

# Student Manual

2nd Edition

# GRADUATION PROJECT

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# THE GRADUATION PROJECT HANDBOOK FOR STUDENTS

CHARLOTTE-MECKLENBURG SCHOOLS

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# THE GRADUATION PROJECT HANDBOOK FOR STUDENTS

## CHARLOTTE-MECKLENBURG SCHOOLS

The goal of the Graduation Project is to validate that CMS students have acquired the skills, knowledge and concepts necessary to perform well when they leave high school. Each student will use educational tools to broaden his/her knowledge about a particular, self-selected topic. The topic should be complex and comprehensive enough to challenge the student intellectually and creatively. The topic should be viewed as one that requires cumulative knowledge. Each student will demonstrate mastery of his/her topic through the four components of the Graduation Project:

### 1. RESEARCH-BASED PAPER

- The content shows that knowledge has been gained and that the student is able to analyze, apply, and synthesize that knowledge.
- There is a minimum of five sources, including at least one primary source. Students should avoid encyclopedias and other general-information references (including current technological reference bundles).
- For purposes of documentation, students should use the most current *MLA Handbook*, *APA Handbook* or an equivalent with in-text citations and technological (the Internet, for example) referencing.
- The final draft of the paper includes a works cited page.
- The paper is 6-8 pages of text.

### 2. APPLICATION PRODUCT

- The product is an appropriate outgrowth/extension of the research.
- The amount of money spent on the product will not impact the overall evaluation score.
- Students must also complete a minimum of 15 service hours towards the product.

### 3. ORAL PRESENTATION BEFORE A REVIEW BOARD

- The student will make an oral presentation of the research findings and defend those findings.

### 4. PORTFOLIO

As students progress through the project, they will produce or compile items for a portfolio, which should contain the following:

- Project Proposal
- Mentor Confirmation (if applicable)
- Project Log
- Scored Research Paper
- Reflective Writing – (one entry after each Progress Check and one at the completion of the entire project)
- Product Approval Form
- Letter to the Review Board
- Other items as appropriate (pictures, surveys, graphs, etc.)
- Evidence of service hours completed

Evaluation of the oral presentation, product, and portfolio will be completed by a review committee.

Each student must complete a research paper before continuing to the product, presentation and portfolio phase of the Graduation Project. All four components must be completed in order to receive credit for the Graduation Project.

## ROLE OF THE STUDENT

Through the completion of the Graduation Project, students have an opportunity to showcase a topic of interest through the four components that serves as a culminating project of the high school experience. The graduation project embodies a process where students can select an area of interest and hone their focus on a specific topic to develop. The completed project can serve a variety of purposes for the student as he/she pursues post-secondary studies or enters the workforce.

Because much of the project is completed without the daily supervision of classroom teachers, it is essential that each student take full ownership of the step-by-step process involved in the culminating project. Only when each student has independently worked on the project at hand, will he/she reap the benefits from completing the Graduation Project. Students must realize that all work presented for their projects will be assumed to be their own.

**Student** responsibilities include, *but are not limited to*, the following:

- Selecting a viable project.
- Successfully completing all components of the Graduation Project: research paper, portfolio, product, and oral presentation.
- Working on the culminating project individually, unless otherwise approved for modification to this requirement.
- Submitting all paperwork and documentation by designated deadlines.
- Seeking advice and assistance when needed.
- Maintaining documentation of completed tasks and timelines.
- Identifying and maintaining regular contact with the English teacher or Academic Advisor (as designated by your school) and optionally a mentor, as the graduation project is created and developed.
- Using a variety of communication techniques (electronic, written, verbal), such as the letter of intent, interviews, phone calls, and electronic communication, as project work progresses.
- Researching and writing a paper on a topic that addresses the specified guidelines.
- Completing and documenting verifiable work outside the regular school day on the product component.
- Preparing a portfolio documenting work completed and making the portfolio available for the review panel in advance of the oral presentation.
- Making a presentation to the review panel that is evaluated as satisfactory by the panel.

## ROLE OF THE FACULTY AND STAFF

Every member of the faculty and administrative staff, when appropriate, should be actively involved in the implementation of the Graduation Project.

**Faculty and staff** are integral to the successful implementation of the Graduation Project. Members of the faculty and staff should be involved at all levels of planning and implementation. Because the Graduation Project is a culmination of all the experiences during students' secondary education, all faculty and staff are key to students' success at any stage of the process. Some of the areas where faculty and staff may serve during the process include:

- Academic advisor
- Mentor
- Resource person
- School-based committee member
- Review panelist
- Graduation project coordinator
- Evaluator
- Graduation project advisory council

## ROLE OF THE ACADEMIC ADVISOR OR ENGLISH TEACHER

The **academic advisor** or **English teacher** may be any teacher from any content area (or English) who serves as the main contact at the school to help a student develop and complete his/her graduation project. The advisor/English teacher can help the student refine the project idea and approve various aspects of the project. The academic advisor/English teacher serves as the "go to" person and inspiration for the student throughout the completion of the project over the course of the student's high school experience. The role of the Academic Advisor/English Teacher may include but is not limited to assisting students with the following:

- Selection and narrowing of a topic
- Process of research
- Documentation of research
- Revision and editing of the paper
- Approval of the topic
- Approval of the product
- Completion of all applicable Progress Checks, documentation logs of service hours, notification of parents, and selection of mentors
- Monitoring of the student log of activities

# ROLE OF THE MENTOR

**The mentor component is optional, but highly recommended.**

A mentor is strongly encouraged for the Graduation Project, but not required. Students who utilize a mentor and document contact and provide a reflection will receive incentive points towards the project total for their Graduation Project.

