WORK IN PROGRESS

Health Careers Curriculum Integration Guide

Curriculum Integration Study Group Natividad Rodríguez High School Arroyo, Puerto Rico 2014-2016

Introduction

In October, 2014, the faculty and students of this school, the Natividad Rodríguez Gonzalez High School in Arroyo, Puerto Rico (NRGHS), carried out a Vision and Mission Workshop. This workshop was facilitated by ASPIRA of Puerto Rico (ASPIRA-PR), as a component of the collaborative project Puerto Rico Youth Health Careers, a project lead by the Puerto Rico Academy of Medical Directors (PRAMD). PRAMD received a grant from the U.S. Department of Labor to promote high school graduation and postsecondary access in health related careers.

In the Vision and Mission Workshop, the following principles were adopted and defined: love; sense of belonging; educational quality; commitment and union; and school and community integration.

The School Mission states:

"The Natividad Rodriguez-González High School aims to promote in the students the development of affective, cognitive and psychomotor skills that allows them to reach their potential and become a useful citizen for society. We do this by fostering the sense of belonging, motivation and commitment. We cultivate positive values and changes in an environment of love and healthy interactions in order to achieve a high quality of education."

The School Vision is expressed as follows:

"We will be a model school that promotes an education towards values and the common good. Our students will be able to make decisions about their future and to become useful and independent citizens integrated into a constantly changing society.

We also adopted the following values as a guide:

Common Good Solidarity
Empathy Respect
Equality Union
Responsibility Peace
Integrity

After revising the mission and vision statements and deliberating on principles and values, we identified current efforts that advance those principles, as well as the mission and vision. In that same line, we generated ideas of other programs and systems that we could develop at the school level that will contribute to achieve our Mission and Vision. One of those ideas was to develop a curriculum integration Project with health related careers as the integrating element.

Afterwards, ASPIRA invited faculty members to participate in a Study Group as a small learning community strategy to learn about curriculum integration and about health careers in the curriculum. That is how the Curriculum Integration Study Group at the NRGHS came to life. The idea was to create a study and design community that would have formal and informal sessions to read and share our learning about these topics. It was established that participation would be voluntary. A first meeting of the Study Group took place in which those faculty members that were interested Various faculty members representing different to a first meeting. disciplines, the School Director, and four ASPIRA staff members took part at that first meeting. From ASPIRA were present Adalexis Ríos, Executive Director, Sasha Montañez, Curriculum Development Planner, Sergio Gómez, Mentor Teacher, and Leida Vega, PRYHC Coordinator for ASPIRA. The group met for the first time on February 26, 2015. Initial participants were the following:

Millie Rivera Rodríguez	Spanish Teacher
Manuel Ortiz Cruz	Math Teacher
Rosa del Pilar Cotto Colón	Business Administration Teacher
Caroll Santiago	Business Teacher
Gonzalo E. Cintrón	History Teacher
Madeline González Iglesias	English Teacher
Eunice J. Muñoz	Math Teacher
Andrés Gongón Colón	School Director

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Loida Rodríguez Ortiz	Responsible Parenthood Teacher
Adaliz Cabán Ríos	Social Worker
Hayra Santiago	PRYHC Parents Coordinator

As of April, 2016, group member were the following:

Millie Rivera Rodríguez	Spanish Special Ed Teacher
Manuel Ortiz Cruz	Math Teacher
Rosa del Pilar Cotto Colón	Business Administration Teacher
Caroll Santiago	Business Teacher
Eunice J. Muñoz	Math Teacher
Andrés Gongón Colón	School Director
Loida Rodríguez Ortiz	Responsible Parenthood Teacher
Adaliz Cabán Ríos	Social Worker
Hayra Santiago	PRYHC Parents Coordinator
Tianny Rodriguez	Special Education Teacher
Jenny Malvet	Spanish Teacher

We agreed to have brief meetings during lunch time and other afternoon meetings on the dates agreed. In the shorter meetings, we would share during the lunch hour and comment on the readings. During the afternoon meetings, in addition to discussing the readings, we conducted various reflective, creative and deliberative exercises, such as the development of the conceptual map of the discipline, generating ideas of how to integrate the issue of health careers to our respective classes The adoption of competency framework for Career Education of the Association for Career Education and Guidance (ACEG)¹ and the design of a general template to facilitate the design of integrated learning units. During the first year, we held five (5) meetings during the first year and six (6) meetings during the second year, for a total of thirty-five (35) hours.

¹ The ACEG framework for careers and work-related education: A PRACTICAL GUIDE. http://www.cegnet.co.uk/uploads/resources/ACEG-Framework-final.pdf

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ASPIRA created an online course using NEO LMS Edu 2.0 platform², where participants can have access to the readings and submit the agreed tasks. Throughout the process, we conducted the exercise of systematization of the experience, systematic reflection that enabled us, together with the analysis of minutes, materials generated in the course, and other documents, to develop this guide and construct the meaning of the study group experience. For four months we shared a small learning community that represents a very appropriate approach to continuing professional development.

What follows is Professor Sergio Gómez, Mentor Teacher reflection of the March 26, 2015:

"According to the description provided by ASPIRA: The Study and Design Group is a forum aimed at promoting orientation, analysis, and reflection about the theoretical, cognitive and procedural benefits, linked to the integration of Health Careers in the core subjects of English, Spanish, Mathematics, History and Science.

This time we developed a workshop in a collaborative and constructive environment, while assessing the systematization of experience using technology information systems. To participate, all colleagues registered into the online course. The same can be accessed at the following address: https://aspiracursosenlinea.neolms.com/

After completing the deliberative dialogue based on the principles of integration of the health careers topic, while enjoying a delicious lunch, we gathered in a room equipped with computers and internet system. We accessed the online course to get familiarized with the dashboard. The fellowship and solidarity helped and led cooperative learning. We all learned from peers and develop the skills needed to navigate the application. Among many capabilities built into the system it provides and encourages communication in the study group. In this regard, the exercise helped us to understand the operation and advantages of the various available forums: presentation, ideas and questions.

