

Entrepreneurship/Design Thinking
UBD Curriculum
Egg Harbor Township Middle School
Technology Department



Career and Technical Education

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DISTRICT MISSION STATEMENT

Our mission in the Egg Harbor Township School District is to partner with the student, family, school, and community to provide a safe learning environment that addresses rigorous and relevant 21st Century standards and best practices which will develop academic scholarship, integrity, leadership, citizenship, and the unique learning style of students, while encouraging them to develop a strong work ethic and to act responsibly in their school community and everyday society.

CAREER AND TECHNICAL EDUCATION

Mission:

New Jersey's Office of Career and Technical Education seeks to prepare students for career opportunities of the 21st century, succeed as global citizens and support healthy economic growth for New Jersey. Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state.

INTRODUCTION

The most precious resource teachers have is time. Regardless of how much time a course is scheduled for, it is never enough to accomplish all that one would like. Therefore, it is imperative that teachers utilize the time they have wisely in order to maximize the potential for all students to achieve the desired learning.

High quality educational programs are characterized by clearly stated goals for student learning, teachers who are well-informed and skilled in enabling students to reach those goals, program designs that allow for continuous growth over the span of years of instruction, and ways of measuring whether students are achieving program goals.

EGG HARBOR TOWNSHIP SCHOOL DISTRICT CURRICULUM TEMPLATE

The Egg Harbor Township School District has embraced the backward-design model as the foundation for all curriculum development for the educational program. When reviewing curriculum documents and the Egg Harbor Township curriculum template, aspects of the backward-design model will be found in the stated enduring *understandings/essential questions*, *unit assessments*, and *instructional activities*. Familiarization with backward-design is critical to working effectively with Egg Harbor Township's curriculum guides.

GUIDING PRINCIPLES: WHAT IS BACKWARD DESIGN?

WHAT IS UNDERSTANDING BY DESIGN?

"Backward design" is an increasingly common approach to planning curriculum and instruction. As

its name implies, “backward design” is based on defining clear goals, providing acceptable evidence of having achieved those goals, and then working ‘backward’ to identify what actions need to be taken that will ensure that the gap between the current status and the desired status is closed.

Building on the concept of backward design, Grant Wiggins and Jay McTighe (2005) have developed a structured approach to planning programs, curriculum, and instructional units. Their model asks educators to state goals; identify deep understandings, pose essential questions, and specify clear evidence that goals, understandings, and core learning have been achieved.

Program based on backward design use desired results to drive decisions. With this design, there are questions to consider, such as: What should students understand, know, and be able to do? What does it look like to meet those goals? What kind of program will result in the outcomes stated? How will we know students have achieved that result? What other kinds of evidence will tell us that we have a quality program? These questions apply regardless of whether they are goals in program planning or classroom instruction.

The backward design process involves three interrelated stages for developing an entire curriculum or a single unit of instruction. The relationship from planning to curriculum design, development, and implementation hinges upon the integration of the following three stages.

Stage I: Identifying Desired Results: Enduring understandings, essential questions, knowledge and skills need to be woven into curriculum publications, documents, standards, and scope and sequence materials. Enduring understandings identify the “big ideas” that students will grapple with during the course of the unit. Essential questions provide a unifying focus for the unit and students should be able to answer more deeply and fully these questions as they proceed through the unit. Knowledge and skills are the “*stuff*” upon which the understandings are built.

Stage II: Determining Acceptable Evidence: Varied types of evidence are specified to ensure that students demonstrate attainment of desired results. While discrete knowledge assessments (e.g.: multiple choice, fill-in-the-blank, short answer, etc...) will be utilized during an instructional unit, the overall unit assessment is performance-based and asks students to demonstrate that they have mastered the desired understandings. These culminating (summative) assessments are authentic tasks that students would likely encounter in the real-world after they leave school. They allow students to demonstrate all that they have learned and can do. To demonstrate their understandings students can explain, interpret, apply, provide critical and insightful points of view, show empathy and/or evidence self-knowledge. Models of student performance and clearly defined criteria (i.e.: rubrics) are provided to all students in advance of starting work on the unit task.

