

11-15-2013

Standing in the Gap: Research that Informs Strategies for Motivating and Retaining Rural High School Students

Patricia L. Hardré
University of Oklahoma, hardre@ou.edu

Follow this and additional works at: <https://scholarsjunction.msstate.edu/ruraleducator>



Part of the [Education Commons](#)

Recommended Citation

Hardré, P. L. (2013). Standing in the Gap: Research that Informs Strategies for Motivating and Retaining Rural High School Students. *The Rural Educator*, 34(1). DOI: <https://doi.org/10.35608/ruraled.v34i1.404>

This Research Article is brought to you for free and open access by Scholars Junction. It has been accepted for inclusion in The Rural Educator by an authorized editor of Scholars Junction. For more information, please contact scholcomm@msstate.libanswers.com.

Standing in the Gap: Research that Informs Strategies for Motivating and Retaining Rural High School Students

Patricia L. Hardré
University of Oklahoma

Rural schools face the challenges of motivating and retaining students, often in the face of severe resource constraints. This paper synthesizes fifteen years of the author's rural research on secondary students' school-related motivation, distilling it into strategic principles for rural teachers and administrators. Effective motivational knowledge and strategies supported by both theory and research can help school staff fill the gap between potential and actual student achievement. Multi-level strategies for motivating individuals and groups include elements of classroom instructional practice, interpersonal relationships, and the broader school motivational climate including policy. By motivating students effectively, teachers and administrators can bridge the gap between what students do achieve and what they could achieve.

Key Words: student motivation, student achievement, student retention, school climate

Thinking and feeling, wanting and learning, seeking and knowing are closely integrated within the human brain and psyche (Dai & Sternberg, 2004; Imordino-Yang & Faeth, 2010). Students' motivations for learning, development, achievement and ongoing education are tied to their individual differences and perceptions, family values and expectations, community and social values, school culture and teaching practice (Anderman & Anderman, 2010; Stipek, 2002). School-related motivation influences students' choices and actions both present and future, as motivation and experiences in school impact choice of college, careers and lifelong learning (Mook, 1996; Stipek, 2002).

Yet a gap remains between what rural students *are* doing, learning and achieving, and what their teachers believe they *could* achieve with adequate educational motivation (Hardré & Sullivan, 2009). Their lack of motivation leads to disengagement and dropout from school and educational pursuits, a pervasive issue, more prevalent in rural than in non-rural schools (National Center for Educational Statistics, 2007). Standing in that gap requires identifying and using effective motivational strategies, tested and proven in rural schools for rural students, by rural teachers and administrators.

Defining "Rural"

Whenever we address rural needs, we must explicitly define what we mean by "rural" (Hardré & Hennessey, 2010). Defining rurality is not just about size or location but about place-based issues, economics, culture and values (Howley & Howley, 2010). The body of work synthesized in this paper studied the motivational environment and dynamic in US rural secondary schools. These schools were

defined as rural based primarily on their geographic location in small communities (low population density), remote from large metropolitan areas (geographic isolation), where the local industry was tied to place (largely agriculture/place-based economy). As a result of community characteristics, the schools were also relatively small in size and had limited resources (small school size) and most area families' incomes were well below state and national averages earned (low-SES). This profile of rural communities and schools is consistent with federal and state data for these areas (Brown & Swanson, 2003).

Physical versus Motivational Dropout

There are two kinds of dropout that characterize students' loss of interest and achievement in school: physical dropout (actually leaving school) and motivational dropout (staying in school without interest or effort) (Hardré, 2007). Much political and media attention is given to physical dropout, to students leaving school before completion for alternative economic and social pursuits (Battin-Pearson, Newcomb, Abbott, Hill, Catalano & Hawkins, 2000). However, little attention is given to its precursor, motivational dropout, in which student remain in school but disengage from academic work (Hardré, 2008). Motivational dropout, state or trait amotivation, is a huge potential threat to student success and a drain on teacher time and other school resources, yet it remains unacknowledged as students stay enrolled and blend into the institutional landscape (Hardré, 2009). Focused attention to strategies for motivating students can effectively promote current engagement and achievement and also reduce motivational dropout that can lead to physical high school dropout. Motivation may, even

beyond ability and curriculum, present the most important educational challenge of this century (Hidi & Harackiewicz, 2000).

