Self-Monitoring: Demystifying the Wonder of Expert Teaching

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Natural talent will not make you an expert teacher, but you can learn to be an expert.

The world's greatest athletes make fascinating subjects for observation and study. Part of the fascination stems from witnessing extraordinary performances that raise the ceiling of human potential ever higher. Much of the fascination also derives from the contradiction between what we recognize as greatness and what we perceive as relatively little effort in achieving it. For example, most people find it difficult to fathom running a marathon (26.2 miles) in under two hours and 20 minutes, but those who can do it often appear to glide comfortably along as they traverse miles of asphalt at a blistering pace. Many conclude, therefore, that what is showcased by the expert performer must be the product of nature's rare gift to the fortunate few. Yet, what is truly fascinating about expertise in sports is that, in the vast majority of cases, this conclusion could not be further from the truth.

Contrary to common thinking, it turns out that there is very little evidence to support the existence of so-called natural talent. Conversely, a great deal of research illustrates the compounding effects of practice in reaching superior levels of sport performance (Starkes & Ericsson, 2003). The natural appearance of expert performances in fact belies the planned and purposeful process galvanizing the expert's every move toward greatness. This tends to be true not only in sports, but in many other performance domains, as well. And, as you have probably guessed by now, it just so happens that teaching is one of them.

Extraordinary teaching emerges in much the same way as expertise in sports. Although teachers at the top of their game often make teaching seem easy and natural, those who reach and thrive at the highest levels of instructional expertise do not bank on some innate advantage to carry them toward excellence. Instead, they commit to continued practice and engage calculated strategies designed to guide them toward better teaching. Expert teachers recognize and monitor both their limits and advantages and then take focused action to maximize their potential. Essentially, this is how successful teachers reach personal bests and continue to do so over the course of their career. This article reveals the secret to wondrous teaching by sharing how expert teachers foster excellence through self-monitoring, and explaining how any teacher can adopt this critical practice on the road to expertise.

What Is Self-Monitoring?
Educational psychologists define self-monitoring as observing and tracking one's own professional performances and outcomes (Zimmerman, 2002). Chi, Glaser, and Farr (1988) explain that self-monitoring is a common practice of experts. Years of experience enable experts to identify their strengths and limitations more accurately than their less-accomplished contemporaries. Until recently, it was not clear how exceptional teachers use self-monitoring to their advantage, but new research suggests that they focus on and monitor key aspects of their performance—a practice that leads to the development of strategies for professional maintenance and growth (Schempp, McCullick, Busch, Webster, & Mason, 2006; Schempp, Webster, McCullick,
Personal characteristics that affect student learning need to be self-monitored. One study found that the personal trait most often self-monitored by expert golf instructors was their concern for students and student success.

Busch, & Mason, (2007). Self-monitoring is not merely a way to improve instructional practice; it is a way to continuously advance one's level of expertise in teaching.

Learning to Self-Monitor
The intuitive self-awareness that experts acquire is a product of profound and virtually uninterrupted introspection over many years. Developing expertise in teaching through self-monitoring requires an unflagging interest in rediscovering and renewing oneself in relation to professional goals. Recent research indicates that expert teachers self-monitor four fundamental aspects of their teaching: (1) instructional skills (2) teaching perspective, (3) personal characteristics, and (4) knowledge base (Schempp, et al., 2006).

Instructional Skills. First and foremost, expert teachers self-monitor their instructional skills (Schempp, et al., 2006). Rink (2006) defines instruction as “a process that involves both teacher and students in a highly interrelated set of events” (p. 14). Therefore, instructional skills encompass the competencies teachers need to effectively interact with students during a lesson. Presenting tasks to learners, providing useful performance feedback, and reinforcing desired student behaviors are all examples of instructional skills in teaching.

Videotape feedback can be a useful exercise for learning to self-assess one's instructional skills more accurately. However, the value of videotape feedback depends on the ability of the viewer to identify critical aspects of performance (Magill, 1994). Teachers may therefore need to learn what aspects of their instruction to focus on. A variety of systematic observation tools, such as ALT-PE, CAFIAS, and QMPTS (Darst, Zakrajsek, & Mancini, 1989), can be highly useful toward this end, as they are designed to train the observer's focus on selected critical dimensions of the instructional process. Systematic observation quantifies teaching and learning processes against measures representing conceptions of effective teaching. For example, the Qualitative Measures of Teaching Performance Scale (QMPTS) instrument analyzes several instructional variables related to the teacher's communication, such as the presentation of motor tasks to learners (Rink & Werner, 1989). As defined by QMPTS, effective task presentations should include teacher behaviors such as full demonstrations and the use of skill cues to help learners develop and remember the correct movement patterns of a skill. By evaluating themselves against clear definitions of effective teaching, teachers can learn to recognize their instructional strengths and weaknesses with increased precision.

