


## Education in the 21st century

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### ABSTRACT

The thesis project presented below essentially aims to develop a model (instruments) for evaluating the performance of students according to the competencies required according to the modular curriculum and the graduation profile of those in the specialty of graphics, in accordance with the Professional Profile.

This model will be composed of three main categories of content: Intellectual Competencies, Conditions of Efficiency; and General Competencies, each of which is made up of a certain number of competencies, which in turn are broken down into Performances and will be elaborated through the collection of background information through interviews and structured surveys to leading organizations in the educational and business sector of the commune and region. and teachers of the specialty of graphics.

Based on the results, the competencies will be classified according to the level of importance of the same to the efficient performance of the students and according to the current level of the demands of each of them in the world of work, which will allow to determine the needs of deepening that should be taken into account for learning in the Lyceum and thus achieve the Graduate and Professional Profile according to the labor reality.

The results of the research will allow us to evidence existing gaps in the Performance for the achievement of the Competencies of the students in the Vocational Technical High School, which would lead to the search for methodological strategies that lead to the achievement of the Competencies in the modular curriculum; thus allowing the development of instruments to evaluate the performance of students in relation to the labor competencies (required according to the graduation profile) In addition, this standardised assessment model will have to allow us to measure the level of reading and writing, mathematics, language, etc. basic skills required by the labour market.

We will facilitate the implementation of curricular content that increases students' ability to undertake, make responsible decisions and analyze problems in a systemic way, and that nurture creativity, autonomy and responsibility at work. We will encourage the existence of educational projects that promote entrepreneurship.

**Keywords:** Students, Constructivism.

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## INTRODUCTION

"They told me about it and I forgot it, I saw it and I understood it, I did it and I learned it"  
Confucius

By carrying out an analysis of constructivism, considering the various variables and points of view from a philosophical, social and psychological conception, it allows us to have a more complete vision of this position and its benefits to achieve in our students a quality education with really significant learning.

Bearing in mind that all constructive learning involves a construction that is carried out through a mental process that ends with the acquisition of new knowledge, we can understand that the previous knowledge that the student possesses will be key to the construction of this new knowledge.

Through this work it is intended to carry out an analysis of the different situations where constructivism has been linked to the Educational Reform in Chile, in terms of psychological and didactic aspects; However, it is worth noting the importance and transcendence of the constructivist theoretical and educational position, which cannot be reduced to its impact on this reform process, basically because these tend to involve numerous relationships with educational policies that, logically, refer to problems of a political nature and go beyond the didactic educational field.

## FORMULATION OF THE IMPROVEMENT OR INTERVENTION PLAN

**Constructivism in educational reform and associated factors have not allowed the achievement of significant learning, is it a problem of curricular didactics?**

According to studies constantly carried out by the World Bank and through the application of international measurements such as the PISA test, applied by the OECD, it yielded results that deserve "URGENT" review, due to the low level of learning achieved by our students with respect to the 32 countries participating in this measurement.

Based on this data and other research, I can point out that today the great problem is the resistance of some teachers to the changes that have been operating with the implementation of the educational reform, in the application of which new demands seem to be made, both in the aspects of the curricular type and of educational management. as pedagogical; The existence of authoritarian traits in the relations of the school is observed, which gives continuity to traditional or disciplinary forms that are intended to be overcome with the educational reform.

The disconnect that exists between the purpose of the Educational Reform and the transfer of knowledge from educational agents to students is reflected in the traditional paradigm of instruction on constructivism in the classroom.



We know that the process of Educational Reform is outlined with the intention of providing students with the fundamental knowledge expressed in a quality education that allows them to acquire and develop cognitive, moral and social competencies, that is, to develop essential competencies, personal dispositions, fundamental cognitive skills and basic knowledge. progressively transform the child into a person competent to fend for himself or herself and to act honestly, effectively and accordingly in various domains; appropriating the codes of culture and proactively functioning in the midst of the tensions of contemporary society.

In order to meet these demands, teachers must review and rethink their conceptions of learning – learning and teaching to learn, and not forget that education does not have a purely intellectual mission, since its objective is to prepare people to act in real-life situations; to become competent in the performance of the normal practices of a community of people who are already competent, so as to be able to interact and coordinate with them, to acquire the predispositions and values that allow them to integrate themselves into a shared order, and thus participate in culture as a subject fully responsible for their freedom.

Within a range of explanatory tendencies, **constructivism** stands out as one of the tendencies that has managed to establish spaces in research and intervention in education, due to its systematicity and its results in the area of learning, unlike other approaches, which propose explanations that approach only the object of study and others that only resort to the knowing subject as the ultimate reason for learning. Constructivism proposes the interaction of both factors in the social process of the construction of meaningful learning, that is, **learning by doing**.

### What is constructivism?

Among the many definitions of this concept, we find one that refers to the :

"A set of theoretical elaborations, conceptions, interpretations and practices that, in addition to having a certain agreement with each other, also possess a range of perspectives, interpretations and practices that are diverse enough to be considered as one."

With the above, it can be understood that constructivism is a means by which both the theoretical and practical aspects of certain objects of study (in this case with regard to the field of learning and obtaining knowledge) can interrelate and oppose each other in such a way as to have not only a broad and integrating perspective of the object of study, but also a but also, that the different types of knowledge prevent conceptions from being radicalized, which enriches the research around this practice of study.