**A graduation project mentor** is a community or faculty member who has expertise, experience, background or interest with the project topic and accepts the following responsibilities:

- Allocates time and makes arrangements to work with the student on the project.
- Provides suggestions and advice to the student on applicable aspects of the research paper, product, portfolio, and oral presentation.
- Provides accurate and honest verification of the student's work.
- Serves as a support and resource to the student in all stages of the graduation project process.
- Signs and returns all required forms.

Anyone from the community who is 21 years of age or older that has a background on the student's chosen topic or is considered to be an expert in the field the student is researching for the project may serve as a graduation project mentor. All community-based mentors must be screened through the CMS Volunteer process and approved prior to serving as a mentor.

Mentors who are not CMS employees must submit an application and be approved to volunteer by the Office of Strategic Partnerships. Mentors must also consent to a background check. Ideally, students should select their own mentors. Mentors should have an expertise, background, or interest in the student's topic that will assist the student in the successful completion of the Graduation Project.

Additional information about the role of mentor can be accessed on the district website.

## MENTOR DOCUMENTATION

### **Mentor Confirmation**

Mentor agrees to assume responsibility for mentoring.

### **Mentor Log**

Mentor records assistance to students.

### **Project Proposal**

Mentor (along with parent and Academic Advisor) approves/disapproves student topic.

### **Student Project Log**

Mentor initials contacts with students.

### **Progress Checks**

Mentor (along with Academic Advisor) evaluates progress of students at prescribed intervals.

### **Description of Product**

Mentor (along with parent and Academic Advisor) approves/disapproves student choice of product.

# GRADUATION PROJECT TOPIC SELECTION

## OVERALL GUIDELINES

Each student will choose a research topic. The following guidelines will assist the student in choosing the subject to be explored.

**The research topic should be one that requires knowledge across multiple subjects.** It should be a natural outgrowth of interest and combine skills of all, or most, content areas. For example, a student who researches the changes in the ozone layer is using cumulative knowledge from English, math, science, and history.

**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 topic *First Aid* would find it impossible to include EVERYTHING about first aid (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 the research topic *The Application of Band-Aids to Skin Abrasions* probably would not find enough information.

**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 already knows a great deal about the subject of juvenile diabetes. Unless that student pursues a new angle to diabetes, that topic might not yield much new learning.

**The research topic should be one that is academically and creatively challenging to the student.** 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. Making such a choice would relegate the paper, the product, and the presentation to the mundane and uninteresting. The topic should require an academic and creative s-t-r-e-t-c-h for the student.

**Expenditures will not enhance the evaluation of the project.** Students should avoid choosing topics that might involve expenses they are not prepared to handle. If the research will involve travel or long distance calls, the student may want to make another choice. If the product that grows out of the research will require expensive materials, the student may want to make another choice. Remember, the student is NOT EXPECTED to spend money in order to complete the project.

**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.

**Primary research is a valuable component of any inquiry.** It may be wise for students to explore the possibilities for personal interviews, informal surveys, empirical observation, etc., before making a final selection of topic.

**Some preliminary research may be helpful to the student.** By reading about a certain topic, the student may expand his/her areas of interest. Possibilities for new areas of exploration may surface. For example, if a student was not able to find precisely what he or she needed but did find usable information, it is possible for him/her to change focus while keeping the same main topic.

**Students should use good judgment to be certain that the topics they choose are appropriate for presentation to a Review Board and the general public.** Remember that the senior English teacher, the mentor, and the parent(s)/guardian(s) of the student must approve the selection of the topic.

Graduation Project  
TOPIC PROPOSAL & APPROVAL FORM

Student \_\_\_\_\_

Overall Topic to be researched: \_\_\_\_\_

Product (What will you DO?): \_\_\_\_\_

Research (What is your working thesis?): \_\_\_\_\_

Check one:

\_\_\_\_\_ I have discussed this project with the student and find it is **ACCEPTABLE**.

\_\_\_\_\_ I have discussed this project with the student and find it is **UNACCEPTABLE**.

Comments, suggestions, or concerns:

Parents' Signature(s) \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

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Check one:

\_\_\_\_\_ I have discussed this project with the student and find it is **ACCEPTABLE**.

\_\_\_\_\_ I have discussed this project with the student and find it is **UNACCEPTABLE**.

Comments, suggestions, or concerns:

Teacher Signature \_\_\_\_\_ Date \_\_\_\_\_



# THE GRADUATION PROJECT PROGRESS CHECK #1

Student \_\_\_\_\_ Date \_\_\_\_\_

Topic of Project \_\_\_\_\_

What sources have you consulted?

Comment briefly on your progress to date, any problems you have experienced, and any assistance you may need. Attach extra paper, if needed.

Academic Advisor or English Teacher's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Academic Advisor or English Teacher's Comments:

Mentor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Mentor's Comments:

Parent's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent's Comments:



# THE GRADUATION PROJECT PROGRESS CHECK #2

Student \_\_\_\_\_ Date \_\_\_\_\_

Topic of Project \_\_\_\_\_

What sources have you consulted?

Comment briefly on your progress to date, any problems you have experienced, and any assistance you may need. Attach extra paper, if needed.

Academic Advisor or English Teacher's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Academic Advisor or English Teacher's Comments:

Mentor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Mentor's Comments:

Parent's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent's Comments:



# THE GRADUATION PROJECT PROGRESS CHECK #3

Student \_\_\_\_\_ Date \_\_\_\_\_

Topic of Project \_\_\_\_\_

What sources have you consulted?

