



## **Teacher Adaptability to Change in Special Education: Creativity and Commitment to the Institution**

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### **Abstract**

The transition to inclusive education implies a global transformation of the school. Mexican teachers face the implementation of the paradigm of inclusion in special education. We set out to define new skills needed in special education teachers' profiles in the inclusion framework. In the survey presented to 39 Special Education graduates in Puebla who responded to our questionnaire, we related the variables of demand in their work to adapt to technological and organizational changes, commitment and satisfaction with the institution, and teaching competence in creative innovation. We processed the data with the open-source statistical software PSPP to test our data's reliability and relate the variables employing Pearson's correlation coefficient. In order to meet the job requirements of adapting to technological and organizational changes, special education teachers must enhance their competence of creative innovation (Pearson's  $R = .77$ ); and feel commitment and satisfaction with the institution they work in (Pearson's  $R = .73$ ). Such commitment to and satisfaction with the institution require collaborative work with the rest of the teaching staff and the institution's authorities. Conditions for teachers' identification with and commitment to the institution build up through a dialectic relationship between the institutions and employees.

Keywords: Special Education, Inclusive Education, Alumni Survey, Commitment, Creativity

### **Introduction**

The transition to an inclusive school leads to a global transformation. Mexican teachers face the implementation of the paradigm of inclusion in special education. "This does not necessarily imply the elimination of professionals, but rather their re-professionalization" (Gallego & Rodríguez, 2007), raising teacher awareness of the variety of barriers students face in school and society. Preferably receive from the training school preparation on the needs of culturally diverse learners (Brownell, Ross, Colón, & McCallum, 2005), in line with Ainscow (2019), review national policies, lead the

development of inclusive schools, and create inclusive classrooms.

Graduate studies are a two-way mechanism between professionals and the institution that trained them, with the former becoming an essential source of feedback. Graduates express the social role and values acquired during their academic training (Villacrez Oliva, 2018) and are genuinely interested in contributing ideas to improve professional training and working life in special education. Furthermore, graduate studies help us review the faculty's mission's effectiveness and assess its accurate understanding of the social environment (Aldana de Becerra, 2008) because graduates provide us with up-to-date information on educational challenges in the field.

Special education is challenging and requires adjusting teachers' profiles and skills. Gersten et al. (2001) studied the relationship between the intention to stay in special education and factors such as job satisfaction, commitment to teaching in special education, and stress relief through collaboration with principals and other teachers. The role of the teacher is crucial in implementing inclusion in the classroom. Teachers are the most significant influence on pupils' educational and social outcomes with special educational needs (Efthymia & Alison, 2017). We should note that when school inclusion fails, it can result in poor school socialization, feelings of social rejection, and low aspirations of integrated students (Lackaye, Margalit, Ziv, & Ziman, 2006). Let us consider that special education in Latin America still has dedicated institutions called in Argentina "escuela colador" or "strainer schools" (Schwamberger & Silvia Grinberg, 2020). Special schools serve the population that does not have access to the few existing integrated schools; other itinerant special education teachers, both in Brazil and Mexico, intervene in classrooms where coexistence among students still needs to be considered inclusive (Silva et al., 2020).

Teacher competence is situationally and socially determined (Blömeke & Kaiser, 2017) and evolves. In special education, teaching competence has proven to improve when teachers receive professional instruction in special education (Nougaret, Scruggs, & Mastropieri, 2005). Such training might include simultaneous instructional internships, discrete trials, and video reviews of internships (Vuran & Olcay, 2012); unfortunately, job stress levels are notable due to causes such as lack of motivation and low job satisfaction (Major, 2012). The coverage of special education teachers in regular schools is insufficient; although we do not have data on how many schools are attended by teachers and how many do not have special education services, we can get an idea if we have the following information:

According to SEP (2020) there are two types of services in the entity: the Multiple Attention Centers (CAM), which serve 2591 students (0.14% of the total number of students in primary education), and the Service and Support Units for Regular Education (USAER), which have in their registry 14634 (0.14% of the total number of students in primary education).

Teachers must cope with stress and adapt to organizational and technological

changes in the workplace. The competence of adaptability is familiar to teachers. In our daily work, we establish relationships with different people, and we are used to modifying our verbal and non-verbal approaches to address them (Hunt, 1976). Every strategy should adapt to local needs, which is better than choosing a single intervention (Skiba et al., 2008) and an ability to adapt to the school curriculum and the class (Pérez y López Francés, 2017). Both teachers' motivation to work in an inclusive classroom and students' desire to participate and collaborate is essential in building on what students find enjoyable and productive. (Hopkins, 2008).

