

IT WORKED!

Can High School Teachers be Coached? Megan Gittermann

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While pursuing my own professional learning and attempting to grow my professional network as a secondary mathematics coach, I recently discovered an acute lack of resources dedicated to the high school coach. At both local and national conferences, I often find myself a unique representative in a room full of elementary and middle school coaches. Although many coaching strategies transcend instructional levels and I learn an immense amount from my elementary and middle school counterparts, I always wonder, Where are all the high school coaches? Are high school classrooms already providing everything our mathematics learners need to be successful? The data surrounding student performance on high school college and career readiness tests would suggest otherwise; so, why do our teachers not have the support of full-time high school mathematics coaches as they attend to the important business of ushering our students into college and careers?

In discussing the disparity with colleagues, there seems to be, anecdotally at any rate, the pervasive opinion that high school mathematics teachers are too resistant to change and hard to coach to warrant a financial commitment to coaching. Words like "arrogant" and "elitist" are casually thrown around the mathematics education world in reference to the high school teacher. As a former high school mathematics teacher, newly transitioning into a position of high school mathematics instructional support teacher, or full-time coach, I was initially surprised and hurt by this belief. I thought back to my recent days in the classroom, and I did not recall having any difficulty collaborating with my colleagues. Had I been hard to approach or stuck in my ways? If I was, should I perhaps write a letter of apology to NCSM? Or maybe my former team leaders and coach deserved gift baskets for the time that they dedicated to me. I could have sworn that I was open-minded when I was a classroom teacher. In fact, I have vivid memories of reflecting on my practice, attending professional conferences, reading books, and asking veteran teachers for advice in order to become a better teacher. I know I loved my students, and I know I desperately wanted them to learn. So, why was there this disconnect between what I believed about myself as a teacher and what I was learning about high school teachers, in general, from the coaching perspective?

In reality, there are barriers to high-quality instruction everywhere, but those faced by high school teachers are often misunderstood in the education community. The stakes in high school feel horribly high, and the deadlines feel terribly close. The high school educators experience the great joy of watching their students join adulthood, and the overwhelming terror of releasing their students into the world. They celebrate the college acceptance letters of their students, and dry their tears that result from the rejection letters. They nervously watch the rapidly approaching graduation deadline, while anxiously weighing the importance of student accountability against the very real implications of a student not earning a high school diploma or getting accepted into their college of choice in the current economic environment. First and foremost, they desperately want their students to succeed, because where society sees insolent teenagers, they see children who rely on them for their future. The high school teacher is keenly aware that when their students leave their classrooms as children, they enter the world in which they will live as adults.

At every level, the day-to-day business of coaching boils down to trust. At the high school level, it is imperative that an instructional coach has an understanding of, and patience with, the barriers innate to high-quality instruction at the high school level. High school mathematics teachers have been encouraged for years to change their practice, but many have learned not to trust, nor expect, that support for these changes will exist. When I have been most successful in developing a coaching relationship at the high school level, it has always started with a commitment to understanding teachers as whole people and helping them bear the very real burden of the high-stakes nature of their decisions. It is vital that a high school mathematics coach be not only dedicated to a strong instructional vision, but also sympathetic to the difficulties that high school teachers may face.

Compounding the problem of the rapidly emptying hourglass is the sheer quantity of content in high school courses, in addition to the lack of high-quality resources available to high school teachers. Conferences, websites, research-based texts, commonly used professional resources and publications, video vignettes, and a variety of professional development materials either provide very little assistance beyond Algebra 1, or they take an incredibly traditional and procedural approach to "covering" the high school content. How does one provide a concrete and student-centered exploration of rational functions, properties of logarithms, or the complex number system? High-quality resources tailored to such content that aren't strictly procedural in nature are uncommon, at best. The fact is that we are expecting high school teachers to change their instruction while simultaneously not providing the material resources or coaching supports necessary for the professional growth we seek. Naturally, the reaction by most high school professionals is to resort to a teaching style that worked for the overwhelming majority of them. Faced with few viable alternatives, direct instruction to rows of students becomes the default method of delivery, and engaged learning is abandoned. Perhaps some of the resistance we see is a product of the culture of high schools, an assumption of the uppermost levels of mathematical expertise based on one's Secondary Mathematics teaching certificate, or the manifestation of some sort of underlying teacher frustration, even arrogance, but maybe some of it is not. Maybe some of the "hard-to-coach" reputation attributed to high school mathematics teachers is related to the vast divide between their needs and the supports available to them. How might a coach make these supports available? Better yet, how can a coach re-engage and empower a group of teachers who have felt over-burdened, under-supported, and misunderstood for years?

Effective high school coaches of mathematics must understand content at a depth that allows them to be responsive, flexible, and creative in the lesson design process and in addressing a wide variety of instructional levels. In the absence of high-quality instructional resources, a math coach must be able to respond to the questions of teachers of advanced mathematics courses, and work with them to adapt the student-centered strategies that we know work to content that may not lend itself easily to such strategies. Additionally, the high school mathematics coach must have a support system available when her/his own knowledge falls short. The reality is that the application of advanced mathematics coursework often requires knowledge of other content areas such as physics, and developing conceptual understandings might require leveraging technology in a way that may be outside the comfort zone of many coaches and teachers. It is important to build a network of "experts" (district based and beyond) who can be consulted in an effort to respond to teacher needs. This sort of effective consultation and responsiveness in the planning process is the first step in earning the trust necessary to transition to collaboration and true coaching.

If we cannot meet our high school mathematics teachers in the middle by supporting their teaching with both the attention and materials that coaches and specialists provide their elementary and middle school counterparts, then how can we expect changes in their teaching? Utilizing mathematics coaches at the high school level requires a highly skilled and well-prepared mathematics coach with a strong commitment to the district's vision, and an abundance of patience. We owe it to our students to provide better instruction during their capstone K-12 educational experience, and the high school mathematics coach can, and should be, an important component of this commitment.

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