

Advancement Via Individual Determination (AVID) professional development as a predictor of teacher leadership in the United States

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This study expands on the work of Huerta *et al.* (2008) by reexamining the relationship between professional development and teacher leadership using more comprehensive measures of each. By confirming Huerta *et al.*'s (2008) finding that Advancement Via Individual Determination (AVID) professional development is a significant predictor of teacher leadership, the current study indicates that AVID does in fact support educators with quality professional development which helps them become more apt in their leadership abilities. Even more experienced teachers continue to develop as leaders as they receive additional professional development. Outcomes of this study are expected to benefit school leaders, teachers, AVID personnel, district level administrators and staff developers, and policy-makers interested in AVID as a school reform effort.

Purpose

While the impact of Advancement Via Individual Determination (AVID) on student achievement has been extensively researched (Guthrie & Guthrie, 2002; Watt *et al.*, 2007; Black *et al.*, 2008), the effect of AVID professional development on teacher leadership has only recently been examined. Research published by Huerta *et al.* (2008) found that AVID professional development, when defined as the number of AVID summer institutes attended, is a significant predictor of teacher leadership. Even after the effects of a teacher's gender, level of education, and teaching experience were accounted for, AVID professional development was still a significant predictor of teacher leadership. The purpose of the current study was to examine the relationship between AVID professional development and teacher leadership using more comprehensive measures of each. Additionally, the current study examined the

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role of the AVID site coordinator, a leadership role that elective teachers often assume, and examined whether AVID professional development impacts inexperienced teachers differently than experienced teachers.

Background

AVID and AVID professional development

Advancement Via Individual Determination (AVID) is an academic support program that prepares academically average secondary school students for college eligibility and success by placing them in advanced classes and by providing them with an academic and social support elective class. An AVID site team and lead elective teacher (often the AVID program coordinator) are responsible for overseeing AVID implementation and growth at their school. These individuals receive comprehensive professional development in order to use AVID's teaching methodologies and curriculum to ultimately disseminate AVID strategies to all teachers in the school (Swanson, 2005). Beginning with one high school and 32 students in 1980, AVID now serves nearly 300,000 students in over 4000 elementary and secondary schools in 45 US states and the District of Columbia, and across 15 countries (AVID Center, 2009).

AVID professional development is required of schools in order to meet AVID's certification guidelines which include implementing AVID's 11 essentials. Essential 10 requires that schools identify resources for program costs, which includes providing funds for ongoing participation in professional development activities. Schools must also agree to implement all of AVID's essentials and to participate in the AVID certification process. Essential 11 states that schools must have an active interdisciplinary AVID site team that collaborates on issues of student access to and success in rigorous college preparatory courses (AVID Center, 2009).

This makes the AVID program unique in the world of staff development. Its professional development component is organized and effective, resulting in core individuals becoming vested stakeholders in the program. Sparks (2002), executive director of the National Staff Development Council, shared that quality staff development is not always utilized appropriately in the school setting, noting that the daily practice of teaching and leading is not always interrelated. Blankenstein (2004) noted that many schools do not know what they want or need and consequently do not engage in meaningful staff development. Additionally, he stated that schools must understand their needs before they go searching for help.

Teacher leadership

The idea of teachers as leaders both in and out of the classroom has been examined, but a clear and consistent definition of teacher leadership is difficult to find (York-Barr & Duke, 2004; Greenlee, 2007). Teacher leadership is most often aligned with instructional and participative leadership. Instructional leadership

deals with organizational variables that impact teachers, such as school culture, as well as with teachers' behaviors and activities that directly affect the growth of students. Participative leadership focuses on the decision-making processes of a given group or organization, with a potential outcome of enhanced organizational effectiveness (Leithwood & Duke, 1999).

Until recently, teachers interested in becoming leaders in a formal public K-12 setting had three options: (1) become an administrator; (2) organize or join activist-type teacher movements (mainly in urban settings); or (3) become involved in local union affairs to help improve conditions of work in the profession (Institute for Educational Leadership, 2001). In recent years, teachers have taken on more leadership roles, either formally or informally in the school setting (Katzenmeyer & Moller, 2001; York-Barr & Duke, 2004; Moller, 2005).

