

LEADERS WHO GROW: WHERE BEHAVIORAL SCIENCE, ADULT EDUCATION, AND PROFESSIONAL DEVELOPMENT MEET

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Abstract

In this study, we investigate whether or not there is a connection between three distinct but complementary areas of research, namely the behavioural science of motivation, adult learning, and leadership. What is it that keeps mature professionals interested in furthering their education, and how does that relate to their leadership style and effectiveness? An expansion of the existing body of literature is investigated in order to combine andragogy, self-determination, and the theory of transformational leadership. A cohort of adult professionals in leadership positions has their responses to questions taken from two different models, the Care Model of Adult Orientation and Implication on Learning and Training Activities and the Multifactor Leadership Questionnaire. These models were modified from one another. The findings suggest that leadership style can be predicted using learning motivation orientation and that there is a positive correlation between the two. Further ramifications of the "learnerleader" for research, practice, and higher education initiatives are addressed, along with how learning motivation can be used as a tool to forecast leadership style and improve leader selection, development, and succession. Also covered are additional implications of the "learnerleader" concept. This quantifiable research has the potential to offer significant insights into how the quality of having an intrinsic motivation to learn can act as a precursor to transformational leadership behavior, as well as the influence that transformational leaders have on the teams and organizations that they are a part of.

Keywords: Adult Education, Behavioral Science

INTRODUCTION

This research departs from the conventional doctrine, which suggests that competency models for the development of leadership should concentrate on the abilities and experience of leaders. Instead, the findings of this research suggest that an organization's succession planning strategy should prioritize the early identification of potential leaders as well as the ongoing development of those leaders. This new capability is the motivation to continue learning. (Folkman, 2014). This study centers on a specific type of executive

who has shifted their perspective on learning from viewing it as a stagnant body of information to instead viewing it in terms of intellectual mobility, critical thinking, and eventually development, performance, and transformation. In a more fundamental sense, it attempts to emphasize learning motivation as a competency that is important for leader identification at the beginning of the professional lifecycle as well as throughout the entirety of it. According to the findings of academic studies, intrinsic motivation is an inherent inclination) and biochemical representation of the human predisposition towards learning, development, and innovation that is ever-present throughout the course of an individual's entire existence. Consequently, administrators, human resource and talent management professionals, and other organisational decision-makers will benefit from identifying an individual's learning motivation orientation early in the career trajectory and previous to advancement into a leadership position. This is because identifying an individual's learning motivation orientation allows them to better understand the individual's potential for growth. Furthermore, research indicates that a leader's motivation and ability to learn is essential to the success of an organization. As a result, since leadership remains a direct entryway to organisational outcomes, it is too expensive to chance selecting and developing leaders based on uncertain characteristics and aptitude. Participants in this research are adults who are either currently in a leadership position or have held leadership positions in the past. characterizes this person as an example of a knowledgeable and dedicated professional who holds a high position in an organization, and whose efforts are almost always successful and only occasionally unsuccessful. (p. 4). As a consequence of this, Argyris expresses concern that these professionals may be missing one essential quality, specifically the skill set required to effectively handle failure when it invariably takes place. Despite this, the concern highlights how important it is to have the flexibility and mobility that comes from growth and development in relation to continuous learning as an alternative to a mentality that views learning as something that can only be done once. Therefore, Argyris' defense provides a primary justification for the significance of recognizing an employee's learning motivation, as intrinsic, early in the career trajectory and applying that knowledge to the employee's potential to become a transformational leader. This is done by referring to the employee's potential to become a transformational leader as the "potential to become a transformational leader." Organizations will be in a better position to meet future challenges and improve their likelihood of sustainability and competitive advantage if they emphasize the value of their leaders' proclivity for learning and self-awareness, and if they establish a conduit through which leaders' own practices facilitate a climate in which employees are also encouraged and supported to learn.