## JUSTIFICATION

According to the current Chilean Educational Reform, in order to achieve the fundamental objectives and the minimum mandatory contents in young people, the teacher must act as a mediator of learning, which translates into a new form of pedagogical work, which has as its center the activity of the students, their characteristics, their knowledge and previous experiences; Therefore, they must be knowledgeable about multiple intelligences, be aware of the evolutionary needs of each of their students, know the stimuli of their contexts and finally contextualize the activities. In addition, you must know that knowledge is not the result of a mere copy of pre-existing reality, but that it is a dynamic and pragmatic process, since it interacts with information in order to acquire a mental interpretation or reinterpretation; This is how more elaborate models of explanation are constructed.

Perhaps it is the way to explain the meaning that students acquire from certain information they know and that, according to their own processes of analysis and capacity, allow them to change their schemes, "help" them to acquire new knowledge and adapt it to the pre-existing reality.

The interaction of the subject with his environment, and the self-construction that is formed in the interaction between the two, is what maintains constructivism.

When we talk about the constructivist current, we find that it focuses the student on a more participatory, dynamic, and practical role, to obtain learning, skills and aptitudes; of course, for this, the interaction of the subject with its social, historical and cultural context is necessary.

## OBJECTIVES:

1. Analyze the Theory of Learning: Constructivism, from the point of view of its rationality and consistency with the teaching and learning processes supported within the framework of the Educational Reform.
2. Teachers identify Constructivism as a factor associated with learning in the Chilean Educational Reform.

## MARCO REFERENCIAL

There are many theories and currents of thought that come together in a constructivist vision, such as the Piagetan, Gestalt, Wallon, Vygotsky, Bruner, Dewey, Gagné, Ausubel, Novak, among others. It is therefore that we can see that constructivism is enriched by a set of epistemological, psychological, educational and sociocultural visions.

Mainly, and according to Piaget's Theory, emphasis should be placed on the relationship between psychological development and the learning process; Its acquisition consists of taking elements or stimuli from the environment, assimilating them, accommodating them and relating them



to existing structures, and then using them as sources of new behaviors that will allow the individual to apply what has been learned.

Instead, Ausubel emphasizes that the key element of school education is meaningful learning, prioritizing the goal of learning how to learn over the goal of skills or content. To speak of significant learning is to highlight the construction of meanings as a central element of the teaching-learning process. Man is a being capable of building and storing his own knowledge. He's a social being. Vygotsky contributes by pointing out the importance of language, starting from signs, which are structured for communicational purposes in terms of their order, rules and norms. This structuring intervenes in the relationship established by human beings and signs, that is, in the attribution of meanings. Linguistic theories of communication have attempted to explain how signs trigger meanings or mental images in people. According to Vygostky, in the cultural development of the child, every function appears twice: first, at the social level, and later, at the individual level; first between people, and then within the child itself; From the above, it can be deduced that Vygostky emphasizes the social environment as a fundamental element in the construction of the young person's knowledge. This element "social environment" intervenes in such a way that, according to Brunner, young people learn by discovery where intellectual development depends on this contact with others and/or with themselves, which is why the integration of the family into the school as a participating entity in the learning process is vital.

On the other hand, Gagné emphasizes the need to fulfill some functions in teaching so that true learning takes place, such as a change in the cognitive structure, which has several facets, the most important being:

- The difference of unstructured areas;
- Generalization from one area to another;
- The restructuring of management, or psychological significance, of existing structures.

Let's not forget that a learning situation is motivating when it is intrinsically related to something of interest or significance to the person; when there are positive valences, and the situation allows you to dominate your environment.

It is important to highlight once again that the language of the ongoing Educational Reform insists on the construction of meaningful learning by the student.

Another important aspect is the one raised by Feuerstein, who considers that one of the great problems of education is not promoting methodologies that allow children and young people to develop behaviors to think, develop, evaluate and reflect, thus not allowing them to achieve significant learning.



The above-mentioned approaches directly support the educational policies of the Ministry of Education, which are aimed at achieving the objectives of improving the quality and equity of educational opportunities.

It is also important to rescue some Psychological and Philosophical conceptions of Constructivism:

### PSYCHOLOGICAL CONCEPTION:

Constructivism aims for the student to construct his/her own learning, therefore, according to TAMA (1986) the teacher in his/her role as mediator must support the student to:

- Teach them to think: Developing in them a set of cognitive skills that allow them to optimize their reasoning processes.
- Teaching about thinking: Encouraging students to become aware of their own mental processes and strategies (metacognition) in order to be able to control and modify them (autonomy), improving learning performance and effectiveness.
- Teaching on the basis of thinking: This means incorporating learning objectives related to cognitive skills into the school curriculum.

In the student, the process of metacognition should be encouraged; Taking this as a basis, some tasks are presented taken from the book "Learning to Think and Thinking to Learn" by TORRE-PUENTE (1992) where it is visually reflected how to favor this metacognition in the student:

TASK: Purpose, Characteristics, Knowledge I have on the subject, What is the best strategy (phases and techniques), Moments, Process Assessment, Errors, Causes, Correct, Apply new strategies, etc.