It is important to note that the dynamics of the exercise encouraged the process of peer learning and the "professional friendship". We

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² https://www.neolms.com/info/features

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worked in a family-like scenario, strengthening our gaps related to the use of ICT. "

It should be noted that professional friendship was cultivated throughout the semester and good working chemistry was generated.

Integrated Curriculum

The first articles read by the group^{3,4} allowed us to develop the concept of curriculum integration. We learned about the different approaches or models for curriculum integration. For example, the connected model in which a theme or topic connect the different disciplines. The shared model has a shared approach to planning and design, and the integrating element can be a theme, a concept, or a skill. The basted model, multiple intelligences serve as the stitches that connect the disciplines. So, there are multiple ways to create an integrated curriculum: themes, concepts, competencies, events, skills, inventions, discoveries, problems or controversial issues. The faculty team is responsible for the conversations, deliberations, and above all, the creative process of designing the learning units or courses that will connect the different disciplines so that the learning experience is relevant and meaningful to the students that will lead them to construct an integrated understanding of the world, and not a fragmented vision.



Conceptual Map of the Discipline

The strategy of developing the conceptual map of the discipline, prior

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Ortíz, E. () Retos y Perspectivas del Currículo Integrado. Cuadernos de Investigación en Educación, 21: 35-56, Río Piedrasyl UPR.

What experiences learning do I hav

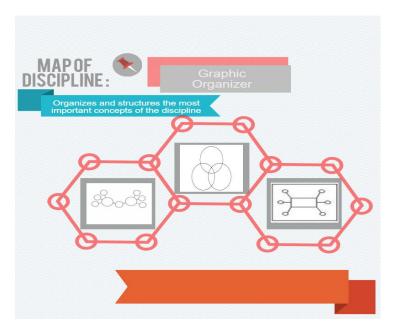
⁴ Illán Romeu, I. y Molina, Saorín J. (2011). Integración Curricular: respuesta al reto de educar en y desde la diversidad. Educar em Revista, núm. 41, julio-septiembre, 2011, pp. 17-40, Brasil: Universidad Federal de Paraná.

to initiating the curriculum integration project was used in the early 90s by the teachers of the Middle School Manuel Elzaburu of San Juan in their Curriculum Integration Project, which was facilitated by the person who today is Executive Director of ASPIRA of Puerto Rico, Mrs. Adalexis Rios. In that curriculum integration project, the integrating element would be a series of competencies identified by the teachers and a series of generating themes selected by the students.

This strategy was also used in other projects facilitated by Mrs. Rios in the programs of Physical Therapy and Occupational Therapy from the University of Puerto Rico at Humacao. At that time, the project was part of the Project for the Development of Thinking Skills at the University of Puerto Rico. The conceptual map emanates from the mindset of the discipline. So, thinking skills and concepts of discipline helps implement an articulated manner, concepts such as the substantive dimension and thinking skills as procedural and contextual dimension.

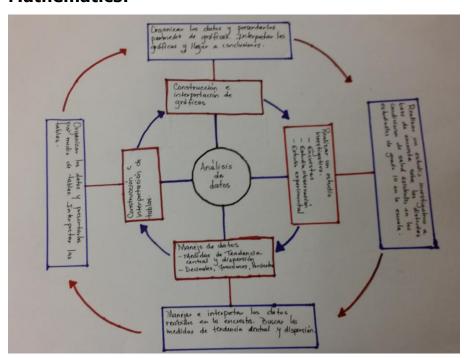
The conceptual map allows teachers to achieve awareness of their substantive and procedural knowledge of the discipline, to graphically capture it and to have it as a visual reference when making decisions on curriculum integration. The conceptual map of the discipline was done as a step prior to thinking about the questions of how to integrate the theme of health careers into the subject I teach, and what concepts from the discipline I teach represent an opportunity to integrate health careers into my subject matter.

Before beginning to develop the conceptual map of the discipline, we got familiarized with samples of conceptual maps:

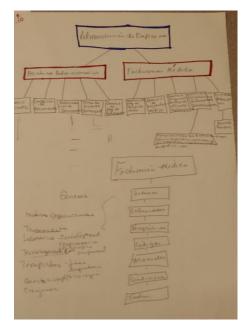


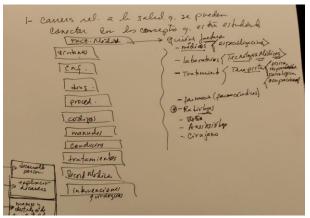
What follow are examples of the conceptual maps of the disciplines produced by study group members:

Mathematics:

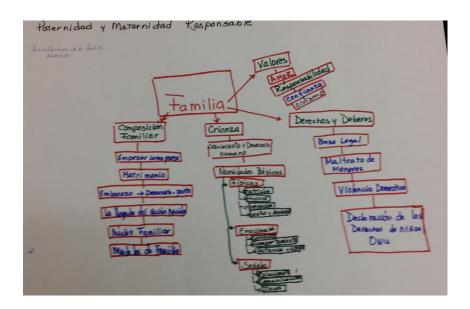


Business administration:

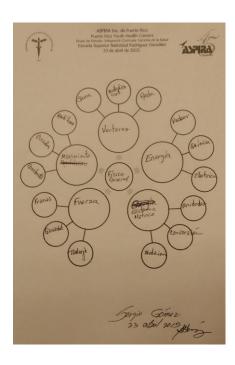




Responsible Parenthood:



Physics:



Career Competencies

The ACEG Framework for Careers and Work Related Education⁵, proposed by the Association of Career Education and Guidance, from the United Kingdom, contains three general areas, each of which is operationalized in more specific competencies:

- 1. Developing yourself through careers and work related education:
 - a. Self-awareness
 - b. Self-determination
 - c. Self-improvement as learner
- 2. Learning about careers and the world of work
 - a. Exploring careers and career development
 - b. Investigating work and working life
 - c. Understanding business and industry
 - d. Investigating jobs and labor market (LMI)
 - e. Valuing equality, diversity and inclusion
 - f. Learning about safe working and environment
- 3. Developing your career management and employability skills
 - a. Making the most of career information and guidance

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⁵ The ACEG Framework for Careers and Work-related Education: A PRACTICAL GUIDE.

