



Teachers' perceptions of professional development experiences: an ongoing concern

Percepciones de docentes acerca de las experiencias de desarrollo profesional: una preocupación que continúa

Jafeth E. Sanchez,
Susan L. Williams,
Margaret M. Ferrara,

University of Nevada, United States

Journal for Educators, Teachers and Trainers, Vol. 9 (1)

<http://www.ugr.es/~jett/index.php>

Fecha de recepción: 06 de diciembre de 2016

Fecha de revisión: 16 de junio de 2018

Fecha de aceptación: 17 de septiembre de 2018

Sanchez, J.E., Williams, S.L., & Ferrara, M.M. (2018). Teachers' perceptions of professional development experiences: an ongoing concern. *Journal for Educators, Teachers and Trainers*, Vol. 9(1). 102 – 115.



Journal for Educators, Teachers and Trainers, Vol. 9 (1)

ISSN 1989 – 9572

<http://www.ugr.es/~jett/index.php>

Teachers' perceptions of professional development experiences: an ongoing concern

Percepciones de docentes acerca de las experiencias de desarrollo profesional: una preocupación que continúa

Jafeth E. Sanchez, jesanchez@unr.edu

Susan L. Williams, susanwilliams@netzero.com

Margaret M. Ferrara, ferrara@unr.edu

University of Nevada, United States

Abstract

Teachers' perceptions of professional development experiences related to process, content, and context were explored to better address leadership preparation needs. Teachers responded to the Professional Development Questionnaire, three demographic variables (teaching experience, Title 1 status, and current grade level) pertaining to the individual, and one open-ended comment field. A total of 327 teachers from a large western school district in the United States responded. The findings indicated that there were no significant differences for the three demographic grouping variables. Overall, results revealed low mean values, indicating that teachers disagreed or strongly disagreed with statements related to their professional development experiences. Teachers also indicated that their own building administrators did not value professional development. Finally, teachers' perceptions of professional development also suggested that professional development topics were irrelevant, and that they were not provided with enough time to integrate topics into their current practice

Resumen

Se exploraron las percepciones de maestros acerca de las experiencias de desarrollo profesional relacionadas con el proceso, el contenido y el contexto, a fin de responder mejor a las necesidades de preparación para el liderazgo. Maestros respondieron al Cuestionario de Desarrollo Profesional, tres variables de agrupaciones demográficas (experiencia enseñando, estado de Título 1, y nivel de grado actual) pertenecientes al individuo, y un campo de comentarios de composición abierta. Un total de 327 maestros de un distrito escolar grande del occidente de los Estados Unidos respondió. Los resultados revelaron que no había diferencias significativas para las tres variables de agrupación demográfica. En general, los resultados revelaron bajos valores promedios, indicando que los maestros estaban en desacuerdo, o fuertemente en desacuerdo con las declaraciones relacionadas a sus experiencias de desarrollo profesional. Los maestros también indicaron que sus propios administradores no valoraban el desarrollo profesional. Finalmente, las percepciones de los maestros de desarrollo profesional también sugirieron que los temas al respecto eran irrelevantes y que ellos no tenían suficiente tiempo para integrar dichas cuestiones en su práctica cotidiana

Keywords

Teachers; Perceptions; Professional development; Principals; Capacity; Questionnaire

Palabras clave

Maestros; Percepciones; Desarrollo profesional; Directores; Capacidad; Cuestionario

1. Introduction

School education leaders face many complex challenges in today's era of accountability and increased level of student diversity. Some challenges are unique and created by today's changes in the way instruction is delivered or how curriculum is framed and selected for the classroom. Teachers are now faced with current demands on how to integrate technology in the classroom, implement state approved Common Core Standards, align learning targets to assessment methods, and build teacher capacity to address multiple areas of school reform effectively. One challenge is time-old but persists is high-quality professional development through teacher support and training (Dana & Yendol-Hoppey, 2008; Joyce & Calhoun, 2010; Killion, 2013). Ironically, this challenge is one that needs to be confronted and challenged. After all, professional development is an essential tool for increasing teachers' capacity related to knowledge, skills, attitudes, and beliefs to successful impact academic outcomes for students (Cohen & Hill, 2000; Dana & Yendol-Hoppey, 2008; Joyce, Weil, & Calhoun, 2015; Quint, 2011).

Teacher professional development largely dependent on administrator support. It is critical that leadership preparation programs provide opportunities for aspiring principals to consider and examine existing needs related to professional development for teachers, including teachers' perceptions of professional development experiences. As such, this study is part of a larger study (Williams, 2014) that explored teachers' perceptions of professional development experiences in response to the Professional Development Evaluation Questionnaire (Guskey, 2000, 2002). Teachers' perceptions of professional development experiences related to process, content, and context were explored to better address leadership preparation needs. Teachers responded to the Professional Development Questionnaire, three demographic variables (teaching experience, Title 1 status, and current grade level) pertaining to the individual, and one open-ended comment field. This study and its findings provide a stronger understanding of existing teachers' perceptions that may help leadership preparation programs support aspiring leaders in how to frame problems related to professional development, consider existing teacher data for exploration, and practice ways to effectively assess and implement professional development within a school leadership role.