### CONCEPTION IS PHILOSOPHICAL:

Constructivism posits that our world is a human world, the product of human interaction with the natural and social stimuli that we have managed to process from our "mental operations" (Piaget).

This constructivist philosophical position implies that human knowledge is not received passively from the world or from anyone, but is actively processed and constructed, and that the cognitive function is at the service of life, it is an adaptive function, and therefore knowledge allows the person to organize his or her experiential and experiential world.

Constructivist teaching considers that human learning is always an inner construct. For constructivism, objectivity in itself, separated from man, is meaningless, since all knowledge is an



interpretation, a mental construction, from which it is impossible to isolate the researcher from what is being investigated. Learning is always an inner and subjective reconstruction.

Understanding the problem of the construction of knowledge has been an object of philosophical concern since man began to reflect on himself. It is argued that human beings are essentially a product of their ability to acquire knowledge that has allowed them to anticipate, explain, and control many things.

We recall that the Educational Reform, through its approach, states that the student learns by doing, but for this it is necessary for the teacher to change his didactics for the development of the curriculum.

We constantly hear from students a severe criticism of the work of teachers in general, pointing out among other things: **"their classes are fomes", "they always do the same thing", "they do not motivate", etc.**, and sometimes the students themselves refer to the fact that they do not apply **"the Didactics"**; most of the time understood as that entertaining activity designed on the basis of some technological tool such as the Internet, power point, video, etc., even among the teachers themselves, similar value judgments are made, cataloging the teachers according to their didactic management. However, in order to make a judgement about whether a teacher is didactic or not, we must first delve into understanding what this concept really means.

Of Didactics we can say that *"It is a science, a theory, a technique, a method or resource, it is an art, a discipline whose purpose is to plan the contents, plan the classes, plan the evaluations, have didactic resources, know how to transmit knowledge, make the classes more enjoyable, develop the capacity of the students, monitor learning. Didactics is also related to teaching, learning, instructing, communicating, transmitting knowledge"* (**Pagés Joan, Teaching to Teach: the didactic training of future teachers**)

## **EDUCATIONAL IMPROVEMENT PLAN**

Constructivism is one of the currents that has inspired the current Chilean Educational Reform. This conception is based on the premise that students are not empty minds that must be filled with an infinity of conceptual contents, sometimes totally decontextualized from their reality, but on the contrary, these active and participative subjects of learning have *"prior knowledge"* that serves to *hook the new content and allow you to attribute meaning to it to some degree. This engagement is not automatic, but the result of an active process of the students, which will allow them to reorganize their own knowledge and enrich it* (The Active and Constructive Nature of Knowledge; p 2.; Adaptation made by the Pedagogical Modernization Commission of the PUCP of the text "What makes students learn?" by Teresa Mauri, published in "Constructivism in the classroom". Editorial Graó. Barcelona, 1999. Pages 65-84).



From this perspective, the student actively participates in the construction of knowledge, taking their own reality as a point of reference, and based on this, they can better understand the content that the teacher gives them.

This is achieved through brainstorming to activate what the student already knows about the topic, thus producing the relationship between what the student already knows (previous knowledge) and what he or she is going to learn. This is intended for the student to achieve meaningful learning, defined as the process by which new knowledge or information is related to the cognitive structure of the learner in a non-arbitrary and substantive or non-literal way. This interaction with the cognitive structure does not occur considering it as a whole, but with relevant aspects present in it, which are called subsumers or anchoring ideas (Ausubel, 1976, 2002; Moreira, 1997). The presence of inclusive, clear and available ideas, concepts or propositions in the learner's mind is what gives meaning to this new content in interaction with it (Moreira, 2000). This definition makes it clear that the student's mind is not blank, but has elements that will serve as a link to the new knowledge.

The work of the teacher in this case is not that of an expert scholar who knows the subject matter in depth (What makes students learn?; p. 2; adaptation of the text by Teresa Mauri, published in constructivism in the classroom), the figure of the teacher according to the Educational Reform is that of a guide-facilitator, It accompanies the student in the construction of relevant knowledge and helps them to enhance their zone of proximal development, which is the distance between the real level of development and the level of potential development (definition extracted from Vygotsky), that is, the student has a level of intellectual development that can be enhanced if the appropriate strategies are used. In conclusion, constructivism poses a great challenge for teachers and students because to put it into practice requires commitment and dedication.

The questions that arise spontaneously are the following: is constructivism properly applied in national classrooms, and if not, why is it not done?

The universe of study of this work is based on the student as the first agent of the teaching-learning process and in order to achieve significant learning in them, I propose that teachers plan according to the following pedagogical principles:

- **The student is ultimately responsible for his or her own learning process.** It is he who constructs knowledge and no one can replace him in that task. The importance given to the student's activity should not be interpreted in the sense of an act of discovery or invention but in the sense that it is the learner and, if he does not do so, no one, not even the teacher-facilitator, can do it in his place. Teaching is entirely mediated by the constructive mental activity of the student.

Do not forget that the student is not only active when he manipulates, explores, discovers or invents, but also when he reads or listens to the explanations of the teacher-facilitator.