- b. Preparing for employability
- c. Showing initiative and enterprise
- d. Developing professional finance capability
- e. Identifying choices and opportunities
- f. Planning and deciding
- g. Handling applications and interviews
- h. Managing changes and transitions

ACEG's description of each general area and the corresponding competencies is presented in the next pages⁶:

Developing yourself through careers and work-related education

Self-awareness	Realistic appraisal of their qualities and skills, roles and responsibilities, values and attitudes needs and interests, aptitudes and achievements enables individuals to make informed choices, assess their suitability for opportunities and identify priorities for their own development. It provides the foundation for building self-esteem, personal identity and career wellbeing.	
Self-determination	Self-regulation and taking greater responsibility for the things that they do and that happen to them enables individuals to develop their sense of career agency, adaptability and resilience. Self-awareness enables individuals to make sense of their own story. Self-determination empowers individuals to improve their own story and to imagine possible futures for themselves.	
Self-improvement as a learner	Understanding what they have learned, what they need to learn next and how they learn best prepares individuals for lifelong learning in careers and work. It fosters positive attitudes to learning and the skills of planning, review and reflection.	

Learning about careers and the world of work

Exploring careers and career development	Career exploration promotes curiosity, opportunity awareness and a more positive attitude to the challenges, risks and rewards of careers and working life. A better understanding of career processes and structures enables individuals to make sense of their own careers as well as the career experiences of others.
Investigating work and working life	Investigating the meaning and nature of work helps individuals to understand the benefit: and drawbacks of working life. It complements career exploration.
Understanding business and industry	Understanding business and industry enables individuals to find out how businesses operate and to appreciate their role and impact on social and economic life.
Investigating jobs and labour market information (LMI)	Individuals need to know how to access and analyse relevant and appropriate job and labour market information when they are ready for it.
Valuing equality, diversity and inclusion	Individuals need to learn that society's commitment to equality, diversity and inclusion benefits them and others by opposing the damage caused by stereotyping, discrimination and prejudice. It also enables organisations to make the best use of the full range of talent available.
Learning about safe working practices and environments	Learning how to keep themselves and others safe in whatever working environment they are in helps individuals to maintain health and safety standards at all times.

⁶ The ACEG framework for careers and work-related education: A PRACTICAL GUIDE. http://www.cegnet.co.uk/uploads/resources/ACEG-Framework-final.pdf, pages 6 and 7.

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Developing your career management and employability skills

Making the most of careers information, advice and guidance (CIAG)	Individuals need to learn how to recognise trusted sources of information, advice and guidance and how to make effective use of all the sources of help and support available to them.
Preparing for employability	A priority for children and young people is to gain the skills and experience that will enable them to get jobs and sustain themselves in employment.
Showing initiative and enterprise	This area of learning encompasses everything from becoming a top entrepreneur to showing initiative and enterprise in everyday life. It helps individuals to learn about risk, effort and making the most of opportunities.
Developing personal financial capability	The increasing cost of training and further and higher education makes it essential for individuals to know about managing their money. They need to know how to make decisions about spending, saving and investing to ensure their economic wellbeing now and in the future.
Identifying choices and opportunities	Using networking, negotiation, information and evaluation skills enables individuals to maximise their choices and opportunities, including those that are unforeseen or unplanned. Individuals need to be able to recognise suitable progression pathways and qualifications.
Planning and deciding	Decision-making involves getting information, clarifying values and preferences, identifying options, weighing up influences and advice, solving problems, anticipating future decisions and having a 'back-up' plan. It also involves being able to cope with chance events and unforeseen consequences.
Handling applications and interviews	Promoting themselves in a way that attracts the attention of selectors and recruiters as well as managing the applications process involves developing a range of self-presentation and marketing skills that individuals will need throughout their lives.
Managing changes and transitions	Plans and decisions can break down if individuals fail to prepare for the career moves they need to make. Awareness of how to cope with life changes and transitions, partly gained from reflecting on previous moves, can support lifelong career development and employability.

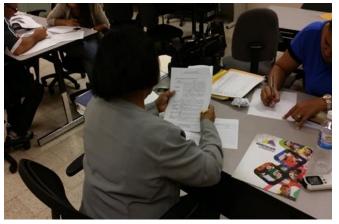
Template for the Design of Learning Units Integrating the ACEG competencies



In performing
the analysis to nurture
deliberation on the
ACEG Framework for
Careers and Workrelated Education, we
identified the following
skills as most
relevance to each of

the disciplines that were represented in the study group:

Subject Matter	Competencies to emphasize
Mathematics:	Exploring careers and career development, Investigating jobs and
	labor market
Spanish:	Investigating work and working life, Exploring careers and career development, Managing applications and interviews
Physical Education:	Valuing equality, diversity and inclusion, Exploring careers and career development, Learning about safe working and environment
Accounting:	Exploring careers and career development, Investigating jobs and labor market
Planned Parenthood:	
Business Administration:	Exploring careers and career development, Self-improvement and learner, Investigating jobs and labor market

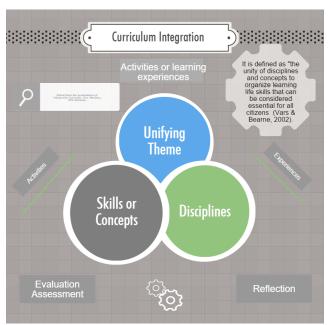


We agreed to emphasize the following areas:

- Exploring careers and career development
- Investigating jobs and labor market
- Investigating work and working life

Also, we agreed to use the curriculum integration model of

theme/topic /competency as integrating element, and chose health careers and competencies for the work and the career as integrating themes.



We designed a template to guide the design and planning of learning units integrating health careers and competencies for the work and the career.