Stage III: Designing Learning Activities: Instructional tasks, activities, and experiences are aligned with stages one and two so that the desired results are obtained based on the identified evidence or assessment tasks. Instructional activities and strategies are considered only once stages one and two have been clearly explicated. Therefore, congruence among all three stages can be

ensured and teachers can make wise instructional choices.

At the curricular level, these three stages are best realized as a fusion of research, best practices, shared and sustained inquiry, consensus building, and initiative that involves all stakeholders. In this design, administrators are instructional leaders who enable the alignment between the curriculum and other key initiatives in their district or schools. These leaders demonstrate a clear purpose and direction for the curriculum within their school or district by providing support for implementation, opportunities for revision through sustained and consistent professional development, initiating action research activities, and collecting and evaluating materials to ensure alignment with the desired results. Intrinsic to the success of curriculum is to show how it aligns with the overarching goals of the district, how the document relates to district, state, or national standards, what a high quality educational program looks like, and what excellent teaching and learning looks like. Within education, success of the educational program is realized through this blend of commitment and organizational direction.

INTENT OF THE GUIDE

This guide is intended to provide teachers with course objective and possible activities, as well as assist the teacher in planning and delivering instruction in accordance with the New Jersey Core Curriculum Content Standards. The guide is not intended to restrict or limit the teacher's resources or individual instruction techniques. It is expected that the teacher will reflectively adjust and modify instruction and units during the course of normal lessons depending on the varying needs of the class, provided such modified instruction attends to the objectives and essential questions outlined below.

Entrepreneurship/Design Thinking - Power Standards

Standard Number	Standards
One Semester Course	
8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
8.1.8.A.4	Graph and calculate data within a spreadsheet and present a summary of the results
8.1.8.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
8.1.8.C.CS2	Communicate information and ideas to multiple audiences using a variety of media and formats.
8.1.8.D.3	Demonstrate an understanding of Fair Use and Creative Commons to intellectual property.
9.1.8.A.1	Explain the meaning and purposes of taxes and tax deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay.
9.1.8.A.2	Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.

Unit Name: #1 - Financial Literacy

Time Frame: 6-8 days

Author: Jessica Fairchild

UNIT

Subject: Technology

Country: USA

Course/Grade: Entrepreneurship/Design Thinking 7th/8th

State/Group: NJ

School: Egg Harbor Township Middle School

UNIT SUMMARY

Students will be able to identify and define factors that affect personal financial decisions and planning

UNIT RESOURCES

- MS Excel/Google Sheets
- MS Word/Google Docs

INTERNET RESOURCE LINKS

- **TV411 - Finance: Earning & Spending, Saving & Investing**
<http://www.tv411.org/finance>
- **BizKids: Financial Planning**
<http://bizkids.com/themes/financial-planning>
- **Practical Money Skills: Grade 7 & 8**
https://www.practicalmoneyskills.com/teach/lesson_plans/grades_7_8/
- **Read, Write, Think: Interactive Resources**
http://www.readwritethink.org/files/resources/interactives/venn_diagrams/

STAGE ONE

GOALS AND STANDARDS

PFL.9.1.8.A.1 - Explain the meaning and purposes of taxes and tax deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay.

PFL.9.1.8.A.2 - Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.

PFL.9.1.8.A.7 - Explain the purpose of the payroll deduction process, taxable income, and employee benefits.

CRP3 - Attend to personal health and financial well-being.

ENDURING UNDERSTANDING

Students will understand factors that affect personal financial well-being, understanding that having a realistic budget helps prepare them for success.

ESSENTIAL QUESTIONS

- **Who will you be financially?**
- **Why is financial planning necessary for individual success?**

KNOWLEDGE AND SKILLS

Understanding the value of financial literacy, reasons for budgeting and importance of saving.