Comment briefly on your progress to date, any problems you have experienced, and any assistance you may need. Attach extra paper, if needed.

Academic Advisor or English Teacher's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Academic Advisor or English Teacher's Comments:

Mentor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Mentor's Comments:

Parent's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent's Comments



# Research Paper





# GUIDELINES FOR THE GRADUATION PROJECT PAPER

1. The research-based paper can be constructed from any genre, including but not limited to:
  - Expository
  - Compare and Contrast
  - Cause and Effect
  - Argumentative (Persuasive)
  - Critical Review
  - Analytical
  - Literary
2. Each paper must cite a minimum of five different sources. Encyclopedias and other general resources are not acceptable, including current, technological reference bundles. Students should strive for variety and balance in their selections.
3. Papers should be approximately six (6) to eight (8) pages of text.
4. **The thesis statement should be in bold-faced type.**
5. Sources should include at least one primary source, such as original documents, authoritative interviews, or analytical data based on interviews. Primary sources add immediacy and relevance to the research. Students whose primary sources are individuals should note in the text or annotate in the works cited entry the person's area of expertise. **NOTE: Students should identify primary sources with bold-faced type in the list of works cited.**
6. Students should learn to interpret research in terms of possible bias and to examine research in terms of validity. This examination is especially important when students are using on-line sources.
7. Research should take a variety of forms, primary and secondary, traditional and non-traditional. Students may design, administer, and analyze surveys, conduct interviews of experts, access on-line databases, or consult portable database products. Students should tailor the type of research to their topic of research to ensure a reasonable balance of sources.
8. Students should be cautioned not to rely solely on on-line sources.
9. Students must carefully document all research information they cite in their papers. This should include parenthetical documentation within the paper and a list of works cited at the end of the paper.
10. Students should access the most recent edition of the *MLA Handbook for Writers of Research Papers* guidelines for appropriate documentation.
11. Students should be thoroughly informed of research ethics and the serious consequences of plagiarism.

## Graduation Project Activity

### Feasibility Filter: Pre-Search Step #2

In order to determine if your chosen topic will result in engaging research and discovery, or end up in dead-ends and roadblocks, filter your topic through the following questions and place a check in the column which best matches your answer.

Mostly High Ratings = **Green Light!**

Mostly Low Ratings = **Red Flag!**

TOPIC:		
Feasibility Question	High	Low
1. What is the likelihood that this topic can be seen from multiple perspectives?		
2. What is the likelihood that there is something about this topic that is controversial – a point on which experts disagree or which they interpret differently?		
3. What is the likelihood that a body of information about this topic exists?		
4. What is the likelihood that there have been recent new developments in this field?		
5. What is the likelihood that you will be able to identify 5 W's and an H for this topic? (who, what, when, where, why, and how)		
6. What is the likelihood that you can identify 2-3 primary sources in this field (names, job titles, situations, legal documents, original texts, etc...)		
7. To what degree are your opinions informed or uncertain regarding this topic? (Is there room for you to become an "expert" yourself?)		
8. To what degree are you able to view this topic objectively?		
9. What is the likelihood that this topic is focused enough to be thoroughly addressed in 8-10 pages?		
10. What is the likelihood that you will be able to develop a position or thesis statement regarding this topic (something that you can prove, not just explain)?		
11. What is the likelihood that you will be able to clearly link your learning from the research to your experience/product hours?		
12. How comfortable would you feel presenting this topic to a panel of adults?		

Source: Dianne Niemann, Partnership for Dynamic Learning

## Graduation Project Activity

### Narrowing A Topic

A research topic choice is very important. Your topic should be narrow enough that you can find targeted research on the topic, but broad enough to cover an 8 – 10 page research paper. Consider the following questions when deciding how to narrow a research topic:

- What do you already know about the topic?
- Is there a specific **time period** you want to cover on your topic?
- Is there a **geographic region or country** on which you would like to focus?
- Is there a **particular aspect** of this topic that interests you? For example, historical influence, sociological aspects, specific groups or individuals involved in the topic, etc. (Adapted from [www.lib.duke.edu/libguide/refining.htm](http://www.lib.duke.edu/libguide/refining.htm))

Here are some ways to ensure a narrowed focus for your research project:

<b>Narrow Topic By:</b>	<b>General</b>	<b>Specific</b>	<b>More Specific</b>	<b>Very Specific</b>
▪ Time	Sports	Basketball	NBA	Changes in the NBA since the 1960s
▪ Location	Mammals	African Mammals	Big Cat Mammals in Africa	The Cheetah's Future in Kenya
▪ Genre	Music	Rock & Roll	Early Roc & Roll Artists	Elvis Pressley's Influence on Rock & Roll
▪ Area of Study	Medicine	The Development of Antibiotics	Use of Antibiotics in Preventing Polio	Over prescription of antibiotics will lead to the "superbug"

(Chart adapted from <http://mccoy.lib.siu.edu/explorer>)

Use the blank chart to practice narrowing your topic:

<b>Narrow Topic By:</b>	<b>General</b>	<b>Specific</b>	<b>More Specific</b>	<b>Very Specific</b>
▪ Time				
▪ Location				
▪ Genre				
▪ Area of Study				

Reviewed by Academic Advisor/English Teacher

\_\_\_\_\_  
Academic Advisor OR English Teacher's Signature

\_\_\_\_\_  
Date

## Graduation Project Activity

### Narrow Your Research Topic & Identify Your Essential Question

Once you have identified a **general subject(s)** that you are interested in, the next step is to narrow the subject and identify the **essential** or **research question**.

