

TOPIC SELECTION

TOPIC SELECTION GUIDELINES

A Senior Experience Capstone is about doing and learning! Choose a topic that will be interesting and worthwhile and will extend your knowledge. However, making the decision may not be easy. Consult with your Faculty Advisor, and remember to keep your Senior Experience manageable. Carefully choose a product or process that you can build or produce or a community-based service you can provide. Questions used for topic selection:

- Is there a clear connection between the research topic and the product/process you want to produce?
- Does the product/process represent significant amounts of time, effort, and appropriate complexity? Does it go beyond what you already know how to do?
- Is the Experience something you will do outside of your regular class or co-curricular requirements?
- Will the product involve tangible evidence of your work – either something physical that can be seen and touched, a community-based service that can be documented as beneficial or something that can be written, produced, taped, or presented?
- Is the Experience related to your chosen career cluster?

Guidelines to help guide the topic selection:

- 1. The research topic should be one in which the student is interested, but not one about which the student is already an expert.**

If a student has been a diabetic for ten years, worked closely with the Juvenile Diabetes Association, and has been a volunteer in the children's diabetic ward in a local hospital, he or she probably knows a great deal about the subject juvenile diabetes. Unless that student pursues a new approach to diabetes, that topic may not yield much new learning.

- 2. The research topic may be one that requires cumulative knowledge across grade levels and content area.**

It should be a natural outgrowth of interest and combined skills of all, or most content areas. For example, a student who researches the changes in the ozone layer is using cumulative knowledge from at least English, math, science, and history.

- 3. The research topic is challenging to the student academically and creatively.**

The student should take care not to choose a topic that is limited to relatively simple ideas or one that has little application or extension possibilities. The topic should require an academic and creative stretch/risk.

- 4. Preliminary research may be helpful.**

By reading about a certain topic, the student may expand his/her areas of interest. Possibilities for new areas of exploration may surface. It may be wise, therefore, to explore the possibilities for personal interviews, informal surveys, empirical observation, etc., before making a final topic selection.

- 5. Students should avoid choosing topics that might involve expenses they are not prepared to handle.**

For example if the research involves travel or long distance calls, the student may want to make another choice. If the product that grows out of the research will require materials, the student may want to make another choice. Remember, the student is not required, encouraged, or advised to spend money in order to complete the Senior Experience. Expenditures will not enhance the evaluation of the Senior Experience.

6. Students should avoid choosing topics that might endanger themselves or others.

For example, experiments which are potentially explosive or activities such as handling poisonous snakes are not appropriate. Remember that the student must have *Experience Proposal* approved by the Senior Experience Capstone Steering Committee and Faculty Advisor prior to beginning the Experience.

7. The research topic should be one that is broad enough to allow the student access to enough information, yet narrow enough to make the research scope reasonable.

For example, a student choosing the career cluster *Health Science* would find it impossible to include everything about health science (home remedies, history of emergency services, the treatment of burns, how to stop bleeding, evolution of first aid courses, etc.) On the other hand, a student choosing to research *The Application of Band-Aids to Skin Abrasions* probably will not find enough information. A better choice would be *Bandaging for Sports Injuries*.

8. The research topic should be related to the student's chosen career cluster.

South Dakota has adopted the following 16 career clusters:

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Arts, A/V Technology and Communications
- Business Management and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing
- Science, Technology, Engineering and Mathematics
- Transportation, Distribution and Logistics

EXAMPLES OF SENIOR EXPERIENCE CAPSTONE TOPICS BY CAREER CLUSTER

The following list is a sampling of topics that could be used for Senior Experience Capstone. It is not an all-inclusive list, but is intended to serve as a starting place when beginning the process of topic selection.

