Teachers approach professional development and in-service opportunities as if they’re approaching a train wreck. They know they must see what’s ahead, but they can’t bear the sight of it. Most teachers recoil in fear when professional development days appear on the school calendar. Further, when allowed a choice, they will generally choose workshops that will add to their “bag of tricks”—brief, hands-on activities they can use in their classrooms on Monday, instead of the sometimes painful specter of initiating long-term, systemic change in their standard operating procedures.

Teachers must deal with a diversity of students’ abilities, strengths, and interests in their classrooms while at the same time covering the material, prepping students for standardized tests, and preparing themselves to be “highly qualified.” Legislation requiring services for gifted and talented students and the paucity of quality programs for such students has left the classroom teacher to fill the void, which brings up the question: How do classroom teachers address issues of equity and excellence while pursuing curricular and instructional innovations that fundamentally change the way schools operate? Further, how do classroom teachers receive the training they need to teach to students’ varying abilities, interests, and learning styles?

There has been one innovation introduced that has demonstrated initial and lasting change: peer or technical coaching (Joyce & Showers, 1995) combined with strategies and techniques for enhancing and differentiating curricula for high-ability students. I had the opportunity to work as a technical coach with an elementary faculty for an entire year. This article represents a summary of that action research study, the purpose of which was to chronicle a year of implementing technical and peer coaching models to help teachers modify, differentiate, and enrich the curriculum for diverse learners.

Technical or Peer Coaching

Over the past 2 decades, Joyce and Showers (1983, 1995) have published the seminal work on technical or peer coaching. They defined technical coaching as coaching that occurs with the assistance of a university representative, usually from a school of education, who is fluent in the curricular or instructional innovation they seek to implement. Peer coaching is defined by the collegial, collaborative efforts of teaching peers as they implement innovations as a group. Joyce and Showers (1995) also suggested that teachers learn from each other in the process of planning instruction, developing the materials to support it, watching each other work with students, and thinking together about the impact of their behavior on the learning of their students. From their earlier studies they suggested that teachers who had a coaching relationship practiced new skills and strategies more frequently and applied them more appropriately than did their counterparts who worked alone to expand their repertoires. Members of peer-coaching groups exhibited greater...
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long-term retention of new strategies and more appropriate use of new teaching models over time. Coaching helped nearly all the teachers implement new teaching strategies. Equally important, teachers introduced to the new models could coach one another, provided that the teachers continued to receive periodic follow-up in training settings (Showers & Joyce, 1996, p. 14).

Joyce and Showers (1983) also warned of several potential pitfalls that must be avoided when implementing a coaching model. First, teachers need a deep understanding of content and pedagogical skills if they are to institute lasting change. Since many teachers are generalists by nature, many do not have the content-specific skills required to delve more deeply into subject matter. Next, teachers must be prepared to implement innovations immediately after initial training or risk losing the enthusiasm inspired by that training. Further, coaches must be prepared for the rough spots that may impede implementation. The autonomy and solitude of teaching may create a culture resistant to change, even if that change creates a collegial and collaborative work environment. The worst offenders are often the veteran teachers who have a stake in maintaining the status quo and are resistant to trying new methods and ideas. Next, teachers must discuss when to use a strategy in addition to how. Teachers used to reviewing the same curricula can sometimes miss opportunities to introduce new strategies or materials. Finally, teachers must be prepared to fail. That is, they must be prepared to admit that a strategy or method was unsuccessful and move on. Gifted students especially appreciate honesty and sincerity from their teachers and can be quite forgiving. Students also become creatures of habit and may resist initial attempts to change the learning environment. At these times, the support and friendship fostered within the study team is vital to ensuring continued implementation.

If these potential obstacles can be overcome, coaching can be a highly successful staff-development model. The research on technical and peer coaching suggests that an ongoing, supportive team approach is the most successful type of staff-development practices in use today.

Total School Improvement

Renzulli (1994) introduced a model of talent development for all students while providing for the most able among them. One major component is curricular modification, which includes the “triaging” of textbooks (the analysis and surgical removal of unchallenging and repetitive content), modifying existing curricular units through the use of advance organizers, higher level questioning strategies, connecting the unit of study to the disciplines, curriculum compacting (Renzulli, Smith, & Reis, 1982) and designing units of study based on interdisciplinary concepts (Kaplan, 1986; Renzulli, 1988; Renzulli, Leppien, & Hays, 2000).

According to Renzulli (1994), most classroom curriculum development is driven primarily by textbooks, the quality of which has declined substantially in the past 20 years. The reality of large, heterogeneous classes necessitates teaching to the middle, which means that students at either end of the ability spectrum are left behind. Curricular modification frees time for more challenging learning experiences by streamlining and eliminating learned content; thus, teachers have more time to add depth and breadth to the existing curriculum.