My general subject(s) of interest are:

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In order to narrow your subject, you must conduct some **preliminary research**. Find several books or articles (avoid .com information) on your topic and browse them to get an overview. Look at the table of contents, scan the chapters, look at the captions under pictures. After doing this preliminary research:

List three facts that you already know about your subject:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

List three questions that you would like to know about your subject:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Then, structure several what, which, how, or why questions about your subject.

**WHAT** What effect...? What difference...? What if...? What is the best choice for...?

**WHY?** Why does it matter that...? Why do... Why...?

**WHICH?** Which is most important...? Which path is best to...? Which is the best design...?

**HOW?** How could things be better? How does this effect...?

Adapted from <http://www.mchs.mariposa.k12.ca.us>

# Using Graphs, Charts, Tables or Other Visual Aids in a Research Paper

## Guidelines:

1. Tables, graphs, and charts **MUST BE STUDENT-GENERATED**. This means that students may NOT simply copy and paste. The graphic/visual aid must be produced by the student, based on information gathered by the student or researched by the student.
2. Tables, graphs, and charts or other graphics/visuals must be accompanied by an explanation in the paper. References should precede (come before) the visual aid/graphic and explain or analyze the information contained in the graphic/visual aid or a facet of the graphic.

## Consider the following:

- Every student essay is **REQUIRED** to include a visual component in his/her research paper.
- Visual components may be one of the following: diagrams, charts, graphs, graphic organizer, maps, or artistic renderings (drawing, sketch, etc.).
- Visual components **MUST** be original (i.e. student created); in other words, the visual component may not be a photocopy of a visual element taken from another source.
- The visual component must be used by the student to compile information researched from various sources and then placed into a student-generated/created visual (chart, graph, table, diagram, map, sketch, etc).
- The visual component must be incorporated into the paper; it cannot be attached at the end of the paper.
- The visual component must reference material introduced and explained within the text of the paper, and should be presented within the proximity of where the information is contained in the paper. In other words, where the material contained in the visual is referenced, insert the visual aid as an illustration of that material/information to provide clarification and insight.
- The visual component should be no larger than  $\frac{1}{2}$  of the page size and no smaller than  $\frac{1}{4}$  of the page size.
- Most word processing programs contain tools to assist in preparing a visual component and allowing for its placement directly within the text of the paper.

## Basic Rules:

Graphics, often called figures, make technical information clearer by presenting it in a visual way. There are simple guidelines to use to both generate graphics and present them in formal writing pieces such as paper and essays. Some tips are:



- Make sure that the graphic or figure corresponds to the topic and overall thesis or purpose of your essay/paper.
- Keep your graphics simple. They should illustrate one idea – and the reader/audience should be able to understand the idea immediately.
- Use as few words as necessary in graphics. The following are appropriate: title, labels, scales, numbers and essential information is all that should be included in addition to the statistics.
- Make sure to place the graphic on the page where it is referred to. The graphic should add to the purpose of the paper/essay and there should always be discussion, input about the graphic within the paper/essay.



## The most common graphics found in papers/essays are:

- Bullet points
- Tables
- Graphs
- Pie charts
- Bar charts

## Bullet Points

**BULLET POINTS DO NOT COUNT AS THE “VISUAL” ELEMENT REQUIRED FOR THE GRADUATION PROJECT.**

Bullet points are used in professional writing and can be a powerful device for presenting a list of elements. While this does not count as the “visual” element required for the Graduation Project essay, bullets can be used to break-up text and present elements in a format that is easier to read. Here are some helpful hints and guidelines for using bullet points effectively:

- Use bullet points sparingly – the list created should only contain things that are worth the reader’s/audience’s attention. Too many lists on a page will destroy the effectiveness of the list.
- Keep the list short – try not to include more than seven or eight items on the list.
- All items in the list should be grammatically of the same kind (verbs, adjectives, nouns, etc.)
- Make the points consistent with the ‘platform’: or the text that introduces the list.

## Tables

Tables are used to compare and categorize large amounts of information. A table should not be constructed unless repetitive data must be presented. If only a few items of data are presented, consider explaining them in text rather than in a table. Here are some helpful hints and guidelines for using tables effectively:

- Limit the range values shown in the table. If the values of variables do not change much, consider grouping the data into ranges.
- Tables have both left and right (horizontal) dimensions and up-and-down (vertical) dimensions. Ideally, tables should read down a column, not across rows. However, much will depend on the purpose of the table.
- Words in a column should be lined up to the left (left justified).
- Numbers in a column should be right justified, or lined up along the decimal point.
- Break vertical lists by a line space every few lines.
- Use vertical space, rather than solid lines, to divide columns.
- Give each column a clear, crisp heading. These should be understandable without reference to the text or any footnotes to the table.
- Separate column headings, or totals, from the rest of the table using a thin horizontal line.
- If you have placed a table in your paper, make sure that you have referred to it in the text of your paper.

