

Knowledge-Sharing Strategies Among **Adapted Physical Educators**

Seumg-oh Choi

Hannam University, Korea

Ron French

Texas Woman's University

Lisa Silliman-French

Texas Woman's University

Physical educators are often ill-prepared to provide appropriate physical education services to students with disabilities because of limited preservice and in-service experience and training (Block, 2007; Lieberman & Houston-Wilson, 2002). According to the U.S. Government Accountability Office report (2010), only 33% of general physical educators reported being prepared to teach students with disabilities. In many cases, school districts are interested in improving physical education programs that include students with disabilities but do not have the resources to provide the appropriate preparation. One approach is to hire highly qualified adapted physical education specialists to provide direct services to students with disabilities and consultative services to physical educators.

To meet the need for high-quality educational services for students with disabilities, adapted physical educators must be continuously engaged in learning and expanding their skills. Adapted physical educators cannot be satisfied with the knowledge and skills they learned during their adapted physical education teacher preparation to adequately meet their students' needs. Knowledge and skills mastered during undergraduate and graduate training may not be sufficient to provide a contemporary, evidence-based service delivery program. In addition, there are many adapted physical educators who are isolated within their school district because of the itinerant service delivery model, and as a result, information may not be shared through effective collaboration. This could lead to a knowledge gap as well as a skill gap related to contemporary knowledge and evidence-based practices.

Through formal education and years of practical experience, many adapted physical educators have an abundant source of knowledge that needs to be effectively shared with other adapted physical educators. This knowledge is critical today with an emphasis on the use of evidence-based practices that are developing and evolving rapidly.

One approach is to develop and implement "knowledge-sharing" behavior between adapted physical educators where they have opportunities to develop, locate and accumulate quality knowledge and skills to become "knowledge-intensive" adapted

physical education professionals. Strategies must be implemented within the educational system to provide intrinsic, and, if needed, extrinsic motivation for adapted physical educators to become "knowledge-intensive" professionals. The main premise of knowledge sharing is that adapted physical educators mutually exchange their knowledge as well as skills to jointly develop new strategies to increase their ability to effectively achieve individual student's educational goals. In this article, the term *knowledge sharing* is defined as the behavior of disseminating and exchanging adapted physical educators' acquired knowledge and skills. The purposes of this article are to (a) present a basic understanding of the factors influencing knowledge sharing among adapted physical educators and (b) identify numerous strategies that may facilitate the knowledge sharing among adapted physical educators to improve adapted physical education service delivery to students with disabilities. There has been a paucity of information regarding the specific strategies adapted physical educators can employ to facilitate knowledge sharing in literature. Therefore, many of the suggested strategies have been applied from contemporary literature outside of general and adapted physical education such as public administration, business administration, and engineering.

Factors Influencing Effective Knowledge-Sharing Practice

There is a proliferation of literature on the barriers that are believed to influence individual knowledge sharing. Adapted physical educators' knowledge sharing is most commonly hindered by the lack of time and lack of knowledge (Hew & Hara, 2007). Lack of time is actually an issue of competing priorities. That is, sharing knowledge is not something adapted physical educators are expected or paid to do by their school district. Providing direct adapted physical education service to students with disabilities in the public school is a higher priority than sharing their knowledge and skills. Adapted physical educators

must share their knowledge and skills in their “spare time.” Time sharing will fluctuate depending on how busy adapted physical educators are serving the students on their caseload.

Actual or perceived lack of knowledge is another barrier. For example, adapted physical educators who are not comfortable with their level of expertise concerning content matter being discussed may be hesitant to share what they know. This is because they are afraid what they share may not be completely accurate and may be potentially misleading to those with whom they are sharing their knowledge and skills (Ardichvilli, Page, & Wentling, 2003).

Collaborative Strategies for Knowledge Sharing for Adapted Physical Educators’ Professional Development

It is important to extend the knowledge sharing so that evidence-based practices of teaching may be shared by everyone in a school or a school district (Collinson & Cook, 2004; Shaw & Perkins, 1992). For example, schools or school districts may integrate certain collaborative strategies for adapted physical educators’ professional development, as outlined below.

