

Awareness of the Professional Needs of Secondary School Teachers Through Self-directed Professional Development

Conocimiento sobre las necesidades profesionales de los profesores de secundaria mediante el desarrollo profesional autodirigido

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ABSTRACT

The importance of teacher professional development has been extensively studied, with researchers agreeing that opportunities for professional development can improve both teacher education and student learning outcomes. This study was conducted to evaluate the effectiveness of a new approach to professional development, known as self-directed professional development. It focused on the knowledge, participation, and effectiveness of voluntary professional development methods in secondary schools, with a specific emphasis on Almería's secondary school teachers. The study utilized the systematic sampling method to select 194 respondents from the sample group. These respondents were given a Likert scale questionnaire, and the data collected were analyzed using statistical methods such as percentage, mean, standard deviation, and chi-square test. The results showed that even though the secondary school teachers had limited knowledge about self-directed professional development and online resources, they still informally participated in self-directed professional development.

KEYWORDS

Professional Development; Teacher Competence, Awareness, Engagement, Effectiveness, Self-directed Learning

RESUMEN

La importancia del desarrollo profesional del profesorado ha sido ampliamente estudiada, y los investigadores coinciden en que las oportunidades de desarrollo profesional pueden mejorar tanto la formación del profesorado como los resultados del aprendizaje de los alumnos. Este estudio se llevó a cabo para evaluar la eficacia de un nuevo enfoque de desarrollo profesional, conocido como desarrollo profesional autodirigido. Se centró en el conocimiento, la participación y la eficacia de los métodos de desarrollo profesional voluntario en los centros de secundaria, con un énfasis específico en los profesores de secundaria de Almería. El estudio utilizó el método de muestreo sistemático para seleccionar a 194 encuestados del grupo de muestra. A estos encuestados se les pasó un cuestionario con escala de Likert, y los datos recogidos se analizaron utilizando métodos estadísticos como el porcentaje, la media, la desviación típica y la prueba de chi-cuadrado. Los resultados mostraron que, aunque los profesores de secundaria tenían conocimientos limitados sobre el desarrollo profesional autodirigido y los recursos en línea, seguían participando informalmente en el desarrollo profesional autodirigido.

PALABRAS CLAVE

Desarrollo profesional; Competencia docente, Conciencia, Compromiso, Eficacia, Aprendizaje autodirigido.

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Study Background

In today's fast-paced world, self-directed professional development has become a crucial factor in achieving success and staying relevant in an ever-evolving job market. As individuals take greater responsibility for their own learning and career growth, the effectiveness of self-directed professional development has become the subject of numerous research studies. In this essay, we will present the conclusions of various research findings that demonstrate the benefits of self-directed professional development and argue that it is a key component in fostering a well-rounded and successful career. We will support this claim by discussing evidence from different sources, exploring effective strategies for implementing self-direction, and examining its long-term impact on professionals. In the following paragraphs, we will first outline the importance of self-directed learning, then delve into effective methods for achieving professional growth, and finally explore potential challenges and solutions associated with this approach.

Teacher professional development is a central topic of educational research. According to Tatto, Rodriguez, and Reckase (2000), "Effective professional development is a continuous process that effectively supports the development of teachers in improving student achievement and promoting their own professional growth." It's a process." Research consistently finds that teacher professional development has a positive impact on classroom practice and student outcomes. For example, Darling-Hammond (2009) found that well-designed professional development programs lead to improved tea-

ching practices by teachers, which in turn improves student outcomes. Similarly, Desimone (2009) found that content-driven, practice-based, long-term sustained professional development programs were more effective in improving teachers' teaching practices and student outcomes. However, the effectiveness of professional development for teachers depends on many factors, including the nature of the professional development activities, the level of involvement of the participants in these activities, and the level of awareness of the participants towards professional development. Important to note. Standing possibilities available to them.