Career Cluster	Research Paper	Experience
Agricultural and Natural Resources	Animal Abuse	Humane Society volunteer
	Crop	Planting a new crop, measuring yield results
	Deer Population	Wildlife study
	Floral Design	Make floral arrangements and market them
	Horse Training	Train a horse
	Horticulture	Build a greenhouse
	Landscape Design	Create and prepare a landscape design for a house
	Organic Farming	Analyze organic versus regular farming techniques by planting test lots
	Orphan Wild Animals	Animal rehabilitation volunteer
	Veterinary Medicine	Shadow veterinary doctor
Architecture and Construction	Home Building	Help build a Habitat for Humanities house
Arts, A/V Technology and Communications	Architecture	Draw blueprints, make a model
	Art Show	Organize an art showcase of your photography work
	Cartooning	Design a cartoon character
	Commercial Art	Commercial art advertising
	Impressionist Artists	Paint impressionistic art
	Murals	Paint mural
	Plays	Write a play, coordinate its presentation
	Poetry	Write a selection of poetry for possible publication
Business and Administration	Business Ownership	Start a small business which markets or produces a product or service
	Marketing and Promotion	Prepare/implement a business marketing plan
	Medical Secretary	Shadow medical secretary
	Stock Market	Chart stock
Education and Training	Coach	Serve as a coach for a sports or fine arts group
	Elementary Education	15 hours aiding in a Kindergarten classroom
	Hearing Impaired	Learn sign language, teach it to a group of elementary school students
Education and Training	Karate Skill Demonstration	Learn karate, do a demonstration of techniques and a report on the history and origins.

Career Cluster	Research Paper	Experience
	Sports Broadcasting	Announce at a sports event, coordinate broadcasting arrangements with the radio station
Health Science	Children's Book	Research and write a children's book on a health topic. Read the book to an elementary school class.
	Crack Babies	Community Awareness program
	Dentistry	Work at a dental clinic
	Drug Testing	Work in health care facility
	Drugs in Elementary Schools	Present program in schools
	Emergency Room Medicine	Shadow emergency room doctors
	History of Diseases	Research changes in different types of diseases from the 1900's to present
	Nutritional Cooking	Prepare and sell a cookbook with recipes of nutritious foods
	Teens and Drugs	Write and perform a one-act play
	Tobacco (Substance Abuse)	Conduct a school awareness program that could include presentations, guest speakers, brochures, posters, etc.
Hospitality and Tourism	Dance	Organize a dance team, prepare a program to present at a Senior Citizens Center or during half time at a sporting event
	Music	Coordinate/present a piano recital, proceeds for charity
	Music Arranging	Write a composition for an orchestra
	Radio Broadcasting	Take part in a radio broadcast
	William Shakespeare	Shakespearean monologues performance
Human Services	Babysitting	Offer a series of classes in babysitting
	Care of Elderly	Volunteer in a retirement/nursing home
	Child Abuse	Design a prevention program
	Handicapped Housing	Design a barrier-free house
	Homeless	Coordinate a food and/or clothing drive
	Homeless People	Food-clothing drive
	Homeless People	Volunteer at a shelter
	Preschool Learning	Serve as a student teaching aide for a preschool
	Student Rights When Arrested	Handbook on What to Do
	Teen Peer Pressure	Write, direct, and perform a play
Teen Pregnancy	Volunteer at a Crisis Center	
Information Technology	Programming	Create a record-keeping program for a business
	Web Page	Design and maintain a web page for your school or a community organization
Law and Public Safety	Community Safety	Survey/analyze the community for safety issues. Prepare a written

Career Cluster	Research Paper	Experience
		analysis to present to the city commission. Select one issue, such as vacant buildings, as the focus of your Experience.
Retail/Wholesale Sales and Service	Design	Research fashion design in history, create a dress/suit for a particular period
	Fashion	Sew prom dress
	Fashions 1940-1990	Fashion show
	Modeling	Study modeling techniques, model fashions for an event
Scientific Research/ Engineering	Hydropower	Create a model
	Water Pollution	Examine and test water nearby, compile statistics, compare to reports from some time ago
	Weather	Study and report on the changing weather patterns for a certain time period or region
	Weather Forecasting	Forecast weather for a week
Transportation, Distribution and Logistics	Car Restoration	Restore an antique car
All Clusters	Individual Career Plan	Prepare a career plan for your interest area, arrange for job shadowing in your career area
	Job Certification	Select an occupational area and attain certification – child care, computers, nurses aide, etc.
	State/Community Analysis	Research, analyze, and predict the current job/occupational outlook for your community

TOPIC SELECTION GUIDE EXAMPLES

Senior Experience project are in the following categories: Career Exploration, Design a product system or service, Event/activity planning, Investigation, Learn a new skill or improve an existing skill, or Research.