- **Professional dialogue:** A group of adapted physical educators or related professionals meets regularly and discusses up-to-date adapted physical education trends and issues, as well as educational theories, models, and practices of teaching and learning (see photo below). The purpose of professional dialogue is to foster adapted physical educators’ self- and collaborative reflections on teaching practices and issues, which facilitates more reflective decision-making practices.

- **Study groups:** The purpose of study groups is to encourage lifelong learning. Through the process of planning, reading, sharing, and discussing, adapted physical educators are able to share their knowledge and skills, enhance partnership with others, gain more educational knowledge, and increase their abilities to think logically, organize, discuss, express, and communicate.
- **Peer-adapted physical educator observation:** An adapted physical educator observes, analyzes, and discusses another teacher’s instruction by using appropriate observational forms (see photo on following page). The purpose of peer adapted physical educator observation is to improve both adapted physical educators’ current teaching performance.
- **Peer coaching:** The process of peer coaching is similar to the peer-adapted physical educator observation. However, peer coaching emphasizes the development and sharing of new teaching strategies and techniques through observing and providing feedback about an adapted physical educator’s teaching practices (Minor & Preston, 1991).
- **Curriculum development:** Adapted physical educators work cooperatively to design an adapted physical education curriculum or transform the curriculum into practical, evidence-based lesson plans related to their students’ individualized education programs based on state requirements.
- **Collaborative action research:** A group of adapted physical educators cooperatively conducts action research projects to solve teaching problems or other issues (e.g., discipline prob-





lems). Throughout the projects, adapted physical educators play the roles of sharer, transformer, and developer of knowledge (Oja & Smulyan, 1989).

The concern in the implementation of some of these collaborative strategies is that it is normally under the control of the school administration, and administrators often view these activities as contrived collegiality. This is related to an administratively imposed and controlled form of collegiality, which in some cases discourages the development of adapted physical educators' knowledge sharing (Little, 1990). Accordingly, as a school or a school district supports adapted physical educators' knowledge sharing, moving to a bottom-up, problem-solving approach is essential. This allows adapted physical educators to take ownership and to guide their professional needs for not only the students with disabilities that they provide instructional services too, but also collaborate with other professionals/parents who are involved with these students.

Administrative Strategies That Foster Knowledge Sharing Among Adapted Physical Educators

For effective collaboration, school or school district administrators who have an influence on developing knowledge sharing need to consider the six interrelated conditions of knowledge

sharing with their adapted physical educators: (a) prioritizing knowledge sharing, (b) fostering inquiry, (c) facilitating the dissemination of knowledge, (d) practicing democratic principles, (e) attending to human relationships, and (f) providing for members' self-fulfillment (Collinson & Cook, 2004).

However, these six interrelated conditions are rarely systemically linked to knowledge sharing. It is important to connect everyday practices in adapted physical education service delivery systems to a holistic framework that facilitates adapted physical educators understanding of how their thinking and behaviors influence the performance at learning of their students, work environments, collegial interactions, decision making, and innovation (Collinson & Cook, 2004). The following provides numerous practical recommendations for school administrators on how to foster knowledge sharing.

1. **Enhanced Leadership and Effective School or School District Management**
 - Applying appropriate leadership such as having adapted physical education teachers involved in the decision-making process so that they may feel professionally empowered.
 - Establishing effective appraisal and reward systems that directly take into account collaboration and knowledge sharing. The financial reward for knowledge sharing may not be possible. The following alternatives may be considered: (a) recognition in newsletters and web pages, (b) special assign-