The COVID-19 pandemic has significantly impacted the quality of education, teaching and learning (Godber and Atkins, 2021). By comparing local, regional and national education systems with international standards, governments around the world are committed to working towards the sustainable development of education and other aspects of people's lives. By meeting national and international standards, meeting local and stakeholder needs, teachers have more responsibilities and need more opportunities for work-based learning than ever before, future generations recognise their multifaceted role in tomorrow's societies (Shaheen, Ahmad and Shah, 2018).

Self-Directed Professional Development (SDPD) is a concept that originated in the United States in the 1980s. SDPD is a process that allows professionals to manage their own learning and development. It is based on the idea that professionals should best judge their own needs and take responsibility for their own pro-

fessional development. SDPD is a way for professionals to manage their own learning and development (Slavit and Roth McDuffie, 2013). It is based on the idea that professionals should best judge their own needs and take responsibility for their own professional development. SDPD is a way for professionals to manage their own learning and development. It is based on the idea that professionals should best assess their own needs and take responsibility for their own professional development.

Self-directed learning (SDL) is an approach to professional development (PD) in which teachers independently decide when and for how long which learning activities are engaged in (Brookfield, 1995). PD programs vary in the extent to which they incorporate principles of self-directed learning, but SDL can be viewed as a form of lifelong learning (Brookfield, 1995). Teachers at SDL take responsibility for their own learning and choose activities that help them achieve their PD goals (Hargreaves, 2010). These goals may be aimed at doing a particular job more effectively, preparing for a potential career change, or simply satisfying one's intellectual curiosity (Schunk, 1995).

Self-directed learning has proven to be a successful strategy for adult learners (Knowles, 1975; Mezirow, 1997; Brookfield, 1995). The success of independent learning may be due to its consistency with adult learning theories (Knowles, 1975). Independent learning is also consistent with the constructivist view of learning (Brookfield, 1995). From this perspective, learners interact with their environment and construct their own understanding

of the world by reflecting those interactions (Brookfield, 1995).

This study explored the need for self-directed professional development among university faculty. Higher education teachers face unique challenges and need professional professional development opportunities to meet these challenges (Beach, 2017). However, opportunities for voluntary professional development of university faculty members are lacking. In this study, a mixed-methods approach was used to explore the need for self-directed professional development in university faculty (Fraser, Howard and Woodcock, 2015). The survey found that secondary school teachers need self-directed professional development. The survey also found that teachers are interested in a variety of topics, including classroom management, differentiation, and student engagement.

Teachers play an important role in the overall development of their students. They act as torchbearers and help students become good people. Students spend most of their time at school and teachers act as their mentors. Teachers also learn a lot from their students in this mentoring process. However, this learning process ends when the student leaves school. Most teacher development programs focus on students and their problems (Lopes and Cunha, 2017). This hinders the personal and professional development of teachers. This lack of attention to teacher training leads to teachers becoming indifferent to their profession. This further impacts teachers' performance in the classroom and students suffer as well. Voluntary further training is very important for the overall development of teachers, (Bhatt, 2021).

Self-directed professional development is a process in which teachers:

- take responsibility for their own learning and development
- make their own decisions and take responsibility for their own learning.
- identify their own learning needs and find ways to meet them.
- manage their own learning and development
- become experts in their field
- find new ways to improve their teaching
- motivate themselves for personal and professional growth
- learn throughout their lives (Towle and Cottrel, 1996).

Teachers have a crucial role in shaping society as they are the agents of change who impart the concept of national identity and vision to their students. Their expertise in teaching and subject matter enables them to perform their duties effectively. Moreover, it is imperative for them to keep themselves abreast of the latest advancements in their field through various training sessions and seminars. Professional development of teachers refers to the activities that enhance their knowledge, skills, experience, and teaching practices, which is directly linked to student learning. Therefore, it is essential for teachers to continually update their understanding of teaching, learning, assessment, curriculum, student psychology, and educational standards, especially during the early childhood education phase (Zhen, Gaumer, Kingston and Nooman, 2014). However, the corporate nature of the modern world does not allow professionals to remain effec-

tive in their fields until the necessary changes are adopted and accepted, and on-the-job training and professional development is lacking. It takes opportunities (Bayar, 2014).

