

# Teachers' primary concerns in a case of educational innovation introduction in primary schools in Greece

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## Abstract

*By converting all-day primary schools of suburban and urban areas in Greece into schools that implement the Comprehensive Reformed Educational Programme (CREP), a set of innovations were implemented, significantly altering the Greek school. The purpose of this study was to investigate the effect of selected variables over concerns of teachers who work at such schools. Additionally, this research asked the teachers to identify the professional development support and interventions required to enable them to make better use of the Book-reading Advancement (Philanagnosia) Activities innovation. Teachers' administrative and pedagogical guidance executives, based on the above, will design the necessary interventions to positively address teachers' concerns and implement the specific innovation in the most effective manner. Overall, the study found that higher teacher concerns were task related, with a significant record of information and self-concerns, which may indicate that the introduction of the innovation was not properly designed to address teachers' primary concerns.*

**Keywords:** Innovation management; book-reading advancement activities; Philanagnosia; Stages of Concern (SoC);

## 1. Introduction

### **Book-reading Advancement Activities (Philanagnosia) in Greece primary schools during the reform effort of 2010.**

The design of the new curriculum by the Ministry of Education of Greece was made with the aim of addressing with a holistic approach the dysfunctions of primary education and the modernization of structures and content. With the beginning of the reform effort in the school year 2010-11, both the New Curricula were piloted, which focused on the student and the learning process and highlighted the active role of the teacher, as well as the operation of schools that implement the Comprehensive Reformed Educational Programme (CREP). The declared goal of the reform was the gradual transformation of the primary school through the enrichment of resources and means (human and material) in the direction of an open and creative learning community.

In 2011, new Curricula for the teaching of Modern Greek Language and Literature were prepared for the primary school, with the aim of implementing pilot program in 99 of the 961 CREP primary schools. These programs gave impetus to the development of practices and activities related to the literary book and

highlighted the inspiring role of the teacher who will promote these processes, to restore a relationship between the students and the book. This role is also related to the operation of the school library. This pilot program was implemented with many obstacles and in a negative climate on the part of the educational world, did not yield the expected results and essentially abandoned the idea of diffusing any positive conclusions that could have been drawn. The planning and the implementation strategy and the effectiveness of the reform efforts made by the Ministry of Education during the three years 2010-2013 could be the subject of special research.

The creation of CREP primary schools was a large-scale reform, which would unfold with the simultaneous introduction of a set of innovations that would change (according to the designers' intention) for the better the Greek educational system to its mandatory levels. They brought changes to the curricula, to the weekly schedules but also to issues of technological support for the implementation of these innovations. These schools will have a mandatory schedule of 35 hours per week (daily 08:00 - 14:00) for all students and an optional two-hour afternoon program (14:00-16:00).

This package, according to the wording of the Institute of Educational Policy (I.E.P), contained innovations, including the introduction of the teaching of Book-reading Advancement Activities (*Philanagnosia*) as an independent course of the Curriculum, the introduction of computer science by the first grade of Primary School (6-7 years old), the introduction of an experiential activities, increasing gym hours in all classes, introducing art and teaching classroom drama and theatre, expanding English language teaching starting from first grade, and health education, the environmental - sustainability education and traffic education.

In the set of innovations that teachers were invited to introduce in their teaching work, they included the teaching of Book-reading Advancement Activities (*Philanagnosia*) in a distinct teaching hour in the schedule. The aim of this innovation was to cultivate the Book-reading disposition of students with Book-reading Advancement activities and reading inspirations. The guidance on the part of the Ministry of Education and the I.E.P. it was limited to laws and orders that outlined the innovations at a technical and operational level and were informative about the type of changes and goals that teachers had to achieve.