- **The constructive mental activity of the student is applied to contents** that already have a considerable degree of elaboration, that is, that is the result of a certain process of construction at the social level. Students construct or reconstruct objects of knowledge that are in fact constructed. Students construct the system of written language, but this system is already elaborated; Students construct elementary mathematical operations, but these operations are already defined; Students construct the concept of historical time, but this concept is part of the existing cultural baggage; Students construct the norms of social relations, but these norms are the ones that normally regulate the relationships between people.
- **The fact that the constructive activity of the student is applied to pre-existing learning content conditions the role that the teacher-facilitator is called to play.**

Important: The role of the teacher cannot be limited solely to creating the optimal conditions for the student to develop a rich and diverse constructive mental activity; He must also try to guide this activity so that the student's construction progressively approaches what the contents mean and represent as cultural knowledge.

Learning a content involves attributing a meaning to it, constructing a representation or a "mental model" of it. The construction of knowledge involves a process of "elaboration" in the sense that the student selects and organizes the information that comes to him or her through different means, the teacher among others, establishing relationships between them.

In this selection and organization of information and in the establishment of the relationship, there is an element that occupies a privileged place: the pertinent prior knowledge that the student possesses at the time of starting learning.

### TEACHERS HAVE AN IMPORTANT ROLE IN THE CONSTRUCTION OF MEANINGFUL LEARNING OF STUDENTS ACCORDING TO THE REQUIREMENTS OF THE EDUCATIONAL REFORM

Mediation is an intervention made by the teacher to enrich the student's relationship with his or her environment. When they offer him a variety of situations, they communicate their meanings, show him ways to proceed, help him understand and act in the environment.

In order for the teaching-learning process to be effective, the teacher must consider:

**Intentionality:** communicate and teach clearly what you want to convey, producing a state of alertness in the student.

- **Reciprocity.** Because when there is a strong communication bond between teacher and student, more effective learning occurs.



- **Transcendence.** The teacher must never forget that the student's experience goes beyond a "here and now" situation. The student can anticipate situations, relate experiences, make decisions based on what has been previously experienced, apply knowledge to other problems, without requiring the direct action of the teacher
- **Mediation of meaning.** This invites teachers to construct concepts with students and they will continue to do so in various situations by putting thought and intelligence into action, establishing relationships or developing hypotheses.
- **Mediating feelings of competence and accomplishment.** The teacher must ensure that his students have a positive disposition to learn and accept new challenges, so that they will have confidence that they can do well. Strengthening their feelings of security and enthusiasm for learning is the foundation on which their self-image is built.

The positive recognition of the achievements and skills that have been put into play to carry out the activity successfully, increases self-esteem, facilitates the feeling of personal achievement and cooperation with others.

Although the teacher must not forget that teaching must be individualized in the sense of allowing each student to work independently and at their own pace, it is necessary for them to promote didactic activities to develop collaboration and group work, since in this way better relationships are established with others, they learn more, They feel more motivated, their self-esteem increases, and they learn more effective social skills.

In practice, this social conception of constructivism is applied in cooperative work, and for this the teacher must apply the following strategies:

- Clearly specify the purposes of the course.
- Make certain decisions in how to place students in the group.
- Clearly explain to students the task and goal structure to be achieved.
- Monitor the effectiveness of the groups.
- Assess the level of achievement of students and help them discuss, which also need to be collaborated with each other.
- For a group work to be truly cooperative, it has the following characteristics:
  - Positive interdependence.
  - Face-to-face introduction.
  - Individual Responsibility.
  - Use of interpersonal skills.
  - Group processing.



## CONCLUSIONS

After carrying out the analysis and identifying constructivism as a factor associated with the Educational Reform, I can conclude that; This educational reform is based on constructivism, since all its actions tend to ensure that students build significant learning, according to the previous experiences and knowledge that they bring.

But even so, the great flaw of the Reform is that teachers have not made this current their own, they must know very well its principles and the importance of constructivism in the processes associated with teaching and learning, because only in this way, they will have a solid basis for its implementation, a situation that today occurs scarcely in our classrooms by these actors of the educational system.

When we talk about "construction of learning", we mean that in order to learn, the student must make different cognitive connections that allow him to use mental operations and with the use of his previous knowledge to build new learning, a process that It must be guided by the teacher (according to the Educational Reform), who must have a role of mediator in learning, making the student investigate, discover, compare and share his ideas, but in the classrooms it is scarcely happening, since the traditional Instructional paradigm continues to predominate.

For an effective action from the point of view of constructivism, the teacher must start from the level of development of the student, always considering his previous experiences, this is achieved by applying an adequate diagnosis, a situation that many teachers do not do because they consider it unnecessary, because they believe that the student knows something (supposed), but does not investigate what.

It is true that constructivism is the fashionable current that should be applied to the entire curriculum, but according to what has been exposed and personal experience, in practice it is difficult to be totally constructivist, since the realities in schools are varied and there are many factors that influence to fully ascribe to this theory, being able to cite as factors: The predominance of instruction over letting the student do what he wants, the power and excessive authority on the part of the educator to maintain discipline in the classroom represent authoritarian remnants of the traditional relationship that brings effects on learning, the mechanism of externalization of obligations to which some teachers resort in the face of the social construction and the political-economic system, by instructing students with the duty of educating society, criticizing their evasive actions and attitudes in this regard without considering their own participation as teachers of the political system.