It is difficult to define what makes a teacher a teacher leader. A recent report published by the Institute for Educational Leadership (2001) identified critical issues that transcend traditional roles such as instructor, to include more roles previously held by only the principal. Other research purports that participation in school-level policy-making activities constitutes a partial operational definition of the teacher leader (Darling-Hammond, 1997; Gonzalez & Lambert, 2001). Fullan (1994) argued that teachers must exhibit proficiency in several 'interrelated domains' to function as leaders, including knowledge of teaching and learning, collegiality, educational contexts, continuous learning, and others.

The notion of 'teacher leader' defies definition as a set of prescriptive qualities and is often viewed as an institution-specific phenomenon. This is what Pounder *et al.* (1995) call a situation-based organizational phenomenon. For example, Lieberman and colleagues (2000) use the term 'teacher leaders' to identify individuals who have a way of thinking and acting that is sensitive to teachers, to teaching, and to the school culture. The actual way teacher leaders practice their participation in leadership activities is dependent on the particular context of a school.

AVID teacher as leader

Schools implementing AVID strive to expand the teaching strategies and methodologies used in the AVID elective classroom to all classrooms in the school, thereby creating schoolwide reform. Several studies have examined AVID as a reform model (Watt *et al.*, 2002, 2004, 2006), yet none looked at the role of teacher in the reform process. Findings of Brooks *et al.*'s (2004) study of teacher leadership and school reform indicate that leadership is ambiguous, as it is a contested notion between the principal and teacher(s). In AVID schools, ideally the principal and AVID teacher are part of the same team responsible for program implementation. Watt *et al.* (2004) examined the role of the principal in the implementation of AVID's 11 essentials and found that principals who attended the AVID summer institute professional development had higher levels of implementation than did those who did not. The AVID elective teacher is often the AVID coordinator and must lead site team members in the quest for successful implementation of the program's 11 essentials.

Katzenmeyer and Moller (2001) assert that teacher leaders are those that lead within and beyond the classroom, and also influence the improved educational practice of other teachers within the school. Teacher leaders are described by Gabriel (2005) as those who create and oversee a successful team, such as with the AVID teacher, equipping AVID site team members with valuable resources to improve student achievement. Teacher leaders must be provided with increased access to resources, information and expertise in order to affect change in their schools (Hallinger & Richardson, 1988). AVID elective teachers, through their training and professional development from AVID, receive such resources and are at the center of ensuring a classroom and school environment conducive to empowering students to become more responsible for their learning, while they themselves become more responsible not only for their teaching within the classroom but also for their leadership roles outside of the classroom.

Methods

Over 3100 middle school and high school teachers attending one of the eight AVID summer institutes (SIs) held in Dallas, Orlando, Sacramento, Atlanta, San Diego, and Chicago in 2008 completed a survey titled *Survey of AVID teachers*. Surveys were distributed and collected by hand at each of the institutes to provide flexibility to respondents and ensure a high response rate. Once collected, partially completed surveys were removed, resulting in data from 3016 AVID elective teachers from schools that are currently implementing or planning to implement an AVID program. Respondents represented 42 states and four foreign countries, with the highest percentage of respondents from California (28%) and Texas (18%).

The *Survey of AVID teachers* solicited information regarding a teacher's demographics, professional development, and leadership activities. Responses were entered into SPSS 12.0 for analyses. Descriptive and inferential statistics were run to examine the effect of AVID professional development on teacher leadership and to determine whether AVID professional development impacts inexperienced teachers differently than experienced teachers.

Measures

Professional development. AVID's professional development is an ongoing process that begins with a week-long summer institute and continues throughout the year via ongoing support from trained regional and district directors (Watt *et al.*, 2007). District and regional directors receive specific professional development and training for the purpose of not only managing their AVID program but to also train and guide the elective teachers and site teams. The AVID summer institute provides AVID elective teachers with instructional strategies and a specific curriculum to use in the AVID classroom. Some of these strategies include Cornell note-taking, the use of writing, inquiry, collaboration, and reading strategies, as well as facilitating tutorials.