CURRI	C U L U M I N T E G	R	A T I O N U	NIT	
	DESIGN	1			
Theme:				Estimated time:	
Course:	by:	}		Grade:	
Description: (Context)					
General Objective:					
Standards:					
Learning Expectations (According to PR Department of Education Guides)					
Work and Career Competencies:	Exploring careers and career development		Other competencies:		
	Investigating jobs and labor market				

	Investigating work and working life					
Specific Objectives:	Activity		Phase (Initial, Developmen	ıt, Clos	sin	g)
•						
•						
•					•••••	
•					•••••	
Evaluation:						
Product: (Research, interview, campaign, biography, etc)						

The Study Group as a Learning Experience

From the systematization of the learning experience, we identified recommendations and issues on which we would like to expand our knowledge and reflections. What follow are excerpts from the participants reflections:

Lessons learned:

"So far, I think the main learning is the element of voluntary participation. The public education system in Puerto Rico is very centralized, everything is imposed and teachers generally feel it as oppressive. Voluntary participation forms the basis for empowerment, the products and the results of the group belong to their own school and to the participants themselves. Another lesson learned is flexibility. The less structured the idea begins, the more the space for collective creativity (for example, from a study group to a study/design group). The other lesson is informality; I think it helps building community. This is not a workshop coming offered by 'experts', group members get together to learn from previous experiences, from the readings and from the creative process."

"We learned to work our map of curriculum integration."

"I have a clear vision that helps me understand the importance of specialists in the area of health and their relationship with the concepts and skills of the courses I offer."

"To create the map of the discipline. Graphic organizers. Conceptual maps.

"Very good activity that encourages collaborative learning and effective curriculum development."

"Collaborative work. Development of the map of the discipline. To relate topics to the health careers."

"I could evaluate my profession from another perspective. I could analyze as my profession can contribute to the solution of psychosocial and emotional problems in our youth."

"The importance of the implications of working with integrated in school curriculum. Preparation of a template for the development of integrated activities."

"Of course, every learning experience helps us for the future. Become aware of what students need and how we can reach them.""

"A clearer picture of health related skills that will help me do research on this topic with my students, in order for them to better understand and choose careers that would be best for them."

"How to integrate the ideas of the competency model."

"Using the skills for careers and work for a planning model for curriculum integration."

Recommendations

"To anyone who wants to have a similar experience I would recommend to first of all believe in the creative potential of teachers (and people in general). I think that's the starting point. I think the voluntary participation makes an important difference. It would have been better to agree in that first meeting that each member of the group would identify readings or reference."

"To encourage our colleagues to participate in these experiences."

"To begin with a macro in order to identify everything. A graphic organizer presents it in a better way."

"Analysis of the conceptual organizers we developed and compare them with other educators or experts. Evaluation of software to create graphic organizers."

"To search for information and refer to the map of the discipline in developing the classes."

"I recommend the experience as it took place, since, as in systems theory, all components are affected by any existing problem. Every subject matter has a relationship with health careers, since many concepts are inter-related and are used in health careers.

"Collaborative work is an experience that strengthens peer learning."

"I recommend this experience to other colleagues because it enriches our professional growth, and also, we meet other people who have the ability and skills to bring knowledge from another perspective."

"To carry out research guiding the students so that they can identify their needs and expectations."

"I recommend this experience because it helps to incorporate curriculum integration in order to develop the students interest in health careers."

Expanding Knowledge

"I would like to go deeper into the creativity elements that are present in an experience of this sort, for example, I have identified flexibility. Other elements of creativity are fluidity, elaboration, and innovation."

"Examples of themes to integrate Health careers in our disciplines."

"Some examples of curriculums about these topics"

"The detail of health careers into the curriculum."

"Conections with health careers."

"The scientific method and its application to the topic."

Conexiones con temas delas carreras de la salud.

"Evaluation of integration projects carried out by other colleagues who are more experienced in the process of curriculum integration with the purpose of promoting health careers."

"Commitment."

"Competencies for the career and work."

"Research method for this model."

"Curriculum integration."

Invitation to NRGHS Faculty

In August, 2015 The NRGHS Health Careers Curriculum Integration Study Group presented the Curriculum Integration Guide to our colleagues, and invited them to join the study group, which continued its learning process during school year 2015-2016. During the first semester, teachers

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designed integrated units, using the agreed upon and hereby presented framework and began implementation. We invited new members and two teachers joined the group.

The Implementation Experience in 2015-2016

Some of us began implementation of the integrated units in our classes. We established a calendar of implementation, so that the Mentor Teacher could collaborate in the design and in the preparation of materials and manipulatives. Prof. Sergio Gomez, the Mentor Teacher, was a group member since the beginning. He helped us in the design, and accompanied us during implementation. See **Appendix 1** for a description of the design / implementation status of each group member, which illustrates that this is not a lineal process. Each teacher goes at his/her own tempo/rhythm, as they feel confident, and according to the relation of the topic with the course content and timing.

Appendix 2 includes various examples of the Integrated Units, and the experience of implementation. In the Nutrition Unit in Responsible Parenthood course, some products generated by the students are included. In the Math Unit in which the students surveyed youth and adults regarding their knowledge about diabetes, we have included the questionnaire and the survey results. The students learned statistics concepts, about diabetes, and health professions related diabetes prevention, diagnosis and treatment.

Systematization of the Experience

As colleagues were applying their designs in class, two systematization of the experience processes took place: one with students, and the other with teachers. We present some examples of the Shorthand Course in the Business Administration Program:

"I feel confident because I learned how to make a professional resume."

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- "I learned to be confident when searching for an employment, since I have those professional qualities required from a professional."
- "...I also learned to do a good job at the time of writing a document."
- "...I Also learned to know myself better."
- "...to discover myself."

When asked about what they would like to learn more, they responded:

- "I would like to know more about how to perform in an interview."
- "What would have happened if I haven't had this opportunity?"
- "...the expression."

