

Easing the Transition

Helping First-Year Science Teachers Thrive

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I remember the pre-planning days just prior to my first days of teaching. Everyone in my department tried to be helpful; they all kept asking, "Are you ready?" I would smile and reply, "I think so." But inside I was thinking "What do I need to be ready?" I had no clue and was too embarrassed to ask. I made it through my first year behind closed doors praying no one would come into my classroom.

Everyone had also told me it would take three years to settle in so I assumed that this was just the way it was. I drove home everyday asking myself, "What have I gotten myself into?"

- An Experienced Science Teacher,
Reflecting on the First Year

First year teachers face a complex set of challenges. New relationships are negotiated as administrators, teaching colleagues, students and parents present themselves to the new teacher. A challenging array of procedural details demands the novice teacher's attention. Most new teachers grapple with issues of classroom management, discipline, and content mastery. Entrenched in our teacher lore is wide acknowledgement that the first year of teaching is extremely challenging, even in the most desirable conditions.

Our experience as high school science teachers and teacher educators leads us to believe that a new culture of support for novice science teachers is on the rise. In recent years, a marked increase in mentoring initiatives has emerged in response to this need. Increasing numbers of teacher leaders are expanding their view of best practice to include efforts to nurture the professional growth of new teachers. In mentoring first year teachers, many veteran science teachers have found that the ongoing dialogue with their protégé has promoted their own reflection, yielding substantial professional growth.

New teacher attrition rates in the U. S. are five times higher than those of more experienced teachers. Current data indicates an attrition rate of 40% within the initial three induction years of the teaching profession, however, in districts with effective mentoring, the attrition rate has been reduced by one-half (Boreen, et al., 2000). Given these facts,

we may be more inspired to consider our role in easing the transition shock of new teachers by providing support as mentors.

Effective mentors have many roles in their support of a beginning teacher. They serve as friends, coaches, encouragers and role models. For this reason, it is important for mentors to be positive, enthusiastic and empathetic individuals. Strong mentors are effective teachers with the interpersonal skills to convey their expertise to novices in a supportive manner. When mentoring a new teacher, one must draw from experience as an effective classroom manager. The best mentor teachers work from a strong and ever-growing base of pedagogical and science content knowledge. Of utmost importance, effective mentors realize that their role is not evaluative. Mentors provide non-judgmental support with an eye towards the professional growth of the new teacher (Koballa, et al., 1992). As much as possible, mentors let their protégés direct the growth process. This is achieved by asking good questions to gain understanding of the beginning teacher's needs, while also monitoring their progress as a caring friend. Just as effective teachers facilitate knowledge construction of subject matter with their students, the effective mentor facilitates growing conceptions of best practice in the mind of a new teacher. Finally, the mentor embraces the role. Just as the best teachers have a passion for their work, the most effective mentors operate from an intrinsic commitment to help a novice teacher develop.

An Action Plan for Mentoring in the First Year

Five stages of growth and development of the first-year teacher have been defined (Moir and Strubb, 1995). Those five stages are anticipation, survival, disillusionment, rejuvenation, and reflection. The anticipation phase is characterized by an eagerness to succeed and an anxiety of the unknown

regarding the first year of teaching. The leading quote in this article is characteristic of beginning teachers' anticipation and (often quiet) uncertainty. It is during these days of pre-planning that the concerned mentor must establish rapport and promote honest dialogue with the new teacher. As mentors we can capitalize on the positive energy new teachers exhibit in the anticipation phase by helping them set up their workspace, consider critical administrative managerial tasks, meet other teachers at the school, and plan lessons for the first week.

During the early weeks of the first year, new teachers inevitably experience a survival phase, with concerns focused on student behaviors and broader management issues of teaching and working with students in the classroom. We must realize that in these early weeks the transition is felt in the extreme, as novice teachers encounter the myriad details of full time teaching. There is little time to reflect. In September, new teachers feel overwhelmed and are functioning at a reactive level. In these initial weeks, frequently check on your protégé at different points in the school day. Expect opportunities to answer questions regarding school policies, or to discuss concerns regarding pacing or evaluation of student learning. Lab activities are an important area where the new teacher may need guidance. Novices may need assistance finding lab equipment and supplies, assigning workable groups, developing procedures to ensure that the lab environment is a safe and productive one, and evaluating the effectiveness of the activity after its implementation.