In contrast to Huerta *et al.*'s (2008) study which only used one item to assess AVID professional development (the number of AVID summer institutes previously attended), the current study includes a second measure to gauge the amount of additional training AVID elective teachers received from their district or regional directors. This additional measure of AVID professional development is a four-item scale that indicates how many of the following types of meetings or workshops an elective teacher attended: AVID coordinator/teacher meeting, AVID site team meeting, tutor meeting, or parental involvement meeting. These meetings or workshops are held throughout the year and provided teachers with opportunities to network with other AVID elective teachers, receive additional training from their AVID district director and interact with parents. Respondents were asked to mark ('1' = yes, '0' = no) whether they attended such types of trainings or activities. A reliability analysis indicates that all four items adequately contribute to the scale's internal consistency, resulting in an alpha of 0.65. The four-item scale ranges from '0' to '4', with an overall mean of 1.11 (SD=1.20).

Teacher leadership. Definitions of teacher leadership often focus on descriptions of the activities and roles of teacher leaders, including, but not limited to, involvement and membership in professional teacher organizations, involvement in decision-making, sharing ideas with colleagues, mentoring new teachers, presenting workshops to colleagues, and collaborating with peers (Taylor & Bogotch, 1994; Paulu & Winters, 1998; Gabriel, 2005). Lambert (2003) stated that teacher leaders are 'those whose dreams of making a difference have either been kept alive or have reawakened by engaging with colleagues and working within a professional culture' (p. 33). A 16-item teacher leadership scale was constructed based on such activities (see Appendix), whereby respondents were asked to identify how often they engaged in leadership activities: '1' = not yet, '2' = rarely, '3' = sometimes, '4' = often. A reliability analysis indicated that all 16 items adequately contribute to the scale's internal consistency, resulting in an alpha of 0.87. The 16-item scale ranges from 16 to 64, with an overall mean of 45.06 (SD=9.10).

Other variables considered. Additional variables included in this study relate to teachers' teaching experience (total number of years teaching, and total number of years teaching at one's current school), teachers' demographics (gender and level of education) and a key leadership role/position that some teachers hold (whether or not the teacher is an AVID site coordinator). These variables were included to examine whether each is associated with and/or impacts teacher leadership.

Results and discussion

The purpose of this study was twofold. First, the researchers sought to expand on the work of Huerta *et al.* (2008) by examining the teacher leadership and professional development of AVID elective teachers using more comprehensive measures.

Additionally, the researchers sought to examine whether AVID professional development impacts inexperienced teachers differently than experienced teachers. Prior to addressing these areas, however, descriptive statistics were compiled to provide some overall characteristics of the AVID teachers surveyed in this study.

Population characteristics

A total of 3025 AVID teachers participated in this study. Almost three-quarters of the teachers were female (74%) and a majority were white (65%); 13% were Hispanic, 14% were African-American, 4% were Asian or Pacific Islander, and 4% indicated that they were either Native American or some other ethnicity. Most of the teachers (69%) have been teaching at their current school for five years or less. However, according to their total teaching experience, most of the teachers (61%) have been teaching for six years or longer. These characteristics are very similar to those found in Huerta *et al.* (2008) which stated that even though teachers have ample teaching experience, many have switched schools and thus may still be considered as a new or inexperienced teacher in their current school.

Another characteristic of interest pertains to teachers' level of education. Fifty per cent reported that a bachelor's degree was the highest degree they obtained while 49% reported that they completed a master's degree. Less than 1% of the teachers earned a doctoral degree; however, since comprehensive training and development occurs in a doctoral program, their data were removed to avoid possible confounding in the analyses involving teacher leadership, thereby bringing the number of usable surveys to 3016.