Study Groups Convening



The study group as a learning community took place in our school, and in another of the PRYHC schools, the Rafael Lopez Landron High School in Guayama, PR. With the purpose of sharing and reflecting upon our learning experience, and our attainments, we coordinated a

convening between both groups. The Study Groups Convening took Place in April 22, 2016. ASPIRA Puerto Rico facilitated the conversation. During the Convening, participants shared their experiences in the study group and during implementation. We also identified next steps for each school, and identified sustainability strategies.

Among the next steps, we identified the operationalizing the ACEG

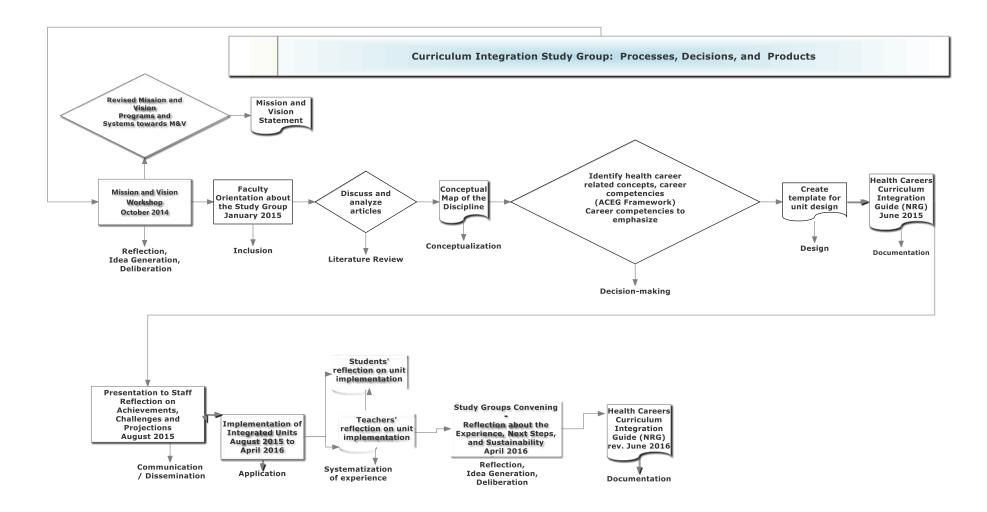
competencies to establish observable behavior indicators that could help students observe their own development, and that could the teachers determine the development of work and career competencies.

As sustainability strategies, we talked about what we have learned that belongs to ourselves. Other ideas include dissemination of the experience and our achievements in the school and the community. This Curriculum Integration Guide will be part of the induction of new teachers so that they get motivated to join the group and to integrate health careers, and competencies for the work and the career in their subject matters. It was also suggested to this project in local newspapers and radio.



Curriculum Integration Study Group Flowchart: processes, decisions, and products

In the next page, we present a flowchart that summarizes the reflective, dialogic, deliberative and creative process followed by the NRGHS Curriculum Integration Study Group during the past two years, from which this Curriculum Integration Guide emerges. This is work in progress. The NRGHS will continue its Curriculum Integration Project in school year 2016-2017.



Appendix 1: Implementation Status

Anejo 2: Fases de desarrollo del Grupo de Estudio (matriz informativa)

	NOMBRE	MATERIA	HORAS DE CAPACITACIÓN	FASE	OBSERVACIONES
1.	Rosa Cotto	Administración de Empresas	1:20 pm	Completó Implantación y Sistematización con estudiantes. Falta sistematización del maestro	Se encuentra en proceso de operacionalización de las competencias.
2.	Carol Santiago	Manejo del teclado	8:10 am y 10:40 am	No ha diseñado No ha implantado	Escogió las competencias vocacionales y diseño su mapa de estudio. Se encuentra en el inicio de su diseño de integración curricular
3.	Millie Rivera	Educacion Especial (español)	1:20 pm 2:10 pm	No ha diseñado No ha implantado	Escogió las competencias vocacionales y diseño su mapa de estudio. Se encuentra en el inicio de su diseño de integración curricular.
4.	Hayra Santiago	PRYHC	Durante la mañana	No ha implantado	Se encuentra en proceso de operacionalización de las competencias.
5.	Manuel Ortiz	Matemáticas	1:20 pm	Falta editar diseño y proceso de sistematización	Se encuentra en proceso de operacionalización de las competencias. Falta transcribir el diseño e incluir recomendaciones.
6.	Loida Rodríguez	Salud y paternidad	9:00 am	Falta diseño, implantación y sistematización	Se encuentra en proceso de operacionalización de las competencias. Falta transcribir el diseño e incluir recomendaciones.

7.	Jenni Malvet	Español	8:10am / 2:10pm	Falta diseño, implantación y sistematización	Se ausentó a las últimas 2 reuniones.
8.	Eunice Muñoz	Matemáticas	12:30 pm	Falta diseño, implantación y sistematización	Se encuentra en proceso de operacionalización de las competencias. Falta transcribir el diseño e incluir recomendaciones.
9.	Tianny Rodríguez	Educacion Especial (Español)	12:30 pm	Falta revisar diseño, calendario y sistematización	Se ausentó a las últimas reuniones.

