to the student. Some examples of interesting, authentic projects with built-in flexibility include:

- Design a musical instrument that you can play without using your mouth or hands
- Choose a challenging terrain and design a vehicle that can conquer it
- Create a sculpture that incorporates both light and motion

2. Give students the basics, but keep it short. Students will always need some basic knowledge to get some traction on their projects, but the amount of information that the entire class will need is probably less than you would expect. Chunk this general information into organized blocks of 5 to 10 minutes tops, and deliver these in a mini-lesson at the start of class. If you find that you need more time, ask yourself if students really need the information you are delivering. If they do, ask yourself if the project they are working on is indeed an authentic problem and not your own learning objective disguised as a problem that the students really own.

3. Model great research skills. If I have done a good job with the project design, students will get the vast majority of the information they need from their own independent research. For this to work, however, I need to coach them in good research skills, and I sometimes invite the librarians in to help. This research, which often draws from internet message boards, programming language documentation, sample code, and Wikipedia, is a slightly different skillset than the research that students might do for a history research paper.
“In fact, when you assign a grade to something like creativity, students will often perform for the grade and not for the best possible solution. Thus, a grade for creativity will often become an unintended disincentive.”

4. **Scaffold complex skills.** Tools like Makey Makey, Little Bits, Scratch, Tickle, and Tynker make it easier than ever for novice students to create authentic products that solve real problems. If you teach CompSci or electronics and you aren’t familiar with any of these tools, stop reading right now and Google them. My personal favorite is an Arduino-compatible board called the Light Blue Bean, which can be programmed from an iPad using the block-based language Tickle.

5. **Check for understanding always.** In a classroom focused on highly individualized projects, it’s critical that the teacher monitor what students are struggling with. Optimal learning occurs when students struggle with a problem to which they believe they can find the solution. If they cross over into frustration and confusion, they are at risk of giving up. Teachers should keep careful track of what students know and what they need to learn in order to successfully complete their projects. Using strategies such as “fist-to-five” or “thumbs-up” to check the understanding of the entire group after a mini-lesson is also helpful.

6. **Favor found and recycled objects.** In his TED talk video, Daniel Pink talks about the connection between creativity and what is know as Functional Fixedness—or people’s tendency to see only a single use for an object. Requiring students to fashion electric switches out of clothes pins, or building a robot torso out of a soda bottle, will help students to flex their creative muscles and think beyond the standard uses for everyday objects.

7. **Model mental inventory taking.** Innovation and problem-solving depend on having a great understanding of what you know and what you still need to learn. Build in components of your projects that require students to list the things they understand about their project and also to articulate as specifically as possible the things they still need to understand better.

8. **Whatever you do, don’t try to grade creativity and innovation.** Grades work really well when there is a correct answer you want students to work toward. If you want them to own a problem and to produce a genuinely original solution to it, you cannot motivate that with a grade. In fact, when you assign a grade to something like creativity, students will often perform for the grade and not for the best possible solution. Thus, a grade for creativity will often become an unintended disincentive.

Innovation isn’t a standard that you can teach directly and then test for. Innovation is more like a habit of mind that is fostered through consistent attention to classroom culture and expectations. With practice, the eight guidelines above can help teachers cultivate such a culture in any classroom.

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