Focusing on this important trait will increase the probability of advancing individuals who have the potential to become transformational leaders and these individuals' potential to succeed in that position. Although successful leadership is not exclusively a function of an intrinsic motivation to learn, this emphasis will improve the likelihood of advancing individuals who have the potential to become transformational leaders. As a result, one of the primary goals of this research is to demonstrate the responsibility that learning motivation has in the process of effectively identifying leaders, developing leaders, and preparing for successors. The results of this study will offer a greater understanding and

new information that guides organizations to create competencies and contribute to a climate that advocates learning and fosters growth and transformation through its leaders. This will be accomplished by leveraging the principles of adult learning, motivational science, and transformational leadership. In doing so, the results of this study will offer a greater understanding and new information.

The findings of this research will also be useful to higher education administrators and instructors who are concerned with the creation and delivery of effective leadership development programmes and marketing to adult learners. This research will build upon previous lines of inquiry into adult learning and leadership, connecting these concepts in a novel manner. It may also encourage scholars to examine the behavioural attributes of leaders who self-direct their learning activities and development in the context of organisational outcomes. This research will build upon previous lines of inquiry into adult learning and leadership.

The Rationale, as well as Some Research Questions

To be more specific, the purpose of this study is threefold: (i) to investigate whether adult professionals' motivation to learn is driven by intrinsic or extrinsic factors; (ii) to investigate the theoretical framework underlying the transformational and transactional leader; and (iii) to determine whether there is a quantifiable relationship between learning motivation, as either intrinsic or extrinsic, and leadership style, as either transformational or transactional. This study will add to the existing body of research by presenting quantitative evidence of learning motivation as a prognostic description of leadership style. In this manner, the study will complement the work that has already been done. The purpose of the research is to add a new component to the currently recognized motivations of adult learners as well as their behavior as leaders in their daily lives. This will allow for the creation of a measure that can be used to identify prospective leader effectiveness and to facilitate development.

Background

There has never been a time in history when organizations have struggled more than they do today to find the answers that will allow them to achieve both sustainability and a competitive advantage. Organizations are coming to the realization that they need to master agility and adaptability in their strategy and leadership in order to meet the demands of change, uncertainty, and the revolutionary transformation that is occurring all around them. Increasingly, organizations need to begin with their leadership in order to manage this change and produce results.

OBEJECTIVE OF THE STUDY

- A dedicated worker who holds a prominent position in an organization
- The purpose of the research is to add a new component to the motivations of adult learners as they are currently understood

RESEARCH METHODOLOGY

The Q approach was utilized in this study to arrive at conclusions on the professional development requirements for teachers. Q method analysis is a research method that allows for the measurement of approach, attitudes, and perception of the participants. Q method analysis utilizes the strength of both qualitative and quantitative methods. In the data analysis process of this method, various statistical analyses are used to find out the common points in the responses of the participants. Q method analysis uses the strength of both qualitative and quantitative methods. The responses from the participants are used as the basis for determining a correlation coefficient in this approach. The r statistics approach is the one that is utilized the vast majority of the time when determining a correlation coefficient. The analysis of the Q method is an important method to investigate the idea patterns in the sample participants, and it enables comparisons between the groups. The framework that is revealed by the Q method is, in a sense, comparable to that of a hierarchy. The strength of the Q methodology is that it can determine whether the perceptions, attitudes, and beliefs of participants can be associated under a broader theme. Another strength of the Q methodology is that it can reveal the common ideas of the participants because it can sort these ideas in order of priorities. The exploratory factor analysis (EFA) procedure and the basic component analysis process of the Q approach are quite similar to one another, with a few key distinctions between the two. In the process of scale development, relevant items are determined by using principal component analysis, which is a subset of explanatory factor analysis. On the other hand, the principal component analysis that is part of the Q technique will organize the pertinent concepts. As a consequence of this, the relevant items that are grouped together in explanatory factor analysis correspond to the groups of persons in the Q method analysis that have similar thoughts. Participants In this context, the sample for this study consisted of 35 educators working in state schools run by the Ministry of National Education in the Cappadocia provinces (Aksaray, Nevsehir) of Turkey. There were 24 men and 11 females included in the sample for this study. Participants in the research were all instructors in the respective academic areas. In addition to this, the selection of the participants was done with careful attention paid to the equitable distribution of the various topic subjects. In light of this, the information for the present investigation was gathered from educators in the fields of mathematics, science, Turkish, English, and social studies in elementary schools. There was a wide variety in the amount of expertise that the instructors had, ranging from 3 to 25 years ($X = 12.75$, $Sd = 7.06$).