After observing and analyzing each videotaped lesson, teachers should set goals for improvement. Educational psychologists recommend that, for goal-setting to be most effective, people should set both short- and long-term goals (Bandura, 1986; Schunk & Zimmerman, 1998). For example, a teacher using the QMPTS to analyze her videotaped instruction might identify that her use of demonstrations and learning cues is weak. She sees that she tends to give long explanations of how to perform movement tasks but never actually demonstrates the tasks. Also, she discovers that her long-winded explanations include too many new learning cues, some of which appear to hinder instead of help student performances. Table 1 provides a hypothetical example of how this teacher might focus on improving these instructional weaknesses using short- and long-term goal setting. An important guideline to remember with this exercise is that it is essential to continually revisit and revise goals, both in the short and the long terms. Some goals may prove to be unrealistic. Others, once they are reached, may need to be changed according to newly presented obstacles and increased insight on the road to expertise.

A second method that teachers can use to assess their instructional skills more accurately is to identify what these skills include and reflect on each skill separately and in relation to others. Teachers should first create an exhaustive list of the myriad of instructional tasks that define their day-to-day work. Rink (2006) refers to the things teachers do as “teacher functions.” She and others (e.g., Schempp [2003]; Sledentop & Tannenhill [2002]) have provided useful frameworks for understanding the various dimensions of effective physical education teaching, such as planning for instruction, developing and sequencing content, and assessing student learning and performance. By listing all of the teacher functions necessary for effective teaching, teachers can create a broader and better-defined spectrum of their skill base, which in turn can enable them to reflect more thoroughly on their teaching and evaluate their pedagogical skills from multiple perspectives. An example of a list and evaluation of some general teacher functions discussed by Rink (2006) is presented in figure 1.

Teaching Perspective. Despite their unparalleled success with students, expert teachers continually seek new approaches and challenges to broaden their view of the teaching-learning process and provide students with an even greater service.
Expert teachers understand that effective teaching is student-directed and that no single teaching strategy or style fits the needs of every student. The broader and more diversified the range of approaches that teachers employ, the better chance they have of reaching more students in a meaningful way.

A plenitude of resources offer teachers diverse perspectives on the teaching-learning process. Several texts examine teaching physical education from multiple perspectives and orientations, such as a continuum of direct to indirect styles (Mosston & Ashworth, 2002), an assortment of instructional models based on varying levels of student decision-making and responsibility (e.g., Hellison, 2003; Metzler, 2005; Siedentop, 1994), and competing philosophies concerning the purpose and scope of the physical education curriculum (Jewett, Bain, & Ennis, 1995). A better sense of the different perspectives will enable teachers to define more clearly their own approach to teaching and to develop an understanding of how they might adopt new and possibly more effective approaches.

For example, a teacher might learn to categorize his instruction as teacher-driven and commanding, according to Mosston and Ashworth’s (2002) framework of instructional styles. To bring a new perspective to the teaching-learning process, the teacher might choose to adopt a more indirect instructional style, such as the guided discovery style, where more responsibility is placed on students for decision-making and learning. Alternatively, the teacher might apply an instructional model, such as sport education or the teaching games for understanding approach, which would also serve to increase students’ sense of ownership in the learning process. By changing the dynamics of the instructional environment, teachers are able to experiment with new possibilities for student success. Other strategies that teachers can use to gain a new perspective include teaching new content (e.g., nontraditional or culturally diverse sports and games), working with a wider variety of students (e.g., leading before- or after-school activities, tutoring, and observing other teachers’ lessons).

**Personal Characteristics.** The beginning of this article stated that expert teaching is much like expert performance in sports. It is useful to continue that comparison in presenting this next section. A large part of preparing for excellence in sports involves the personal choices that athletes make on a daily basis. To revisit our example of long-distance running, it is common knowledge that the steps to winning a race include more than logging many miles and pounding
<table>
<thead>
<tr>
<th>Teacher Functions</th>
<th>Self-Rating</th>
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| Planning for Instruction           | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Organizing the Learning Environment| - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Managing Student Behavior          | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Presenting Tasks                   | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Checking for Understanding         | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Delivering Feedback                | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Developing Content                 | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |
| Assessing Student Learning         | - Keep it up!  
- Could be better.  
- Needs immediate attention!  
Comments: | |

out intervals on the running track. Elite runners also make personal lifestyle choices, such as going to bed early, eating plenty of carbohydrates, and drinking lots of water, all of which serve to enhance the effectiveness of their workouts. Simply stated, winning on the track requires making important choices off the track.

