Creatively Teaching Creative Learning:

An Innovation Plan for Professional Development in Chesterfield County Schools

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Abstract

The following literature review will explore research relating to the idea that educators can benefit from a shift in professional learning practice, away from a predominantly short-term workshop-based model over which teachers have little or no control, and toward a model implementing the same learning practices teachers are encouraged to use in their classrooms. This research will be related to a proposed professional development plan for Chesterfield County Public Schools that, through exploration of the creative process and with the aid of instructional technology, including audio production software and online content delivery, allows teachers to develop a growth mindset in themselves and determine how to help their students develop the same mindset. Participants will explore the learning content from different perspectives as the program progresses: as learners, as peer coaches and collaborators, as mentors, and as instructional leaders.

Introduction

As education practices move away from a 20th-century conformist model and toward a more learner-driven, inquiry-based paradigm, with teachers stepping away from the front of the classroom and more frequently into the role of a learning guide or facilitator, educators are finding themselves needing to help students navigate a learning environment that the educators themselves have never experienced. Learners are (wisely) being encouraged to explore and discover solutions to real-world challenges and problems through creative thinking and experimentation, rather than simply regurgitate information. An ever-greater emphasis is being placed on helping students learn how to learn. Teachers who have not experienced this model,

either as teachers or learners, are at a disadvantage when it comes to helping students make the most of it. Furthermore, even as teachers are looking for professional learning opportunities to develop these necessary skills and practices, they are being subjected to the very same learning models that they are being directed to phase out of their classroom environments: lecture-based, passive one-off workshops, rather than the engaging lessons and activities they are expected to help their students experience.

Why This Innovation Plan Exists

The current proposal centers on two premises: first, that establishing a growth mindset is critical to a learner's success and development; second, that many teachers do not have adequate professional learning support to help them foster the development of such a mindset, either in their students or themselves.

There is ample research regarding the first premise. Dweck's *Mindset* (2016) outlines her research on the development of such a growth mindset and its importance to the learning process. The William and Flora Hewlett Foundation cites developing an academic mindset and a belief in one's ability to grow as one of the key competencies of deeper learning (2013); the 2017 NMC/CoSN Horizon Report identifies deeper learning approaches as being a "Key Trend" in five out of the group's six most recent reports (Freeman, Adams Becker, Cummins, Davis, & Hall Giesinger, 2017).

Unfortunately, the second premise is also well-documented. Darling-Hammond, Chung Wei, Andree, Richardson, and Orphanos offer a rather grim appraisal of professional learning in education, especially when comparing the United States to other countries; their *Professional*

Learning in the Learning Profession report indicates that teachers in the U.S. have far less time for development and collaboration than their counterparts abroad, and the development they do experience is overwhelmingly of the single-day workshop, "sit and get" variety (2009). The assessment of TNTP's 2015 report *The Mirage* is even bleaker, asserting that few teachers feel they get any significant benefit from professional development efforts, and even fewer actually do.

What This Innovation Plan Does

The current proposal resolves to address these two challenges by implementing a new professional learning model in Chesterfield County Public Schools, a model that leverages instructional technology (much of which is already in place in the district) to help teachers develop growth mindsets in themselves and in their students. The underlying principle of this new model is that it treats teachers not as passive vessels of learning, but as active participants; in short, it applies the same practices that teachers are continually being encouraged to implement in their classrooms to the teachers' learning environment, treating teachers not as deliverers and receivers of content, but as learners themselves.

Gulamhussein (2013) proposes that effective professional learning for teachers adheres to five principles:

- 1) Professional learning must be ongoing and of significant duration.
- Teachers must receive support as they implement changes in their classroom practices.

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- Teachers should engage in active learning as they explore new concepts and practices.
- 4) Teachers should have new concepts and practices modeled for them.
- 5) Professional learning content should be discipline- or grade-level specific, rather than generic.

Under the proposed model, participants will volunteer to be part of a cohort in a year-long program, first as learners themselves, then as peer coaches, and finally as mentors to learners who have joined later cohorts. Participants who complete the program are encouraged and incentivized to take on cohort leadership roles themselves the following year. This course structure alone embraces four of Gulamhussein's five principles, declaring that effective professional development will be of significant duration, employ active learning and modeling, and provide learners with coaching as they implement the lessons they are learning.