Anejo 2: Curriculum Integration Units Designs

D I S E Ñ O P	ARA LA INTEGRACIÓN				
	CURRICULAR				
Tema: Prevención de lesiones deportivas		Tiempo: 60 min.			
Recurso: Hayra Santiago / Arlene Torres (PRY	HC) Por: 4 semanas	Grado:			
Curso: Educación Física		11mo			
Descripción: (Contexto) Adquirir conocimientos acerca de los movimientos realizados en algún tipo de deporte en la que puedan prevenir accidentes ocurridos en prácticas o entrenamientos. También, puedan aplicar técnico de primeros auxilios RICE. El foco principal de la unidad será integrar los conceptos de los movimientos del deporte con integración de las carreras de la salud con el fin de que los estudiantes exploraren e identifiquen.					
Objetivo General:	Desarrollar, aplicar, comprender, analizar, evaluar y conocer: ✓ Lesiones en los deportes y entrenamientos. ✓ Formas correctas o en la rehabilitación. ✓ Funciones de los músculos. ✓ Anatomía del cuerpo.				
Estándares ✓ Dominio del movimiento. ✓ Comprensión del movimiento. ✓ Conducta responsable. ✓ Estilos de vida activos y saludables.					
Expectativas	✓ Lograr conocimiento amplio de las lesiones en cualquiera de las ramas que s dentro o relacionado a los deportes.	erán estudiadas			

Competencias Vocacionales:	Autoconocimiento Igualdad, Diversidad e Inclusión	Desarrollo personal de la capacidad financiera.
	Autodeterminación Aprendizaje sobre prácticas seguras en el ambiente de	Identificando opciones y oportunidades
	Exploración de carreras y X	Planificación y toma de decisiones
	Investigación Laboral y la Vida Laboral Vida Laboral Preparación para la empleabilidad	Manejo de las solicitudes de empleos y entrevistas
	Investigación de empleos y mercado de trabajo. Mostrando iniciativa y emprendimiento	Gestión de cambios y transiciones
Objetivos Específicos	Descripción de la Actividad	Fase (IDC)
Identificar, nombrar, clasificar.	Entregar hojas de las diferentes anatomías del cuerpo: Huesos, músculos y articulaciones.	Mostrar diferentes tipos de lesiones que se producen con el movimiento del cuerpo (articulaciones): ✓ Tobillo ✓ Hombro ✓ Rodilla ✓ Espalda ✓ Cadera
Describir y definir.		Tipos de lesiones más frecuentes: lesiones por sobrecarga, musculares, tendones, ligamentos, huesos y articulaciones.

• Ejecutar.	 Distribución de temas a cada estudiante y realizar un foro. Repartir temas de las lesiones deportivas a los estudiantes a los estudiantes que se van a impactar. Practicar y aplicar técnicas de vendajes con los mismos estudiantes. Se estará llevando a cabo la práctica de cómo vendar según el tipo de lesión. Enseñanza de los primeros auxilios en caso de una emergencia previa. Técnicas como inmovilizar el área. Técnicas de RICE (rest, ice, compression, elevation). Procedimiento de emergencia ante una lesión. 	
Evaluación:	Elaborar un opúsculo informativo de la lesión de preferencia: Tema de la lesión, descripción de la lesión y rehabilitación. Incluir fotos y realizar una estadística cuan frecuente es la lesión. Identificar y describir los profesionales de la salud que intervienen en la recuperación de una lesión	
Producto Generado:	Intercambian conocimientos, opiniones sobre los temas discutidos para ser utilizados en un futuro para alguna profesión en específico como lo es terapia física, terapia atlética, masajo terapéutico, fisiología del ejercicio.	

A continuación presentamos el material didáctico propuesto para la implantación de la unidad de integración curricular del curso de educación física:

NOMBRI	E DEL ESTUDIANTE:
	de de 2016.
Grado 11	
Maestra S	Sra. H. Santiago/ A. Torres
TRABAJ	O ESCRITO PARA ENTREGAR COMO UN REQUISITO PARCIAL.
I.	TEMA: LA PREVENCIÓN DE LESIONES CAUSADAS POR LA PRACTICA DE UN DEPORTE.
II.	INSTRUCCIONES: RESPONDA EN FORMA BREVE. CUANDO SEA NECESARIO, ENUMERE LOS DATOS.
A.	Por definición ¿Qué son las lesiones deportivas?
B.	Escoge, nombre y describe en detalle, un tipo de lección causada por la práctica deportiva.
C.	Mencionar cirugía (en caso de una lesión crónica) y su rehabilitación. Debe incluir alguna técnica de vendaje si hay que inmovilizar el área.
D.	Mencione cinco profesionales de la salud que intervienen en el tipo de lesión que escogiste .
	a
	b
	c
	d
	e

- E. ¿Cuáles son las lesiones más frecuentes? Realiza una búsqueda de información que incluya los datos estadísticos relacionados con lesiones más frecuentes.
- F. Menciona al menos 10 profesiones relacionadas con la salud.
- G. Explica, brevemente, por qué estudiarías una carrera relacionada con la salud.
- H. ¿Actualmente, recibes los servicios de tutoría patrocinados por ASPIRA en la Escuela? Explica.
- I. Describe en tus propias palabras las prácticas necesarias para evitar lesiones serias en la práctica deportiva.

Gracias por el tiempo dedicado en realizar este proyecto. CURSO: EDUCACIÓN FÍSICA

Profesora: H. Santiago / A. Torres

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Natividad Rodríguez González High School (NRGH	S
Health Careers Curriculum Integration Study Grou	up
Health Careers Curriculum Integration Guide	

	Health Car	eers Curriculum Int	egration Guide
EDAD	SEXO F	M	GRADO

Integración de la Educación Física a las Carreras de la Salud.

Cuestionario para determinar cuántos estudiantes hacen deportes o ejercicios y toman las precauciones correctas para la prevención de las lesiones.

No tienes que escribir tu nombre solo marca con una X el encasillado correspondiente de acuerdo a tu persona.

Cuestionario	SI	NO	ALGUNAS VECES
1. ¿Calientas antes de comenzar los ejercicios?			
2. ¿Cuándo sientes dolor, continúas haciendo el ejercicio?			
3. ¿Al finalizar los ejercicios, haces un estiramiento breve (Cooldown)?			
4. ¿Has sufrido algún tipo lesión?			
5. ¿Has tomado terapias por alguna lesión?			
6. ¿Has visitado a un profesional que ha intervenido con tu tipo de lesión?			
7. ¿Entiendes que es necesario dormir de seis a ochos horas diarias?			
8. ¿Tomas agua con frecuencia?			
9. ¿Sí haces algún tipo de ejercicio riguroso, lo haces diariamente?			
10.¿Te alimentas saludablemente?			