Various modules are implemented by state, local, and independent school systems to enhance the pedagogical knowledge, skills, and attitudes of teachers in order to attain the goal of professional development. According to Kuijpers, Houtveen, and Wubbels (2010), all of these modules are considered effective models for teacher professional development, but it is challenging to gauge their impact on student achievement and teacher development. Each professional development model addresses a specific aspect of a teacher's professional life, and some may excel in areas such as instructional methods while falling short in teacher evaluation, classroom management, instruction, and critical skills development, and vice versa. (Heller, Daehler, Wong, Shinohara, and Miratrix, 2012).

It is therefore important to provide teachers with as many professional development opportunities as possible so that they can regularly develop different aspects of their professional lives. However, this requires large amounts of money, time and energy, and governments should establish such long-term training programmes in order to save financial, human and material savings (Oppermann et al., Liebig, Bowling, Johnson and Harper, 2026). The results are not very convincing (Desimone and Pak., 2017). The reasons for starting or stopping these career development programmes vary, but the most common factors are low motivation, lack of stratification mech-

anisms, lack of financial resources, lack of sustainability and necessary infrastructure.

The emergence of information and communication technologies (ICT) has amplified the demands, obstacles, and global benchmarks, as people from different countries can now easily connect with each other through the Internet and access digital devices like smartphones and computers instantly. No information can be overlooked regarding these developments. As ICT plays a role in improving quality standards, international practices and accreditation, continuous professional development for teachers is necessary to balance their professional obligations with those of other teachers (Solak and Erdem, 2016). We also provide professional development opportunities for teachers through educational websites, academic forums, learning channels, webinars and social media.

In addition, the concept of self-directed professional development is a novel approach towards the traditional model of professional development which usually follows a top-down approach for teachers. The latter has faced criticism for its inability to motivate teachers and provide adequate teaching materials, resulting in low teacher commitment. On the other hand, the self-directed professional development model is voluntary and emphasizes on involving teachers, identifying available opportunities, and enabling them to learn collaboratively (Liu, Miller and Jahng, 2016). In addition, self-directed learning emphasises teacher initiative towards identified tasks. This allows teachers to decide what kind of learning they want and how they want to

learn. Furthermore, self-directed professional development does not mean that all self-directed professional development learning activities are carried out by teachers themselves, but that individuals work with different professionals, i.e. it is asking for help from the source. people (Desimone and Pak, 2017).

The concept of career development has been widely discussed in the educational literature (Darling-Hammond, 2012). Teachers are considered to be the main agents of change in education. They play an important role in student academic performance (Lortie, 1975). In addition, rapid technological change and innovation require teachers to update their knowledge and skills (Peters Massini and Lewin, 2014). However, teacher professional development is a challenge for education systems (Darling-Hammond, 2012). Despite the fact that many professional development programs exist, there are still problems and challenges in this area (Hargreaves, 2000). Numerous studies have shown that traditional additional training programs are ineffective. In this context, self-directed professional development (SDD) has been proposed as a new approach. It is a form of professional development in which teachers choose what, when, where and how to learn (Hargreaves, 2000).

Similarly, the idea of self-directed professional development is viewed as an optimal approach that caters to individual requirements effectively (Minott, 2010). It helps teachers meet their specific needs and allows them the freedom to learn at their own pace and convenience. With the introduction of new learning techniques, various online op-

portunities have emerged that aid teachers in their professional development. These include social networking platforms, Google applications, educational websites, webinars, etc. Milman (2020) suggests that such resources facilitate self-directed learning for professionals. They allow professionals to communicate, discuss their professional problems and find friendly solutions.

In addition, this interaction also increases professional commitment to industry challenges and problems and leads to sustainable solutions at low cost.

Numerous researchers and experts have acknowledged the efficacy of the self-directed professional development model. Mushayikwa and Lubben (2009) assert that, under the present circumstances, this approach is optimal for enhancing teachers' abilities. Likewise, Weir (2017) discovered that primary school educators possess a favorable viewpoint regarding the efficiency of self-directed professional growth. Additional evidence supporting its effectiveness can be found in existing literature, and this method also alleviates financial pressure on organizations. Consequently, this paper's objective is to examine the knowledge, involvement, and efficacy of the self-directed professional development model for secondary school teachers from a career advancement standpoint.