STAGE TWO

PERFORMANCE TASKS

- PFL.9.1.8.A.1
- Online interactive
- PFL.9.1.8.A.2
- Google Drawings/Online interactive
- MS Word/Google Docs
- PFL.9.1.8.A.7
- MS Excel or Google Sheets

OTHER EVIDENCE

Teacher observation, graphic organizers, NJTAPIN rubric, completed spreadsheet

STAGE THREE

LEARNING PLAN

PFL.9.1.8.A.1//PFL.9.1.8.A.7

Identify paycheck deductions and benefits through videos and online interactives

Learn the purpose of taxes through videos and creating a budget with MS Excel or Google Sheets

PFL.9.1.8.A.2//CRP3

Understand the difference between an employee and boss using a graphic organizer in Google Drawings or Read Write Think (Venn diagram) boss v. entrepreneur

Learn financial terms through videos and online interactives. Create a class dictionary, financial journal or write an essay, create a story or skit using financial vocabulary.

Unit Name: #2 - Understanding Entrepreneurship and the Design Thinking Process Days

Time Frame: 6-8

Author: Kathi Clayton/Tom Puggi

UNIT

Subject: Technology

Country: USA

Course/Grade: Entrepreneurship/Design Thinking

State/Group: NJ

School: Egg Harbor Township Middle School

UNIT SUMMARY

Students will understand Entrepreneurship and the Design Thinking Process. They will discover their “genius” and will formulate a “Passion Project” to be developed throughout the semester.

UNIT RESOURCES

- MS Excel/Google Sheets
- MS Word/Google Docs

Internet Resource Links:

- **Thrively**
<http://www.thrively.com/classroom>
- **Venturelab**
<https://venturelab.org/>
- **Solving Business Problems with Design Thinking**
<http://mitsloan.mit.edu/newsroom/articles/design-thinking-explained/>
- **BizKids Business Resources**
<http://bizkids.com/business-resources>
- **BizKids Lesson Plans**
<http://bizkids.com/teachers>

STAGE ONE

GOALS AND STANDARDS

9.1.8.A.2 Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.

9.1.8.A.6 Explain how income affects spending decisions.

9.2 CAREER AWARENESS, EXPLORATION, AND PREPARATION:

- 9.2.8.B.3 Evaluate communication, collaboration, and leadership skills that can be developed through school, home, work, and extracurricular activities for use in a career.
- 9.2.12.C.6 Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business.

9.3 CAREER AND TECHNICAL EDUCATION:

- 9.3.12.BM.1 Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision-making in business.
- 9.3.12.BM.1 Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision-making in business.

New Jersey State Learning Standards Technology

- TECH.8.1.12.A.CS2 - Select and use applications effectively and productively.
- TECH.8.1.12.C.CS2 - Communicate information and ideas to multiple audiences using a variety of media and formats.
- TECH.8.1.12.C.CS1 - Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.
- TECH.8.1.12.C - Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

CRP6. Demonstrate creativity and innovation.

ENDURING UNDERSTANDING

Students will understand that being entrepreneurial isn't just about starting companies. It is about having a vision and making it a reality. It is a way of thinking that can be learned and practiced.

Students will understand and learn how to.....

- **Explain** how small businesses contribute to the local economy.
- **Identify** resources available to entrepreneurs when creating a local business.
- **Discuss** why should someone become an entrepreneur
- **Explain** what are the benefits of becoming an entrepreneur
- **Describe** why it is important to perform a self assessment to see if you have entrepreneurial skills
- **Identify** what are the pros and cons of starting your own business, buying a business or owning a franchise

ESSENTIAL QUESTIONS

- **What is your genius?**
- **How can someone turn a passion or hobby into a profitable business?**
- **What are the skills needed to start your own business?**
- **What risks will you take starting and maintaining a business?**
- **What are the common elements overlooked when starting a business?**
- **How is Design Thinking important to being an Entrepreneur?**

KNOWLEDGE AND SKILLS

Students will know:

- How small businesses contribute to the local economy.
- The resources available to entrepreneurs when creating a local business.
- The importance of target markets.
- Different strategies for starting a new business.
- The advantages and disadvantages of purchasing a franchise..
- The pros and cons of entering into a family business.
- What factors to consider when choosing a business to start.