Data Analysis

In the scope of this study, a total of 36 items that were generated in item form were based on the instructional development, scientific field development, personal development, and organizational development dimensions of professional development. The items were given to the specialists who hold doctoral degrees in education administration, curriculum creation and instruction, special education, assessment and evaluation, respectively. A few alterations of a less significant kind have been made to the products with the assistance of the knowledgeable individuals. Each individual participant was given a copy of the item form to fill out. The information for this study was gathered during the months

of November 2018 and February 2019. The amount of time necessary to finish each item form was around 25 minutes on average.

Table: 1

Instructional development	Instructional technologies and material design	I need knowledge about designing and using instructional materials (34)
		I don't have any problems in preparing and using teaching materials. (16)
		I need knowledge about using technology for teaching purposes. (19)
		I follow the innovations in information and communication technologies and apply them in my lessons. (24)
	Teaching strategies	I think I need training about different teaching methods and techniques. (5)
		I can easily use various teaching strategies in my lessons. (26)
		I do not feel qualified enough to make my students think critically and creatively. (1)
		I can easily improve my students thinking abilities. (14)
		I feel the need to develop myself in preparing appropriate learning environments. (2)
		I am successful in teaching environment and classroom preparation activities. (22)
Instructional development	Lesson planning	I feel the need to improve myself in preparing lesson plans in accordance with the curriculum. (18)
		I do not have any problems in preparing lesson plans in accordance with learning outcomes in the curriculum. (3)
	Classroom management	I need training to cope with undesired behaviours in the classroom. (33)
		I do not have difficulty in preventing student interventions that negatively affect the lesson. (4)
		I need to learn how to build a classroom management system that is appropriate for different student groups. (20)
		The differences in the proficiency levels of the students do not affect my classroom management skills. (10)
	Student participation	I would like to learn different teaching methods to motivate students and to encourage them participate in classroom activities. (35)
		I can always motivate my students and encourage them participate in the classroom activities.
	Assessment and evaluation	I need to be familiar with the use and development of appropriate and different measurement instruments for evaluating learning outcomes. (21)
		I have enough knowledge about assessment and evaluation. (8)
Special education	I need knowledge about how to provide appropriate learning environments for students with special needs (such as hyperactive, specific learning difficulties, gifted). (27)	
	I do not have difficulty in teaching gifted children or children with learning disability. (15)	
Scientific field development	Scientific research methods	I want to learn the research methods and statistical research techniques related to my scientific field. (36)
		I have enough knowledge about scientific research methods. (9)
	Participation in projects and professional training programs	I need knowledge on how to take part in national and international projects and activities related to my scientific field. (23)
Personal development	Planning	I would like to take support about career planning and time management. (28)
		I am good at career planning and time management. (17)
	Anger management	I need to improve my anger management skills. (29)
I do not have any problems in controlling my anger (25)		
Organizational development	Effective communication skills	I think I need to have knowledge about verbal and nonverbal communication skills. (11)
		I think I have effective communication skills (30)
	Organizational structure	I need information about organizational structure and operations (12)
		I have enough information about school culture and school work. (31)
Team work	I feel the need to improve myself about teamwork activities for the school's needs. (7)	
	I consider myself adequate about the team work in the institution. (32)	

As shown in

Table 2: The Normal Distribution Schema between the Edges Of -5 And +5 Was Used In the Q Matrix

I do not agree					Neutral	I agree				
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5

In the process of identifying the requirements for the teachers' professional development, the first thing that was done was to determine whether or not the instructors have any commonalities. In order to achieve this goal, the program known as PQMethod 2.35i was used to carry out basic component analysis and varimax rotations.