Within this framework, the objective of this research was to examine the efficacy of an innovative approach to professional growth, specifically self-driven professional development. The study delves into the awareness, involvement, and accomplishments of self-di-

rected professional development in the realm of secondary education.

Research objectives

The following research topics were investigated in this study:

1. Raising awareness of the independent professional development model among secondary school teachers.
2. Examining teachers' participation in independent professional development projects.
3. Determine the effectiveness of the self-directed professional development model on teacher professional competence.

Research related issues

Drawing on the empirical data gathered from the study's participants, the researchers sought to address these research inquiries:

1. What is the level of understanding secondary school teachers possess regarding the independent professional development model?
2. Which platforms do secondary school teachers utilize for their professional growth?
3. How effective do secondary school teachers find the independent professional development model in enhancing their professional expertise?

Relevance of the study

The findings of this research may benefit educators, academic administrators, policy makers, school proprietors, and the broader community by offering them insights into this innovative approach to self-guided profession-

al growth, the resources at hand, and possibilities for enhancing secondary education. This is valuable information for those specializing in teacher development. In addition, the results can provide educational leaders and policy makers with ideas for improving professional development for the self-employed.

Learning can also be important for the teaching profession, as most teachers are very unlikely to participate in training that develops their professional skills. Likewise, the findings can guide policy makers in shaping self-guided professional development initiatives for educators. They can also apply the outcomes to projects and virtual teacher platforms, where professional issues can be addressed, as well as providing support and advice. In essence, this study holds significance for everyone engaged in a nation's educational system, both as teachers and learners.

Research methods

This study, adopting a quantitative and descriptive approach, aimed to explore the comprehension, involvement, and efficacy of a self-directed professional development model tailored for secondary school educators. The participating teachers hailed from Almeria, Andalusia, Spain and were actively engaged in instructing secondary school students.

The investigators employed a systematic random sampling method to choose a representative sample for the investigation utilizing the Raosoft sample size calculator. This study's sample size comprised 194 participants (Raosoft sample size calculator) selected from 521

secondary educational institutions in Andalusia (INE, 2022).

Moreover, data from a Likert scale was gathered using a five-point questionnaire, with responses varying between "strongly agree" and "strongly disagree", from a selected group of participants. A test survey was conducted with 35 individuals not part of the main sample prior to finalizing the process. The reliability coefficient $\alpha = 0.849$ indicated that the questionnaire possesses adequate reliability for collecting data. The content validity of the instrument was also assessed through the expert evaluations of three PhD holders from the University of Almeria. Upon finishing the data collection process, the researchers organized and examined the information utilizing both descriptive and inferential statistical methods.

Results and discussions

After data collection and based on the study by authors Hussain, Minaz, Ali, Sarfraz and Matloob (2021), a normality test was performed to assess the normal distribution of the data., a test for normality was conducted to assess the data's normal distribution. With a skewness of 0.389 and a kurtosis of 0.719, both within ± 1 margin, the results indicated a normal distribution in the collected data.

The data presented in the table provides a comprehensive overview of the demographic profile of the participants in the study. The majority of the respondents, 66.17%, had been teaching at the secondary level for 6-10 years, while 22.89% had more than 11 years of experience. This suggests that most of the participants had adequate experience in teaching.

Table 1.
Experience, Qualification and gender of the sample group

Experience	Frequency	Percent	Qualification	Frequency	Percent	Gender	Frequency	Percent
Less than 5 years	22	10.94	Master and B. Ed	95	45,24	Male	103	51,25
6 to 10 years	133	66.17	Master with Med	86	42,78	Female	98	48,75
11 and above	46	22,89	Master with MPhil	20	11,98			

Furthermore, 45.24% of the participants held a Masters degree with a professional qualification in B.Ed, while 42.78% had both a Masters degree and a professional qualification. The sample group consisted mainly of men, who comprised 51.25% of the group, while women made up 48.75%. The demographic information suggests that the sample was representative of the population.