A second major aspect of Renzulli’s plan for school improvement includes enrichment teaching and learning. This is characterized by Renzulli’s (1977) original approach to gifted and talented programming, the Enrichment Triad Model, which consists of Type I enrichment (e.g., general exploratory activities such as guest speakers, field trips, oral presentations); Type II enrichment, which includes group training activities (e.g., methodological and thinking skills); and Type III

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enrichment, which suggests original individual or small-group investigations of real-world problems.

A third major component of Renzulli's model is curriculum differentiation, which includes the extensive use of preassessment to determine students' strengths, interests, and learning styles; flexible grouping practices that necessitate the creation of small groups based on those preassessed areas; and the differentiation of existing curricula by increasing their breadth (interest, choices, and learning style variation) and depth ("tiering" lessons for different ability levels).

**Collegial Coaching in One Setting**

I had the opportunity to work as a technical coach with an elementary school faculty for an entire school year to provide training in classroom modification or enhancement, differentiation and enrichment practices, and monthly technical coaching. Two school-level lead teachers (the enrichment teacher and the media specialist) and separate grade-level leaders were chosen prior to my introduction as the technical coach. Each grade-level leader was sent to Confratute, the University of Connecticut's summer institute for enrichment teaching and learning. The teachers were administered a needs assessment (Schlichter & Olenchak, 1992), and I worked with individual grade-level teams monthly over the course of the academic year using Showers and Joyce's (1996) model of technical and peer-coaching study teams. The model suggests that the training components proceed in the following order: theory presentation, modeling or demonstration, guided practice, structured and open-ended feedback, and in-class assistance with transfer. The teachers practiced the strategies and reported back to me on their progress. Additionally, teachers invited me to observe differentiated practices and provide feedback on the lessons. The teachers also provided feedback on any difficulties or obstacles they encountered during the implementation phase. After the initial 1-year technical coaching period, the GT and grade-level lead teachers took responsibility for ongoing peer coaching, procurement of resources and materials, and development of community resource contacts.

The teachers decided to create study teams from each grade level, with two or three teachers on each team. Additionally, the special education teacher and the language arts specialist also sat in on frequent meetings. As students vary in their levels of readiness and ability, so do teachers.

The 4th-grade teachers were immediately prepared to implement advanced differentiation strategies such as tiering assignments because the study team leader, Teacher R, had already completed modification or remodeling of his existing curriculum. He first tried to tier a math lesson, but reported that he was very frustrated with the results. He had one student who had completely mastered the material, and he wondered why there was a need for him to complete any additional work in this area. I suggested to him that this was a case in which curriculum compacting (Renzulli, Smith, & Reis, 1982) might be a more appropriate strategy. The group discussed the mechanics of curriculum compacting, working on the documentation and the replacement activities.

Another 4th-grade and first-year teacher, Teacher M, indicated that she had had trouble with tiering. The group discussed the tiered lesson and realized that she had tried to tier a lesson that was actually a skill that students could either perform or not. They discussed the need to use concepts and principles and other big ideas in order to tier efficiently. At the next meeting, Teacher M reported that the next tiered lesson had been more successful.

Later, the 4th-grade teachers implemented a program of independent projects entitled "Anything Goes." At the end of the yearlong collaboration, Teacher M discussed her learning and growth:

Two of my boys who did Titanic blew my mind, too. They got all dressed up and did an interview and the way that they did it was so creative and it really came across. We didn't really do a lot of planning. We know that they spent a lot of time at each other's house after school, but I really didn't know what was going to happen. I think that it was a good experience because the kids felt they could really go for it. And they did.

Teacher M also tried to enrich her curriculum by inviting more guest speakers to her classroom (Type I experiences). She invited her brother to speak to the children about music and opera. An additional positive consequence was that he had been identified with AD/HD and dyslexia as a young man. The students were mesmerized by his theatrical reading and commented about his reading ability. The teacher felt that the students were enlightened and surprised that someone who had been recognized as having a learning disability could be so successful.

Sometimes, strategies that are cognitively powerful also find a voice in the affective domain. Teacher R commented on his awakening to the reality of students' differing learning styles:

That's a good point because I don't think that, in the past in education, the belief was "Let's work with their learning styles."

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It was "Let's make them get this style." And now it's "Let's work with them and evaluate them because you can't change somebody's learning style." It's what it is, so you work with it. And I think in the past people had always tried to change the kids to fit a particular mold.

Teacher J, the special education teacher, also commented that, because she was involved with the entire faculty, she saw pretesting and curriculum compacting being used on a regular basis:

Not only in 4th grade, but I think a lot of the classes are doing a lot of the pretesting to compact. And I'm also seeing that there are different ways to assess the students, and it doesn't have to be the same instrument for everybody to tap into their learning styles. That's been kind of exciting to see.

The 1st-grade teachers were also a polished group. They already used many of the strategies of modification and differentiation (flexible small groups, modification of the curriculum, and tiering of assignments), so the focus became implementing the Schoolwide Enrichment Model (Renzulli & Reis, 1997). The 1st-grade teachers had two objectives: (1) create interest centers for reading focused on author studies and nonfiction and (2) develop and implement enrichment clusters (Renzulli, Gentry, & Reis, 2003).