Students will be skilled at:

- Performing a self evaluation of personal skills need to be an entrepreneur
- Taking a self assessment to explain risks involved with starting your own business
- Describing what successful Entrepreneurs value as important traits to have when starting a business
- Applying the Design Process when creating a new

STAGE TWO

PERFORMANCE TASKS

- Self Assessment
- Research Project for Noteworthy Entrepreneurs
- Understanding the Design Process and show how a product conforms to this process
- Role play activity "Risk to Starting Your Own Business"

OTHER EVIDENCE

Teacher observation, graphic organizers, and completed multimedia project.

STAGE THREE

LEARNING PLAN

- **Thrively - Strength Assessment and Understanding Your Genius**
<https://www.thrively.com/dashboard/child/0/course/-L6i6DopWk18nlygdBPx>
- **Understanding the Entrepreneurial Mindset**
<https://venturelab.org/wp-content/uploads/2018/04/VentureLab-Entrepreneurial-Mindset-and-Skillset.pdf>
- **What is a Business?**
http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_107.pdf
- **Can Money Buy Happiness?**
<http://bizkids.com/wp/wp-content/uploads/BK-605-Middle-School.pdf>
<http://bizkids.com/clip/rachele-brooke-smith>
- **Four Steps of Design Thinking**
<http://bizkids.com/clip/rachele-brooke-smith>
- **Escape the Box**
http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_305.pdf
<http://bizkids.com/clip/direct-ed>

**Unit Name: #3 - Product Invention, Business Idea
Business Plans & Funding for Products**

Time Frame: 8-10 days

Author: Kathi Clayton/Tom Puggi

UNIT

Subject: Technology

Country: USA

Course/Grade: Entrepreneurship/Design Thinking 7/8

State/Group: NJ

School: Egg Harbor Township Middle School

UNIT SUMMARY:

Students will develop a business idea or invent a product and create a business plan and and secure funding for the product or business.

UNIT RESOURCES

INTERNET RESOURCE LINKS

- **BizKids Business Resources**
<http://bizkids.com/business-resources>
- **BizKids Lesson Plans**
<http://bizkids.com/teachers>
- **Small Business Administration - Making a Business Plan**
<https://www.sba.gov/business-guide/plan-your-business/write-your-business-plan>
- **Small Business Administration - Calculate Your Startup Cost**
<https://www.sba.gov/business-guide/plan-your-business/calculate-your-startup-costs>
- **Small Business Administration - Fund Your Business**
<https://www.sba.gov/business-guide/plan-your-business/calculate-your-startup-costs>

STAGE ONE

GOALS AND STANDARDS

9.1.8.B.7 Construct a budget to save for long-term, short-term, and charitable goals.

9.1.8.B.8 Develop a system for keeping and using financial records.

9.1.12.B.6 Design and utilize a simulated budget to monitor progress of financial

ENDURING UNDERSTANDINGS

- A business plan is a roadmap to your future.

- A business plan helps communicate ideas to others.
- A business plan identifies the need for resources.
- A business plan outlines your business for you to use as a tool for communication to others.

ESSENTIAL QUESTIONS

- How can someone turn a passion or hobby into a profitable business?
- What are the skills students need to start their own business?
- What is a business plan and how does it benefit a business?
- How does an entrepreneur successfully market and sell his/her product?

KNOWLEDGE AND SKILLS

Understanding the importance of a business plan and how to create one.

STAGE TWO

PERFORMANCE TASKS

- Understand why you need a business plan.
- Become familiar with different business structures.
- Identify sources of funding for your business.
- Learn financial terms.
- Create a business plan.