2. The role of professional development

Guskey (2000) viewed professional development as an important endeavor central to the advancement of the education profession. He described professional development as a series of processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve student achievement. Guskey advocated that professional development is a process that is intentional, ongoing, and systemic. In addition, he believed that the vast majority of teachers and school administrators are keys to school improvement and are dedicated professionals who work hard under extremely demanding situations. Guskey (2000) highlighted that "*the importance of professional development did not stem from an acknowledgement of deficiencies; rather, it was rooted in the growing recognition of education as a dynamic, professional field*" (p. 30).

The concept of professional staff development has been explored as an essential mechanism to support student learning and achievement. Dana and Yendol-Hoppey (2008) noted that many educators believe teacher learning is an indispensable component of school improvement; the authors suggested that participation in certain kinds of professional development and time spent in those programs are related to gains in student achievement and teacher classroom practices. Fullan (2010) indicated that professional development is necessary in helping staff develop communication, build trust, collaborate, problem-solve, and facilitate skills needed for transformational leadership. According to Fullan (2010), professional development is also needed to help teachers engage in critical analysis of their teaching, better understand how students learn, and make their teaching more student-centered and meaningful to enable students to become active participants, critical thinkers, and life-long learners. Staff development is also important in assisting educators to critically examine and identify key

aspects of a school's culture, which may lead to changes in curriculum, instruction, and student achievement (Fullan, 2010). Lowden (2003) explained that teachers believed that effective professional development was critical for teacher growth and student achievement. Lowden (2003) also reported a strong correlation between teachers' reported implementation of new knowledge and skills in the classroom and the impact on student learning outcomes.

3. A framework for professional development

Guskey (2000, 2002) structured his professional development evaluation on a theoretical framework that included three categories and used six critical levels of evaluation to assess impact. The three categories are consistent with the Standards for Staff Development (National Staff Development Council, 2001). He defined process variables as the *how* of professional development. This includes not only the type and form of professional development but the way these activities are planned, organized, carried out, and followed up. Then, content characteristics refer to the *what* of professional development. Content is the foundation of professional development trainings that incorporates new knowledge, skills, and understandings. This is characterized by participants having a deeper understanding of particular academic disciplines, specific pedagogical processes, or new role expectations and responsibilities. Also included in content characteristics are the magnitude, scope, credibility, and practicality of the change required to implement new knowledge and skills. Finally, context characteristics are the *who*, *when*, *where*, and *why* of professional development.

In addition, to the three major categories, the theoretical framework for professional development evaluation includes six critical levels for gathering information about professional development. These are arranged hierarchically from simple to complex as follows: (a) participants' reaction; (b) participants' learning; (c) organization support and change; (d) participants' use of new knowledge and skills; (e) student learning outcomes; and (f) participants' change in attitudes and beliefs (Guskey, 2000; Lowden, 2003, 2005; Tallerico, 2012). The first level focuses on teachers' satisfaction and reactions to their professional development experience. It is primarily concerned with whether teachers liked the experience. The second level explores the acquisition of new knowledge skills; it is to validate the relationship between what was intended and what was achieved in terms of professional development. It can be used formatively to correct misunderstandings prior to implementation or summatively to clarify problems or difficulties experienced (Guskey, 1997, 2000). The third level provides questions that help analyze organizational support and change in a specific school or district. These include probes to explore teacher perceptions regarding how supportive the district policies are, the strength of leadership in the district, quantity of resources, and the atmosphere in the school and district (Guskey, 2000; Newmann, Smith, Allensworth, & Bryk, 2001).

The fourth level includes questions related to how participants use newly acquired knowledge and skills. Participants are asked whether the new knowledge and skills resulted in a change in their teaching practice and increased student achievement (Guskey, 2000). The fifth level explores the impact on student learning outcomes and can be used to focus and improve all aspects of the professional development progress-design, implementation, follow-up, and continuation (Guskey, 2000). Lastly, the sixth level addresses change in attitudes and beliefs of participants' teaching and learning. According to Guskey (2002), although professional programs differ in delivery there is generally a common purpose – to change teachers' classroom practices, beliefs and attitudes, and improve student learning through such changes. With these potential changes in mind, Lowden (2003) designed the Professional Development Questionnaire that incorporated six critical levels of professional development evaluation as framed by Guskey (2000, 2002).