*This sample graphic is a professional example not a student-generated model. Students could use this information to develop their own graphic.*

### An example table

**Table 5a: Demographic indicators**

	Sub-Saharan Africa	Middle East and North Africa	South Asia	East Asia and Pacific	Latin America and Caribbean
Population under 16 (millions)	258	149	464	542	167
Population under 5 (millions)	100	54	161	185	55
Population annual growth rate (1965-80) %	2.8	2.8	2.3	2.2	2.5
Population annual growth rate (1980-92) %	3	3	2.2	1.7	2.1
Crude death rate 1960	24	21	21	19	13
Crude death rate 1992	15	8	11	7	7
Crude birth rate 1960	49	47	44	39	42
Crude birth rate 1992	45	35	32	23	26
Life expectancy 1960 (years)	40	47	43	47	56
Life expectancy 1992 (years)	51	64	58	68	68
Total fertility rate	6.4	5	4.3	2.5	3.1

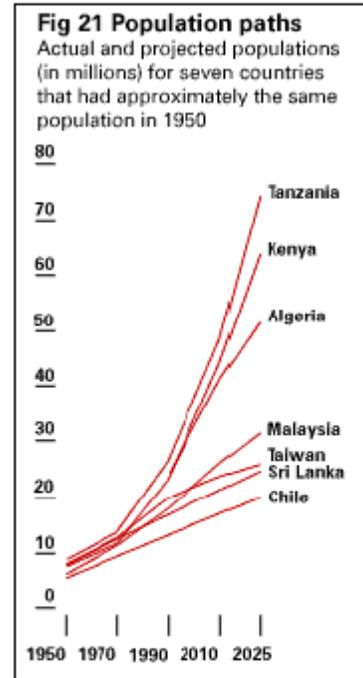
Source: UNICEF (1994)

## Graphs

Graphs can be used to show how variables relate to each other. There are basic rules that can be used when preparing and using graphs in research papers:

- Avoid using graphs if the data you are presenting is sparse or monotonously repetitive.
- If the precise values are important, then use a table instead of a graph.
- Use graphs that illustrate your message in an interesting way. If it doesn't look interesting, don't use a graph.
- Avoid using graphs that only show one curve or line. If it does, it might be better to describe in words, rather than show in a graph.
- If there is more than one line in a graph, choose colors or marks that make the lines easy to distinguish from each other.
- Make connecting lines clear and easy to distinguish from other lines on the graph.
- Use a legend to explain what each of the lines represent and set the legend well away from the data lines (for ease of read).
- Do not extend the horizontal ( $x$ ) or vertical ( $y$ ) axes beyond what is necessary to include your data. If your data ranges in value from 0 to 46, consider having the axis between 0 and 50, but not more than that.

## An Example Graph



Sources: United Nations World population prospects: the 1992 revision, 1993 Data for Taiwan from World Bank, 1993

*This sample graphic is a professional example not a student-generated model. Students could use this information to develop their own graphic.*

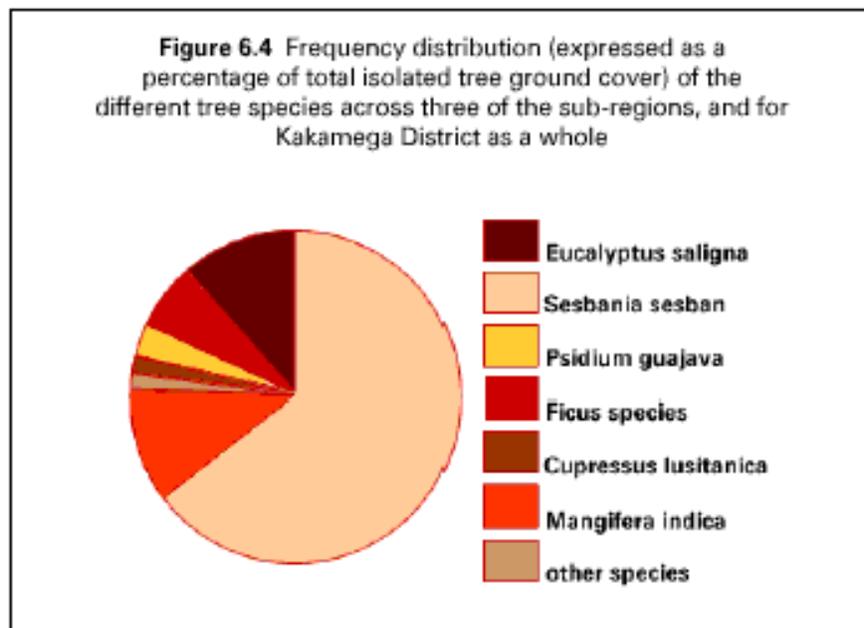
## Pie Charts

Pie charts are used to show proportions and how information relates to each other in relation to those proportions. Below are basic rules to follow when using a pie chart in research papers:

- Avoid using pie charts unless it would be more tedious to describe the results in words.
- Limit the number of slices shown in the pie chart. Ideally, your chart should show no more than five (5) slices.
- Ensure that the color or pattern used for each slice is distinct from all other slices. Also make sure each is clearly labeled.
- The difference in size between slices should be obvious.
- If the precise values are important, consider using a table to show the data instead.
- Try starting the arrangement of slices at “twelve-o’clock” on the chart and arrange slices clockwise in descending order of size.
- Provide a legend for the pie chart so that the reader can easily grasp what each proportion represents.
- Legends that explain what each of the slices are should be set well away from the chart.
- Make sure to label the chart.
- Provide a title for the chart and any explanatory notes – but keep to a minimum.

### An Example Pie Chart

(This pie chart has too much information, consider grouping some of the information, so that there are five or less slices in the pie).