As mentioned earlier, the 16-item measure of teacher leadership ranges from 16 to 64, with an overall mean of 45.06 (SD=9.10) among all teachers. Upon examining a frequency distribution of means for the 16-item scale of teacher leadership, a slightly positive skew is evident (see Figure 1). The fact that teachers' level of teacher leadership is not normally distributed but is positively skewed may lend support to Dewey's (1960) assertion that teachers exhibit at least some form of leadership due to their role as an intellectual leader of a group. In the sections remaining, this 16-item scale is used as a more thorough measure of teacher leadership than the three-item scale that was used in Huerta *et al.* (2008).

In addition, AVID teachers were asked about the content area in which they taught. Thirty-three per cent of the AVID teachers' major content area was English language arts, 16% were mainly social studies teachers, and 14% were mathematics teachers. Fifty-eight per cent of respondents were high school teachers and 42% were middle school teachers. Also, 29% of the teachers indicated that they were the site coordinator for the AVID program at their school.

Teacher leadership and quantity of AVID professional development

Huerta *et al.* (2008) hypothesized and found that AVID elective teachers who received professional development training from the AVID summer institutes (SIs)

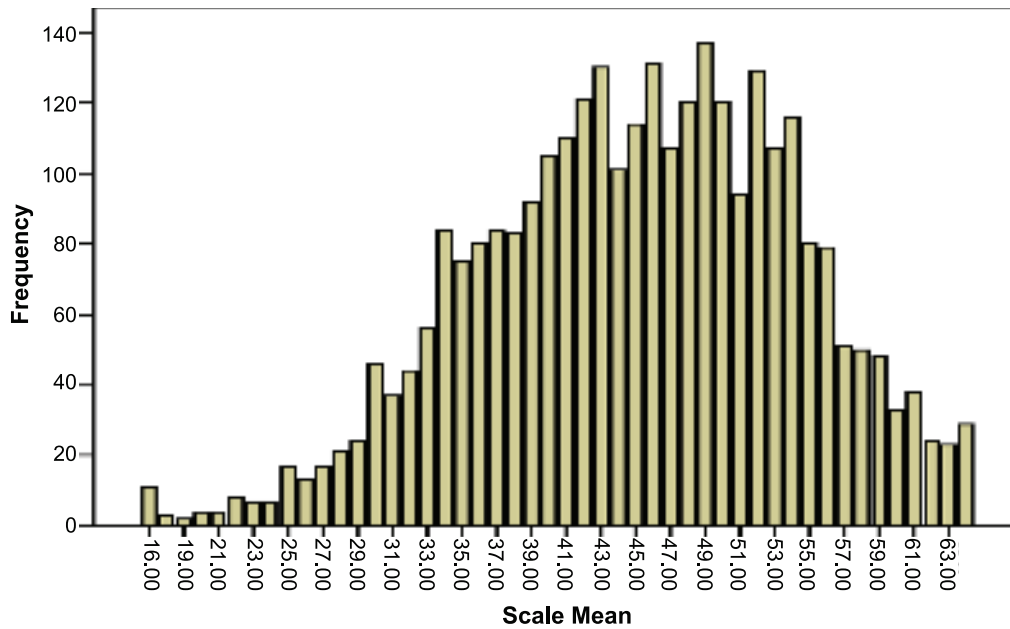


Figure 1. Frequency distribution of teachers' means on the 16-item scale of teacher leadership

exhibit greater levels of teacher leadership than teachers who had not yet received such professional development. In an attempt to replicate this finding, a one-way analysis of variance with a Scheffe pairwise comparison was run to determine if differences in teacher leadership existed between groups of teachers who attended the summer trainings and those who did not. For this analysis, as was done in the previous study, teachers were placed into one of four groups depending on the number of SIs they previously attended. The ANOVA yielded a statistically significant difference in teacher leadership means among the groups (see Table 1 of the Appendix). An examination of group means indicates that teacher leadership increases with each SI that a teacher attends. Teachers who attended zero, one, two, or three or more summer institutes had respective teacher leadership means of 44.05, 46.27, 46.90 and 48.05.