4. The role of the principal

The desired changes related to professional development need the support and guidance of the school leader. The principal's role is to structure professional development to support the school culture, vision and mission, and ultimate goal of continuous improvement in student achievement. The outcome of professional development for teachers should be improved pedagogical skills that help all students gain essential knowledge and skills as part of life-long learning (Cook, 2015; Darling-Hammond & Richardson, 2009). More importantly, this type of effective professional development is identified by teachers and school leaders as essential for improving overall achievement in schools across the United States (Darling-Hammond & Richardson, 2009). This is an ambitious quest as the vast majority of practicing teachers currently in schools were educated under a different paradigm of instruction and learning (Fullan, 2010; Prothero, 2015; Thompson & Zeuli, 1999).

Currently, organizations such as Learning Forward have created the Standards for Professional Learning and one of the standards is to help administrators establish and sustain effective professional learning, one of which includes leadership. This particular standard specifically indicates a lens on professional development: "*Leadership: Professional learning that increase educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate and create support systems for professional learning*" (Standards for Professional Learning, nd, p. 2). The standard serves as a paradigm shift for school leaders who are charged providing ongoing and meaningful professional development for their school teachers and school staff (Cook, 2015; Zimmerman & May, 2003).

5. Methodology

The study took place in a larger western district, the second largest district in the state with approximately 63,000 students; 54% of the students are from diverse backgrounds and 46% as Caucasian. The district's most recent data profile from 2014-2015 indicated that the high school graduation rates are at their highest, 75%. The district has 64 elementary schools, 14 middle schools, and 11 high schools. There are approximately 200 administrators and 3,700 teachers. For this study, there were 327 teachers who responded to the questionnaire. Of those teachers, their teaching experience ranged from one year to 44 years of experience, the median was 13 years of experience. There were 166 (51%) and 160 (49%) who indicated having 1-13 and 14-44 years of experience, respectively. The teachers' grade levels also varied. The fewest group of respondents included 48 (15%) teachers within an auxiliary level, followed by 130 (40%) who taught at the secondary level, and 149 (46%) taught at the elementary level. For teachers who taught at the elementary levels, including 33 auxiliary teachers, data was collected regarding whether they taught at a Title I elementary school. There were 89 teachers at Title I elementary schools, and 93 teachers at non-Title I school.

Data for this study were collected using an electronic questionnaire available to all teachers in the school district. The questionnaire was distributed after a three-year period of time in the district during which there was a focus on a strategic improvement plan designed to direct and focus personnel to transition into a new phase of educational reform efforts. A section in the strategic improvement plan was devoted to providing appropriate, quality training and professional development to all staff members.

The researchers followed the protocol necessary to conduct this study. Approval was attained from the university's Institutional Review Board and from the school district. The district's chief accountability officer provided deidentified existing data that included the responses from the Professional Development Evaluation Questionnaire, which were then used for the purposes of this study. At the district level, teachers were informed about a questionnaire through the district's web-based weekly newsletter. The invitation seeking teachers' responses to the questionnaire remained on their web-based newsletter for eight weeks. The letter invited teachers to complete the questionnaire, which was available via a hyperlink and housed on the school district's server. A similar invitation to participate in the questionnaire was emailed from

the district officer to certified staff in all schools in the school district, and a total of 327 teachers completed the questionnaire.

5.1. Questionnaire

The Professional Development Evaluation Questionnaire (Lowden, 2003), from which data were attained for this study, is organized into two sections and consists of three major categories for professional development evaluation – process, content, and context. The first section of the instrument focuses on the demographic data, as well as the process and content categories for professional development. The demographic data asks teachers to indicate their total years of teaching experience, their years of teaching within the current district, the grade level they teach, their subject/content area, and whether they are at a Title I or non-Title I school. Then, the process category for professional development evaluation is identified by the first set of questions, which aim to identify teachers' perceptions of how they believe professional development is linked to particular goals and ask teachers to indicate the types of professional development models and delivery methods they have experienced. The next set of questions probe teachers' perceptions about professional development and recent professional development in which they were engaged. Both of these questions also have an open-ended option for teachers to provide additional input.

The second section of the instrument focuses on the third major category for professional development evaluation, which is the context. A total of 40 questions ask teachers to agree or disagree with statements about professional development related to context. Teachers are asked to use a Likert scale with five possible ratings, with 1 = Strongly Disagree, 2 = Disagree, 3 = No Opinion; 4 = Agree, and 5 = Strongly Agree. These questions are the core of the questionnaire and create the six levels of professional development evaluation (see Williams, 2014). The levels and their corresponding questions are as follows: (a) teachers' reaction with Questions 10 – 15, (b) teachers' learning with Questions 16 – 19, (c) organizational support and change with Questions 20 – 24, (d) teachers' use of new knowledge and skills with Questions 25 – 29, (e) student learning outcomes with Questions 30 – 37, and (f) teachers' change in attitudes and beliefs with Questions 38 – 52. As previously noted, there is a hierarchical arrangement to each level, which means each subsequent level provides more meaningful information about teachers' perceptions (e.g., Level 6 is more informative than Level 1). The ratings for each question and within each level provide a rating score and the sum of the levels can be used as an overall evaluation for professional development. An open-ended option at the end of the questionnaire is available for further comment by the teacher respondent.