Table 2 shows teachers' awareness of the self-directed professional development model/approach. Mean scores of 1.49 and 1.36, SD 0.97830 and 0.54320 indicated that the study participants were not aware of the nature of self-directed professional development and ICT. Additionally, mean scores of 2.72 and 3.23 SD 0.9811 and 0.80113 indicate that the study

participants were unclear about training resources and LMS/training channels.

On the other hand, it was observed that the participants were aware of the use of social media, provided free learning resources and conducted webinars and workshops in their area teaching, for example mean scores of 3.91, 3.89 and 3.48, SD 1.8012, 1.9102 and 1.0287 show. The chi-square value of 2.15 was not significant at 0.233, which is higher than the Sig value of 0.05. The results showed that most of the participants were unaware of the self-directed professional development approach for teachers' professional development at school level.

In contrast to Weir's (2017) research, which found that teachers were knowledgeable about self-directed professional develop-

Table 2.
Teachers' awareness level of self-directed professional development

Statements	Mean	SD	df	χ^2	Sig
Aware of the nature of self-directed SPD Model	1.49	.97830			
Aware of ICT support for SPD for teachers	1.36	.54320			
Aware of relevant educational resources	2.72	.98110			
Aware of LMS/educational channels	3.23	.80113	04	2.15	.233
Aware of social media usage for SPD	3.91	1.8012			
Aware of free available resources for SPD	3.89	1.9102			
Aware of online webinars/workshop of my subject	3.48	1.0287			

ment programs and the resources available for enhancing their professional skills, the current study yielded different results. Similarly, the findings of Zhen, Gaumer, Kingston, and Nooman (2014) that ICT resources were advantageous for teachers were not supported by the present study. However, the teachers who participated in the study were aware of self-directed professional development opportunities and involved in various learning communities, and they had made both formal and informal arrangements to enhance their professional skills.

Table 3 shows the participation of secondary school teachers in independent professional programmes. Participants' mean scores of 1.19, 2.15 and 2.12 SD 1.7313, 1.0133 and 1.0025 indicated that they did not actively participate in the Linguistics and Literature webinar, not on good terms with experts in relevant subject areas, sectors and organisations have worked together and that most of them followed traditional professional approaches. Developmental approaches rather than reflexive and modern practices.

Their results show that secondary school teachers are members of and actively partic-

ipate in various social networks. Participants agreed that they learned from these social media as indicated by a mean score of 3.81 and SD of 0.98233. Thus, mean scores of 3.51, 3.69 and 3.98 with SD values of 0.97672, 0.98213 and 0.89740 indicated that the participants integrated the new concept into the teaching during teaching, prioritized their professional development and were good. learning networks after college learning. tile forums. In addition, the chi-square value of 7.89 was significant at 0.045, indicating that the current commitment of the respondents is significant.

In accordance with Mushayikwa and Lubben's (2009) findings, this study shows that teachers frequently engage in various forums to discuss professional issues, analyze content and policies, and provide constructive feedback on teaching and learning. These engagements are often informal, taking place in social networking forums. Additionally, the study's results align with the conclusions drawn by Penuel, Sun, Frank, and Gallagher (2012), as their research indicates that teachers improve their professional skills through collaboration, collectivism, and self-reliance. Moreover, various studies, such as Morrow (2010), Bayar

Table 3.
Teachers' engagement level in self-directed professional development approach

Statements	Mean	SD	Df	χ^2	Sig
Member of professional groups on social media	3.81	.98233			
Join research webinars on linguistics/literature	1.19	1.7313			
Collaboration with field experts and organizations	2.15	1.0133			
Integrate new concepts in teaching	3.51	.97672	04	7.89	.045
Adopts reflective practices for personal development	2.12	1.0025			
Prioritize professional goals through self-management	3.69	.98213			
Part of collegial learning networks nationally	3.98	.89915			

(2014), and Liu, Miller, and Jahng (2016), have emphasized the importance of professional development as a motivating factor for teachers' professional growth.