- ments, (c) allowing to attend and/or to present at conference, (d) visiting other adapted physical education programs, (e) presenting at school board meetings, and (f) list-serves. Furthermore, adapted physical educators can be motivated to share knowledge for personal gain. Some possible forms are to (a) gain a better understanding of the area of adapted physical education, (b) gain a better professional reputation, and (c) gain emotional support.
 - Enhancing leadership support from the school principal and/or director of special education in the case of knowledge sharing. For example,
 - demonstrating supportive interests in knowledge sharing that is reflected in school vision,
 - supporting financially and assigning the needed staff to share knowledge and skills with other adapted physical educators, and
 - encouraging adapted physical educators who are actively involved in knowledge sharing.
2. **Awareness of Educational Issues Especially Related to Adapted Physical Education**
 - Monitoring up-to-date educational issues especially related to adapted physical education and other schools' or school districts' developmental initiatives to define knowledge visions (i.e., what type of knowledge will be needed, developed, and retained) and future developmental initiatives to guide the knowledge-developing process with direction and vitality (Von Krogh, Ichijo, & Nonaka, 2000).
 - Designing and infusing relevant and appropriate collaborative activities in school or school district administrative plan.
 3. **School or School District Vision and Educational Goals**
 - Including adapted physical educator's aspirations in vision building and planning (e.g., accessible playgrounds).
 - Communicating any management information such as school or school district vision, knowledge visions, educational goals, and decisions made across all levels of the school or school district to form shared understanding (Law, 1999).
4. **School or School District Atmosphere and Culture**
 - Cultivating a caring and trusting atmosphere to increase adapted physical educators' motivation to develop and willingness to share knowledge and work together (Stoll & Fink, 1996).
 - Establishing a collaborative, experimental, and innovative culture to foster the implementation of knowledge sharing activities for adapted physical educators' professional development. For instance, adapted physical educators recognize the benefits of participating in these types of activities and also to encourage other adapted physical educators to experiment, innovate, and then share knowledge and skills (Halsall, 1998; Rosenholtz, 1985).
 5. **School or School District Organizational Knowledge Assets**
 - Organizing and maintaining good practices in teaching and also specifying individual adapted physical educators' capabilities to be knowledge repositories (e.g., in either a filing cabinet or an electronic database) so that adapted physical educators are able to store and access relevant explicit forms of knowledge easily and know where to locate relevant experts (e.g., special education teachers, general physical educators, occupational therapists, physical therapists, or parents) to solve their problems or those of others (Alwert & Hoffmann, 2003).

Personal Practical Strategies That Foster Knowledge Sharing Among Adapted Physical Educators

There are practical strategies adapted physical educators can actively implement related to knowledge sharing. The knowledge sharing among adapted physical educators, whenever possible, should be emphasized by using some of the following strategies.

To Collectively Share Knowledge

Adapted physical educators need to be passionate about their profession. Sharing their knowledge can be a way to spread ideas to advance the field of adapted physical education and through this process help students with disabilities perform and learn more effectively. This could be at district, state, regional, national, and international levels.

To Develop a Sense of Reciprocity and Altruism

Individual adapted physical educators may help others by sharing knowledge because they had received help at some point in the past. This is related to fulfilling a professional moral and ethical obligation.

Adapted physical educators tend to be motivated by altruistic motives to share knowledge. Batson, Ahmad, and Tsang (2002) suggested that the most commonly proposed source of altruism is empathic emotion toward other individuals. Experienced adapted



physical educators may feel empathy toward other beginning teachers' struggles. The empathy feeling induces the feeling of compassion on the part of the knowledge sharers, invoking them to share knowledge.

Reduce the Gap Between the Intention and the Behavior of Knowledge Sharing

It was difficult for adapted physical educators to transform the intention of knowledge sharing into the behavior of actual knowledge sharing. This is generally due to diversionary action and isolation induced by individualism and competitiveness among adapted physical educators (Seo, 2010). It is needed to develop a cooperative atmosphere among adapted physical educators in the same school or school district (see photo on previous page).

Develop a Respectful Environment

A respectful environment could motivate knowledge sharing. Everyone needs to honor the opinion of other professionals even though they may not agree.

Professional Communities

Adapted physical educators form communities as the places where they share a clear purpose and can be involved in professional dialogues and also join professional communities outside the school or school district (i.e., state, regional, national, or international organizations) for the purpose of broadening their scope of understanding (Quinn, Anderson, & Finkelstein, 1996).