5.2. Research design and data analysis

A quantitative research design was used as a guide in the analyses of this study. For each of the designated groups in the research questions, statistical analyses were conducted using Analysis of Variance (ANOVA) or *t* tests. Prior to each analysis, Levene's test was used to determine homogeneity of variance, and assumptions of normality were confirmed for the six levels of evaluation and the value for the overall total score of these levels, as attained from teacher responses to the Professional Development Questionnaire. Although the Pearson Correlation Coefficient was calculated by Lowden (2003), Cronbach's alpha was used in this study to assess the instrument's internal reliability. Specifically, the six subscales were analyzed using Cronbach's alpha; this resulted in a value of .842, which indicates strong internal reliability. For the questionnaire in this study, face validity was not assessed, but experts in the field of education and professional development have verified this validity (Lowden, 2003). Finally, the additional comments provided in regard to teachers' professional development experiences were examined in their entirety using content analysis to identify trends and patterns in order to make inferences (Stemler, 2001).

There were three independent variables (i.e., years teaching experience, Title 1 status, and current grade level) and seven dependent variables (i.e., six levels of evaluation scores and a total score of levels) used in this study. The dependent variables were comprised of several questions with a 5-point Likert scale, as previously discussed. A unique set of questions formed

the six levels and, therefore, provided a score for each level. The scores from each level were summed to create an overall total score of the levels. For the purposes of this study, the score ratings attained from the questionnaire were treated as continuous variables and analyses were conducted accordingly. Along with this, the areas of the survey that were open-ended for teacher comments were used to augment the descriptive data. The larger study provides further variable and coding details (see Williams, 2014).

6. Limitations

There are several limitations that were considered in this study. The first limitation is a lack of research on professional development in the district where the current study took place, so there was no comparative data to help determine whether there had been any changes in teachers' perceptions in professional development. Second, this study did not include a direct measurement of student achievement, which would have given the study another dimension. Third, inasmuch as multiple test scores were used, the statistical probability of a Type I error is increased (Green & Salkind, 2008). Fourth, this study was conducted in a large school district; however, the results were limited to those who responded and cannot be generalized.

7. Results

7.1. Descriptive findings

7.1.1. Process: questions 1-7

In analyzing teacher responses related to professional development process and goals, Questions 1-5 provided information about their views. The yes response with the highest percentage (80%) was in teachers indicating they received training in teaching English Language Learners. The next highest percentage was in being aware of the district's professional development plan (68%), as well as believing that their professional development plan is linked to school improvement and student achievement (68%). At the same time, a number of teachers (37%) indicated they were not sure if the professional development plan was related to the teacher evaluation process. Similarly, a number of teachers (42%) indicated that they had not received training in teaching students with special needs.

Question 6 asked teachers to identify how professional development was offered. There were 91% of teachers who indicated they participated in professional development during an early-release day. In addition, 73% also said they participated in professional development during the beginning of the academic school year. The next closest response was in professional development being offered in the evening, with 63% of the teachers choosing this option. However, the lowest response in professional development opportunities was during their lunch hour (3%).

Question 7 sought information about the type of activity in which they had participated for professional development within six major types as follows: (a) individually guided staff development, (b) observation/assessment, (c) involved in development/improvement process, (d) training, (e) inquiry, and (f) courses. The highest response was in the category of observation/assessment, where 91% identified their classroom evaluation by their administrators and the formal feedback as the type of professional development delivery. The next was within training, which reflected half-day or full-day workshops or seminars (90%) and presentations and demonstrations (82%). Courses were also selected as a prime type of professional development, with 80% of the teachers selecting graduate courses as a means of professional development. Interestingly, only 49% selected guided practice, 48% selected peer study groups, 43% selected peer observation, and 42% identified mentoring as professional development formats in which they had participated.

7.1.2. Content: questions 8-9

For Question 8, teachers could select multiple options to identify who was involved in the decision-making process for professional development. Many teachers (68%) responded that the district level administrators or the building level administrators were making decisions about the professional development content offered. Some teachers (34%) indicated that they decided the content for professional development, while other teachers (32%) indicated it was a combination of individuals who were part of the decision making process. Grade level or department chairs (22%) and a Professional Development Committee (20%) received a low percentage, indicating less involvement in the content decision-making for professional development in the district. The respondents were also given an open-ended option of *other* if they wanted to more specifically address who was involved in the decision-making process; there were 23 (7%) teachers who selected this option. However, their comments indicated that they did not know who was involved in the decision-making process for identifying the topics of teachers' professional development opportunities. In Question 9, 258 of the 327 respondents (79%) listed three professional development opportunities offered by the school district. Most notably, 91 of teachers (28%) specified professional development participation opportunities were related to academics, curriculum, and training for the Common Core State Standards (CCSS). The next highest response included 74 teachers (23%) who listed opportunities related to learning about instructional models. There were 19 teachers (6%) listed a topic related to assessment and data.