The Scheffe post-hoc comparison of mean differences revealed a significant difference in teacher leadership means between teachers who had not previously attended a SI and those who attended one SI. There was an increase in teacher leadership means between the first and second SIs, from 46.27 to 46.90; however, the mean difference was not statistically significant. As was the case in the previous study, these findings imply that teachers exhibit significant gains in teacher leadership once they have attended their first SI but something of a plateau in teacher leadership gains occurs after the second SI.

In the current study, an additional measure of AVID professional development was created to further explore the relationship between AVID professional development

and teacher leadership. An ANOVA with a Scheffe pairwise comparison was run to determine if differences in teacher leadership existed between groups of teachers who attended additional AVID trainings and activities that were led by their district or regional directors. For this analysis, teachers were placed into one of five groups depending on the number of additional activities they attended. The ANOVA yielded a statistically significant difference in teacher leadership means among the groups (see Table 2 of the Appendix). An examination of group means shows that teacher leadership increases as teachers attend more types of trainings and activities. Teachers who attended zero, one, two, three, or four additional activities had respective teacher leadership means of 43.86, 44.47, 46.17, 47.12 and 49.91. The Scheffe post-hoc comparison of mean differences revealed an interesting finding: teacher leadership does not increase significantly unless a teacher has attended at least two of the additional activities led by their district director (DD) or regional director (RD).

Teacher leadership and years of teaching experience

To understand whether gains in teacher leadership are solely a result of the amount of AVID professional development received, other variables were considered. The previous study hypothesized and found that teachers exhibit greater levels of teacher leadership as they become more experienced with their teaching and more experienced with their current school. In the current study, two separate ANOVAs were run to determine whether differences in teacher leadership existed between groups of teachers with different amounts of teaching experience. Two variables of teaching experience were examined: the number of years a teacher has been teaching at their current school and the number of years of total teaching experience.

For the first ANOVA, as was done in the previous study, teachers were placed into one of six groups depending on the number of years of experience teaching at their current school. A significant difference in teacher leadership means was found among the groups (see Table 3 of the Appendix). A review of the group means shows that longer time spent at the same school results in increased levels of teacher leadership. Teachers who have been teaching at their current school for less than 2 years, 2 to 5 years, 6 to 9 years, 10 to 13 years, 14 to 17 years, or 18 years or more had respective teacher leadership means of 40.94, 44.62, 48.30, 49.80, 50.25 and 49.61. However, a Scheffe post-hoc analysis revealed that increases in teacher leadership stop becoming statistically significant after a teacher has been at their school for six to nine years.

For the second ANOVA, as was done in the previous study, teachers were placed into one of six groups depending on the total number of years they had been teaching, regardless of whether they were at the same location or not. As seen in Table 4 of the Appendix, a significant difference in teacher leadership was found among the groups, with more teaching experience resulting in significant increases in teacher leadership. Teachers who have been teaching for less than 2 years, 2 to 5 years, 6 to 9 years, 10 to 13 years, 14 to 17 years, or 18 years or more had respective teacher leadership means of 36.14, 42.44, 46.50, 47.06, 48.18 and 50.26. A Scheffe post-hoc analysis, however, revealed that the gains in teacher leadership are no longer

statistically significant after six to nine years of teaching. One exception to this is the group of teachers who have taught for 18 years or more; they exhibit significantly greater teacher leadership than those with less experience.

Other variables associated with teacher leadership

The previous study hypothesized and found that certain demographic variables, such as teachers' gender and level of education, are each related to teacher leadership. To corroborate these findings, two independent samples t-test procedures were conducted. With regard to teachers' level of education, teachers who had a master's degree exhibited significantly greater levels of teacher leadership ($M = 46.79$, $SD = 8.77$) than did those teachers who only had a bachelor's degree ($M = 43.38$, $SD = 9.09$), $t(2971) = -10.40$, $p < .001$. Additionally, females exhibited significantly greater levels of teacher leadership ($M = 45.58$, $SD = 8.90$) than did males ($M = 43.59$, $SD = 9.51$), $t(2986) = -5.30$, $p < .001$. These findings are consistent with the previous study: female teachers and teachers who earned a master's degree each exhibit greater levels of teacher leadership than do males and those who earned only a bachelor's degree, respectively.