In particular, "Philanagnosia" is another expression of the love for reading books in general, or specifically, for literary books. This love is related to reading practices, which develop a communication framework. This love of reading, that is, *Philanagnosia*, has been recognized as an important parameter of wider human cultivation and particularly beneficial in helping children to go through the developmental stages of childhood and adolescence safely. The term "*Philanagnosia*", although relatively new in the Greek language, can become a carrier of what is referred to as "reading culture", which will inspire respect and love for reading and books. As a term, it can be differentiated from corresponding foreign language terms, both conceptually and ideologically (literacy, literatie), but it manages to unilaterally condense some foreign language constraints ("love reading", "aimer lire" etc.) which contain a positive identified relationship of the reader with the book. However, the main scope of reading is cognitive and is used in school-type activities or programs, regardless of context. The reality of modern Greek education (competitive cognitive approach, non-supportive environment, stressful program, lack of libraries, rapid devaluation of equipment, etc.) turn reading from a natural, dynamic process into an artificial, forced and one-sided dimension.

This fact quickly emerged as a potential source of difficulty and / or stress for teachers, who would have to

form the appropriate teaching material on their own, in order to systematically teach *Philanagnosia* and to cover the teaching objectives of the course. This obligation required the relevant knowledge and experience of the Curriculum regarding the teaching of literature and the production of material (for example, lesson plans with goals, predictions for teaching and evaluation of learning outcomes), an act for which the vast majority of teachers were not trained, nor did they have experience of organized and systematic production of teaching materials.

In order to support teachers and facilitate the systematic teaching of *Philanagnosia*, educational institutions must respond with programs and incentives related to teachers' concerns about the adoption of innovation. They must also formulate an understanding of the obstacles (such as the lack of administrative and pedagogical support for the systematic teaching of *Philanagnosia*) which emerge in participants as they implement innovation.

Understanding teachers' concerns during the implementation phase can help management and pedagogical executives to support teachers by providing them with appropriate professional development activities. Approaching the teaching of *Philanagnosia* at CREP primary schools with a user-centered approach, the Concern Based Adoption Model concept highlights change as a developmental process that is experienced individually within an organizational context and recognizes the personal aspects and feelings of change, highlighting the perceptions of those involved in the process of change.

Understanding the different concerns of teachers when examining the teaching of *Philanagnosia* in the CREP primary schools is useful for understanding the experiences that teachers experience when adopting innovation. This process will help in the targeted planning of appropriate professional development activities to support and survive innovation in the school environment. In particular, exploring how the combination of personal, Book-reading Advancement Activities and organizational characteristics influences the greatest intensity (or peak) of concerns can help design professional development and intervention programs to properly address the main characteristics that appear to affect intensity of unrelated concerns, concerns for the individual, for the project and for the effects on students.

This study, which seeks to understand teachers' concerns about the systematic teaching of *Philanagnosia* in CREP primary schools, will be valuable for understanding possible ways of adopting similar innovations that have been or will be introduced in school units of this type (or similar). As mentioned above, the centrally designed educational policy, trying to reform the compulsory education units, establishes changes and introduces innovations in the operation of the school units at a more frequent pace and with greater intensity. Therefore, the understanding of teachers' primary concerns about the teaching of *Philanagnosia* in CREP primary schools is important, so that management and pedagogical executives can provide the appropriate programs, resources, and initiatives to support and maintain the teaching of *Philanagnosia* in CREP primary schools.

The theoretical framework of this study is mainly based on the Concerns Based Adoption Model (CBAM) and on Stages of Concern (SoC) that have been developed by George, et al., (1979, 2008) and Hall & Hord, (1987, 2011) (<https://www.air.org/resource/stages-concern>). This model refers to the intensity of users' concerns about the implementation of innovations. This model was considered appropriate for the initial framework of examining the concerns of teachers implementing a range of educational innovations, due to its widespread acceptance in educational research and focus on understanding an individual's attitudes,

perceptions, thoughts and assessments. when using an innovation.

The literature identifies a large amount of studies that have been supported by the Stages of Concern (SoC) of the Concerns Based Adoption Model (CBAM) and which have examined various innovations in educational environments, providing researchers with a way to explore emotions, feelings and perceptions of those who have been involved in a process of change, and in some cases, certain characteristics, such as years of innovation have been identified, which may affect the intensity of a particular stage of concern (Hord & Roussin, 2013; Hall & Hord, 2011; George, Hall & Stiegelbauer, 2008; Long & Constable, 1991; Strawitz & Malone, 1984).