7.1.3. Context: questions 10-52

Questions 10-52 were examined in Section Two, which represented the hierarchical Levels 1-6 of the professional development evaluation. Level 1 responses were in regard to teacher's reactions about professional development in their district. There were six statements and the highest response was in the area of time well-spent ($M = 3.03$, $SD = 1.23$), while the lowest one was in regard to professional development being non-threatening ($M = 2.21$, $SD = .894$). Level 2 included four statements that aimed to identify whether a new skill or knowledge was learned as a result of the professional development. The highest rating was in learning the theory behind the practice ($M = 2.72$, $SD = 1.07$), while the lowest rating was in learning practical instructional strategies ($M = 2.35$, $SD = 1.04$). Level 3 represented five statements related to organizational support and change efforts that occurred through professional development in the district. The statement with the highest rating was related to professional development being recognized as extremely important by parents ($M = 3.37$, $SD = .896$), followed by being recognized as extremely important by colleagues ($M = 3.22$, $SD = 1.11$), and having a positive impact on the culture and climate of their school ($M = 3.03$, $SD = 1.17$). The response with the lowest mean ($M = 2.17$, $SD = .874$) was in regard to whether professional development in the district was recognized as being extremely important by building administrators.

Level 4 included five statements related to using new knowledge gained from the professional development. This addressed whether teachers applied, implemented, and experimented with new instructional strategies and classroom practices. Results indicated that teachers rated their commitment to new teaching strategies ($M = 2.69$, $SD = 1.02$) and long-lasting changes in their teaching ($M = 2.66$, $SD = 1.04$) among the highest means. The statement with the lowest mean ($M = 2.18$, $SD = .943$) was in regard to whether teachers experimented or practice the new instructional strategies when returning to their classrooms. In Level 5, teachers responded to eight statements that aimed to identify how teachers believed professional development generally impacted student learning. The statement with the highest mean ($M = 3.02$, $SD = .931$) was in regard to student increases on state or district assessments. Yet, the statement with the lowest mean ($M = 2.46$, $SD = .974$) was in regard to whether professional development had a positive impact on students' learning. Finally, Level 6 included 15 statements, which were about teachers' changes in attitudes and beliefs about teaching and learning. The highest mean ($M = 2.37$, $SD = 2.04$) was within teachers' attitudes and beliefs changing when professional development connects to district needs and overall school improvement. The statements with the lowest means were in regard to whether teachers' professional development experience was meaningful to them ($M = 1.86$, $SD = 1.03$) and whether teachers learned practical instructional strategies ($M = 1.83$, $SD = .936$).

It is also useful to consider a more holistic view and look at the mean of means for each of the six levels. These are presented in Table 1. The highest mean rating was within Level 3, which measures organizational support and change efforts. However, the area was the lowest mean rating was within the Level 6, which measures the greatest impact of professional development – student learning. Overall, these mean ratings further revealed that teachers were far from agreeing or strongly agreeing with positive impacts of professional development experiences. When examining means unique to each statement or the means for each level, all values were reflective of disagreement or no opinion. More specifically, none of the responses indicated positive agreements with statements related to their professional development experiences.

Table 1.
 Level 1-6 Mean of Means

Dependent Variable	<i>M</i>	<i>SD</i>
Level 1	2.65	.87
Level 2	2.51	.94
Level 3	2.81	.61
Level 4	2.46	.88
Level 5	2.79	.89
Level 6	2.10	.88
All Levels (1 – 6)	3.16	.86

At the end of the questionnaire, Question 53, was an open-ended option for respondents to write comments concerning their professional development experiences offered by the school district. There were 107 comments provided; of those comments, 51 teachers indicated professional development was irrelevant, 16 teachers said they lacked time to implement any learnings, and 14 teachers indicated they lacked input in the process. While most comments clearly fit into these three themes, there were 26 teachers whose comment did not seem to fit into these themes; the comments were generic or unrelated to professional development.

7.2. Research question 1

Independent samples *t* tests were conducted based on 326 responses for years of teaching experience. Teachers with 13 or less years of experience were $n = 166$, while those with 14 or more years of experience were $n = 160$. These two groups were used to address the following question for this study: When groups are established by total number of years teaching experience, are there group differences on mean scores and total mean scores in each of the six levels of evaluation?

For this question, the dependent variables were Levels 1 – 6 and All Levels. Of note, during the data screening process, square root variable transformations to approximate or meet normality (Mertler & Vannatta, 2013) were conducted for Levels 1, 4, 5, and the All Levels variables. However, Levels 2 and 6 were variables that necessitated a logarithm transformation to also meet the normality assumption, as both of these had a substantial, positive skew (Mertler & Vannatta, 2013). Level 3 did not require a transformation, as the assumption of normality was met. These variable values were used for Research Question 1, as well as subsequent questions. In analyzing the data for Research Question 1, Levene's test was significant ($p = .027$) for Level 4; thus, homogeneity of variance was not met, so a Mann-Whitney *U* test was conducted on this variable. After conducting the Mann-Whitney *U* test for Level 4, results were not significant ($M_{Rank, 13orLess} = 165.23$, $M_{Rank, 14orMore} = 161.71$, $U = 12,999$, $z = -.34$, $p = .734$). Therefore, there were no group differences between the two groups of years of teaching experience when examining Level 4. The results of *t* test analyses for all other levels are

presented in Table 2. Results indicated there were no group differences between the two groups of years of teaching experience for any of the levels and the total score of levels.