Creativity means a person's capacity to produce new or original ideas (Wyse & Spendlove, 2007) to show curiosity, motivation, and multi-perspective (Jahnke, Haertel, & Wildt, 2017). There are experiences of working on creativity in early childhood special education to maximize their social and emotional potential through art therapy. (Patricia, Bush, Siegel, & Ventura, 2010). To teach creatively is not the same as teaching creativity. To teach creatively means responding to learners' needs, leading them to develop their creativity. (Jeffrey & Craft, 2004). The British NFER report (1998) called "professional creativity" the ability of sensitive eclecticism to respond to curriculum, group, and individual needs. The ultimate meaning of improving practices through innovation and creativity lies in forming dynamic professionals (Santa Anna, 2019) who know their mission to improve society.

On the other hand, the relationship between commitment and performance exists, but it is complex and depends on how commitment manifests. (Angle & Perry, 1981) Some factors are known to encourage teachers' outstanding commitment, such as the perception of a benefit in professional development (Grunwald & Peterson, 2003) and teachers' positive experiences in the teaching exercise. Positive experiences produce satisfaction and lead to personal and professional development and fulfillment (Gonzalez Such & Subaldo, 2015). A survey carried out with teachers in Mexico shows a medium-high satisfaction with the profession, highlighting the social-relational aspect positively and negatively, the evaluation, and salary. (Cantón Mayo & Téllez Martínez, 2016) As per Siqueira (2008), investigating job satisfaction means evaluating how much the enterprise's offered returns in promotions and salary satisfy the worker. Commitment to the institution is related to affective and normative aspects (Machado Dias, Luiz de Paula, & Barbosa de Oliveira, 2016); we intended to confirm whether a commitment to the institution also plays a role in adaptation to technological and organizational changes in special education.

### **Research Method**

We collected the data from a questionnaire solved by 39 Special Education graduates working in special education in Puebla. They graduated 2 to 5 years ago from BINE institute. The questionnaire is an adaptation of the instrument "Esquema Básico para Estudios de Egresados" (ANUIES, 1998), modified and approved by the Institute's Alumni

Follow-up Committee, which is published and available for consideration by the general public. The questionnaire addresses their satisfaction and challenges in their field of work in Puebla, Mexico. In addition, we maintain a relationship with alums through mailing lists and social networks through this institutional program.

Graduates responded to 17 items rated from 1 to 4 (Likert scale) on pro-fessional requirements in special education and satisfaction with their work. Graduates valued each item as highly demanding, lightly demanding, and not demanding.

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Table 1: Variables

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Special Education graduates	
Level of demand in their work to adapt to technological and organizational changes.	Commitment to and satisfaction with the institution.
	Teaching competence of creative innovation.

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We evaluated the results for all variables, including the three related variables. First, we calculated Chi-square to test the categorical data fit to the theoretical distribution. Second, the data were processed with the open-source statistical software PSPP to relate the variables using Pearson's and Spearman's correlation coefficients. Third, we tested our data's reliability using Cronbach's Alpha for the whole sample and its variables. Finally, we had to conduct a conceptual discussion to discover the relationship between the variables.

### **Results and Discussion**

In the general review of the satisfaction questionnaire results, graduates valued their integration into working life, addressing that a significant satisfaction was to put the acquired knowledge into practice; in contrast, the areas in which they were less satisfied were salary (income and benefits) and professional recognition. Previously, special education teachers' predicted teacher exhaustion, cynicism towards the teacher community and inadequacy in the pupil-teacher relationship. (Soini, 2019)

The variables involved in this study presented the following results.

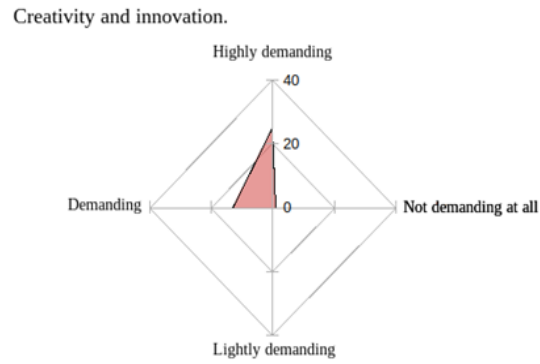


Figure 1: Teaching competence of creative innovation

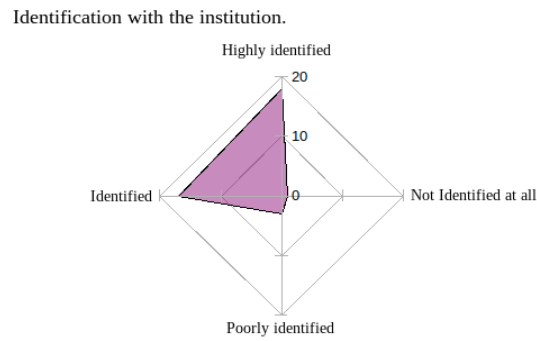


Figure 2: Commitment to and satisfaction with the institution

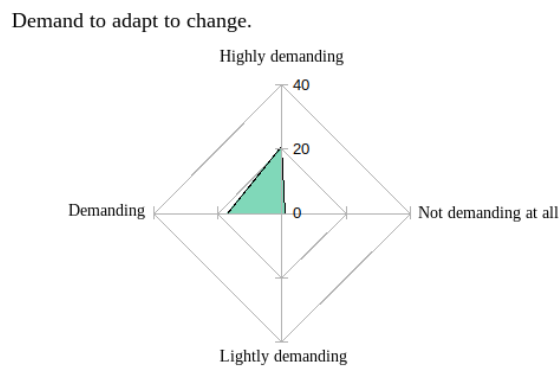


Figure 3. Level of demand in their work to adapt to technological and organizational changes

The chi-squared test for the three variables was as follows:

	Commitment	Adaptation	Creativity
Chi-Square	94.79	74.63	127.45
df	3	2	2
Asymp. Sig	.000	.000	.000

We tested our data's reliability using Cronbach's Alpha and tested the reliability of our statistical sample.