OTHER EVIDENCE

STAGE THREE

LEARNING PLAN

Small Business Administration: 10 Steps for Starting Your Business

<https://www.sba.gov/business-guide/10-steps-start-your-business/>

BizKids: Crash Course on Starting a Business Lesson Plan

http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_405.pdf

BizKids: Crash Course on Starting a Business "Business Genie" Video

<http://bizkids.com/clip/business-genie>

BizKids: Understanding Income & Expenses Lesson Plan

http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_123.pdf

BizKids: Understanding Income & Expenses "Young Entrepreneurs" Video

<http://bizkids.com/clip/profile-rockin-w-cattle-company>

BizKids: Business Structures Lesson Plan

http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_502.pdf

BizKids: Business Structures "Nailing It" Video

http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_502.pdf

BizKids: Have a Plan Lesson Plan

http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_201.pdf

Guide to Writing a Business Plan

<http://bizkids.com/wp/wp-content/uploads/Kids-Business-Plan.pdf>

Business Plan Formats - Small Business Administration

<https://www.sba.gov/business-guide/plan-your-business/write-your-business-plan>

Calculate Your Startup Costs

<https://www.sba.gov/business-guide/plan-your-business/calculate-your-startup-costs>

Unit Name: #4 - Marketing, Branding, & Patents

Time Frame: 6-8 days

Author: Guy Zompa

UNIT

Subject: Technology

Country: USA

Course/Grade: Entrepreneurship/Design Thinking 7/8

State/Group: NJ

School: Egg Harbor Township Middle School

UNIT SUMMARY:

All students will use digital tools to discover, develop, and be introduced to the concepts of involved in developing marketing, branding, & the Patent Process & approval.

UNIT RESOURCES

- Google Docs
- Google Drive
- Internet Search Engines
- Adobe Free Creative Suite (Spark)

Internet Resource Links:

The Marketing Mix and the 4 P's of Marketing

https://www.mindtools.com/pages/article/newSTR_94.htm

12 Terrific Marketing Lesson Plans for Busy Teachers

<https://www.aeseducation.com/blog/2015/03/marketing-lesson-plans>

Design Your Own Logo

<https://spark.adobe.com/make/logo-maker/>

The Art of Logo Design Video

<https://www.youtube.com/watch?v=x3jTSB2ez-g>

How to Teach Digital Marketing

<https://academy.hubspot.com/education-partner-program/how-to-teach-digital-marketing>

How to Teach Social Media

<https://academy.hubspot.com/education-partner-program/how-to-teach-social-media>

BizKids: Entrepreneurship

<http://bizkids.com/themes/entrepreneurship>

STAGE ONE

GOALS AND STANDARDS

8.1.8.D.5 Understand appropriate uses for social media and the negative consequences of misuse.

8.2.8.B.1 Evaluate the history and impact of sustainability on the development of a designed product or system over time and present results to peers

ENDURING UNDERSTANDING

Selection of tools & products chosen will be at the students discretion.

ESSENTIAL QUESTIONS

- What are the four P's of Marketing?
- What steps does it take to create something that would allow a patent?
- What role does social media play in today's marketing plan?
- What makes a company's logo desirable or recognizable?

KNOWLEDGE AND SKILLS

Knowledge will be gained through the use of digital tools assists in generating solutions and making decisions from a business owners standpoint.

STAGE TWO

PERFORMANCE TASKS

8.1.8.D.5 Understand appropriate uses for social media and the negative consequences of misuse.

8.2.8.B.1 Evaluate the history and impact of sustainability on the development of a designed product or system over time and present results to peers

- Students will design a logo for their product/project
- Students will create social media & marketing plan to share their product

OTHER EVIDENCE

Teacher observation, submitted projects, peer review and editing

STAGE THREE

LEARNING PLAN

Students will take the product that they have chosen to bring to market, and design an online media campaign for it. They will design a logo, and create a social media campaign for their project. They will learn about and create posts to go on all social media platforms, as well as the marketing plan.