Hoja de Criterios:

La siguiente tabla específica los criterios que han de evaluarse en el trabajo especial "Prevención en la lesiones deportivas".

Criterios	Observación
A. Presentación del tema	15 puntos
 Definir prevención deportiva. 	
- Elección de una lesión.	
B. Mencionar rehabilitación.	10 puntos
- En caso de que la lesión sea crónica	
tipo de cirugía.	
C. Técnica de vendaje.	25 puntos
- Muñeca.	
- Tobillo.	
D. Relacionar a las carreras de la salud.	25 puntos
- Búsqueda de los profesionales que	
intervienen en la lesión.	
- Mencionar 10 de las carreras de la	
salud.	
- Investigar en el internet (referencias)	
las profesiones de las carreras de la	
salud.	
E. Explicar interés en alguna carrera de la	10 puntos
salud y por qué lo estudiaría.	
F. Describe en tus propias palabras.	10 puntos
G. Limpieza y presentación.	5 puntos
H. Bonificación: Servicios de Tutorías	Total: 100 puntos Nota final:
Valor: 5puntos.	

PROF.: H. SANTIAGO/ A. TORRES

Salón: ____

Jueves, 21 de abril de 2016.

Hoja de Asistencia:

Tema: Prevención de Lesiones.

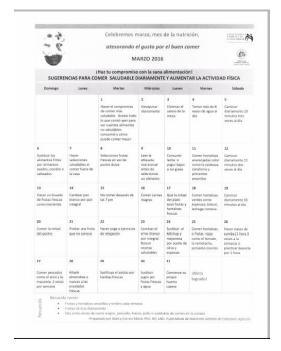
Nombre y Apellidos (Letra de Molde)	Firma
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DISEÑO PARA LA INTEGRACIÓN CURRICULAR Tema: La Nutrición (Sana y Buena alimentación) Tiempo: 2 semanas Curso: Paternidad y Maternidad Responsable Profesora: Loida Rodríguez Ortiz Grado: 10-11-12 Integración de Paternidad y Maternidad Responsable con las Carreras de la Salud. Descripción: (Contexto) Se integrará el tema de las carreras de la salud con el tema de Nutrición – Sana Alimentación. **Objetivo General:** Luego de haber divulgado Marzo, mes de la Nutrición y sus implicaciones en la vida y el desarrollo de los niños en os estudiantes: ✓ Definirá el termino Nutrición. Fomentará planes de acción para mejorar los hábitos alimentarios. Estimulará la práctica de actividad física dando énfasis en la familia y la comunidad. Promoverá la promoción y distribución de productos que contribuyen a una sana alimentación. Impulsará la detención de la obesidad y el sobre peso en las Familias. Identificarán las carreras relacionadas con nutrición y las competencias vocacionales necesarias para estas. Recibirán orientación sobre la Nutrición del Proyecto, Ruta 4H por a Sra. Carmen J. Rodríguez y la estudiante Explica las alternativas para mantener un estilo de Vida Saludable. Estándares Identifica la importancia de practicar un estilo de vida saludable. Selecciona y compra alimentos de acuerdo con si valor nutritivo. Explica las alternativas para mantener un estilo de vida saludable. Identifica las ocupaciones relacionada con las industrias de alimentos y nutrición. **Expectativas** ✓ La buena Salud depende de la selección de alimentos nutritivos. **Competencias Vocacionales:** Igualdad, Diversidad e Inclusión Desarrollo personal de la Autoconocimiento capacidad financiera. X

	 Autodeterminación X Aprendizaje sobre prácticas seguras en el ambiente de trabajo 	Identificando opciones y oportunidades
	• Exploración de carreras y desarrollo x de carreras	Planificación y toma de decisiones x
	 Investigación Laboral y la Vida Laboral Preparación para la empleabilidad • 	Manejo de las solicitudes de empleos y entrevistas
	Investigación de empleos y mercado de trabajo. Mostrando iniciativa y emprendimiento	Gestión de cambios y transiciones
	 ✓ El autoconocimiento les ayuda a evaluar sus oportunidades e identificar se Provee desarrollo de la autoestima, identidad y el bienestar profesional. ✓ Evaluación de sus cualidades y destrezas, roles y responsabilidad, va intereses. Incluye las aptitudes y los logros que le permiten al individinformada. 	alores y actitudes, necesidades e
Objetivos Específicos	Descripción de la Actividad	Fase (IDC)
de promoción, carteles, escritos,	Los estudiantes desarrollaron promoción sobre Marzo mes de la Nutrición y su estudiantes y la familia. Como parte de la integración del tema de las carr incluirán en su cartel las competencias que debe poseer los profesionales de la sa	eras de la salud los estudiantes

Plan ECA	Introducción del Tema:	Aplicación:		
• ¿Qué sabe el estudiante sobre el Tema Nutrición y Sana Alimentación?	 Nutrición Sana Alimentación Conocimientos Básicos de Alimentación Hábitos Alimentarios La Familia, transmisora de Hábitos y Sana Alimentación; niños y adolescentes. 	 Marzo – Mes de la Nutrición Después de haber divulgado "Marzo mes de la Nutrición" y sus implicaciones en la vida y desarrollo de los estudiantes: Los estudiantes desarrollarán algún tipo de promoción, carteles, escritos, acróstico, poema, juegos, hojas sueltas relacionadas con la alimentación y las Carreras de la Salud relacionadas con nutrición, 		
Evaluación:	 Contestarán un cuestionario sobre la alimentación y lo tabularon. Promoción de Nutrición y sus profesiones y competencias. 			
Producto Generado:	 Análisis de datos obtenidos por el cuestiona Discusión socializada sobre los elementos ir 			

Material Educativo utilizado para la implantación de la Unidad de Integración Curricular:







Trabajos realizados por los estudiantes:

La Nutrición:

La nutrición es importante, Nos ayuda con nuestra vida, Por eso debemos ser consciente, En nuestra comida.

Comer saludable ayuda el corazón, Y no es hacer dieta, Sino tener consciencia y razón, Con tu receta.