To conclude this analysis, I consider the following reflection important: It cannot be established that one paradigm is bad and the other good. Paradigms have responded to specific cultural-historical contexts and developed accordingly. Each of these models has contributed to the



improvement of the teaching-learning process and it cannot be categorically stated that a given paradigm has been overcome and another has been given way. If we reflect deeply, we can realize that there are currently educational establishments that are still governed by the positivist or traditional paradigm, while others emphasize the sociocritical or interpretative model, while other establishments focus on the emerging paradigm.

<b>Selección y Planteamiento del Problema</b>
<b>a) Formulación del problema.</b>
<p>La falta de instrumentos que nos permiten evaluar los desempeños de los alumnos y así asegurar el logro de las competencias generales, específicas y laborales y por ende el aprendizaje.</p> <p>“La propuesta que se presenta en este proyecto de investigación es un sistema de evaluación del desempeño de carácter formativo que está orientado a mejorar la calidad de la educación, Apoyaremos la integración de la formación técnica en un sistema de aprendizaje permanente, a fin de elevar la calidad de las ofertas académicas, aumentar la matrícula de técnicos de nivel superior y fomentar la formación técnica basada en competencias laborales.</p> <p style="text-align: center;"><b>Competencias de:</b> <b>Formación general</b> <b>Destrezas básicas</b> <b>Comprensión Tecnológica</b> ( ¿Para qué .....? ) ( ¿Por qué .....? )</p> <p style="text-align: center;"><b>Competencias de:</b> <b>Formación de hábitos laborales.</b> <b>Dominio de operaciones y procedimientos.</b> ( ¿Qué hacer.....? ) ( ¿Cómo hacerlo .....? )</p> <p style="text-align: center;"><b>PERSONA COMPETENTE</b> <b>Recurso Humano Calificado</b> <b>para la empresa competitiva</b></p>
<b>b) Propósito</b>
<p>En Chile, el nivel de enseñanza media técnico profesional ocupa hoy en día el 49% de la población estudiantil, un lugar muy importante en el sistema educativo chileno, por su ya repercusión en la fuerza de trabajo que tanto la requiere. Es por ello que la eficiencia, eficacia, calidad y adecuación a los requerimientos actuales del sector productivo es no solo una necesidad, sino un imperativo.</p> <p>Para poder comprobar lo anterior se hace necesario la aplicación de instrumentos evaluativos que midan los desempeños para el logro de competencias generales, específicas y laborales.</p> <p>Concretamente la evaluación del desempeño es el proceso de reunión de evidencias por uno o más medios, que implica la revisión, el análisis de la misma y la emisión de un juicio por el evaluador, sobre la evidencia, con el objeto de hacer diferencias acerca de las competencias generales, específicas y laborales de un estudiante, con tres propósitos generales:</p> <ol style="list-style-type: none"><li>1.- el reconocimiento del desempeño que ha realizado el alumno/a</li><li>2.- la inferencia del desempeño futuro del sujeto en las áreas de competencia.</li><li>3.- Lograr las competencias según el Perfil de Egreso ideal al mercado laboral.</li></ol>



### **c)Objetivos (General y específico)**

#### **Objetivo General:**

- a. Elaborar un modelo para evaluar el desempeño de los estudiantes en relación con las competencias laborales, específicas y generales que permita reflexionar para mejorar los aprendizajes.
- b. Valorar el logro del desempeño de manera sistemática con instrumentos pertinentes, validos y confiables según estándares preestablecidos al interior de la unidad educativa, con el fin de proporcionar los elementos que permitan adecuar las estrategias didácticas para el logro de los objetivos.

#### **Objetivos Específicos:**

- 1.- Generar una base de datos de comportamientos laborales con los conocimientos, habilidades y destrezas correspondientes a cada nivel de desempeño.
- 2.- Identificar las competencias laborales básicas genéricas requeridas en el mundo laboral.
- 3.- Analizar las implicancias del enfoque de educación basada en competencias sobre el desarrollo curricular y aplicar sus elementos básicos en el desarrollo de una propuesta de evaluación de los desempeños.
- 4.- Interpretar la evaluación de aprendizajes en un curriculum por competencias.

### **b) Preguntas de investigación**

-En este proyecto de investigación, se intentará dar respuesta a las siguientes interrogantes:

- ¿Hay una evaluación integrada que se pueda realizar y que refleje las competencias por evaluar según el currículum modular?
- ¿Para qué evaluar los desempeños?
- ¿Qué se evalúa?
- ¿Cómo se evalúan los desempeños?
- ¿Quién evalúa los desempeños?

### **c) Justificación**

En la actualidad se aprecia un marcado consenso respecto a la idea de que el fracaso o triunfo de todo el sistema educativo esta basado principalmente en la calidad del desempeño de las competencias básicas, específicas y laborales, por lo que se hace necesario que las organizaciones educativas cuenten con las herramientas adecuadas para la ejecución de un control para evaluar el logro de los desempeños, siendo que la evaluación es un elemento fundamental de la organización de toda institución educativa.

En el mismo se pretende orientar, a mejorar la calidad del instrumento de evaluación del desempeño que se utilizan en los establecimientos educativos.