Table 3: Displays The Scores Along Their Respective Distributions. In The Table, the First Participant Is Denoted By the Designation P1 (Participant 1)

Participant/ Factor	1	2	3	Participant/ Factor	1	2	3
P1	0.7469X	0.1262	-0.2102	P13	0.7401X	0.1905	0.2235
P2	0.5903X	0.5130	0.0731	P14	0.8330X	-0.0143	-0.2105
P3	0.6477X	0.0294	-0.0681	P15	0.4692X	0.2907	0.0386
P4	0.0192	0.8136X	-0.0256	P16	0.4413X	0.1834	-0.0635
P5	0.4789X	0.1863	0.1766	P17	0.6833X	-0.3762	-0.0045
P6	0.7481X	0.0137	-0.0204	P18	0.1481	0.6093X	0.2941
P7	-0.4222X	0.0216	0.0681	P19	0.1123	0.3016	0.6752X
P8	0.6742X	-0.1662	0.1019	P20	0.2719	-0.0066	0.6813X
P9	0.2268	0.6249X	-0.2916	P21	0.7145X	-0.1437	-0.2013
P10	0.1073	0.2119	-0.5339X	P22	-0.1570	0.4514X	0.0984
P11	-0.1536	0.3501	0.4188X	P23	0.8351X	-0.1797	-0.1094
P12	0.5911X	0.3687	0.2006	P24	0.7834X	-0.2094	0.1018
P25	0.6917X	-0.0315	-0.1105	P31	0.4057X	0.2986	0.1090
P26	0.8058X	-0.3023	-0.0924	P32	0.0081	0.4980X	-0.3749
P27	0.5072X	-0.0081	0.4945	P33	-0.2229	0.5465X	0.4758
P28	-0.4344X	-0.2277	-0.1364	P34	-0.2179	0.1253	0.6244X
P29	0.8505X	0.1199	0.1587	P35	-0.0376	0.8061X	0.1451
P30	0.5003X	0.1449	0.3262				

The factor loads of all 35 participants are outlined in the table that can be seen above. The results of the basic component analysis and the varimax rotation analysis revealed that the 35 participants may be categorized according to three different characteristics. The Xi symbol is utilized, and the numbers are printed in bold, so that it is very evident which participant is considered for inclusion in which factor. Within the first component (column), there are 23 individuals, within the second factor (column), there are 7

participants, and within the third factor, there are 5 people. 23 of the 35 individuals, or 65.71 percent, are classified under a dimension, which may suggest that the people have a common quality. From this vantage point, it is possible to make the assertion that the perspectives of instructors about their individual need for professional growth are comparable. It is essential to investigate the shared foundations on which this resemblance is built, as well as to identify the phrases that have the most weight. The items, their Z scores, and their rank according to the Z scores of the other items in each group are presented in Table 4. (in the factor). The elements were arranged in order of their proximity to one another in relation to the 23 individuals who were categorized under factor 1.

Table 4: Z Values of the Items and the Order of Importance of the Items

Item	Factor 1		Factor 2		Factor 3	
	Z	Rank*	Z	Rank*	Z	Rank*
6	1,683	1	-0,343	24	1,025	6
30	1,641	2	1,424	4	-0,473	26
22	1,563	3	-0,048	19	0,625	13
14	1,477	4	0,178	16	-0,243	20
26	1,441	5	-0,903	30	0,900	8
3	1,164	6	0,394	12	-0,383	23
25	1,127	7	1,451	3	-0,370	22
24	1,052	8	-0,340	23	-1,120	31
8	0,889	9	-0,094	20	-0,879	29
17	0,864	10	0,311	14	-0,399	24
16	0,802	11	-0,821	28	-1,122	32
31	0,628	12	0,233	15	-0,401	25
4	0,580	13	-0,453	26	0,900	9
9	0,422	14	-0,869	29	-0,183	19
32	0,353	15	-0,137	21	-0,342	21
13	0,246	16	-1,736	34	-0,001	17
10	-0,159	17	-1,927	36	-2,343	36
15	-0,187	18	-1,737	35	-1,566	35
36	-0,225	19	0,687	10	1,424	3
27	-0,314	20	1,729	2	1,497	2
35	-0,318	21	1,203	6	2,069	1
23	-0,513	22	2,013	1	-1,002	30
19	-0,561	23	0,757	9	1,379	4
7	-0,698	24	0,074	17	0,989	7
21	-0,791	25	0,848	8	0,148	15
12	-0,932	26	0,343	13	-0,815	28
34	-0,955	27	0,964	7	0,815	10
28	-0,972	28	-1,426	33	-0,179	18
2	-1,027	29	-0,293	22	0,121	16
5	-1,036	30	0,496	11	0,780	12
20	-1,053	31	1,207	5	-0,554	27
18	-1,066	32	-1,030	31	0,200	14
33	-1,111	33	0,036	18	-1,280	34
29	-1,231	34	-1,119	32	1,124	5
11	-1,234	35	-0,376	25	0,811	11
1	-1,547	36	-0,694	27	-1,151	33