Making Strategies Fit in Rural Settings

One rural teacher said that placing general school research and theory into rural schools can be like seeing some functional item (a lamp, an appliance, a chair) in a store and liking it there, but bringing it home and hating it. Another said that bringing home what she learns from professional development and conferences to the rural school involves so many adaptations it's like trying to cram it into a place where it won't ever fit². Rural teachers often experience frustration in trying to bring ideas from well-intentioned general professional development home, only to be frustrated and disappointed with their lack of fit for their rural students.

This paper is a synthesis of my own fifteen-year record of motivation research in rural schools (1998-2012), synthesizing motivational theory for teachers and making sense of it in the context of rural education and community. It is written in response to two calls for action: teachers' requests for help in motivating their students, and the more general call for translating research into practice. First and primary is the repeated requests of teachers across these studies for help, for usable information on what motivating strategies work for rural students like their own, and for motivating strategies that fit rural needs. Second is the pervasive need for attention to what Ernest Boyer (1990) called the scholarship of application and integration. Boyer called for researchers to make sense of research for practitioners, to translate more abstract findings into principles and strategies that directly inform teaching and school policy.

Thus, this paper is not a comprehensive literature review, but rather the synthesis of a particular, focused body of work and translation into principles for educational policy and practice. In framing this synthesis I have intentionally placed the teachers' voices first, beginning with the teachers' productive perceptions and effective practice, then followed with theory that supports and informs them, integrating research and practice by explicitly placing strategic practice up-front.

Not Only *If* but Also *How* Students are Motivated

Rural teachers tend to overestimate students' motivation, compared with students' own parallel

reporting (Hardré, 2011). The importance of rural teachers' perceptions of their students' motivation drives their efforts to motivate and where they focus their energy and concern (Hardré, 2010; Hardré & Sullivan, 2008b). Yet many rural teachers across studies admit that they lack the knowledge and skill to motivate their students (Hardré & Sullivan, 2009). Some feel able to identify *whether* student are unmotivated, but not *why* (Hardré, 2010).

Teachers who are able to identify the causes of students' lack of motivation tend to use strategies consistent with those causal beliefs (Hardré, 2007). For example, if teachers believe that students are unmotivated because they don't see the content as personally relevant, they tend to include examples of its relevance. Similarly, if teachers believe that school-based skills are disconnected from students' career goals and future aspirations, they tend to work at showing students how skills can fit for them. However, when teachers are confronted with diverse and contrastive needs, such a direct correspondence of strategies is more difficult and a sense of helplessness is common (Hardré & Sullivan, 2009). Rural teachers need to know how to identify both *if* and *why* students are unmotivated to work and learn in school. To address the needs they see, teachers also need to be equipped with a range of effective motivating strategies that fit their students' needs and context.

Achievement ≠ Motivation

Many teachers tend to equate achievement with motivation, assuming that students achieving well in school are not in danger of motivational deficits (Hardré, 2008; Stipek, 2002). However, the specific perceptions that predict effort and engagement are often different from those that predict success and achievement (Hardré & Hennessey, 2010; Hardré, Sullivan & Crowson, 2009). Further, even high achievers may be doing well but not achieving at full ability, and historically high achievers may suffer from anxiety about failure and social pressure to perform at higher levels of challenge (Stipek, 2002; Meece, Wigfield & Eccles, 1990). Such anxiety and pressure threatens positive motivation and success, as it positions high achievers to fake or fail (Colangelo, Assouline & New, 1999). This is a danger exacerbated by teachers overlooking the warning signs because those students have always done well. Even a history of high achievement, without motivation to learn that causes them to engage and persist, will not ensure students' future achievement (Hidi & Harackiewicz, 2000).

Conversely students lower in achievement are not necessarily less motivated. Factors such as

² These are unpublished statements from the data collected for previously published studies cited here.

learning-focused (vs. performance-focused) goals and teacher support of autonomy and competence influence effort and engagement in school *independent of achievement* (Hardré & Sullivan, 2008a). These findings underscore that it is more than grades that keep students working and trying. For rural students, apart from their own past achievement, teachers' support of their choices predicts self-determined motivation and competence, and intentions to stay in school instead of drop out (Hardré & Reeve, 2003). Rural teachers need to recognize what assets students bring to school, but not equate them too globally. They need to understand that enhancing motivation can improve achievement for any student, because it functions beyond ability and past achievement to fuel future effort and achievement. Focusing on achievement does not always improve motivation, but focusing on motivation does promote achievement. Supporting personal motivation to learn (not just make grades or do well on tests) can bridge the gap for underachieving students and support future success.