Table 2.
Transformed Data, Independent Samples t Tests for Research Question 1

Dependent Variable	<i>M</i> 13orLess	<i>M</i> 14orMore	<i>t</i>	<i>p</i>
Level 1	4.05	4.069	-.202	.840
Level 2	1.29	1.29	-.085	.932
Level 3	28.42	27.74	.324	.314
Level 5	4.80	4.76	.414	.679
Level 6	1.60	1.60	.451	.652
All Levels (1 – 6)	10.90	10.82	.511	.610

Note. $p > .05$ indicates no statistical significance found. Based on transformed data.

7.3. Research question 2

Independent samples *t* tests were conducted using 182 respondents; elementary teachers from Title 1 schools were $n = 89$ and non-Title 1 schools were $n = 93$. As with Research Question 1, the transformed values were used; the dependent variables were Levels 1 – 6 and All Levels. For Level 2, Levene’s test was significant ($p = .013$), thus homogeneity of variance was not met, so a Mann-Whitney *U* was conducted on this variable. After conducting the Mann-Whitney *U* test for Level 2, results were not significant ($M_{Rank, 13orLess} = 92.07$, $M_{Rank, 14orMore} = 90.96$, $U = 4,088$, $z = -.145$, $p = .885$). The results of the *t* test analyses for all other levels are described in Table 3. There were no group differences between the elementary teachers with Title 1 and non-Title 1 for any of the levels and the total score of levels.

Table 3.
Transformed Data, Independent Samples t Tests for Research Question 2

Dependent Variable	<i>M</i> Title I	<i>M</i> non-Title I	<i>t</i>	<i>p</i>
Level 1	4.12	4.08	.468	.640
Level 3	28.15	28.33	-.200	.842
Level 4	3.63	3.63	.043	.966
Level 5	4.81	4.84	-.285	.776
Level 6	1.61	1.60	.357	.721
All Levels (1 – 6)	10.97	10.93	.147	.883

Note. $p > .05$ indicates no statistical significance found.

7.4. Research question 3

A one-way ANOVA for Research Question 3 was conducted using the complete dataset of respondents ($n_{Elementary} = 149$, $n_{Secondary} = 130$, $n_{Auxiliary} = 48$). All assumptions were met and one-way ANOVAs were conducted based on the transformed values. The transformed mean values of the three categories were in proximity to one another and there were no differences found among the three categories and professional development levels, as provided in Table 4.

Table 4.
One-Way ANOVAs for Research Question 3

Dependent Variable		Sum of Square	df	Mean Square	F	p
Level 1	Between Groups	1.609	2	.805	2.047	.131
	Within Groups	127.367	324	.393		
	Total	128.976	326			
Level 2	Between Groups	.012	2	.006	.946	.946
	Within Groups	2.011	324	.006		
	Total	2.023	326			
Level 4	Between Groups	1.493	2	.747	2.109	.123
	Within Groups	114.702	324	.354		
	Total	116.195	326			
Level 3	Between Groups	46.604	2	23.302	.633	.532
	Within Groups	11925.634	324	36.808		
	Total	11972.239	326			
Level 5	Between Groups	2.305	2	1.153	2.126	.121
	Within Groups	175.659	324	.542		
	Total	177.964	326			
Level 6	Between Groups	.070	2	.035	2.003	.137
	Within Groups	5.647	324	.017		
	Total	5.717	326			
All Levels	Between Groups	7.819	2	3.910	1.801	.167
	Within Groups	703.239	324	2.17		
	Total	711.58	326			

8. Discussion

Guskey (2000) defined process variables as the *how* of professional development. This includes not only the type and form of professional development but also the way these activities are planned, organized, supported, etc. Results of this study revealed that related to the process of professional development, 68% of teachers seemed to be aware of goals and how professional development is linked to school improvement and achievement. While this is a majority, it still leaves 32% of teachers who responded the contrary. Also, 57% of the teachers indicated they believed that professional development is related to teacher evaluation; this reflects 43% of teachers who did not know or were unsure about the connection between professional development and their evaluations. Yet, researchers (Guskey, 2000; Darling-Hammond, 2013; Elmore, 2004; Scheicher, 2016; Shakman, Zweig, Bocala, & Balley, 2016; Smylie, 2016) have indicated that the link between professional development and evaluation is a reflection of a school leader's ability to observe a teacher applying new knowledge and skills acquired from the professional development experiences.