Based on the theory of Stages of Concern by Hall and Hord (2011), a person's concerns change as the user evolves and becomes more specialized with the use of an innovation, moving successively from unrelated concerns to those that refer to himself, then to management concerns and finally to those about innovation impact. User concerns (for example, their feelings, perceptions and attitudes) related to the adoption of teaching innovations seem to be of a developmental nature, because the former concerns must be dealt with first (to "lower" the intensity on these) before higher stage concerns arise (which have a positive sign, both for the successful implementation of the innovation and for its consequences on children).

Table 1: Stages of Concern (SoC)

Stages of Concern		Stages of Concern About the Innovation: Paragraph Definitions
IMPACT	Stage 6 – Refocusing	The focus is on the exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation. <b>Expressions of Concern:</b> I have some ideas about something that would work even better.
	Stage 5 – Collaboration	The focus is on coordination and cooperation with others regarding use of the innovation. <b>Expressions of Concern:</b> I am concerned about relating what I am doing with what my co-workers are doing.
	Stage 4 – Consequence	Attention focuses on impact of the innovation on “clients” in the immediate sphere of influence. <b>Expressions of Concern:</b> How is my use affecting clients?
TASK	Stage 3 – Management	Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost. <b>Expressions of Concern:</b> I seem to be spending all my time getting materials ready.
SELF	Stage 2 –	Individual is uncertain about the demands of the innovation,

	Personal	his/her inadequacy to meet those demands, and his/her role with the innovation. This includes analysis of his/her role in relation to the reward structure of the organization, decision making, and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected. <b>Expressions of Concern:</b> How will using it affect me?
	Stage 1 - Informational	A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner, such as general characteristics, effects, and requirements for use. <b>Expressions of Concern:</b> I would like to know more about it.
<b>UNRELATED</b>	Stage 0 - Unconcerned	Little concern about or involvement with the innovation is indicated. Concern about other thing(s) is more intense. <b>Expressions of Concern:</b> I am concerned about some other things.

(Hord & Roussin, 2013; Hall & Hord, 2011; George, Hall & Stiegelbauer, 2008)

It is possible for a person to express their concerns in more than one stage at a time. For example, a person may have personal concerns about how innovation will affect their daily work, and concerns about the consequences of how innovation will change the way they work with their students or colleagues. Concerns should reduce their intensity on one stage, in order to become more intense on another. Ideally, the intensity of concerns should range from the concerns about the person to the concerns about the consequences. However, it is possible that concerns about the individual may increase during the higher stages of the process of adopting an innovation, causing a setback (Christesen & Turner, 2014; LaRocco & Wilken, 2013).

To understand a person's concerns about an innovation, it is necessary to determine the peak of Stages of Concern by highlighting the stage that is most intense for the individual at the present time, and therefore the focus of their energy and time (Hall & Hord, 2011). By recognizing the various stages of concern (as described in Table 1) and highlighting the feelings, perceptions and questions that individuals have when faced with change, we respond to the emotional part of the change of process, and recognize that change has a personal side, experienced by all those involved in the implementation of an innovation. The introduction of an innovation, such as the systematic teaching of Book-reading Advancement Activities, can be a significant personal change for teachers, challenging established teaching and pedagogical methods.

In a number of studies (Hall & Hord, 2011; Hord, 2006; Hall, et al., 2005) it has been certified that the conceptual framework of Stages of Concern is effective in determining the most intense concern area of those who apply an innovation, in a range of fields, from education to health care. This framework helps

us to understand some of the characteristics of potential recipients of innovation (for example, years of service, gender, professional development, support from the organizational environment, etc.), which may affect concerns with the greatest intensity. As a result, using the information that can be provided to us, the executives of management and pedagogical guidance can design and develop interventions, in order to support the teachers who, participate in the process of adopting an innovation. Other studies report that a person's concerns will differ in their intensity, based on several factors, such as the use of innovation, participation in innovation-related professional development activities (Kyriakides, Charalambous, Philippou & Campbell, 2006; Christou, Eliophotou-Menon & Philippou 2004).