Ayuda la concepción de la evaluación por competencia del “saber hacer en contexto” pero no soluciona toda la integralidad del ser. Hay que pensar en modelos evaluativos que responda más a nuestras características; se tendrá mayor efectividad si los docentes son sujetos directos del mismo y no receptores pasivos de indicadores centralizados, donde los estudiantes se sientan partícipes de su formación y del avance en la construcción del conocimiento pedagógico y didáctico.

### **c) Viabilidad**

De acuerdo a las políticas educativas del ministerio de educación y que de acuerdo a los TLC con los diferentes socios económicos de Chile el tema de la evaluación del desempeño cada vez se visualiza con



mayor fuerza lo que nos obliga a perfeccionar nuestros sistemas o modelos de evaluación del desempeño para el logro de las competencias básicas, específicas y laborales. .

El proyecto de investigación abarcará un período de un semestre; comprendido entre los meses de octubre 2006 - Diciembre 2006.

Es importante recalcar que las condiciones para la ejecución del proyecto recurso tiempo y humano están disponibles.

#### **d) Resultados Esperados**

La información recopilada y tabulada se presentarán en cuadros estadísticos y gráficos de cada una de las preguntas realizadas en las encuestas con sus respectivas variables y porcentajes correspondiente. Se analizará la incidencia que tienen estas respuestas en el tema de la investigación, presentando además, resúmenes generales, que permitirán visualizar la realidad de la calidad del desempeño al interior del establecimiento educacional.

### **III. MARCO TEORICO**

De acuerdo al Decreto Supremo de Educación N° 220, en el que se plantea “las necesidades de actualización, reorientación y enriquecimiento curriculares que se derivan de cambios acelerados en el conocimiento y en la sociedad, y del propósito de ofrecer a alumnos y alumnas unos conocimientos, unas habilidades y unas actitudes, relevantes para su vida como personas, ciudadanos y trabajadores, así como para el desarrollo económico, social y político del país, lleva a proponer este nuevo currículum que alude a la formación especializada”, definidos en términos de objetivos terminales agrupados en perfiles de egreso (**desempeños logrados**) competencias laborales.

En la filosofía de la Reforma de la Educación al tratar sobre los procesos de enseñanza y aprendizaje se optó a favor del aprendizaje. La enseñanza se da para que los / las alumnos aprendan: el objetivo es aprender. Desde la educación Inicial la Enseñanza debe realizarse de manera que los alumnos sean el centro y el docente sea el mediador de sus aprendizajes y que así el alumno se encamine hacia la autogestión de su aprendizaje autónomo.

Hoy día, la cultura científico tecnológica plantea nuevos desafíos al conocimiento: la diversidad de información, los diferentes lenguajes, nuevos contenidos, nuevas especialidades que requiere de sujetos capaces de establecer relaciones significativas entre sus "saberes" y con capacidad para resignar lo aprendido, para integrar conceptos, para realizar procesos de reflexión sobre sus propios saberes.

Desde esta perspectiva puede hablarse de calidad, con una enseñanza orientada al desarrollo de competencias que habiliten para enfrentar situaciones y adoptar decisiones con creatividad, innovaciones, exploración de posibilidades, alternativas o nuevas teorías.

La capacidad productiva de un individuo que se define y mide en términos de desempeño en un determinado contexto laboral, y no solamente de conocimientos, habilidades, destrezas y actitudes; éstas son necesarias pero no suficientes por sí mismas para un desempeño efectivo.

A medida que los procesos de globalización de las economías se van extendiendo e imponiendo, el cambiante mundo de la economía y el trabajo pone énfasis en controlar y elevar la calidad de la producción y de las mercancías, lo cual requiere a la vez aumentar la productividad de los recursos humanos involucrados. Una consecuencia de lo anterior ha sido el debate acerca de los mecanismos en que las instituciones educativas forman los recursos, y la necesidad de plantear modificaciones en su organización, en los contenidos y en los métodos de enseñanza.

En este contexto global, Chile se incorpora y forma parte de los grandes bloques económicos internacionales.

La necesidad de relacionar de una manera más efectiva la educación con el mundo del trabajo conduce al sector oficial a promover la implementación de la opciones educativas basadas en los denominados modelos por competencias. La política oficial se concreta al crearse el Sistema de Certificación Laboral. Entre algunos planteamientos se establecía que "con la reforma del sistema de formación y capacitación se pretende que el país cuente con recursos humanos calificados que demanda la transformación productiva, la innovación tecnológica y la competencia en los mercados globales" (Ibarra, 1996).

En nuestro país, el tema de las competencias es reciente. En otras latitudes, el término tiene antecedentes de varias décadas, principalmente en países como Inglaterra, Estados Unidos, Alemania y Australia. Las competencias aparecen primeramente relacionadas con los procesos productivos en las empresas, particularmente en el campo tecnológico, en donde el desarrollo del conocimiento ha sido muy acelerado; por lo mismo se presentó la necesidad de capacitar de manera continua al personal, independientemente del título, diploma o experiencia laboral previos. Éste es el contexto en el que nacen las denominadas competencias laborales, concepto que presenta varias definiciones, entre las que sobresale aquella que las describe como la



"capacidad efectiva para llevar a cabo exitosamente una actividad laboral plenamente identificada" (Iberfop-oei, 1998).