Another interesting area related to process was the type of professional development activities or format in which teachers had participated. Many indicated their format was primarily via workshops/seminars and through classroom observation/assessment by an administrator, but the activities with the lowest percentages were the collaborative formats of professional development. Thus, teachers reported an overall lack of peer-to-peer collaboration and

mentoring opportunities for personal improvement. At the same time, 80% of the participants indicated that they received professional development by taking graduate courses through the university. This points to the importance of district-university partnerships needed to effectively support professional development opportunities.

In reference to the *what* of professional development, content characteristics are the magnitude, scope, credibility, and practicality of the change required to implement new knowledge and skills. In this study, very few teachers indicated they had input into the decision-making process for professional development. Yet, the benefits of shared decision-making efforts have been well-documented (Dana & Yendol-Hoppey, 2008). In addition, very few teachers (6%) listed training opportunities for assessment and data. This is alarming because data-based decisions can drive instruction in order to increase student achievement (Dana & Yendol-Hoppey, 2014; DuFour, DuFour, Eaker, & Karhanek, 2004; Schmoker, 2006).

In addition to process and content, the *who*, *when*, *where*, and *why* of professional development define context characteristics. The context involves the organization, system, and where the new understanding will be implemented. Guskey (2000) suggested that an important part of context may be the pressure created by a district's high expectations for the learning of all students. Unfortunately, for each of the six levels related to context, teachers' responses reflected low, negative ratings. Also, teachers did not seem to believe their time was well-spent or that they were learning practical instructional strategies. More concerning is that teachers disagreed that professional development was valued by their own building administrators. With teachers believing that their own leaders did not value professional development, it seems reasonable that teachers did not believe they had long-lasting changes, did not return to the classroom and practiced new instructional strategies. And ultimately, teachers did not believe they had professional development that was meaning meaningful or useful for impacting student achievement. These beliefs were further emphasized in the final open-ended statements, in which 48% of the comments revealed that the topics during their professional development experiences were irrelevant.

It is critical to note that none of the inferential tests were significant. Ultimately and across all levels, teachers rated their professional experiences quite poorly; overall, this removed the opportunity to find potential differences because teachers consistently and similarly evaluated their professional development experiences with low ratings. Consequently, the results of the descriptive findings and the lack of significant findings in the inferential tests for three research questions do not appear to support Guskey's (2000) theoretical model of teacher change that is guided through professional development and overseen by school leadership.

9. Conclusion

The findings in this study reveal an ongoing concern. Teachers are not participating in high-quality professional development experiences. Even more, it is critical to acknowledge that teachers did not believe professional development was valued by their school leaders. Lai (2015) indicated that leaders should be able to develop school capacity for change; she affirmed the need for leaders to foster teacher learning through the decision-making process, promote ongoing connections through participation, and help align various demands and circumstances. Our findings revealed, however, that teachers had little to no input in the decision-making process. Cranston (2016) found that the collaborative process can help create and sustain professional learning. Furthermore, teachers indicated primarily getting professional development in the format of a workshops and presentations. Certainly, "*While there is still a time and place for centralized workshops, much of the professional learning takes place at the school and is directed by the needs of educators and students*" (Cranston, 2016, p. 32). Regrettably, teachers in the current study indicated the topics offered were irrelevant. Those planning professional development should seek participant input and needs (Joyce & Calhoun, 2016).

In this study, despite a district-embedded policy to implement weekly, Wednesday early-release days for professional development by principals, results were all too grim. There continues to be a need for effective principals to build the capacity of teachers and positively impact student achievement. Leadership preparation programs can serve to fill that need. Indeed, the majority of teachers in this study identified university coursework as a format of professional development. Leadership programs can proactively address and provide opportunities to develop teacher leaders, as well support current and aspiring school leaders' needs related to effective and sustained professional development. With strengthened professional development practices as a focus in leadership preparation programs, teachers and principals can continue to enhance learning outcomes for all students.

In addition, principals must work to build teacher leadership within each building. The purpose of teacher-as-leader programs, ones that are now emerging in districts to build capacity of teachers as mentors and co-teachers, needs to be a commonplace practice in schools. The principal, in such a case, serves as a member of the professional team, offering feedback to teacher ideas and providing support.

Overall, the study helps to bring out the teacher voice, one that needs to be respected if heard. A model for professional development needs to be reconsidered – one that includes teachers' voices and teachers as leaders, paired with the support of school leadership. Ultimately, professional development needs to be centered at the local level with multiples voices and levels of expertise.