One variable that was not considered in the previous study is the role of AVID site coordinator, a leadership position that some teachers hold. As AVID elective teachers become more experienced in their role and function within the AVID program on their campus, it is not uncommon for them to assume or be assigned the role of AVID site coordinator. Twenty-nine per cent of the teachers in the current study were also AVID site coordinators, and, as expected, they exhibited a significantly higher level of teacher leadership ($M = 47.55$, $SD = 8.80$) than AVID teachers who were not site coordinators ($M = 44.02$, $SD = 9.04$), $t(2955) = -9.73$, $p < .001$. However, it is worth noting that AVID site coordinators, on average, had more teaching experience, received more professional development, and had a higher level of education than elective teachers who were not site coordinators.

Predictive power of each variable

All of the variables examined in this research are significantly related to teacher leadership. Therefore, to examine the unique predictive power of each variable on teacher leadership, a series of simple regression models were run. Individual model summaries from the simple regressions are displayed in Table 5 of the Appendix. Also included is a multiple regression that shows the joint predictive power when all of the variables are factored into one model simultaneously. The adjusted R-square values indicate that, when considered individually, gender accounts for the least amount of variance (less than 1%) in teacher leadership. Years of total teaching experience, however, accounts for the most amount of variance (16%). AVID professional development, as measured by the number of SIs attended, accounts for almost 2% of the variance in teacher leadership. The additional measure of AVID professional development, quantified by the number of AVID trainings led by district/regional directors

that teachers attended, accounts for almost 3% of the variance in teacher leadership. Even the role of AVID site coordinator, when viewed as an individual predictor, accounts for just over 3% of the variance in teacher leadership.

When all of the variables are included in a regression model simultaneously, R-square is 0.210 which means that approximately 21% of the variability in teacher leadership is accounted for by these variables. Just as was the case in the previous study, the predictor variables explain overlapping portions of the variance in teacher leadership. If there was no overlap among the predictors, then the complete model would account for the sum of the R-square values from the simple regression models – roughly 38%. One example of overlap is evident when reviewing the effect of the number of AVID SIs that teachers attend. This variable, though significant when considered by itself (as seen in Table 5 of the Appendix), was not a significant predictor of teacher leadership when the effects of all the other variables were accounted for or held constant. However, this was not the case in the previous study (Huerta *et al.*, 2008), where AVID SIs were found to significantly predict changes in teacher leadership even after the effects of a teacher's gender, level of education, and teaching experience were held constant. The inability to replicate such a finding is likely due to the fact that the current study includes two additional predictor variables that were not considered in the previous study: the additional measure of professional development and the role of the AVID site coordinator.

To determine whether AVID professional development impacts the teacher leadership of inexperienced teachers differently than experienced teachers, two multiple regression analyses were conducted, one for each group of teachers. AVID teachers were divided into two groups depending on whether they had been teaching for less than 10 years or for more than 10 years. Additionally, AVID site coordinators were removed from these groups in order to focus on how AVID impacts the majority of elective teachers who do not hold formal roles of leadership. Results from the multiple regressions are compared in Table 6 of the Appendix and indicate that gender, level of education and AVID professional development (via the number of additional AVID trainings attended) are each significant predictors of teacher leadership, regardless of whether a teacher is experienced or inexperienced. The analyses also reveal that inexperienced teachers' level of teacher leadership is further influenced by professional development received from the AVID summer institutes. This explains why more variance (adjusted R square) in the group of inexperienced teachers' level of teacher leadership is accounted for by the predictor variables.