El eje principal de la educación por competencias es el desempeño entendido como "la expresión concreta de los recursos que pone en juego el individuo cuando lleva a cabo una actividad, y que pone el énfasis en el uso o manejo que el sujeto debe hacer de lo que sabe, no del conocimiento aislado, en condiciones en las que el desempeño sea relevante" (Malpica, 1996). Desde esta perspectiva, lo importante no es la posesión de determinados conocimientos, sino el uso que se haga de ellos. Este criterio obliga a las instituciones educativas a replantear lo que comúnmente han considerado como formación. Bajo esta óptica, para determinar si un individuo es competente o no lo es, deben tomarse en cuenta las condiciones reales en las que el desempeño tiene sentido, en lugar del cumplimiento formal de una serie de objetivos de aprendizaje que en ocasiones no tienen relación con el contexto.

Mertens citando a Harris, transcribió algunas características propuestas para los programas de formación basados en competencia; se citan algunas:

- Competencias cuidadosamente identificadas, verificadas y de conocimiento público.
- Instrucción dirigida al desarrollo de cada competencia y una evaluación individual por cada desempeño.

La evaluación toma en cuenta el conocimiento, las actitudes y el desempeño como principales fuentes de evidencia.

- El progreso de los alumnos en el programa es al ritmo de cada uno.
  - La instrucción es individualizada al máximo posible.
    - Énfasis puesto en los resultados.
- Requiere la participación de los trabajadores en la elaboración de la estrategia de aprendizaje.
  - Las experiencias de aprendizaje son guiadas por una permanente retroalimentación.

En suma, la generación de competencias a partir de los programas formativos exige a éstos la iniciación de cambios en sus estrategias pedagógicas, en sus enfoques curriculares y en el papel tradicional asignado a docente y alumno.

Se requiere la utilización de una amplia variedad de materiales de aprendizaje combinada con la orientación del aprendizaje hacia la solución de problemas más que la repetición de contenidos.

Los medios tradicionales de administración educativa basados en el grupo que aprende como base de la programación de acciones y de cursos está siendo retada para que permita el manejo individual de los avances logrados por los alumnos y su fácil reingreso a programas que deben ser modulares y abiertos.

#### IV. MARCO CONTEXTUAL

Este proyecto de investigación será realizado en el Complejo Educacional Monseñor Guillermo Hartl, de la comuna de Pitrufquén y en los entornos laborales de la comuna y de la región.

El liceo atiende una población de 950 alumnos de sectores rurales (60%) y alumnos sector urbano de la ciudad de Pitrufquén (40%), entregando una oferta académica con 6 especialidades en las áreas Industrial, Técnica y Comercial.

El modelo de evaluación confeccionado servirá de base para ser aplicado a cualquier medición del desempeño para el logro de competencias en las diferentes especialidades ofrecidas en el marco del Decreto N° 220.

#### V. DISEÑO METODOLOGICO

##### a) Paradigma, perspectiva o enfoque

Esta investigación se va a dar con dos aspectos metodológicos, uno con un enfoque Exploratorio y otro con un enfoque explicativo; el primero nos permitirá familiarizarnos con el fenómeno que se investiga, y podría ser el punto de partida de otra investigación y en tanto con el segundo enfoque orientaremos la investigación a la comprobación de hipótesis causales.

##### b) Tipo de estudio

El presente proyecto de investigación se basa en un estudio de índole exploratoria e interpretativa y para ello el universo estará constituido por todos los alumnos de la especialidad de gráfica del Complejo Educacional Monseñor Guillermo Hartl, cuya participación será activa durante todo el proceso investigativo.



El llevar a cabo esta investigación permitirá familiarizarme más con el tema y posteriormente tomarlo como base de investigación con mayor nivel de profundidad al interior del establecimiento.

#### c) Método

La evaluación del desempeño para el logro de competencias, cualquiera que sea el método a utilizar, es compleja y difícil por el marcado consenso a la idea de que el fracaso o logros de todo el sistema educativo está basado principalmente en él. Por tanto para lograr los objetivos propuestos en el diseño de este proyecto, no puedo limitarme a un solo método de investigación, sino conjugar entre el método deductivo y de análisis pues se inicia la investigación con la observación y preocupación de la problemática a nivel nacional y llevada a una realidad concreta en el establecimiento educacional Monseñor Guillermo Hartl, para posteriormente analizar los datos obtenidos a través de diversas fuentes de información y aplicación de instrumentos..

Este tipo de investigación se basa en los métodos deductivo y de análisis el que se realiza con grupos de alumnos cuya participación es activa durante todo el proceso investigativo; y a través de la aplicación de diversos instrumentos que tienen como meta la transformación de la realidad, es decir que el análisis de los resultados ayudaran al mejoramiento de las practicas pedagógicas y por ende el mejoramiento de la calidad de la enseñanza, lo que implica posteriormente el método de análisis que me permitirá llegar a obtener los resultados necesarios para tener una visión general de cómo incide la calidad del desempeño en el logro de las competencias y así en el mejoramiento de la enseñanza.

Es necesario indicar que la observación directa ideal como método de investigación incorpora fuentes múltiples de datos sobre el desempeño sobre los alumnos.