The pilot phase of this proposal begins with teachers (learners) exploring the creative process of feedback and revision through the use of audio production software, or digital audio workstations (DAW's). Dougherty (n.d.) outlines compelling connections between this type of creative activity, part of what he calls the Maker Movement, and Dweck's growth mindset research. This exploration is a prime illustration of the growth mindset: learners examine the difference between creativity (often thought of as a static or fixed talent) and the creative process (which can be consistently applied by anyone to any endeavor, whether they see themselves as creative or not). Through the process of creating and revising audio works of their own choosing, works of personal significance to them, learners will experience firsthand the effects and benefits of working in a growth mindset: they create, they receive feedback, they revise, and the creative

work is improved. The participating teachers will be experiencing the same learning environment they will be helping to create for their students.

In the next stage of the program, learners will investigate how to best create such a learning environment in their own classrooms. Because these teachers will come from a variety of disciplines, some traditionally thought of as "creative" (visual art or music, for example) and some less so (math, science, etc.), there will be a wide range of possibilities for what this implementation might look like in a given classroom. Participating teachers will collaborate to determine content-specific ways (Gulamhussein's fifth principle) to bring this creative process and growth mindset into their own learning environments. This cross-section of academic disciplines is essential to the program, and is one significant place that instructional technology comes into play: the use of a learning management system (LMS) for asynchronous learning will enable teachers in different grade levels and buildings across the district to easily collaborate through the use of such tools as discussion boards and videoconferencing.

When the time comes for participants to implement their ideas and experiences into their classrooms, they will have the benefit of observation and coaching by their cohort leader and by their peers, and will in return serve as coaches themselves. Over the course of three months, these learners will have the opportunity to try out, evaluate, and revise their implementation plans, in collaboration with their peers (applying the same creative process they studied earlier with music to their own teaching). As this process continues, and their ideas are further refined, they will serve as mentors to teachers in later cohorts as these less-experienced learners move through the same process they themselves experienced earlier. At the conclusion of the

school-year-long program, participants will have experienced the learning community from multiple possible perspectives: learner, collaborator, and mentor.

A final, optional stage of the program will entail teachers who have completed the year-long original program becoming cohort leaders themselves. This is where the model is intended to truly begin spreading: teachers who lead their own cohorts will implement the same professional learning model they experienced, but rather than beginning with exploring the creative process through audio production, they will use content from their own academic area--ideally with a version of the material they implemented in their own classrooms. The expectation is that, as this learning model is more widely implemented, participating teachers will have a greater variety of initial content experiences to choose from: learners who may not be interested in producing music may be more intrigued by creative writing or experimental science. The broader the appeal of the first stage of the program, the more teachers are likely to choose to take part.

Research Support

There is a wide range of evidence to support this teacher-led professional learning model. To begin, research suggesting that learners of any age benefit from the kind of active, inquiry-based learning this model proposes has been available for decades. Dewey put forth his ideas of active learning more than a century ago when he defined understanding as "the offspring of doing" (1916, p. 321), and Vygotsky's concepts of the Zone of Proximal Development and the More Knowledgeable Other are arguably at the heart of inquiry-based learning (1978). More recent research (Desimone, 2011; Desimone, Poret, Garet, Yoon, and Birman, 2002) finds that

professional learning of the type Gulamhussein (2013) recommends (and that Garet, Porter, Desimone, Birman, and Yoon also studied in 2001)--namely, active learning of significant duration that is focused on content-specific teaching practices--increases the effectiveness of professional learning and makes it more likely that teachers will take the practices they have studied and implement them in their own classrooms.

Furthermore, there is a growing worldwide push for school systems to implement some form of teacher-led professional development. Programs such as Lesson Study and Learning Study, two related practices in which teachers collaborate in planning, observing, discussing, and implementing classroom activities and practices, have been in use in school systems in Asia, Australia, North America, and Europe for nearly two decades; a study by Cheung and Wong (2014) found these programs to have benefits for both teachers and students (although the authors indicate that more controlled study is needed). Teacher learning networks under various names--Critical Friends Groups, Teacher Learning Communities, etc.--have been adopted by a variety of school systems during this same period; this includes Chesterfield County's own embrace of Professional Learning Communities. Clearly, there is a recognition of the value of these peer support networks.