The statement "I can always stimulate my pupils and urge them to engage in the classroom activities" received the most favorable responses overall from the 23 participants that took part in Factor 1. I and the item that was responded to with the least amount of positivity was "I do not feel competent enough to have my pupils think effectively." Although there were 18 factors in this study that were associated with professional competence, there were also 18 things that showed they had inadequate

professional growth. When the preferences of the participants that were grouped under the first factor were examined, it was found that the participants preferred the items that indicated that they have professional competence. This was the case because the participants preferred the items that indicated that they have professional competence. The estimated average Z scores for each variable included in the factors are presented in Table 5. The following is the formula for calculating average Z scores:

Table 5: Zmean is equal to the difference between the Z value of the item that is positive about the dimension and the Z value of the item that is negative about the dimension divided by two

		Factor 1 (n=23)	Factor 2 (n=7)	Factor 3 (n=5)	Weighted mean	\bar{x}
Instructional development	Instructional technologies and material design	1.69	-0.72	-1.11	0.78	0.43
	Teaching strategies	1.35	-0.05	0.26	0.88	
	Lesson planning	1.12	0.71	-0.29	0.81	
	Classroom management	0.65	-0.91	0.10	0.25	
	Student participation	1.00	-0.77	-0.52	0.42	
	Assessment and evaluation	0.84	-0.47	-0.51	0.37	
	Special education	0.13	-1.733	-1.53	-0.47	
Scientific field development	Scientific research methods	0.32	-0.79	-0.80	-0.06	-0.11
	Participation in projects and professional training programs	0.38	-1.87	0.50	-0.05	
<i>Continuation of Table 5</i>						
Personal development	Life Planning	0.92	0.87	-0.11	0.74	0.88
	Anger management	1.18	1.29	-0.75	0.90	
	Communication skills	1.44	0.90	-0.64	1.00	
Organiza- tional development	Organizational structure	0.78	-0.06	0.21	0.52	0.38
	Team work	0.53	-0.11	-0.66	0.23	

When the Z scores of all 35 participants were examined, it was discovered that the three dimensions of self-evaluation that had the highest levels of positivity were personal development ($Xz=0.88$), instructional development ($Xz=0.43$), and organizational development ($Xz=0.38$). Personal development had the highest level of positivity. On the other hand, advancements in scientific fields have a deleterious impact ($Xz = 0.11$). It was discovered that effective communication skills ($Z_{mean} = 1.00$), anger control ($Z_{mean} = 0.90$), teaching strategies ($Z_{mean} = 0.88$), lesson planning ($Z_{mean} = 1.00$), instructional technologies and material design ($Z_{mean} = 0.78$), and life planning ($Z_{mean} = 0.74$) have the highest Z scores.