10. References

- Cohen, D. & Hill, H. (2000). Instructional policy and classroom performance: The mathematics reform in California. *Teacher College Records*, 102, 204-343.
- Cook, G. (2015). Principal leadership: Focus on professional development. *ASCD, Policy Priorities*, 21(1), 1-7.
- Cranston, L. (2016). An open door to learning. *JSD, The Learning Forward Journal*, 37(3), 32.-37. Retrieved from <https://learningforward.org/docs/default-source/jsd-june-2016/an-open-door-to-learning-june16.pdf>
- Dana, N. F., & Yendol-Hoppey, D. (2008). *The reflective educator's guide to professional development: Coaching inquiry-oriented learning communities*. Thousand Oaks, CA: Corwin.
- Darling-Hammond, L. (2013). *Getting teacher evaluation right: What really matters for effectiveness and improvement*. San Francisco: Jossey-Bass.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters? *Educational Leadership*, 66(5), 46-53.
- DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn*. Bloomington, IN: NES.
- Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance*. Cambridge, MA: Harvard Education.
- Fullan, M. (2010). *All systems go: The change imperative for whole system reform*. Thousand Oaks, CA: Corwin.
- Green, S. B., & Salkind, N. J. (2008). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Guskey, T. R. (2002). Does it make a difference? Evaluating professional development. *Educational Leadership*, 59(6), 45-51.
- Joyce, B., & Calhoun, E. (2010). *Models of professional development: A celebration of educators*. Thousand Oaks, CA: Corwin.
- Joyce, B., & Calhoun, E. (2016). What are we learning about how we learn? *JSD, The Learning Forward Journal*, 37(3), 42-44. Retrieved from <https://learningforward.org/docs/default-source/jsd-june-2016/what-are-we-learning-about-how-we-learn-june16.pdf>
- Joyce, B., Weil, M., & Calhoun, E. (2015). *Models of teaching* (9th ed.). Boston, MA: Pearson.

- Killion, J. (2013). Establishing time for professional development. *Oxford, OH, Learning Forward*.6.
- Lai, E. (2015). Enacting principal leadership: exploiting situated possibilities to build school capacity for change. *Research Papers in Education*, 30(1), p70-94. doi: 10.1080/02671522.2014.880939
- Lowden, C. (2005). Evaluating the impact of professional development. *The Journal of Research in Professional Learning*, 1-22. Retrieved from <http://www.nsd.org>
- Lowden, C. S. (2003). *Evaluating the effectiveness of professional development* (Doctoral dissertation). Retrieved from <https://unr.edu>
- Mertler, C., & Vannatta, R. (2013). *Advanced and multivariate statistical methods: Practical application and interpretation* (5th ed.). Glendale, CA: Pyrczak.
- National Staff Development Council. (2001). Learning Forward. Retrieved from learningforward.org
- Newmann, F., Smith, B., Allensworth, E., & Bryk, A. (2001). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational Evaluation and Policy Analysis*, 23(4), 297-321.
- Prothero, A. (2015). For principals, continuous learning critical to career success. *Education Week*, Retrieved from <http://www.edweek.org/ew/articles/2015/01/21/for-principals-continuous-learning-critical-to-career-success.html>
- Quint, J. (2011). *Professional development for teachers: What two rigorous studies tell us*. Retrieved from http://www.mdc.org/sites/default/files/full_478.pdf
- Scheicher, A. (2016). *Teaching excellence through professional learning and policy reform: Lessons from around the world, international summit on the teaching profession*. OECD Publishing, Paris. Retrieved from <http://dx.doi.org/10.1787/97892642520509-en>
- Schmoker, M. (2006). *Results now: How we can achieve unprecedented improvement in teaching and learning*. Alexandria, VA: ASCD.
- Shakman, K., Zweig, J., Bocala, C., & Balley, J. (2016). *Teacher evaluation and professional learning: Lesson from early implementation in a large urban district*. (REL 2016-115). Washington, DC: U. S. Department of Education.
- Smylie, M. A. (2016). Teacher evaluation and the problem of professional development. *Mid-Western Educational Researcher*, 26(2), 97-111.
- Standards for Professional Learning (n.d.). Quick Reference Guide. Retrieved from <https://learningforward.org/docs/pdf/standardsreferenceguide.pdf>
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, 7(17). Retrieved from <http://PAREonline.net/getvn.asp?v=7&n=17>
- Tallerico, M. (2012). *Leading curriculum improvement: Fundamentals for school principals*. Lanham, MD: Rowman & Littlefield Education.
- Thompson, C. L., & Zeuli, J. S. (1999). The frame and the tapestry. In L. Darling-Hammond, & G. Sykes (Eds.). *Teaching as the learning profession: Handbook of policy and practice* (pp. 341-375). [Adobe Digital Editions version]. Retrieved from GOOGLE ebookstore
- Williams, S. L. (2014). *Teachers' perceptions of professional development experiences*. (Doctoral Dissertation). ProQuest Dissertations and Theses Global database. (UMI No. 3638324)
- Dana, N. F., & Yendol-Hoppey, D. (2014). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry* (3rd ed.). Australia: Hawker Brownlow Education.
- Zimmerman, J. A., & May, J. J. (2003). Providing effective professional development: What is holding us back? *American Secondary Education*, 31(2), 37-48.