As the first grading period progresses, monitor your protégé's progress in assessing student work. Help them to manage assessment so that grades are ready to be turned in ahead of time. Work with the new teacher to arrange opportunities for them to observe other science lessons. Make frequent, brief observations of your protégé's

teaching. Offer positive feedback and ask the new teacher to identify one or two specific aspects of their teaching that they would like to improve upon. By giving the protégé this voice in the mentoring process you will be providing the autonomy needed by adult learners, while also promoting reflective practice.

The morale of first year teachers typically begins to plummet sometime between October and December. In this disillusionment phase the rigors of teaching and its exorbitant time commitment take their toll. Often teachers begin to tire of the detailed lesson planning that characterized the initial weeks of teaching. This is a good time to provide additional teaching ideas. Discuss emerging concerns voiced by the new teacher. Provide immediate solutions to issues of material management. Where concerns center on pedagogy, content knowledge, or discipline, affirm to the new teacher that it typically takes two or three years of diligent work to achieve strong competence in these proficiencies. Provide advice, but encourage the new teacher to exercise his or her own professional judgment in meeting challenges in the classroom. Don't be afraid to share concerns and dilemmas regarding your own teaching. Remember, you and your protégé are working together to grow professionally. Letting beginning teachers know that you value their ideas and opinions will strengthen the relationship.

A rejuvenation phase tends to occur after the beginning of the second semester. Thus, from late January to February and continuing throughout the spring, a mentor often finds the protégé more interested in adding to their pedagogical repertoire. This is a great time to review with your protégé all of the progress s/he has made in teaching and managing the learning environment. Also at this point in the year, the mentor might find the protégé more attuned to alternative assessment, project-based

teaching, inquiry lessons, or technology integration. To help the new teacher envision aspects of the profession that surpass mere survival, mentors often collaborate with new teachers in their initial efforts to expand their teaching methods.

During this time of year, science departments often make decisions about supplies that will be ordered for the following year. Use this as an opportunity to talk about labs or activities that each of you has planned and the anticipation and excitement that you feel for the coming year. We can all remember our first GSTA Conference. Attend a local, state, or national science teachers' conference with the beginning teacher. You will both return to school with renewed enthusiasm and fresh ideas. Promoting involvement in national and state-level professional science education organizations is a key contribution that the mentor can make to sustain the ongoing growth of the new science teacher.

Although you and your protégé should reflect on your teaching during the course of the entire year, protégés may be more willing to think critically about their teaching once they sense they have survived their first year. Thus, as a mentor you may complete your efforts to support the first year teacher with attention to the reflection phase that characterizes the year's end. Highlight some successes from the year, and review the status of previous dilemmas that you sought to resolve. Discuss ideas for strategies to minimize future problems. Guide the focus of the conversations away from survival concerns of classroom management and towards students learning and assessment practices that motivate students and enhance teaching practice. Mentors should model goal setting for the beginning teacher by initiating dialogue about professional goals for the upcoming year.

At all levels of the educational enterprise, we find teachers at various career stages with a common passion for

excellence in teaching. These are the educators who realize that we are in an ever-growing process of "learning-to-teach". Regardless of career stage, we can all promote reflective practice in our schools by engaging in the professional dialogue that typifies mentoring. If you're an experienced teacher, take steps to build rapport with a new science teacher and perhaps even bring others together for productive partnerships. If you're a new teacher, find one or two colleagues that exhibit a positive, professional demeanor and caring commitment to serving students. Ask this colleague to work with you in a joint-effort to enhance teaching effectiveness.

Not long ago, few beginning teachers were fortunate enough to receive strong mentoring during their first year. We are encouraged by the changing culture of new teacher induction promoted by science teachers who apply their professional concern and interpersonal abilities to the task of helping new teachers thrive.

References

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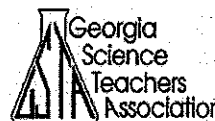
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