The group used the Total Talent Portfolio (Renzulli & Reis, 1994) and an interest inventory to survey the students' interests. They found that the students' reading interests were *Stellaluna* and the *Nate the Great* series. Other interests included science, African music, and architecture and building. The first set of enrichment clusters was developed from this initial interest information. The clusters ran for 1 hour on 5 consecutive Fridays. Parents and community volunteers were solicited, and some of the groups presented their work at "Thrilling Thursday." A second set of clusters was begun in the spring with an identical format. In a culminating session at the end of the year, the teachers summarized their first experience with enrichment clusters and other aspects of SEM.

Teacher D: The biggest thing we've started has been the enrichment clusters. They've been a huge success, and then doing them again, getting to change a few things, fix some things. We're going to take your suggestions [and look at] assessment, real audience, and real products in the end. That's been wonderful, and the kids really love it; they really look forward to it. I think as far as my centers in the classroom are going, I've expanded my scope of what I do in the classroom. There's one little boy who's really interested in geography. We got these new books, and I've been working with him on topography and map skills. I'm not doing much whole-group instruction anymore. On the one hand, it sort of makes you feel guilty, and on the other hand, you look around the room and see them all very busy and being productive and that's the thing: You want them active and moving around and doing something, rather than listening.

The kindergarten teachers represented an interesting challenge. Because they didn't have any primary teaching experience, I often consulted with them regarding their curriculum. Since many of the strategies of modification and differentiation reflect higher level concepts and principles, this group decided to focus on an integrated unit based on the students' top interest choice, "Pets."

They began their unit with a discussion about what kinds of pets they had at home. They followed up with data collection and the creation of a pictograph describing the class's choices of pets. They then brainstormed potential Type I general exploratory experiences. They decided to invite a dog groomer, a pet store owner, and a veterinarian in as guest speakers. The students were enthralled by the X-rays brought by the veterinarian and were intrigued by the rocks lodged in the dogs' stomachs. This issue gave rise to another brainstorming session with me in which potential group culminating projects were discussed. At the end of the collaboration period, students in Teacher J's kindergarten class surprised the coach with a fully illustrated, published version of their original story "Rocky, the Rock-Eating Dog." All students in the class contributed to the work—some by their ideas, some by their writing, and some by their illustrations. Late in the school year, the teachers spoke fondly of the unit on pets and of one young girl in particular who couldn't print her letters on her own.

Teacher J: I always send a little letter welcoming them to school, but this year I just thought I would do a little survey to see what their interests were and maybe go from there. I think with you being here, it kind of pushed me into doing it. [Talking about the "Rocky" picture book], we learned a lot from this book. Of course, we've been writing all year anyway; we do have our own publishing company. [We started with the char-
acter, Rocky, and brainstormed. And that’s really how it got rolling. We did not use everything we brainstormed. We had a beginning, middle, and end, but it probably could have been longer because they just went wild with it. Not all the children were able to write, so for one little girl, I held her hand and we did it together.

There were also struggles in this process. Some teachers were advanced in their use of the strategies, while others had trouble just implementing them. The principal was amazed at the progress of some of the teachers who had spent the majority of their careers using whole-group instruction and were now overheard telling parents about their use of flexible grouping and tiered lessons. The principal was especially excited at the progress of the students; she noted that their questions and interest level at school assemblies were at the highest level she had ever noticed.

The most significant outcome was that students perceived that their teachers were utilizing formal and informal assessment techniques and flexible grouping practices in their daily lessons. Students indicated that they worked in small groups based on interests, learning styles, and abilities. Additionally, they were exposed to different resources and produced different projects for authentic audiences.

Conclusion

Teachers indicated that students at their school perceived that instruction in their classrooms was differentiated based on resources used, type of work completed, activities chosen or assigned, and complexity of work completed. They also indicated that they were differentiating instruction based on interest, learning styles, and ability; were modifying questioning strategies; and, finally, were enriching their curriculum by compacting students out of work already mastered, offering choices and alternative products, and utilizing small, flexible groups based on choice, learning styles, and expectations.

These anecdotes are significant in that they reveal the effectiveness of ongoing and supportive professional development practices. Teachers were encouraged to begin at their own level of readiness and proceed at their own pace. Teachers indicated that they were excited about meeting the needs of some of their brightest students and were open to trying new teaching and grouping strategies. I observed the increased quality, complexity, and sophistication of the students’ products and verbal communication. Additionally, students expressed joy at having the opportunity to work at their own pace and in their own interest areas.

As this case study has shown, technical or peer coaching is a professional development model that can successfully and systemically bring change to a school environment. Schools and school districts must make the financial and emotional commitment to further this mode of professional development, especially if teachers are expected to enhance and differentiate their curriculum to meet the needs of students at all ability and readiness levels.

References