Las frutas, Nos liberan de enfermedades, Por eso debemos comerlas, Porque son importantes.

La salud es algo serio, Debes cuidar de ella, La salud es un misterio, Pero si la cuida será bella.

Por: Richard Pérez (1 1-1)

Por: Izarys Gutierrez (11-1)

La buena nutrición el tabú de nuestro diario vivir. A menudo escuchamos en la calle la palabra nutrición. Pero... ¿Estas claro y tienes definido su concepto?. La nutrición es el Conjunto de procesos, hábitos, etc., relacionados con la alimentación humana. Cuando mencionas dicho termino la gente piensa que es comer y ejercitarse, aunque no esta mal.

Crees que mantener un cuerpo nutrido es realizar las 3 comidas y ya. No, nutrición es saber que la comida de 'fast food' puede saciar tu hambre y destruir tu cuerpo. Nunca esta demas hacer desarreglos pero volverlo un hàbito puede ser mortal para tu salud. Al igual que hacer ejercicios y no comer saludable puede acabar contigo.

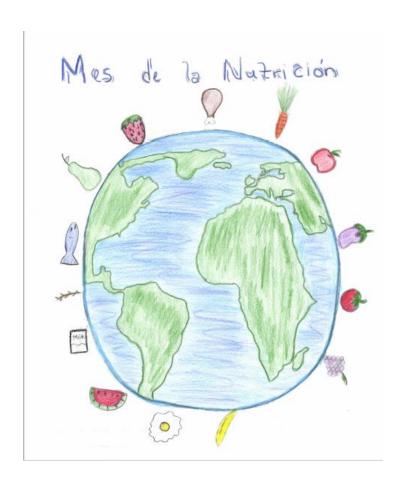
Hoy dia existen millones de dietas para sustituir comidas por batidas. Honestamente no creo en eso pues jamás cambiaria un plato completo por un vaso de 7oz. con proteinas, minerales, etc., que ayudan y destruyen mi cuerpo. La sociedad vive tan ajetreada que prefiere sustituir comidas saludables por batidas o glúcidos.

En conclusión, no cambies una comida saludable por comida chatarra. Antes de hacerlo piensa en tu salud. Buena nutrición mejora tu salud. ¡Atrevete a cambiar!

Jonathan Candelario Ramos

10-2

Días de la semana	Desayuno 7:30am	Almuerzo 11:30am	Merienda 3:00pm	Cena 6:00pm
Jueves	Huevos fritos, hotdog frito y galletas, jugo de china	Arroz blanco, pollo guisado, refresco	Pan con mantequilla de maní, jugo de uva	Pollo guisado y tostones, refresco
Viemes	Revoltillo con salchicha, pan, jugo de uva	Ñame, came frita, jugo de fruit punch	piña	Ñame con carne frita, jug de fruit punch
Sábado	Sándwich de jamón y queso, agua	Papa majada, chuleta de jamón, agua	yogur	Sopa de pollo, agua
Domingo	Tortilla con queso, galletas, jugo de fruit punch	Mofongo con camarones al ajillo, jugo de china	Galletitas de oreo con leche	Sándwich de jamón y queso, jugo de china
Lunes	Cereal con leche	Arroz con salchicha, habichuelas guisadas, agua	Sándwich de atún, jugo de china	Arroz con salchicha, habichuelas guisadas, agua
Martes	Pan con mantequilla de maní, agua	Papas fritas con pescado frito, refresco	Barrita de frutas con agua	Pescado frito, tostones, jugo de china
Miércoles	Hotdog, jugo de fruit punch	Arroz con habichuelas guisadas, pollo asado, agua	Vaso de helado	Pollo asado con lechuga refresco



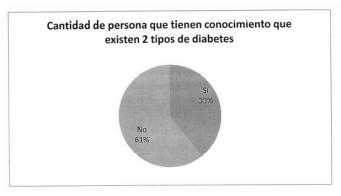
DISEÑO PARA LA INTEGRACIÓN CURRICULAR Tema: Estudio de investigativo: Prevalencia de enfermedades en estudiantes de la Escuela Natividad Rodríguez Tiempo: 2 semanas Curso: Matemáticas por: Manuel Ortiz Grado: Décimo Descripción: Los estudiantes llevaran a cabo una encuesta para estimar el conocimiento sobre la diabetes en la comunidad escolar. Los estudiantes diseñaran el instrumento y luego realizarán el análisis de los datos obtenidos. Al (Contexto) finalizar la obtención de datos para la encuesta los estudiantes presentarán las conclusiones a través de tablas y gráficas. El estudio se realizará en la escuela. **Objetivo General:** El estudiante interpretará y construirá gráficas, tablas y llegará a conclusiones cobre el estudio de Análisis de datos Estándares **Expectativas** El estudiante logrará analizar y construir exitosamente los datos obtenidos del estudio de investigación. **Competencias Vocacionales:** Autoconocimiento Igualdad, Diversidad e Inclusión Desarrollo personal capacidad financiera. Autodeterminación Aprendizaje sobre prácticas Identificando opciones seguras en el ambiente de trabajo oportunidades • Exploración de carreras v X Asesoramiento, información Planificación y toma desarrollo de carreras orientación de carreras. decisiones Investigación Laboral y la X Manejo de las solicitudes de Preparación la para Vida Laboral empleabilidad empleos y entrevistas. Investigación de empleos y Gestión cambios Mostrando iniciativa de mercado de trabajo. emprendimiento transiciones **Objetivos Específicos** Descripción de la Actividad Fase (IDC) Calcular medidas de tendencia central

Dibujar y analizar gráficas		
Evaluación:	Los estudiantes entregarán las tablas y gráficas, así como las conclusiones sobre la e	ncuesta o estudio
Producto Generado:	Resultados de las encuestas.	

Ejemplos de la encuesta realizada por los estudiantes y algunas gráficas que demuestran sus resultados:







Grupo de estudiantes del curso de estadísticas discutiendo los resultados de la encuesta