All individuals will experience concerns during the innovation process and, therefore, management and pedagogical guidance executives, acting as facilitators of change, should be aware of the fact that, although they themselves, for example, may have their own their concerns at the impact stage, many other teachers are new to innovation and have their concerns established at the stage of personal concerns. Facilitators of change must not overlook the fact that resistance to change is a natural reaction, and the best they can do is to take the necessary measures to support those involved in change, respecting their concerns, and not just judging them, for example, calling those who have personal concerns about being "resistant" or "laggards" according to Rogers' theory (Nasim, 2015; Christesen & Turner, 2014; LaRocco & Wilken, 2013; Rogers, 2003).

## **2. Literature Review**

One of the topics in the research on the adoption of innovations, which emerges from the review of the literature, has to do with the role of demographic variables (such as age, gender and previous service in education) in relation to the concerns that are being developed. During the examination of the issues that concern those who adopt an innovation, George et al. (2008) report that traditional demographic variables have no significant relation with concern. This conclusion is confirmed by Christou, et al. (2004), who found in their research on the concerns of teachers implementing new mathematics curricula in Cyprus, that there is no correlation between teachers' concerns and traditional demographic variables ( years of service or age), but there is a correlation either with the years of innovation or with the previous service.

Hord & Roussin (2013) and Hall & Hord (2011) further note that in an effort to implement innovations, variables that are more predictive than traditional demographic variables (eg age and gender), and should be investigated, are the variables that refer to conditions (eg organizational conditions such as school operation, administrative and pedagogical support) and interventions (eg vocational development programs).

One variable of the organizational framework, often cited as a key primary barrier to innovation spread in education, is the perceived lack of administrative and pedagogical support for implementing innovation, which may affect teachers' concerns. Furthermore, in the literature examining the spread of innovations, the value of influence by colleagues is mentioned as a variable of the framework in which innovation is applied. That is, if a colleague uses an innovation, then the awareness and use of innovation by the one who is not using it systematically can increase (Christesen, E., & Turner, J. (2014).

While some studies examine the relationship between organizational variables and the intensity of teachers'

concerns about innovation, several studies have examined the organizational conditions that may contribute to higher levels of concern (such as previous teaching experience - Todd, 1993) and professional development programs (Adams, 2002. Casey, 2000).

Relevant research (Chen & Jang, 2014; Petherbridge, 2007; Anderson, 1997) examines the effect of personal and technological characteristics and context-related variables on the concerns of faculty members from the introduction of learning management systems in the universities of the United States. However, there is very limited research that combines the relationship between personal and book-reading advancement characteristics of teachers as well as organizational characteristics of the context in their concerns.

### 3. Methods

#### 3.1. Sample

The population used in this research were 1,920 teachers in 160 schools that implement the Comprehensive Reformed Educational Programme (CREP) of suburban and urban areas in Greece. The samples used in this research were obtained by multi-stage random sampling from 93 elementary schools (Babbie, 2008). The research tool was sent to CREP schools and it was answered by 1035 teachers (response rate 53.9%).

### 4. Measurement

**4.1. Dependent variable:** teachers Stage of Concern regarding book-reading advancement

**4.2. Independent variable:** Personal, book-reading advancement and organizational characteristics. To measure the independent variables, a set of questions and scales was used, which would measure aspects of book-reading advancement and organizational characteristics as well as demographic information.