Unit Name: #5- Website Development

Time Frame: 6-8 days

Author: Guy Zompa

UNIT

Subject: Technology

Country: USA

Course/Grade: 7th & 8th

State/Group: NJ

School: Egg Harbor Township Middle School

UNIT SUMMARY:

All students will use digital tools to research and design a website that best introduces, showcases, and promotes their selected product.

UNIT RESOURCES

- **Google Sites**
- **Internet Search Engines**
- **Biz Kids**

Internet Resource Links:

- **Google Sites**
<https://sites.google.com/>
- **Wix**
<http://www.wix.com/>
- **Weebly**
<https://www.weebly.com>
- **Emaze**
<https://www.emaze.com/>
- **BizKids: Building Your Business Online**
[http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_203.p
df](http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_203.pdf)
<http://bizkids.com/clip/matrix-parody>

STAGE ONE

GOALS AND STANDARDS

8.1.8.C.CS2 Communicate information and ideas to multiple audiences using a variety of media and formats.

ENDURING UNDERSTANDING

- Web design software will give the ability to create web pages for both business and personal use
- The utilization of enhancements and elements in web development and design contribute to a successful website

ESSENTIAL QUESTIONS

- What makes a good website?
- What design aspects can make a customer return to a website for use?
- What role do online tools play in today's consumer marketplace?

KNOWLEDGE AND SKILLS

Knowledge will be gained through the use of online web building design assists in generating solutions and making decisions from a business owners standpoint.

STAGE TWO

PERFORMANCE TASKS

- Self & Peer Assessment
- Website Creation

OTHER EVIDENCE

Teacher observation, submitted projects, peer review and editing

STAGE THREE

LEARNING PLAN

BizKids: Building Your Business Online Lesson

- http://bizkids.com/wp/wp-content/uploads/Biz_Kids_Lesson_203.pdf
- <http://bizkids.com/clip/matrix-parody>

Students will design a consumer centered website to market their genius hour project to a greater marketplace. This will be a culminating project incorporating all of the previous skills learned and projects created.

Curriculum Resources - Differentiated Instruction

Special Education Interventions in General Education

Visual Supports

Extended time to complete tests and assignments

Graphic Organizers

Mnemonic tricks to improve memory

Study guides

Use agenda book for assignments

Provide a posted daily schedule

Use of classroom behavior management system

Use prompts and model directions

Use task analysis to break down activities and lessons into each individual step needed to complete the task

Use concrete examples to teach concepts

Have student repeat/rephrase written directions

Heterogeneous grouping

Google Apps Voice to Text

G Suite (in App) Training

Resources:

Do to Learn:

<http://www.do2learn.com/>

Sen Teacher:

<http://www.senteacher.org/>

Intervention Central:

<http://www.interventioncentral.org/>

Learning Ally:

<https://www.learningally.org/>

Google Apps Voice to Text

https://www.youtube.com/watch?v=v0rPu_pl0D8

English Language Learners Interventions in Regular Education

Resources:

FABRIC - Learning Paradigm for ELLs (NJDOE)

www.nj.gov/education/bilingual/pd/fabric/fabric.pdf

Guide to Teaching ELL Students

<http://www.colorincolorado.org/new-teaching-ells>

Edutopia - Supporting English Language Learners

<https://www.edutopia.org/blog/strategies-and-resources-supporting-ell-todd-finley>

Reading Rockets

<http://www.readingrockets.org/reading-topics/english-language-learners>

Gifted and Talented Interventions in Regular Education

Resources:

Who are Gifted and Talented Students

<http://www.npr.org/sections/ed/2015/09/28/443193523/who-are-the-gifted-and-talented-and-what-do-they-need>

Hoagies Gifted Education Page

<http://www.hoagiesgifted.org/programs.htm>

21st Century Learning

Resources:

Partnership for 21st Century Learning

<http://www.p21.org/>

Career Ready Practices (NJDOE)

<http://www.nj.gov/education/cte/hl/CRP.pdf>