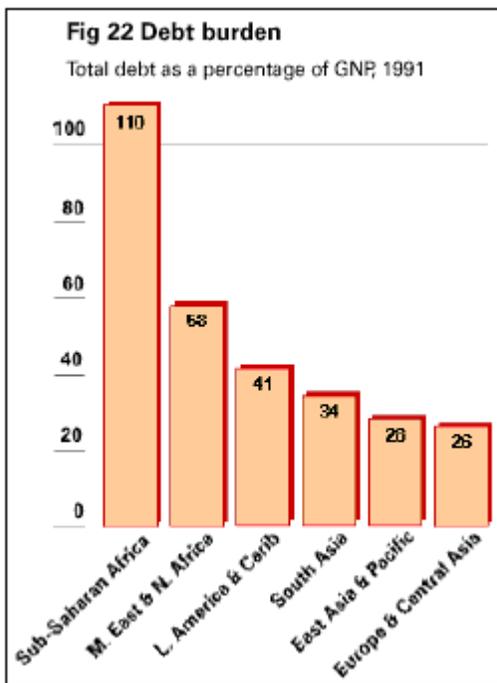
*This sample graphic is a professional example not a student-generated model. Students could use this information to develop their own graphic.*

## Bar Charts

Bar charts are used to show trends and variations. Histograms are a specialized form of a bar chart used to show frequency distributions of data. Below are some tips to consider when using bar charts in research papers:

- Try to limit the number of items you are comparing.
  - Keep the scales consistent (draw as accurately to scale as possible).
  - Place the bars adjoining for continuous trends and apart for discontinuous ones.
  - Consider whether the bars look better vertical or horizontal. A chart that is wider than is tall probably gives the best overall effect.
  - Avoid using bar charts if the data you are presenting is sparse or monotonously repetitive.
  - If there is only one set of data, consider whether it would be better to describe it in words.
- 
- Legends should be set well away from the data.
  - Label both the *x* and *y* axes clearly and indicate the units of measure.
  - Make sure to label the chart and provide a title.

### Sample Bar Chart



Document Source:

*Writing for Change*. International Development Research Center. 27 May 2009 <<http://www.idrc.ca>>.

*This sample graphic is a professional example not a student-generated model. Students could use this information to develop their own graphic.*



# GRADUATION PROJECT RESEARCH PAPER ROUGH DRAFT CHECKLIST

STUDENT'S NAME \_\_\_\_\_ ENGLISH TEACHER \_\_\_\_\_

PAPER TITLE \_\_\_\_\_

COMMENTS: (Circle One)

NOTES:

- |     |    |  |
|-----|----|--|
| YES | NO | INTRODUCES TOPIC WITH A CONCISE THESIS STATEMENT   |
| YES | NO | HAS A CLEAR, LOGICAL DEVELOPMENT WHICH SUPPORTS THE THESIS STATEMENT   |
| YES | NO | HAS A STRONG, INSIGHTFUL CONCLUSION  |
| YES | NO | USES PARENTHETICAL DOCUMENTATION (IN-TEXT CITATIONS) WHERE APPROPRIATE   |
| YES | NO | DEMONSTRATES AN APPROPRIATE BALANCE OF RESEARCH AND STUDENT INPUT (STUDENT SYNTHESIS OF INFORMATION)             |
| YES | NO | CONSISTENTLY USES CORRECT STANDARD AMERICAN ENGLISH  |
| YES | NO | USES AT LEAST FIVE SOURCES (WITH NO GENERAL ENCYCLOPEDIA)  |
| YES | NO | USES AT LEAST ONE PRIMARY SOURCE   |
| YES | NO | HAS ALL SOURCES CITED IN PARANTHETICAL DOCUMENTATION LISTED ON THE WORKS CITED PAGE                              |
| YES | NO | HAS ALL SOURCES ON THE WORKS CITED PAGE MENTIONED IN THE TEXT OF THE PAPER (THROUGH PARANTHETICAL DOCUMENTATION) |
| YES | NO | USES MLA DOCUMENTATION CORRECTLY IN TEXT AND ON THE WORKS CITED PAGE   |

**SIGNATURE** \_\_\_\_\_ **Date Completed** \_\_\_\_\_

## Graduation Project Research Paper Requirements Checklist

- \_\_\_\_\_ 1. Paper submitted in correct format
  - \_\_\_\_\_ Title
  - \_\_\_\_\_ Thesis clearly evident in boldface type
  
- \_\_\_\_\_ 2. Paper typed
  - \_\_\_\_\_ One inch margins
  - \_\_\_\_\_ 12 pt Times New Roman normal font
  
- \_\_\_\_\_ 3. Paper contains student-generated visual
  
- \_\_\_\_\_ 4. Paper contains correct documentation (MLA, APA in-text and Works Cited pages included).
  
- \_\_\_\_\_ 5. Meets or exceeds number of required sources on the Works Cited page
  
- \_\_\_\_\_ 6. Meets or exceeds types of sources required in the Works Cited page
  - \_\_\_\_\_ Primary
  - \_\_\_\_\_ Secondary
  - \_\_\_\_\_ Journal
  - \_\_\_\_\_ Book sources
  - \_\_\_\_\_ Newspaper
  - \_\_\_\_\_ non-print sources (film, photographs, video, graphics, tables, charts)
  
- \_\_\_\_\_ 7. Works Cited page in correct format
  
- \_\_\_\_\_ 8. Paper meets minimum length
  
- \_\_\_\_\_ 9. Evidence of student voice
  
- \_\_\_\_\_ 10. Overall content acceptable

Academic Advisor or English Teacher's Signature

Date

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Papers that do not meet these requirements will not be accepted for scoring until all criteria have been checked off by the Academic Advisor or English Teacher.