Macias (2017), however, would identify these networks and the professional collaboration and learning they facilitate as still suffering from a top-down structure: teachers working toward goals dictated by administration and other forces from outside the learning environment, rather than the bottom-up structure described by Vangrieken, Meredith, Packer, and Kyndt (2017), in which teachers themselves determine needs and guide professional learning efforts. Macias argues that the top-down structure contributes to teachers splitting their time and

energy, attempting to demonstrate compliance with top-down goals while simultaneously attempting to meet the goals they perceive as most beneficial to their students. Stacy (2013) also makes the case for what she and others term "teacher empowerment," positing that teachers who have ownership of their learning will be more invested in it, and that an increase in teacher engagement leads to gains in student achievement. Research by Yoon, Duncan, Lee, Scarloss, and Shapley (2007) appears to bear out this assertion, finding in a nationwide study that students whose teachers had received content-specific professional development of significant length and with ongoing follow-up saw gains of 21 percentile points over an average control group. (Yoon et al. do have reservations similar to those of Cheung and Wong in 2014 regarding the scarcity of controlled study data.)

The current proposal attempts to minimize the top-down nature of professional learning by using a single district-level "top-down" goal--that all Chesterfield County students and staff will embody an infinite learner mindset--only as the broadest of starting points (Chesterfield County School Board 2018). Teachers in the learning community will determine what the journey to that goal will look like in their own learning environment, and in doing so will exercise the same practices as learners that they will implement as teachers.

Barriers

While the current proposal attempts to minimize obstacles to implementation, as with any attempt at innovation, potential barriers do exist. These barriers can be summed up as relating to technology and time.

The proposal addresses the first of these potential obstacles by making use of Chesterfield County's existing technological assets. Participating teachers have county-issued laptops, and, through the district, access to Soundtrap DAW software for completing audio projects and the Canvas LMS for course materials and class discussion. While these may be augmented by such collaborative tools as Google Hangouts (also part of the county's technological infrastructure), these two programs form the bulk of the proposal's technological needs. As these programs are already available to all county teachers and students, they present no added expense.

The question of time poses a greater challenge. The proposed model requires a greater time commitment than most county-provided professional development activities: a full school year of participation, rather than 8 to 10 individual days or half-days spread throughout the year. The proposal also requires participants to observe other teachers in the classroom, and as the program grows beyond its initial single-building pilot stage, teachers may have to travel to other buildings during the school day. The best possible solution to this challenge requires facilitation from administration. In addition to providing time and possibly occasional class coverage for participating teachers to complete these observation activities, school administrators can also help teachers meet the program's large time commitment by accepting that time for county professional development hours, perhaps even excusing participants from school-wide professional development activities. These actions, incidentally, are a positive step toward implementing the bottom-up structure that Vangrieken et al. (2017) describe, with administration providing practical support for teacher-driven learning.

Research Gaps and Further Study

As previously mentioned, researchers like Yoon et al. (2007) and Cheung and Wong (2014) have bemoaned the scarcity of large-scale controlled studies examining the quantitative effects of teachers' professional development on student achievement. This researcher acknowledges that the issue does not seem to have improved much since the 2014 study. While there have been studies examining the improvements that teachers see in themselves after experiencing different forms of professional learning, data that directly links such learning to student achievement is harder to find. This is an area that would certainly benefit from more focused study, as increased student achievement is the ultimate goal of all professional learning activities.

Parallel to this, two other areas that would merit further examination after the implementation of the current proposal involve the academic content areas of the coursework and of the participating teachers. First, are there academic subjects whose students would see greater benefits from this program than others? Studies like the 2007 study by Yoon et al. have focused on subjects such as math and reading. Would students in those content areas see greater benefits from having their teachers implement the current proposal's practices than those students in arts or social studies classes? Similarly, would *teachers* see particular benefits from the program's model of putting teachers in a varied cross-section of disciplines together in a cohort? These are questions that this researcher looks forward to addressing as teachers begin taking advantage of the proposed professional learning model.

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