The column of raw *B* coefficients in Table 6 of the Appendix indicates the extent that teacher leadership will change given a one-unit increase in the respective predictor variable when the other predictor variables are held constant. For example, when an inexperienced teacher's level of education increases by one unit their teacher leadership, as measured on the teacher leadership scale, is expected to increase by 2.652 points. Remember, however, that level of education is a dichotomous variable where 0 = bachelor's degree and 1 = master's degree, which means getting a master's degree increases teacher leadership by 2.652 points for inexperienced teachers when the other variables are held constant. By the same

token, a one-unit increase in inexperienced teachers' AVID professional development, as measured by the number of AVID SIs attended or the number of additional AVID trainings received, would result in an increase of 1.033 or 1.095 points on the teacher leadership scale, respectively. Since these two professional development variables are continuous variables, there is potential for teachers to obtain even further increases in teacher leadership as they receive more AVID professional development.

Conclusions and implications

Researchers examined teacher leadership and AVID professional development using more comprehensive measures than those used in Huerta *et al.* (2008); however, essentially the same methodology and procedures were utilized in the current study. This resulted in the successful replication of several findings from Huerta *et al.* (2008) which support the notion that AVID professional development has a positive impact on teacher leadership. Teacher leadership increases as teachers receive more, and varying types of, AVID professional development. Moller (2005) recognizes the importance of building the capacity of teachers by providing professional development that will result in teachers taking an active role in affecting change.

Teachers grow as leaders as they obtain more teaching experience, whether at their current school or with teaching in general. However, the current study showed that after 6–9 years of teaching, increases in leadership were no longer statistically significant. This is one area where noticeable benefits to receiving professional development become clearly evident. The leadership of experienced teachers, those teaching for 10 years or more, is positively influenced by AVID's professional development trainings that are led by district and/or regional directors. Interestingly, although the gains in teacher leadership stop becoming significant after 6–9 years of teaching, those having 18 or more years of teaching experience are the exception and continue to show gains. An important lesson learned from this finding is that more experienced teachers continue to develop as leaders and that perhaps you can in fact 'teach old dogs new tricks'.

These types of AVID trainings positively impact the teacher leadership levels of teachers as they engage in more and more professional development. Because AVID strives to create or enhance a college-going culture at the school that supports high expectations and levels of achievement for all students (AVID Center, 2009), teachers are able to gain the knowledge, skills and tools necessary to become change agents in their schools. The importance of attending the AVID summer institute for AVID teachers and site coordinators is reinforced by the findings of this study, as is the need for continued professional development activities that assist teacher leaders in bringing about schoolwide change.

One limitation of the current study is whether or not these findings could be generalized or replicated outside the context of AVID. The professional development delivered through AVID summer institutes and other trainings led by AVID's district or regional directors is part of a comprehensive professional development

structure. Though other college preparatory programs and school reform efforts possess different types and degrees of professional development, the authors believe that future studies could examine whether relationships exist between other types of professional development and teacher leadership outside the context of AVID while utilizing methodology similar to that of the current study. As long as teachers are provided with proper resources, information, and expertise, then they can affect change in their schools as teacher leaders (Hallinger & Richardson, 1988). Whether such relationships will be found, however, depends on the content of professional development and the context in which it is delivered to teachers.

When stepping back and viewing the big picture, one may want to conclude that certain types of professional development, such as attending the AVID summer institute, are better suited for newer, less experienced teachers whereas other types of professional development, such as attending AVID trainings led by district or regional directors, are better suited for teachers with more teaching experience. As mentioned before, AVID professional development is comprehensive and builds upon previous AVID experience and training once acquired. The findings of the current study, as well as those of Huerta *et al.* (2008), indicate that AVID does in fact support educators with quality professional development, which in turn helps them become more apt in their leadership abilities.

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Appendix

Directions: The following is a list of activities that teachers sometimes engage in. For each item, please mark a number that best describes your own behavior within the past 12 months. Use the following scale: 1 = not yet; 2 = rarely; 3 = sometimes; 4 = often.