#### d) Técnicas de recopilación de información

**No olvidemos que** de acuerdo con los lineamientos y criterios dados según las políticas educativas: la evaluación debe estar centrada en el desempeño en el sitio de trabajo a partir de su saber (dominios en su formación) de su saber ser (comportamientos y actuaciones) y de su saber hacer (su práctica educativa). Ahora bien, **los instrumentos de evaluación** son las herramientas que se deben utilizar para determinar el desempeño, y a su vez determinar las necesidades de formación de los evaluados.

Entre los instrumentos a utilizar para evaluar la formación de los desempeños están: **Fichas, cuadros y cuestionarios.**

**Las Fichas:** Permitirán determinar las necesidades individuales de formación que tienen o requieren los alumnos, para sugerir y ofrecer alternativas de satisfacción.

**Los Cuadros:** Se utilizarán para hacer consolidadas de necesidades de formación detectadas en los evaluados y permitirán agrupar las necesidades individuales para ofrecer jornadas y talleres tendientes a llenar necesidades comunes de formación y desarrollo en los evaluados.

**Los Cuestionarios:** Se utilizarán para detectar en un intervalo de tiempo, necesidades de formación, abarcando una amplia población de evaluados, y me permitirán diseñar estrategias de satisfacción de necesidades variadas, ya sean de formación y cualquier tipo de necesidades.

También se utilizarán instrumentos para realizar el proceso de **evaluación** del desempeño, entre ellos están:

#### Instrumento de diagnóstico.

Permitirá valorar determinados factores situacionales o contextuales cuya información será necesaria para la planificación y determinación de estrategias que favorezcan el desarrollo de los proyectos en ejecución.

#### Instrumento de medición.

La medición ayudará al evaluador comparar el desempeño del alumno en determinados aspectos o áreas con un estándar o con el de los demás evaluados.

#### Método de evaluación.

”Camino por el que se llega a cierto resultado, incluso cuando ese camino no ha sido fijado de ante mano de manera deseada y reflexionada”.

No olvidemos que los métodos de evaluación del desempeño son considerados como una reflexión, que permite orientar los objetivos propuesto, en relación al perfil de egreso que la especialidad requiere; por lo que las características de las actividades que se incluyan en el deben ser de carácter consecutivo y sistemático.

Los métodos representan normas y procedimientos que se utilizan en el proceso de evaluación del desempeño para organizar y orientar la actividad del profesor hacia el objetivo propuesto, con la finalidad de preparar y dar seguimiento a las competencias laborales.

**Por lo tanto, los métodos de evaluación a utilizar serán:**

**La observación de clases.**





Considero que este método de evaluación es muy importante y a su vez necesario para evaluar el desempeño y puede ser una estrategia de evaluación sistemática, pues las acciones didácticas observables proporcionarán una base suficiente para juzgar el grado de desempeño de los alumnos.

**La Autoevaluación.**

" Es el método por medio del cual, el propio alumno es solicitado para hacer un sincero análisis de sus propias características de desempeño".

La auto evaluación permitirá determinar y estimular la capacidad de auto

análisis y autocríticas del alumno; su potencial de auto desarrollo, y aumentar el nivel de competencia.

**e) Definición conceptual y operacional de variables**

Objetivos	Variable	Indicadores	Item
1.- Generar una base de datos de comportamientos laborales con los conocimientos, habilidades y destrezas correspondientes a cada nivel de desempeño.	Competencias Laborales  Perfil de egreso	Intencionalidad	¿ Existe relación entre el Perfil de Egreso (Decreto 220) con las Competencias Laborales? ¿ Existe claridad de los desempeños requeridos con respecto al las Competencias Laborales?
2.- Identificar las competencias laborales básicas genéricas requeridas en el mundo laboral.	Elementos del Curriculum	Pertinencia	¿ Los contenidos responden a las exigencias del mundo productivo?
3.- Analizar las implicancias del enfoque de educación basada en competencias sobre el desarrollo curricular y aplicar sus elementos básicos en el desarrollo de una propuesta de evaluación de los desempeños.	Competencias Laborales	Claridad	¿ Están definidas claramente las Competencias Laborales? ¿ Pueden ser aterrizadas a la realidad comunal y regional?
		Flexibilidad	¿ Responden a la necesidad productiva del país según los TLC?
4.- Interpretar la evaluación de aprendizajes en un curriculum por competencias.	Evaluación	Actualidad	¿La evaluación esta relacionada con los desempeños?
		Integralidad	¿Están los contenidos expresados con claridad



	Elementos del Curriculum por Competencia	Claridad	en un curriculum por competencia?
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**f) Técnicas de análisis de la información:**

Una vez aplicado los instrumentos citados , se procederá a reunir la información, tabularla, transformarla a porcentajes , analizar las pregunta tras pregunta. Esto se realizara utilizando la planilla electrónica de cálculo Excel Utilizando las fórmulas de sumatoria y la de porcentaje.

Se complementa con la información recopilada a través de la observación directa.

**Presentación y análisis de datos:**

La información recopilada y tabulada se presentarán en cuadros estadísticos y gráficos de cada una de las preguntas realizadas en las encuestas con sus respectivas variables y porcentajes correspondiente.

Se analizará la incidencia que tienen estas respuestas en el tema de la investigación, presentando además, resúmenes generales, que permitirán visualizar la realidad de la calidad del desempeño.



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