Total Score _____
Scorer _____

Graduation Project

# Research Paper Rubric

Total Points	Evaluation Criteria	Distinguished 4	Effective 3	Insufficient 1	Unsatisfactory 0
	Content	Presents skillful, insightful, focused thesis statement	Presents thesis statement with effective insight and focus	Presents thesis statement with minimal insight and focus	Presents no thesis statement or one with no insight and focus
		Expertly synthesizes ideas, providing multiple perspectives that draw strong and clear connections between thesis and related ideas	Effectively synthesizes ideas, providing multiple perspectives that draw connections between thesis and related ideas	Insufficiently synthesizes ideas, providing limited perspectives that draw insufficient connections between thesis and related ideas	Does not synthesize ideas or present multiple perspectives; shows no understanding of connections between thesis and related ideas
		Demonstrates exceptional selection of supporting information, <i>including a primary source</i> , clearly relevant to thesis and related ideas	Demonstrates effective selection of supporting information relevant to thesis and related ideas	Demonstrates insufficient selection of supporting information relevant to thesis and related ideas	Lacks supporting information relevant to thesis and related ideas
		Masterfully balances use of quotations and student paraphrasing	Effectively balances use of quotations and student paraphrasing	Insufficiently balances use of quotations and student paraphrasing	Does not balance use of quotations and student paraphrasing
		Demonstrates flawless use of prescribed format (MLA, APA) including pagination, citations, primary & secondary sources	Demonstrates effective use of prescribed format (MLA, APA) including pagination, citations, primary & secondary sources	Demonstrates limited use of prescribed format (MLA, APA) including pagination, citations, primary & secondary sources	Demonstrates no use of prescribed format (MLA, APA) Does not use a variety of primary or secondary sources
		Seamlessly and masterfully integrates student-generated visual aids (e.g. diagrams, charts, pictures, graphic organizers, etc.) to emphasize and enhance important content	Effectively integrates student-generated visual aids (e.g. diagrams, charts, pictures, graphic organizers, etc.) to emphasize important content	Insufficiently integrates student-generated visual aids (e.g. diagrams, charts, pictures, graphic organizers, etc.) to clarify content	Shows no use of student-generated visual aids to clarify content
	Conventions	Exhibits expert use of language, including skillful word choice, clarity, and consistent voice, fluency and varied sentence structure	Exhibits good use of language, including effective word choice, clarity, and consistent voice, fluency and sentence structure	Exhibits ineffective use of language, including weak word choice, limited clarity, inconsistent voice, fluency and sentence structure	Exhibits severely flawed use of language, including weak word choice, no clarity, no voice, lack of fluency and sentence structure
		Expertly uses standard writing conventions in grammar, spelling, capitalization, punctuation, and usage	Effectively uses standard writing conventions in grammar, spelling, capitalization, punctuation, and usage	Minimally uses standard writing conventions in grammar, spelling, capitalization, punctuation, and usage	Does not use standard writing conventions in grammar, spelling, capitalization, punctuation, and usage

No Paper: Failed to Submit  
No Paper: Failed to Submit  
No Paper: Failed to Submit

Total Points	Scoring Note	Each dimension can receive between 0-4 points. The <b>maximum</b> score for a Distinguished level paper is 32. Papers can receive a combination of points from all categories.	<p><b>Overall Paper Score</b></p> 
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## Graduation Project – Paper Calculation of the Overall Grade

In order to receive credit for the Graduation Project as part of the English III grade, the following conversion chart must be used to calculate the numeric grades after the paper has been scored with the rubric.

Each dimension of the rubric can receive between zero and four points. The maximum score for a “Distinguished” level paper is 32. Papers can receive a combination of points from all categories. Because each category is essential, resubmission is strongly recommended when any single component of the paper score is scored as “Insufficient.” In other words, students revise their papers until all dimensions of the rubric have been met at an “Effective” level.

In NC Wise, the Graduation Project will be recorded as 20% of the 2<sup>nd</sup> Quarter grade in a semester (18 week) course and as 40% of the 4<sup>th</sup> Quarter grade in a year long (36 week) course. The final calculation is equal to the above amount. Teachers must create a new Prep Category title “Graduation Project” upon setting up their grade book with the weight calculated as either 20% or 40% based on the course length.

Point Total	Numerical Conversion	
32	100	
31	95	
30	94	
29	94	
28	93	
27	92	
26	91	
25	90	
24	88	
23	85	
22 - 21	69	Resubmission Strongly Recommended
20 - 19	68	
18 - 17	67	
16 - 15	66	
14 - 13	65	
12 - 11	64	
10 - 9	63	
8	62	
7-1	Resubmission Required	
0	0	

# Product





## GUIDELINES FOR THE PRODUCT

1. The product must be student-generated. Students must design and develop the product. For example, students cannot purchase and assemble a model kit as a product. However, if a student designs a model, builds it from raw materials, and uses it to show application/synthesis of knowledge acquired from research, that would constitute an acceptable product.
2. The product is tangible evidence of the effort and time invested in the endeavor to meet the criteria established for the product. The student should be able to show this product is an extension, application, and synthesis of the research and has practical applications in the real world.
3. The product should be tangible evidence that reflects applications of learning, critical thinking skills, problem-solving skills, teamwork, and personal employability skills, such as responsibility, persistence, and independence.
4. The conception, development, and refinement of the product created must respond to the identified need or desire. This phase of the graduation project offers students an opportunity to connect their educational aspirations with real world career or community service opportunities.
5. The quality of the product created should reflect a minimum of fifteen (15) hours of work.
6. The product must be adequately documented with photographs, logs, letters, reflective journal entries, and other forms of documentation.
7. The product abstract/proposal must be approved by the academic advisor and project coordinator.
8. Students should avoid choosing topics that might require excessive expenses, as the state does not provide funding for student graduation projects.
9. Successful completion of a graduation project is not dependent upon the amount of money invested in the graduation project.