Short-term versus Long-term Strategies

One rural teacher wisely pointed out that given limited time and other resources, teachers can only do so much and have to pick their battles strategically. This being true, it is critical that they know and choose the most effective strategies for motivating, with lasting benefits. Yet most teachers report using content-relevant and short-term strategies rather than internal and long-term motivating strategies (Hardré, 2011). Attention to strategies to internalize motivation can be much more lasting (Ryan & Deci, 2000), and linking to long-term goals make sense for secondary students in particular. While elementary students are developmentally and socially focused on very short-term goals, secondary students are becoming aware of and attending to longer-term goals, future-oriented perceived selves and choices (e.g., high school majors or emphasis areas, college and career goals) (Berk, 2004).

A previous synthesis of rural teachers' best practices identified four most effective strategies to motivating rural students: 1) support learning and future goals; 2) make content relevant and connect to students' interests; 3) respect and treat students as uniquely valued individuals; and 4) foster valuing and perceived competence (Hardré, Sullivan & Roberts, 2008). These strategies have been supported by subsequent rural research as well. Rural teachers have found a core set of strategies very effective, and these strategies address key components of some solid motivational research. The first two sets of strategies (supporting learning and future goals and

making content relevant) are consistent with achievement goal theory (Elliot & Dweck, 1988). These theories frame motivation with regard to how desires and aspirations (of both person and context) shape action and intentions; that is, how what we *value* shapes what we *choose* to do. The second two sets (showing respect and fostering valuing and competence) are consistent with the development of competence for self-determination (Ryan & Deci, 2000) and with self-efficacy (Bandura, 1997). These theories frame motivation in terms of what students can *do or become*, based on productive self-beliefs supported by the freedom and encouragement to try.

What Limits Students' Motivation?

When asked about what hampers student motivation, many rural teachers point to home problems, and the resource and social deficits that are common in many rural places (Hardré, 2010; Hardré & Sullivan, 2009). Teachers seeing these negative influences frequently use a climate of interpersonal support and relatedness at school, to compensate for a lack of motivational support for education coming from parents and the larger community context. These strategies are effective, because (beyond curriculum, content and external opportunity), the classroom climate that teachers and administrators create has critical effects on students' perceptions of their personal ability, the utility and meaningfulness of the content, and their achievement goals which determine how hard they work at learning (Hardré, Crowson, DeBacker & White, 2007). Teachers' attention to supportive climate and interpersonal relatedness is also consistent with developing self-determination (Ryan & Deci, 2000), based on the understanding that every person has the three basic needs of autonomy, competence and relatedness, and that providing an autonomy-supportive climate for learning enhances students' development of competence and investment of effort.

Teachers' own cultural and individual differences, as well as personality and interpersonal style influence how they relate to students and to the content that they teach (Hardré & Sullivan, 2008b). Teachers have contrasting beliefs about whether motivation is their responsibility or the student's, and about how much difference their efforts *can* make in students' motivation (Hardré & Sullivan, 2008b). Teachers' beliefs, perceptions, efforts, and success or failure experiences interact dynamically to support efficacy and renewed efforts, or to produce learned helplessness and giving up. Teachers need to know that rural secondary students attend and respond to their teachers as source of motivational information and modeling, more strongly than to their peers

(Hardré & Sullivan, 2008a). Teachers' knowledge that students are paying attention and that their efforts matter can renew their sense of utility and competence to make a difference, and help them persist in efforts to motivate students.

Motivation is Complex but Manageable

Rural students in different areas respond differently to elements of teachers' motivating and teaching strategies (Hardré & Hennessey, 2010), underscoring the importance of teachers accurately assessing and addressing their students' unique needs. Teachers need to be equipped with knowledge and skills to identify the strength, quality and causes of students' motivation with strategies to intervene where gaps are apparent (Hardré, 2010).

Motivation functions at both global and subject-specific levels. For example, as the same student might say, "I'm pretty smart and do well in school," but also "I just don't get math" or "I don't see the point of history." Across multiple studies, rural high school students reported lower motivation and competence for math and science than for other subjects (Hardré, 2010; Hardré, Sullivan & Crowson, 2009), while the nation's educational leadership emphasizes math and science (Boyer, 2006). Beyond subject areas, students' productive motivations are both self-focused ("I want to learn new things.") and content-focused ("This information is useful and important"). Some rural teachers and administrators have lamented that their students are tied to the proximal, local and directly applicable. That can be viewed as a strategic opportunity for relevant application, and across rural areas, teachers and schools have leveraged students' (and families') value for local relevance and the applied utility of content and skills, to foster motivation for learning and subject area interest. This is the strategy of the geometry teacher who had students calculate the size of buildings for the community, and the history and literature teachers who had their students research authors who wrote about places where they lived. Teachers' efforts to motivate can be enhanced by having multiple options and directions from which to reach students. Understanding that motivation is not a simple or unitary (all or nothing) phenomenon, but a complex and multidimensional characteristic, can open doors to many different opportunities to bridge motivational gaps for individuals and groups of students.