Conclusion

The Adapted Physical Education National Standards (APENS; Kelly, 2006) presents specific competencies related to consultation and staff development (Standard 11), communication (Standard 15), as well as integral involvement in continuing education (Standard 13). One technique that has been recommended in the literature is to continually provide information and skills to adapted physical educators through knowledge sharing. Knowledge sharing is an endeavor that demands adapted physical educators' time and energy. Thus, adapted physical educators who are knowledge sharers should be made to feel that the time and energy they spend sharing knowledge is valued and respected.

Acknowledgement

This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2010-013-G00010).

Selected References

Ardichvili, A., Page, V., & Wentling, T. (2003). Motivation and barriers to participation in online knowledge-sharing communities of practice. *Journal of Knowledge Management*, 7(1), 64-77.

- Alwert, K., & Hoffmann, I. (2003). Knowledge management tools. In K. Mertins, P. Heisig, & J. Vorbeck (Eds.), *Knowledge management: Concepts and best practices* (2nd ed.) (pp. 114-150). London: Springer.
- Batson, C. D., Ahmad, N., & Tsang, J. A. (2002). Four motives for community involvement. *Journal of Social Issues*, 58(3), 429-445.
- Block, M. (2007). *A teacher guide to including students with disabilities in general physical education* (3rd ed.). Baltimore, MD: Paul Brookes.
- Collinson, V., & Cook, T. F. (2004). Learning to share, sharing to learn: Fostering organizational learning through teachers' dissemination of knowledge. *Journal of Educational Administration*, 42(3), 312-332.
- Halsall, R. (1998). School improvement: An overview of key findings and messages. In R. Halsall (Ed.), *Teacher research and school improvement: Opening doors from the inside* (pp. 28-53). Buckingham, England: Open University Press.
- Hew, K. F., & Hara, N. (2007). Empirical study of motivators and barriers of teacher online knowledge sharing. *Educational Technology Research Development*, 55, 573-595.
- Kelly, L. E. (Ed.). (2006). *Adapted physical education national standards*. Champaign, IL: Human Kinetics.
- Law, S. (1999). Leadership for learning: The changing culture of professional development in schools. *Journal of Educational Administration*, 37(1), 66-79.
- Lieberman, L., & Houston-Wilson, C. (2002). *Strategies for inclusion: A handbook for physical educators*. Champaign, IL: Human Kinetics.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91(4), 509-536.
- Minor, J. F., & Preston, K. M. (1991). *Peer coaching at the junior college level: Developing a non-threatening environment*. Available from ERIC Document Production Service (No: ED339410).
- Oja, S. N., & Smulyan, L. (1989). *Collaborative action research: A developmental approach*. New York: Falmer.
- Quinn, J. B., Anderson, P., & Finkelstein, S. (1996). Managing professional intellect: Making the most of the best. *Harvard Business Review*, 74(2), 71-80.
- Rosenholtz, S. (1985). Effective schools: Interpreting the evidence. *American Journal of Education*, 93(3), 352-388.
- Seo, H. S. (2010). Testing the casual model of knowledge sharing behaviors in secondary school teachers for knowledge-based educational administration. Unpublished Doctoral Dissertation, Hannam University, Korea.
- Shaw, R., & Perkins, D. (1992). Teaching organizations to learn: The power of productive failures. In D. Nadler, M. Gerstein, & R. Shaw, (Eds.), *Organizational architecture* (pp. 175-192). San Francisco, CA: Jossey-Bass.
- Stoll, L., & Fink, D. (1996). *Changing our schools: Linking school effectiveness and school improvement*. Buckingham, England: Open University Press.
- U.S. Government Accountability Office. (2010, June). *Students with disabilities: More information and guidance could improve opportunities in physical education and athletics* (Report to Congressional Requestors). Washington, DC: Author.
- Von Krogh, G., Ichijo, K., & Nonaka, I. (2000). *Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation*. New York: Oxford University.



Seung-oh Choi is a professor in the Department of Sports Sciences, School of Natural Sciences, Hannam University, Daejeon Metropolitan City, Korea. Ron French is a professor of kinesiology at Texas Woman's University. Lisa Silliman-French is an associate professor of kinesiology at Texas Woman's University.