The teachers’ concern for overall respondents is a result of the aggregation of individual data into a profile (<https://sedl.org/concerns/admin/>) showing the primary mean percentile individual scores of each stage of concern, with the mean responses on the vertical axis. The curve of the overall mean percentile stage score for all respondents revealed that respondents’ highest concerns were task concerns (73%), with a slight tailing-up of impact-refocusing concerns (see Figure 1). The second peak was the consequences, followed by other concerns (unrelated, self, collaboration, refocusing) at similar levels. Overall, the concerns show a peak in innovation management concerns, with other concerns moving closer to the average, indicating that management concerns need to be addressed first, so that other types of concerns can emerge. This finding confirms a relevant finding by Van den Berg & Ros (1999). (Figure 1)

Table 2: overall respondents

Stage 0	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
48%	51%	52%	73%	59%	48%	47%

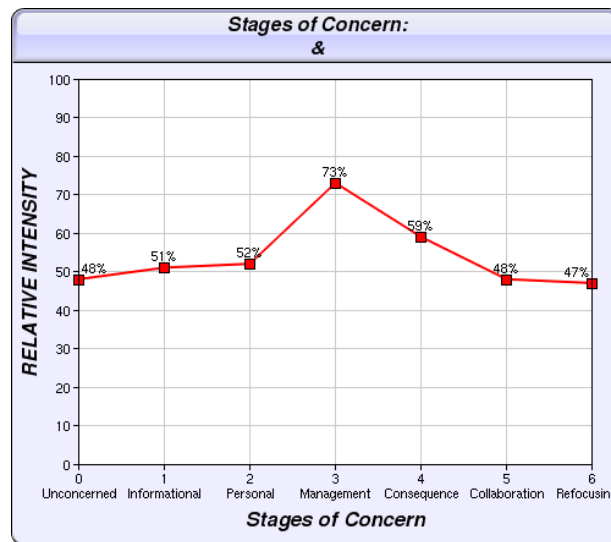


Figure 1

The teachers’ concern based on gender is a result of the aggregation of individual data into a profile (<https://sedl.org/concerns/admin/>) showing the primary mean percentile individual scores of each stage of concern, with the mean responses on the vertical axis. The curve of the overall mean percentile stage score by gender revealed that male highest concerns were task concerns (77%) and female teachers highest concerns were task concerns (73%). This finding indicates that the men in the sample have a higher intensity of management concerns (77%), who also have slightly higher information concerns (Stage 1, 54%, compared to 51% of women). Also, in stages 0, 2, 4 and 5, similar percentages appear, while in stage 6, women excel with a percentage of 52%, compared to 47% of men. (Figure 2)

Table 3: overall mean percentile stage score by gender

Selection	#	stage 0	stage 1	stage 2	stage 3	stage 4	stage 5	stage 6
woman	684	48	51	52	73	59	48	52
man	316	48	54	52	77	59	48	47

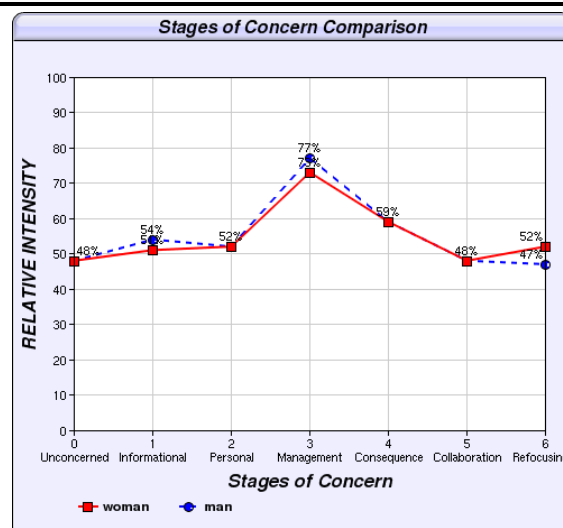


Figure 2



The teachers’ concern based on the number of years taught is a result of the aggregation of individual data into a profile (<https://sedl.org/concerns/admin/>) showing the primary mean percentile individual scores of each stage of concern, with the mean responses on the vertical axis. The curve of the overall mean percentile stage score by years taught revealed that the groups at the ends of the year range have opposite profiles. Those with 1 to 4 years of working experience as teachers have high concerns in the first three stages (unconcerned 61%, informational 63% and personal 63% concerns), while they show lowest concerns in the top three stages (consequence 38%, collaboration 36% and refocusing 34%).