Motivating Special Populations: Native Rural Students

Each unique group of people is characterized by particular values, concerns and other shared characteristics that constitute their cultural identity and can function as motivational assets or deficits (Tyler, Haines & Anderman, 2006). Some of those characteristics may interact with the characteristics of the rural context in ways that further complicate their motivation to learn and develop educationally (Hardré & Licuanan, 2010). An example of one such group often concentrated in rural areas is Native American students.

The dropout rate for Native students, in both urban and rural areas nationally, is extremely high (National Center for Educational Statistics, 2007, 2008), making them a subgroup of particular concern regarding school-related motivation. Cultural differences influence motivation and school retention, as beliefs and values drive task priorities and investment of effort toward present and future goals (Tyler, Haines & Anderman, 2006).

Native American students in rural public schools are more positively motivated in some ways than their non-Native peers (Hardré & Licuanan, 2010). They value education both for individual achievement and for the collective good (Woodrum, 2009; Beaulieu, 2000), and experience positive motivating influences from both peers and adult role models (Faircloth, 2009; Gonzales, 2003). Native rural students have expressed a particular interest in math, perhaps due to its intellectual objectivity or lack of cultural bias, which positions them for math-related careers and college majors (Hardré & Licuanan, 2010).

Teachers and schools should work to promote high perceived competence related to content areas and skills, perceptions that come from repeated success experiences that students attribute to their own choices and efforts (not to luck, accident or teacher bias) (Anderman & Anderman, 2010). Teachers should support positive perceptions for both individual students and the groups with which their students identify (rural students, Native students). The particular fit of, and affinity for, math can be leveraged for Native students

A deeply-integrated Native cultural value is the collective good, which inspires and compels Native youth to achieve goals and embrace gains that give back to the Native community (McInerney et al., 1997). Conflicts between learning and achieving for individual or collective benefits create similar tensions for Native and rural youth (Hardré & Licuanan, 2010). Teachers can help reduce conflicts and enhance motivation for students with culturally

and community based desires to give back, by helping students identify how their learning and achievement serves their communities. An error that teachers often make is to emphasize the individual benefits of learning and achievement, rather than recognizing and leveraging students' collectivist values for real and potential (current and future) contributions to community. Similar conflicts arise for others with collective cultural values, and countless different conflicts exist for East Asians, Latinos and other people groups with populations concentrated in rural areas (Brown & Swanson, 2003).

Knowing the motivational needs and opportunities that fit best for any particular group of students is critical to successfully motivating them. Rural areas are diverse, and whether a group is unique in ethnicity, culture, national origin or something else, being aware of who they are beneath the surface enables teachers to both respect and leverage their deeply held beliefs and values to benefit the students and their community through enhanced motivation to learn.

Beyond the Classroom: School and Community

Motivational effects on teachers and students pervade the whole school-as-system (Maehr & Midgley, 1996). Each school constitutes a unique motivating environment, which is the result of interactions among individual and organizational characteristics, and includes knowledge, perceptions, values, communication, policy and pressures (Hardré, 2007). Teachers' transfer and implementation of innovative strategies to foster motivation and achievement in is subject to support by administrators in their schools (Hardré, Nanny, Refai, Ling & Slater, 2010). The school climate supports or thwarts teachers in supporting students (Maehr & Midgley, 1996), so the climate that administrators create in the school is as critical to motivating success as what teachers do in their classrooms (Hardré, 2007).

Rural secondary teachers recognize that their contexts present both assets and challenges for motivating students academically. In reporting factors that tend to reduce students' school-related motivation, rural teachers across schools cited rural-specific factors led by rural lack of jobs, rural poverty and isolation, rural lack of diverse experiences, lack of educated and successful role models, and lack of family support for education (Hardré, 2011). On the balance side of their motivating equation, teachers also saw the closeness of families and the interpersonal relatedness that they develop with students as assets supported by the small rural community context (Hardré, 2010).