Expert teachers also aim to maximize their performance potential through their personal actions. They realize the importance of strengthening the link between personal and professional attributes to better serve the needs of their students. Behaviors, beliefs, values, dispositions, concerns, and demeanor are all personal characteristics that teachers bring with them to the instructional process, and they influence how teachers teach and how students respond. Teachers who wish to identify personal characteristics that affect their teaching should consider a number of important factors that research has shown to be valuable in relation to quality teaching. A few of these factors are the teacher's level of job satisfaction, types of concerns about teaching, and level of physical fitness.

Research indicates that a teacher's level of job satisfaction and his or her teaching performance are strongly linked (Mottet, 2002). Teachers who are more satisfied with their job care more about performing at a high level and invest
the energy and time to help students learn. Satisfied teachers are more likely to feel that they are benefiting from their daily work, which in turn is likely to promote continued professional learning and growth. Every teacher should set goals to reap personal rewards from their teaching experiences. One way to do this is to plan lessons that challenge them and their students to be better. By infusing new challenges and experiences in their day-to-day work, teachers can escape any risk of falling into a monotonous and motivation-sapping routine.

Teacher concerns also play an important role in effective teaching. Research indicates that the most effective teachers are primarily concerned about the impact they have on their students when teaching, whereas less effective teachers think mostly about themselves and worry about whether they are perceived as credible by their students (Borich & Fuller, 1974). For example, teachers with self-concerns may focus on such personal traits as appearance and mannerisms while teaching, whereas teachers with impact concerns may focus on traits like listening competency and immediacy behaviors (i.e., teacher behaviors that students perceive as warm and friendly). When teachers consider the personal characteristics that play a role in the teaching-learning process, they should focus on identifying and tracking those characteristics that affect student learning. As Schempp et al. (2006) found in their study with professional golf instructors, the most frequently self-monitored personal trait of experts was their concern for students and student success.

Finally, teachers should ask themselves whether their personal conduct is consistent with what they expect from their students. With issues related to health and fitness driving the physical education curriculum, physical education teachers should serve as role models for a healthy and active lifestyle (National Association for Sport and Physical Education [NASPE], 2002; Staffo & Stier, 2000). As outlined in a position statement by NASPE, modeling carries the potential to reinforce the teacher’s credibility and, more importantly, may also be a powerful way to promote healthy student behaviors. The social-cognitive theory has been used as a basis for much research suggesting that children learn to behave by imitating the behaviors of others (Bandura, 1997). One study found that, aside from parents, teachers are the most influential role models for youths (Gilmer, Speck, Bradley, Harrell, & Belyea, 1996). The implication for physical educators is that they should carefully monitor the image they project as physical activity and health professionals. Effectively teaching toward the goals of physical education may ultimately require that teachers demonstrate the types of behaviors—both inside and outside of school—that they are asking their students to adopt.

Knowledge Base. A great deal of attention has been given to the knowledge base for teaching, since certain knowledge, such as content knowledge and knowledge of students, is believed to be essential for expertise to transpire (Shulman, 1987). Research supports this idea, indicating that experts are insatiable learners who continually seek to expand their knowledge, especially their knowledge of content and of learners (Schempp et al., 2007). They identify and fill in the gaps in their knowledge base by engaging multiple strategies. Two of the most frequently used of these strategies are to read extensively and to seek the expertise of other professionals.

Educational theorist Lev Vygotsky (1978) proposed that we learn best when we are in the “zone of proximal development,” which refers to the space between what we know and can do and what a more experienced or expert person is capable of. Within that space, we can learn to think and behave at a higher level than what we could accomplish alone. Expert teachers recognize the benefit of surrounding themselves with lofty ideas, and they look for people whose skills and knowledge surpass theirs. Whenever possible, teachers should take the time to observe the lessons of more experienced or more expert teachers; communicate with well-established educators at different levels of education, including K-12 teachers and professors at colleges and universities; attend professional conferences and workshops; and read both contemporary and classic works on teaching and learning. In other words, teachers should invest in becoming insatiable learners. If experts have taught us anything, it is that even they can never know it all.