When the sub-dimensions are examined, this is the case. On the other hand, the findings show that the mean scores of 36 participants in the sub-dimensions such as special education ($Z_{mean}=-0.47$), scientific research techniques ($Z_{mean}=-0.06$), and engagement in projects and professional activities ($Z_{mean}=-0.05$) are shown to be unfavorable. When the data are reviewed in light of the factors, it was discovered that the

23 people who took part in the first factor rated their own positivity across all of the dimensions and sub-dimensions. This was the conclusion drawn from the findings. The sub-dimensions of personal growth and instructional development were, respectively, the ones that the 23 participants regarded as being most adequate in itself. The participants in component one reported having the lowest levels of competence in the sub-dimensions of special education ($Z=0.13$), engagement in projects and professional activities ($Z=0.38$), and scientific research procedures ($Z=0.32$).

Seven people who took part in the second factor believed that they were lacking in all aspects of professional growth, with the exception of the personal development dimension and the course planning sub-dimension. Participants in the second factor rated their own abilities as being the lowest in the following categories: special education ($Z=-1.733$), classroom management ($Z=-0.91$), scientific research methods ($Z=-0.79$), student participation ($Z=-0.77$), teamwork ($Z=-0.11$), institutional structure ($Z=-0.06$), and instructional strategies ($Z=-0.05$). 5 participants in the third component rated themselves as being somewhat sufficient in the subdimensions of classroom management ($Z=0.10$), engagement in projects and professional activities ($Z=0.50$), instructional tactics ($Z=0.26$), and institutional structure ($Z=0.21$). They have the self-perception that they are lacking in every one of the other subdimensions.

Discussion

This investigation, which was built entirely on the Q approach, sought to determine which of the instructors' professional development requirements were the most pressing. In addition to that, the purpose of this research was to investigate how instructors view their own professional development requirements and whether or not they share a consensus on these requirements. There were a total of 35 educators from a variety of subjects and disciplines from four distinct provinces in Turkey who took part in the study. The information was gathered through the completion of 36 questionnaires. The findings of the study can only be interpreted in this light because the Q technique was used to collect information from a total of 35 participants. When the data acquired from the opinions of the teachers on their needs for professional development are analyzed in general, it is possible to get to the conclusion that the teachers, in general, consider their professional growth to be adequate. According to the findings of this study, it was discovered that instructors perceived themselves to be the most effective in terms of the personal growth dimension of the professional development.

After looking at the Z scores, it was discovered that the mean scores for instructional development and organizational development were rather similar to one another. Yet, when compared to those of instructional development and organizational development, the mean scores for personal development were found to be significantly lower than those of the other two. It was discovered that the most important aspect of professional development for educators was the growth of the scientific field. This aspect of professional development encompassed the sub-aspects of scientific research methodologies as well as involvement in projects and professional activities. When the findings regarding the sub-dimensions of professional development were analyzed, it was

discovered that the sub-dimensions of personal development, such as effective communication skills, anger control, and life planning, and the sub-dimensions of instructional development, such as lesson planning, teaching strategies, instructional technologies, and material design, have the highest Z scores.

This was the case for both personal and instructional development sub-dimensions. These findings suggest that the great majority of educators have a lower requirement for professional development in the areas of personal development, lesson preparation, teaching techniques, instructional technology, and material design in comparison to other aspects of personal development. The findings revealed that professional development training programs were required for the participants, particularly in the areas of special education, scientific research methods, participation in project and professional activities, and so on. This indicated that the participants had a need for professional development training programs, particularly in the aforementioned sub-dimensions of professional development. The outcomes of this investigation were consistent with the findings of other studies that had been done in the past. It was stated that teachers required in-service training on guidance and special education. It was also stated by the researchers that teachers required regular in-service training, particularly for working with students who have learning disabilities, as well as students who are in need of psychological support and who are at risk of dropping out of school. In a previous research, the instructors reported that communication and social skills were needed very seldom in the classroom; the findings of this study were comparable to those of that study.

According to the results of an in-depth study that was carried out by and which included participants from 23 different nations, the most important aspect of professional development for teachers is the provision of special education to kids who have unique requirements. This finding may be an indicator that educators are not prepared to adhere to a plan for the teaching of children who are talented or who have special needs. Children with special needs are children who, in comparison to other children their age, either their physical traits or their capacities for learning are considerably different. It is essential that instructors who intend to play an active part in education have the ability to identify these students and tailor the learning environment to meet their requirements, the present knowledge, strategy, and teaching techniques that are used in educational programs seek to address the requirements of all students in general. As a result, instructors encounter problems in working successfully and giving excellent education to kids who require special education.