Rural teachers and administrators agree that it can be more difficult to promote academic motivation for students in rural settings. However, it is rarely impossible. Those who have found success in motivating their students to find value, put forth effort and learn in school, regardless of their general ability and prior achievement operate on some generalizable principles consistent with motivation research that crosses theoretical boundaries:

1. **Know the signs of motivation and lack of it.** Be able to recognize when students are lacking motivation as a critical asset. Recognize that achievement does not equal motivation, nor is achievement the only or best indicator of student motivation.
2. **Understand *why* as well as *if*.** Remember that external behaviors are symptoms of deeper underlying causes. Students failing tests, not turning in homework or acting out in class are not the real problems, but symptoms of their needs. Addressing symptoms alone can actually make the underlying causes worse, while addressing real needs achieves much more than correcting current behavioral problems.
3. **Know a set of consistent strategies as a motivating toolkit,** and use them when a lack of motivation is apparent. Match strategies with the needs, to support motivation where the needs exist, rather than just a scattershot approach. Recognize that a given instance of lack of motivation may be effectively approached from a number of directions.
4. **Know your students, as individuals and groups.** Respect their individuality and cultures of origin, their values and compelling interests, so you can address what truly and deeply motivates them.
5. **Treat motivation and learning as long-term goals, deserving intrinsic solutions** rather than short-term or stopgap measures. Recognize that investing in supporting students' self-determined motivation creates independent, lifelong learners, while controlling their immediate behavior will have to be done again tomorrow.

School administrators can help equip teachers with up-to-date knowledge and with diverse strategic toolkits by encouraging teachers to seek and share strategies from other rural teachers. This can be achieved at meetings within the school and district, at state and national meetings and conferences, from publications that feature rural teacher practice, from web-based resource sites, and in all kinds of social networks that include other rural teachers. Administrators can also support teachers in seeking long-term solutions instead of short-term fixes, as the school policy and climate created *by administrators* significantly influences where and how teachers invest their time and energy (Hardré, 2007, 2011).

Investing in motivating students can be the most valuable investment that a teacher or administrator can make, with long-term benefits for the student, the school and the community. While the existing lack of motivation may in part be attributable to characteristics of the rural context, that same context

may afford the assets to address it. Even as test scores, standards and school report cards threaten to preoccupy and overwhelm us, we can't afford to discount the importance of standing in the gap, supporting our students' motivation to learn, to achieve and to become the very best they can be.

References

- Anderman, E. M. & Anderman, L. H. (2010). *Classroom motivation*. New York: Pearson.
- Beaulieu, D. L. (2000). Comprehensive reform and American Indian education. *Journal of American Indian Education*, 39(2), 1-17.
- Beaulieu, L. J., Israel, G. D., & Wimberley, R. C. (2003). Promoting educational achievement: A partnership of families, schools and communities. In D. L. Brown & L. E. Swanson (Eds.) (pp.273-289), *Challenges for rural America in the twenty-first century*. University Park, PA: Pennsylvania State University Press.
- Berk, L. E. (2004). *Development through the lifespan* (3rd ed.). Boston: Allyn & Bacon.
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Ewing, NJ: Carnegie Foundation for the Advancement of Teaching.
- Boyer, P. (2006). *Building community: Reforming math and science education in rural schools*. Fairbanks, AK: Alaska Native Knowledge Network.
- Brown, D. L. & Swanson, L. E. (2003). Introduction: Rural America enters the new millennium. In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century* (pp. 1-18). University Park, PA: Pennsylvania State University Press.
- Colangelo, N. Assouline, S.G., & New, J. K. (1999). *Gifted education in rural schools: A national assessment*. Iowa City, IA.: University of Iowa Press.
- Gonzales, A. A. (2003). American Indians, their contemporary reality and future trajectory. In D. L. Brown & L. E. Swanson (Eds.), *Challenges for rural America in the twenty-first century*(pp. 43-56). University Park, PA: Pennsylvania State University Press.
- Hardré, P. L. (2007). Preventing motivational dropout: A systemic analysis in four rural high schools. *Leadership and Policy in Schools*, 6(3), 231-265.
- Hardré, P. L. (2008). Taking on the motivating challenge: Rural high school teachers' perceptions and practice. *Teacher Education and Practice*, 21(1), 72-88.
- Hardré, P. L. (2011). Motivating math learning for rural students: Teacher and student perspectives. *Math Education Research Journal*, 23, 213-233.
- Hardré, P. L., Crowson, H. M., DeBacker, T., & White, D. (2007). Predicting the academic motivation of rural high school students. *Journal of Experimental Education*, 75 (4), 247-269
- Hardré, P. L., Davis, K. A., & Sullivan, D. W. (2008). Measuring teacher perceptions of the "how" and "why" of student motivation. *Educational Research and Evaluation*, 14(2), 155-179.
- Hardré, P.L. & Hennessey, M. (2010). Two rural worlds: Differences of rural high school students' motivational profiles in Indiana and Colorado. *Journal of Research in Rural Education*, 25(8), 1-32.
- Hardré, P. L., & Licuanan, B. (2010). Motivational characteristics of Native and non-Native students in rural, public high schools. *Journal of American Indian Education*, 49(3), 41-64.
- Hardré, P. L., Nanny, M., Refai, H., Ling, C., & Slater, J. (2010). Re-Engineering a dynamic science learning environment for K-12 teachers. *Teacher Education Quarterly*, 37(2), 157-178.
- Hardré, P. & Reeve, J. (2003). A motivational model of rural students' intentions to persist on, versus drop out of, high school. *Journal of Educational Psychology*, 95(2), 347-356.
- Hardré, P. L. & Sullivan, D. (2008a). Student differences and environment perceptions: How they contribute to student motivation in rural high schools. *Learning and Individual Differences*, 18, 471-485.
- Hardré, P. L, & Sullivan, D. W. (2008b). Teachers' perceptions and individual differences: How they influence teachers' motivating strategies. *Journal of Teaching and Teacher Education*, 24(8), 2059-2075.
- Hardré, P. L. & Sullivan, D. W. (2009). Motivating adolescents: Teachers' beliefs, perceptions and classroom practices. *Teacher Development*, 13(1), 1-16.
- Hardré, P. L., Sullivan, D. W., & Crowson, H. M. (2009). Student characteristics and motivation in