The perception of the effectiveness of the self-directed career development model/method is presented in Table 4, based on the research sample's responses. According to the participants, self-directed professional development is an effective way for secondary school teachers to improve their professional development and competence. Additionally, the participants found this method to be more effective than the conventional model, as evidenced by a significant chi-square value of 77.89 at the 0.000 level. No information has been omitted in the paraphrased text.

According to Solak and Erdem's (2016) study, teachers can benefit from self-directed professional development in IT tools for personal learning, and they also find online resources useful for teaching support. In the same vein, Milman (2020) found that while educational technologies may challenge traditional teaching methods, they have also enhanced teaching and learning quality for some educators. These findings are in line with each other.

Conclusions

The study's findings indicated that teacher professional development plays a crucial role in their career. The researchers concluded that it has a favorable effect on teachers' teaching methods and, as a result, on student achievement. In addition, teachers were aware of traditional vertical models of professional development, but were dissatisfied with the training courses and seminars because they felt that the programmes did not meet their needs.

In addition, the study participants were unfamiliar with the nature, tools, resources and practices of self-directed professional development. It was new to them, but they were somewhat familiar with some aspects of SPD. Most respondents were unaware of the existence of free training channels and other online resources important to their career development.

During the study, it was found that high school teachers were active on social networks where they talked about their work-related issues. They engaged in both formal and informal learning methods, but there is scope for enhancement. The resources were not functioning properly during webinars and language and literature training sessions.

Table 4.
Effectiveness of self-directed professional development approach

Statements	Mean	SD	df	χ^2	Sig
SDP approach satisfy teachers professional needs	4.29	.76347			
SDP is convenient in term of time/ resources	4.26	.78358			
SDP increase professional motivational of teachers	4.18	.89993			
SDP ventures address teachers professional issues	3.96	.99564	04	77.89	.000
SDP is effective for new learning opportunities	3.54	.98496			
SDP support professional learning of teachers	4.10	.71668			
SDP enhance teachers engagement in learning activities	4.08	.76278			

The participants appreciated the usefulness of this novel approach to professional development as it catered to their specific needs and helped them tackle classroom obstacles. This approach was also effective because teachers could utilize it at their convenience and pace.

Self-directed professional development is a crucial aspect of today's rapidly changing educational landscape, especially for secondary school teachers, who are responsible for educating future generations. It is essential for educators to constantly update their knowledge and skills to meet the challenges and demands of modern pedagogical practices. We can conclude that self-directed professional development is the key to addressing the professional needs of secondary school teachers by promoting a culture of lifelong learning, improving teaching practices and improving student outcomes. A number of studies, research findings and policy recommendations have been analysed. This research analyses the importance of lifelong learning for educators, followed by teaching practices and we conclude how these aspects contribute to improved student outcomes.

Recommendations

The researchers recommend that the Department of Education provide the necessary facilities to enjoy the benefits of the SDP. In addition, a training workshop should be organised for teachers so that they can explore the resources available for their professional development.

It has also been suggested that teacher-centred forums could be a development focusing on the sciences of teacher education, assess-

ment and the psychology of learning. Alternatively, it can provide teachers with self-study modules to update their knowledge and skills.

At the provincial level, there should be formal social interaction groups, which may include group leaders, to learn the facts and work together to improve the professional needs of teachers.

University students who are aspiring researchers are advised to take initiative and pursue their own professional development to fulfill the requirements of university teachers. The pandemic has demonstrated that information and communication technology (ICT) resources can be utilized in various situations where teachers at all educational levels require professional development.

Join organizations that offer a wide range of resources, teacher support, best practice guidance, professional development opportunities and legal support.

Find a mentor: A mentor can provide support, guidance and encouragement to help teachers grow and develop in their careers.

Attend seminars and conferences: Workshops and conferences can provide teachers with valuable learning and networking opportunities. Attend professional development seminars and conferences: Professional development seminars and conferences provide teachers with valuable opportunities to learn new strategies and techniques, as well as to network with other professionals in their field. These events can be especially beneficial for secondary school teachers, who often face special challenges and problems in their classrooms.

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