As a result of the fact that pre-service training for special education in Turkey consists of just one theoretical course that is delivered at the end of the program, it is possible that teachers may require further professional development in this area. Projects, professional activities, and scientific research methods are also found in the studies conducted. In a study that was conducted by to determine the in-service training needs of primary school teachers, it was discovered that 39% of teachers have a high percentage, and 39.8% of teachers have a partial need for professional development. When it comes to the study it was discovered that 45.7% of the participants need professional development in regard to their involvement in both domestic and foreign initiatives.

The process of getting information on scientific research methods, (which can be used frequently in the field of education), such as action research and case, and participation in national and international projects and professional activities was identified as a primary focus for the personal development needs of teachers. One possible explanation for this finding is that there are a relatively small number of in-service and professional training programs that are specifically related to these topics. Participants in both factors (the second and the third factor) were identified as having a need for professional development in the areas of instructional technology and material design, student participation, assessment, and teamwork.

This is in addition to the areas of professional development that are required by the entire research group. In a similar vein,) discovered that the most common needs for professional development among teachers are the following: the ability to know the various methods in order to measure student knowledge; the ability to know the various learning styles of students in order to meet their learning needs; the ability to know the techniques of cooperative learning and team work; the ability to increase student participation; and the ability to know the techniques for class management. In a similar vein, revealed that the most important professional development needs of the teachers were the development, improvement, and expansion of the use of technology for instruction; the development of critical thinking and problem solving skills of the students; and the development of the skills of working as a member of a team both inside and outside the classroom. found that there is a need for training programs in schools to prevent peer bullying, and the researchers also found that there is a need for training programs to provide opportunities for individual differences in education. the researchers determined that there is a need for training programs to prevent peer bullying in the context of classroom management. According to the results of Copland, teachers require professional development that is relevant to classroom management, and it is recommended that training programs for teachers contain skills related to classroom management. It was mentioned that the requirements of the teachers about professional development are not separate from the needs of the school, and that the needs of the teachers regarding professional development are an integral element of the culture of the school. The researchers also indicated that training for professional growth should be carried out in collaboration with colleagues as a kind of cooperation, which in turn speeds up the process of change and development at the school. When seen from this perspective, it is essential to take into account the fact that instructors want to get better at working together as a team to meet the requirements of the school.

CONCLUSION

In the process of analyzing the factors that contribute to the success of professional development programs, the search for a single solution that is definitive poses the greatest challenge. Although if some broad concepts may be derived from research, the specifics of each individual's or institution's circumstance will always be the most important consideration in identifying the qualities that define effective professional development programs. In certain situations, it may be necessary to have activities run

by teachers, while in others, it may be necessary to have an organized structure. In other words, rather than there being one response that is true or one manner that should be done, there is a variety of solutions that depend on the context. The goal of this study was to compile a list of responses addressing the professional development requirements of teachers by utilizing the richness of diversity. The goal should be to determine the blend that is most appropriate and to be aware that this blend may also vary over time. According to the findings of this study, special education, scientific research methodologies, and project preparation approaches have to be given priority status within activities pertaining to in-service training. In addition to this, there is a demand for training programs that cover topics such as student engagement, assessment, and cooperation in addition to instructional technology and the creation of instructional materials. It is possible that future research may focus on the more particular personal development requirements of educators in relation to the sub-dimensions of personal development. Findings that are more in-depth can be achieved in subsequent studies by performing qualitative research in regard to the professional development requirements that are important to instructors. In addition, there are several restrictions associated with the sample size in this study. In subsequent research, there may need to be a greater number of participants. Teachers from a variety of topic areas took part in this study as participants. Future research might address the professional development needs of teachers that are particular to the subject area in which they are currently working.

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