In addition to seeking help from others, experts broaden their knowledge base by reading. Early research on expertise revealed that grandmaster chess players owned extensive libraries of books (deGroot, 1946/1965). Reading is an inexpensive and accessible way to increase one’s knowledge base for teaching. Publications that are specific to teaching and learning in physical education and sport are the most obvious choice for physical activity professionals. A list of selected professional and research journals in the field is presented in table 2. Additionally, PECentral.com provides a list of other publications that focus on teaching for physical educators and sport professionals.

While it is important to read extensively in one’s field, it is just as important to read more generally in search of
Table 2. Selected Journals on Teaching in Physical Education and Sport

<table>
<thead>
<tr>
<th>Professional Journals</th>
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<tbody>
<tr>
<td><strong>Strategies: A Journal for Physical and Sport Educators</strong></td>
<td><a href="http://www.aahperd.org/naspe/template.cfm?template=strategies_main.html">www.aahperd.org/naspe/template.cfm?template=strategies_main.html</a></td>
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<th>Research Journals</th>
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<td><strong>Adapted Physical Activity Quarterly</strong></td>
<td><a href="http://www.humankinematics.com/apaq/journalAbout.cfm?CFID=26650666&amp;CFTOKEN=29656687">www.humankinematics.com/apaq/journalAbout.cfm?CFID=26650666&amp;CFTOKEN=29656687</a></td>
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<tr>
<td><strong>International Journal of Sports Science and Coaching</strong></td>
<td><a href="http://www.multi-science.co.uk/sports-science&amp;coaching.htm">www.multi-science.co.uk/sports-science&amp;coaching.htm</a></td>
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<td><strong>Physical Education and Sport Pedagogy</strong></td>
<td><a href="http://www.tandf.co.uk/journals/titles/17408989.asp">www.tandf.co.uk/journals/titles/17408989.asp</a></td>
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<tr>
<td><strong>The Physical Educator</strong></td>
<td>www2.truman.edu/pek/public.html</td>
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<tr>
<td><strong>Quest</strong></td>
<td><a href="http://www.humankinematics.com/QUEST/journalAbout.cfm">www.humankinematics.com/QUEST/journalAbout.cfm</a></td>
</tr>
<tr>
<td><strong>Research Quarterly for Exercise and Sport</strong></td>
<td><a href="http://www.aahperd.org/aahperd/template.cfm?template=rqes_main.html">www.aahperd.org/aahperd/template.cfm?template=rqes_main.html</a></td>
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Table 3. Self-Monitoring Strategies for Teachers

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<tr>
<th>Area of Focus</th>
<th>Self-Monitoring Strategies</th>
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<tr>
<td>Instructional Skills</td>
<td>Videotape yourself teaching to identify critical strengths and weaknesses that should be monitored. Focus on and analyze key aspects of instruction. Set goals for improving specific teacher behaviors.</td>
</tr>
<tr>
<td>Teaching Perspective</td>
<td>Seek to understand and change your instructional approach in relation to the perspectives and orientations that leading scholars have used to define teaching and learning in physical education.</td>
</tr>
<tr>
<td>Personal Characteristics</td>
<td>Consider personal factors that relate to teaching performance, such as job satisfaction, teaching concerns, and physical activity and health-related behaviors.</td>
</tr>
<tr>
<td>Knowledge Base</td>
<td>Using a variety of strategies (e.g., attending professional workshops, reading), seek to understand how other experts in education and other fields conceptualize and use knowledge that is relevant to your teaching.</td>
</tr>
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relevant ideas for effective teaching. A recent study of Bobby Bowden, one of the most successful college football coaches of all time, revealed that his office housed an entire library of books on military leadership and strategy (Smith, 2004). The knowledge he accrued from these books helped him develop a rich understanding of winning tactics that could be applied and adapted to the coaching context. It was with this knowledge that Bowden continued to push the limits of his expertise and the performance of his players to new levels of greatness.

**Summary**

Expertise emerges from a driven and directed pursuit of excellence. Through self-monitoring, outstanding performers dedicate substantial thought and attention to developing an intuitive sense of their strengths and weaknesses, which in turn leads to the implementation of strategies for maintenance and improvement. There is nothing natural about expert teaching. Rather, it is with deliberation and purpose that experts engage in self-monitoring to improve their performance levels. Self-monitoring in teaching requires a concentrated effort to continually assess and adapt aspects of one's instructional skills, teaching perspective, personal characteristics, and knowledge base. Table 3 summarizes how teachers can implement self-monitoring in relation to each of these aspects of teaching. By learning to self-monitor, teachers can begin to recognize what it takes to be the best in each step they take on their journey toward excellence.

**References**


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