Career Exploration

Research: Conducts research into required education, professional responsibilities, ethical issues, salary, employment outlook, and opportunities for advancement.

Networking: Develops contacts within the chosen field.

Career Plan: Creates a professional career plan.

Application: Applies the information acquired about a chosen career to the development of a quality product or activity.

Design a Product System or Service

Research: Conducts research into similar work done by others.

Fine Tuning: Makes appropriate adjustments as necessary.

Evaluation: Evaluates the quality of the design by gathering information from sources such as impact studies, product testing, or market research. Identify specified standards of quality and/or safety and make adjustments.

Event or Activity Plan

Research: Conducts research into relevant precedents, laws and/or regulations.

Understands what made similar events successful or unsuccessful.

Publicity: Takes appropriate measures to insure that the target audience takes part in the event or that the event is attended.

Efficiency: Makes efficient use of time, money, people, resources and facilities. Makes contingency plans for unexpected circumstances.

Evaluation: Evaluates the success.

Investigation

Focus: Develops a central question.

Procedure: Designs an appropriate procedure to gather information.

Objectivity: Objectively observes, measures, and records results.

Generalization: Generalizes about the data by comparing and contrasting and noting trends.

Learning a New Skill or Improving an Existing Skill

Research: Conducts research into current methods and practice.

Documentation: Determines a way to measure and document progress.

Evaluation: Establishes qualitative measurable standard for skill level based on expert advice.

Research

Focus: Develops a central question of social, economical, environmental, political, historical, or scientific significance.

Research: Investigates a variety of primary and secondary resources and formulates a thesis.

Writing: Write a paper building and developing an argument using logical thinking and data from research to support the conclusion.

Application: Applies the information acquired about the topic to the development of a product or activity.

LETTER OF INTENT

Once you have selected your topic, formally declare your paper and process/product in a business letter to the Senior Experience Capstone Steering Committee. This letter announces to parents, teachers, and steering committee your intentions.

Knowing how to write a business letter is an important communication in establishing a favorable image of you to people you have never met. The following is suggested for basic letter writing skills.

1. The style of letter is block style.
2. The entire letter is typed at the left margin and one inch.
3. Do not indent at the beginning of each paragraph. Leave a line space between paragraphs.
4. The body of the letter is single spaced.

Proof read for spelling and grammar errors. Continue to redo your letter until it is perfect for your portfolio.

SENIOR EXPERIENCE CAPSTONE PROPOSAL

Due Dates

Proposal _____

Mail to Mentor _____

Your proposal should include the following:

What is the topic or area of study that will be the focus of your Senior Experience Capstone? Why did you choose this topic? What previous knowledge or experience in this area do you have?

What will be the focus of your research paper? Describe your topic, discussing any preliminary areas of exploration or questions you have identified.

What will your Senior Experience be? How will you make your research “come alive”? Who can serve as a mentor to you to complete the Senior Experience and what is their experience or expertise in your chosen field? What resources (time and/or money) do you anticipate this will require?

What is the connection between your research paper and your Senior Experience? How are these components related and how do they together show a concerted effort to explore your topic or area of study?

SENIOR EXPERIENCE CAPSTONE TOPIC CHANGE FORM

As sometimes happens, a student may need to modify the original Senior Experience Capstone. If that happens, a student should address the following questions as he/she modifies the original proposal and secures the required signatures.

1. How do you wish to change the proposed Senior Experience?
2. What is the purpose of the changes?
3. How will these changes help to further explore an area of interest?
4. How will these changes allow better demonstration or representation of learning?
5. Have the proposed changes been discussed with others, such as parents, Faculty Advisor, and Senior Experience Capstone Mentor? What were the responses about the proposed change?
6. How will these changes affect the Experience time line?

Student **Date**

Faculty Advisor **Date**

Parent/Guardian **Date**

Steering Committee Approval: _____ **yes** _____ **no**