- Involvement/membership in professional teacher organizations
- Help design school policy
- Involved in campus level decision-making
- Plan school improvement
- Redesign instruction based on student assessment
- Share ideas with colleagues
- Is a mentor to new teachers
- Help make personnel decisions
- Create partnerships with the community
- Involved in selecting types of professional development
- Present or lead a workshop/session to colleagues
- Influence school budgeting
- Collaborate with peers
- Lead or chair school committees
- Reflect on your own teaching practice
- Initiate school activities

Table 1. ANOVA results for teacher leadership by number of SIs previously attended

Number of SIs Previously Attended	Teacher Leadership			F-ratio
	<i>N</i>	<i>M</i>	<i>SD</i>	
None	1768	44.05	9.50	
One	934	46.27	8.30	
Two	192	46.90	8.32	
Three or more	92	48.05	7.83	
Source	Sum of Squares	Df	Mean Squares	F-ratio
Between Groups	4620.23	3	1540.08	18.92*
Error	242717.41	2982	81.39	–

* $p < .001$.

Table 2. ANOVA results for teacher leadership by number of activities led by DD/RD

Number of Additional Activities Attended	Teacher Leadership			
	<i>N</i>	<i>M</i>	<i>SD</i>	
None	1267	43.86	9.48	
One	718	44.47	8.85	
Two	551	46.17	8.29	
Three	314	47.12	8.59	
Four	138	49.91	8.21	
Source	Sum of Squares	Df	Mean Squares	F-ratio
Between Groups	7319.23	4	1829.81	22.73*
Error	240141.99	2983	80.50	–

* $p < .001$.

Table 3. ANOVA results for teacher leadership by years of teaching experience at current school

Yrs of Teaching Exp at Current School	Teacher Leadership			
	<i>N</i>	<i>M</i>	<i>SD</i>	
Less than 2	770	40.94	9.98	
2 to 5	1275	44.62	8.13	
6 to 9	496	48.30	7.91	
10 to 13	225	49.80	7.29	
14 to 17	111	50.25	8.62	
18 or more	110	49.61	7.53	
Source	Sum of Squares	df	Mean Squares	F-ratio
Between Groups	28845.03	5	5769.01	78.89*
Error	217988.11	2981	73.13	–

* $p < .001$.

Table 4. ANOVA results for teacher leadership by years of total teaching experience

Yrs of Total Teaching Exp	Teacher Leadership			
	<i>N</i>	<i>M</i>	<i>SD</i>	
Less than 2	296	36.14	8.86	
2 to 5	891	42.44	8.19	
6 to 9	649	46.50	8.24	
10 to 13	428	47.06	8.19	
14 to 17	284	48.18	8.00	
18 or more	440	50.26	7.78	
Source	Sum of Squares	df	Mean Squares	F-ratio
Between Groups	47394.03	5	9478.81	141.28*
Error	200067.18	2982	67.09	–

* $p < .001$.

Table 5. Regression model summaries for predictors of teacher leadership

Predictor Variables as Simple Regression Models	Adjusted		
	<i>R</i>	<i>R Square</i>	<i>F</i>
Gender	0.097	0.009	28.070*
Level of Education	0.187	0.035	108.197*
# of AVID SIs Attended	0.131	0.017	52.143*
# of Additional AVID Trainings Attended	0.167	0.028	85.509*
Role as an AVID Site Coordinator	0.176	0.031	94.644*
Yrs Teaching Exp at Current School	0.315	0.099	328.495*
Yrs Total Teaching Exp	0.401	0.161	571.441*
Complete Multiple Regression Model with All 7 Predictors	0.460	0.210	112.305*

* $p < .001$.

Table 6. Comparison of multiple regression analyses for predictors of teacher leadership in inexperienced versus experienced AVID elective teachers

Predictor Variables	Inexperienced Teachers			Experienced Teachers		
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	β
Gender	1.284	0.509	0.066*	2.346	0.682	0.124**
Level of Education	2.652	0.473	0.148**	1.996	0.596	0.121**
# of AVID SIs Attended	1.033	0.413	0.072*	–0.366	0.412	–0.036
# of Additional AVID Trainings	1.095	0.232	0.135**	0.631	0.271	0.093*
<i>Adjusted R square</i>		.054			.034	
<i>F</i>		20.476**			7.514**	

* $p < .05$. ** $p < .01$.