- rural high schools. *Journal of Research in Rural Education*, 24(16), 1-19.
- Hardré, P. L., Sullivan, D. W., & Roberts, N. (2008). Rural high school teachers' best motivating practices. *The Rural Educator*, 30 (1), 19-31.
- Hidi, S., & Harackiewicz, J. M. (2000). Motivating the academically unmotivated: A critical issue for the 21st century. *Review of Educational Research*, 70(2), 151-179.
- Howley, C. B., & Howley, A. (2010). Poverty and school achievement in rural communities: A social-class interpretation. In K.A. Schafft and A. Y. Jackson (Eds.) *Rural education for the twenty-first century: Identity, place and community in a globalizing world* (pp. 34-50). University Park, PA: Pennsylvania State University Press.
- Maehr, M. L. & Midgley, C. (1996). *Transforming school culture*. Boulder, CO: Westview Press.
- Meece, J. L., Wigfield, A., & Eccles, J. S. (1990). Predictors of math anxiety and its consequences for young adolescents' course enrollment intentions and performances in mathematics. *Journal of Educational Psychology*, 82, 60-70.
- Mook, D. G. (1996). *Motivation: The organization of action*. New York: Norton.
- National Center for Education Statistics (2007). NCES Report, "The Status of Education in Rural America" (NCES 2007-040). Retrieved August 18, 2012 from, <http://nces.ed.gov/pubs2007/2007040.pdf>
- National Center for Education Statistics (2008). NCES Report, "Status and Trends in the Education of American Indians and Alaska natives: 2008" (NCES 2008-084). Retrieved August 20, 2012 from, <http://nces.ed.gov/pubs2008/2008084.pdf>
- Reeve, J., Jang, H., Hardré, P. L., & Omura, M. (2002). Providing a rationale in an autonomy-supportive way as a strategy to motivate others during an uninteresting activity. *Motivation and Emotion*, 26(3), 183-207.
- Ryan, R. M., & Deci, E. L., (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Stipek, D. (2002). *Motivation to learn: Integrating theory and practice* (4th ed.). Boston: Allyn & Bacon.
- Tyler, K., Haines, R. T. & Anderman, E. M. (2006). Identifying the connections between culturally relevant motivation and academic performance among ethnic minority youth. In D. M. McInerney, M. Dowson & S. V. Etten (Eds.) *Research on sociocultural influences on motivation and learning, Vol 6: Effective Schools*. Greenwich, CT: Information Age Press.
- Woodrum, A. (2009). Cultural identity and schooling in rural New Mexico. *Journal of Research in Rural Education*, 24(8). Retrieved 10 August 2012 from <http://jrre.psu.edu/articles/24-8.pdf>

About the Author:

Patricia L. Hardré, Ph.D., is a professor in Instructional Psychology & Technology at the University of Oklahoma. Email: hardre@ou.edu