The group of teachers with 21 or more years taught presents the opposite picture. They show lowest concerns in the first three stages (unconcerned 48%, informational 48% and personal 45% concerns), while they have high concerns in the three higher stages (consequences 63%, collaboration 55% and refocusing 52%). The two middle teams in terms of working experience (5 to 10, and 11 to 20 years of working experience) show a similar development of their profile with the highest overall concerns in stage three (management) at levels that show significant intensity of management problems (average peak concerns 80% and 77% respectively). (Figure 3)

Table 4: overall mean percentile stage score by years taught

Selection	#	stage 0	stage 1	stage 2	stage 3	stage 4	stage 5	stage 6
1-4	93	61	63	63	73	38	36	34
5-10	288	55	54	57	80	54	44	47
11-20	392	48	51	52	77	63	52	52
21-more	227	48	48	45	69	63	55	52

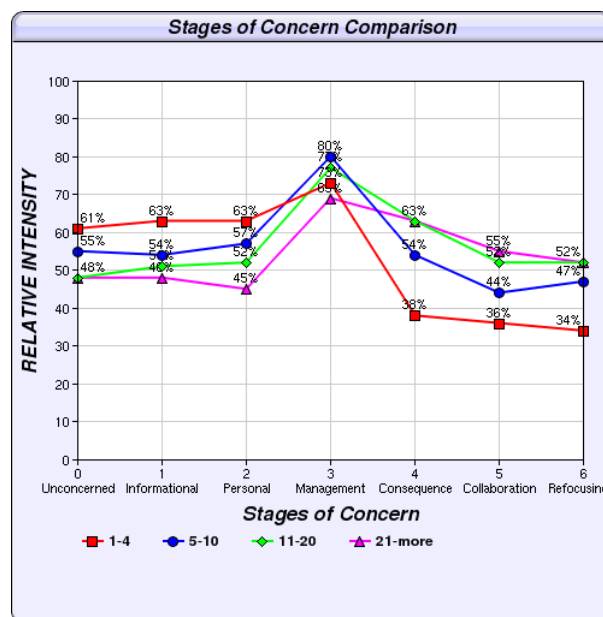


Figure 3

The teachers’ concern based in formal training on book-reading advancement activities is a result of the aggregation of individual data into a profile (<https://sedl.org/concerns/admin/>) showing the primary mean percentile individual scores of each stage of concern, with the mean responses on the vertical axis. The curve of the overall mean percentile stage score based on their participation in formal training on book-reading advancement activities revealed that the overall profile of the teachers (based on the official training for the innovation of book-reading advancement activities, presents the following picture. Teachers who have stated that they have received formal training have very low concerns in the first three stages (unconcerned 40%, informational 45% and personal 41% concerns), and from the stage 3 (management), they begin to rise, to peak in stage 4 (consequences) and to be maintained at relatively high levels in stages 5 and 6 (collaboration and refocusing). On the contrary, those teachers who have stated that they have not received formal training, their concerns peak at stage 3 (management – 77%), and, abruptly, sink to low levels ( stage 4-consequences 54%, stage 5-collaboration 44% and stage 6-refocusing 47%). The effect of formal training on book-reading advancement activities is evident in this scheme. (Figure 4)

Table 5: overall mean percentile stage score based on their participation in formal training

Selection	#	stage 0	stage 1	stage 2	stage 3	stage 4	stage 5	stage 6
Yes	230	40	45	41	65	66	59	57
No	770	55	54	55	77	54	44	47