Reliability Statistics	
Cronbach's Alpha	N of items
.87	3

By applying Spearman's and Pearson's correlation coefficients, the variable "commitment to and satisfaction with the institution" proved to be related to "the level of demand in their work to adapt to technological and organizational changes."

Category	Statistics	Value	Asymp. Standard Error	Approximate T
Ordinal by Ordinal	Spearman correlation	.70	.10	5.91
Interval by Interval	Pearson's R	.73	.09	6.40
No. of valid Cases		39		

Given the resulting values of Spearman's correlation and Pearson's R, we rejected the null hypothesis. The data suggest that the relationship between the variables exists. The first hypothesis is confirmed: Commitment to and satisfaction with the institution enables special education teachers to meet the job requirements of adapting to technological and organizational changes. We now know that an essential factor in adapting to the

administrative and technical changes occurring in special education is the commitment to and satisfaction with the institution. This issue is not possible to solve directly in the teacher training institution. Still, it is relevant to consider when understanding the work situation of our graduates to enhance the necessary skills to cope with the task. Special education professionals have previously mentioned the challenge of integrating technology included technology malfunctions and a lack of teacher and student technological knowledge. (Anderson & Putman, 2019).

Table 4: creative innovation versus adaptation to technological and organizational change

Category	Statistics	Value	Asymp. Standard Error	Approximate T
Ordinal by Ordinal	Spearman correlation	.64	.11	5.01
Interval by Interval	Pearson's R	.77	.12	7.34
No. of valid Cases		39		

Spearman and Pearson correlations for the second pair of variables were also significant. Data confirmed the second hypothesis. The teaching competence of creative innovation enables graduates to meet the job requirements of adapting to technological and organizational changes. Creativity complements the association between perceived autonomy support with teachers' adaptability, and both constructs were positively associated with teachers' well-being and organizational commitment (Collie & Martin, 2017); and complements the relationship of creativity and adaptability to the teaching efficacy for elementary and secondary teachers found by Patrick (2012). Therefore, in addition to learning firsthand about the most and least satisfactory aspects of teachers, we have found two relationships essential to the working life of special education:

To meet the job requirements of adapting to technological and organizational changes, special education teachers must enhance their competence in creative innovation (Pearson's  $R = .77$ ); and feel commitment and satisfaction with the institution they work in (Pearson's  $R = .73$ ).

The relationship between commitment to the institution with meeting job requirements was a discovery. Somehow, we had not considered psychological aspects but rather theoretical ones to evaluate teachers' performance in special education. Such an outcome motivated us to get involved with organizational and work theories to better understand the phenomenon and allowed us to learn about the existing literature on the stress levels suffered by teachers in the area. It is a well-known fact, stated by Potter (2021)

that special education teachers have higher rates of psychopathology diagnosis and symptoms.

We have the empirical pulse of working conditions in private and public schools and know that job security is higher in the public sector. Moreover, we have information on which people who answered the questionnaire work in the public and private sectors. Therefore, we can make that statistical distinction and conduct further research.

### **Conclusion**

The evolution of special education in Mexico has made it necessary to modify teaching competence to adapt to the inclusion paradigm and organizational and technological changes.

In the general review of the satisfaction questionnaire results, graduates valued their integration into working life, addressing that a significant satisfaction was to put the acquired knowledge into practice; in contrast, the areas in which they were less satisfied were salary (income and benefits) and professional recognition.

To meet the job requirements of adapting to technological and organizational changes, special education teachers must enhance their competence in creative innovation (Pearson's  $R = .77$ ); and feel commitment and satisfaction with the institution they work in (Pearson's  $R = .73$ ).

Teachers use creativity when they can match the curriculum with learners' needs and interests; indeed, creative innovation is necessary for special education teachers to create enjoyable and engaging learning environments for each individual in the classroom.

Commitment to and satisfaction with the institution requires collaborative work with the rest of the teaching staff and the institution's authorities. Conditions for teachers' identification with and commitment to the institution build up through a dialectic relationship between the institution and employees, although these challenges add up to teacher exhaustion and cynicism towards the teacher community.

We suggest further study of this variable in the future related to the working conditions, working environment, and salary of special education teachers in Mexico, taking into account the difference in perception between special education teachers working in public and private institutions in Mexico.

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