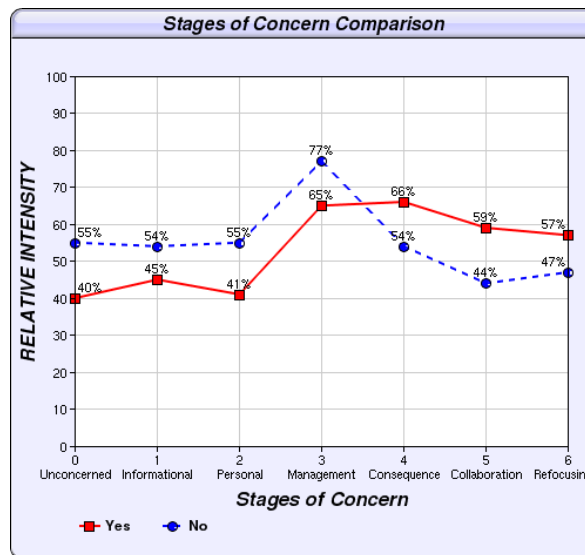


Figure 4

The teachers’ concern based on implementation of other innovation programs is a result of the aggregation of individual data into a profile (<https://sedl.org/concerns/admin/>) showing the primary mean percentile individual scores of each stage of concern, with the mean responses on the vertical axis. The curve of the overall mean percentile stage score by implementation of other innovation programs revealed that teachers who said they were implementing other innovations or programs, in addition to book-reading advancement

activities, had a peak of concerns on stage 3 with a 73% rate with the overall concerns curve of all their stages being smooth and without steep hills or sinkholes. Especially in the three upper stages (4, 5 and 6) we see that it is over 50%. In contrast, teachers who stated that they do not implement any other innovations or programs, other than book-reading advancement activities, also have a peak of concerns in stage 3 with a higher percentage (77%) and with the overall curve of concerns of all their stages being large slopes, especially in the three upper stages (4, 5 and 6) we see to be below 50%. Remarkable is the large difference between stages 3 and 4, which is about 30% (stage 3 has an intensity of 77%, while stage 4 has an intensity of 48%). (Figure 5)

Table 6: overall mean percentile stage score by implementation of other innovation programs

Selection	#	stage 0	stage 1	stage 2	stage 3	stage 4	stage 5	stage 6
Y	741	48	51	52	73	63	52	52
N	259	55	57	57	77	48	40	42

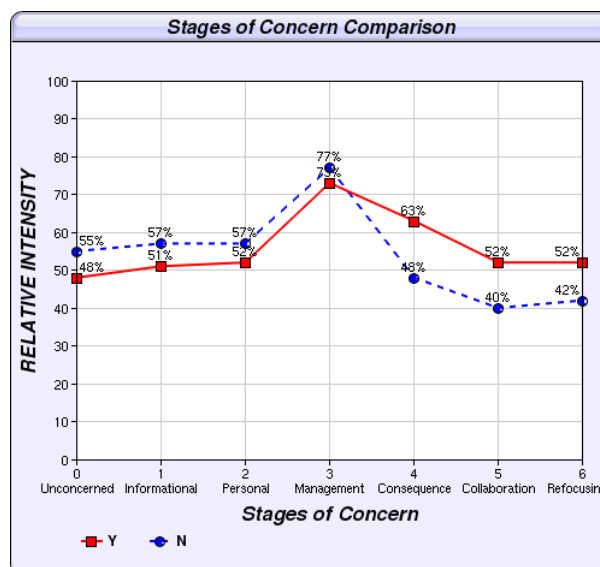


Figure 5

### 5. Conclusion

*Summary of demographic and personal characteristics.* The formal participation of teachers, based on the frequency analysis of all personal characteristics of the sample, was a female teacher, with 11-20 years of service, two years of involvement with the innovation of Book-Reading Advancement activities and who consider themselves somewhat experienced in the use of this innovation of Book-Reading Advancement activities, without having received formal training for it. Nevertheless, they implement other innovations or programs (at the time of the Flexible Zone, such as Health Education programs, environmental education, etc.).

The overall profile of Stages of Concern (SoCQ) for all respondents indicates that the peak of respondents'

concerns (73%) were Innovation Management related, with a second peak (59%) of concerns about the Impact - Consequences of Innovation on teachers' students. Very close to this peak are Self - Personal (52%) and Informative (51%) related concerns. The tendency of concerns shows a peak in innovation management concerns, with other concerns moving closer to the average, indicating that these concerns must be addressed first, in order other types of concerns to emerge.

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