## Choosing an Idea for a Product

It is our desire that the product be something from which you can grow and benefit. There are many different types of products you can choose, that will reflect the information you acquired from your research. Use the following information to guide you as you choose your product.

The product should fulfill a need or desire by either the student and/or community.

- **Physical product** – build or make something; such as a fashion outfit, a computer program, a special engine or a model of a historical scene.
- **Written product** – write a short novel, a journal of reflective essays, a short story, or a collection of poetry.
- **Performance** – perform a dance, a musical selection that has been written, a drama or a magic show.
- **Conduct a teaching or leadership experience**– teach a junior high or elementary class a series of lessons or skill, teach a dance class or coach a little league team.
- **Physical experience**– learn to sky dive, run a marathon, go on a wilderness survival trip.
- **Career-related project** – complete a job shadowing experience in a professional area that you wish to work, volunteer your time at a local office of some kind. Note: simplistic products (like job shadowing without any application beyond the shadowing experience) are generally considered too lightweight to meet the “completion” requirements of the Graduation Project and are unacceptable unless some measure of increased sophistication applies.

This page adapted from the Senior Project Center from Dynamic Learning and the White Oak High School Senior Project Manual.

# Product Description and Approval Form

Student \_\_\_\_\_ Date \_\_\_\_\_

Topic of Project \_\_\_\_\_

---

What form will your product take? (Check all that apply.)

- |   |   |
|---|---|
| <input type="checkbox"/> computer disk, CD    | <input type="checkbox"/> art work           |
| <input type="checkbox"/> video, DVD           | <input type="checkbox"/> photography        |
| <input type="checkbox"/> audio recording      | <input type="checkbox"/> model/construction |
| <input type="checkbox"/> charts, maps, graphs | <input type="checkbox"/> community service  |
| <input type="checkbox"/> other (explain)      |   |

1. What materials will you need?
2. What, if any, expenses do you anticipate?
3. How much time do you estimate will be required to create this project?
4. How does the product demonstrate application of research and synthesis of new knowledge?

(Write any explanatory comments on the back of this sheet.)

\_\_\_\_\_ Approved  
\_\_\_\_\_ Not Approved

\_\_\_\_\_ Approved  
\_\_\_\_\_ Not Approved

\_\_\_\_\_  
Academic Advisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Student

\_\_\_\_\_  
Date

\_\_\_\_\_ Approved  
\_\_\_\_\_ Not Approved

\_\_\_\_\_  
Parent/Guardian

\_\_\_\_\_  
Date



## Graduation Project Product Requirements Checklist

- \_\_\_\_\_ 1. Represents a minimum of 15 hours of work
- \_\_\_\_\_ 2. Is related to the thesis of the research-based paper
- \_\_\_\_\_ 3. Is aesthetically pleasing and creative
- \_\_\_\_\_ 4. Is connected to real-world situations
- \_\_\_\_\_ 5. Demonstrates problem-solving
- \_\_\_\_\_ 6. Implements a variety of sources
- \_\_\_\_\_ 7. Shows evidence of technical skills
- \_\_\_\_\_ 8. Shows use of detail

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Academic Advisor English Teacher's Signature

Date

Products that do not meet these requirements will not be accepted until all criteria have been checked off by the Academic Advisor.



# THE GRADUATION PROJECT PRODUCT LOG

Student \_\_\_\_\_ Academic Advisor/English Teacher \_\_\_\_\_  
Topic \_\_\_\_\_ Mentor \_\_\_\_\_

On this form you will keep a record of your work on your Graduation Project. This is your documentation of the time you have spent working on your project and the time completing service hours. This log should be included in the portfolio. It will help you pace yourself. If you meet with a mentor, ask your mentor to initial in the Date/Time Spent column.

Date/Time Spent	Description of What You Did	Resources Used	Next Step in Plan

Date/Time Spent	Description of What You Did	Resources Used	Next Step in Plan

Total Score \_\_\_\_\_

Scorer \_\_\_\_\_

Graduation Project

# Product Rubric

Total Points	Evaluation Criteria	Distinguished 4	Effective 3	Insufficient 1	Unsatisfactory 0	
	Learning Over Time and Depth of Knowledge	Chooses a product demonstrating significant learning over time	Chooses a product demonstrating a sufficient learning over time	Chooses a product demonstrating limited learning over time	Chooses a product demonstrating no learning over time	
		Demonstrates a significant, logical and relevant link to research topic	Demonstrates an adequate and relevant link to research topic	Demonstrates a minimal link to research topic	Shows no link to research topic	
		Demonstrates comprehensive, critical analysis of research in developing an original product	Demonstrates analysis of research in developing an original product	Demonstrates limited understanding of research in producing an original product	Demonstrates no understanding of research in producing original product	
		Demonstrates exceptional creative thinking, decision-making, reasoning, and/or problem-solving	Demonstrates creative thinking, decision-making, reasoning, and/or problem-solving	Demonstrates insufficient creative thinking, decision-making, reasoning, and/or problem-solving	Demonstrates no creative thinking, decision-making, reasoning, and/or problem-solving	
		Demonstrates extensive connection to real world situations (takes research "on the road")	Demonstrates effective connection to real-world situations	Demonstrates limited connection to real-world situations	Demonstrates no connection to real-world situations	
	Quality of Work/Effort	Exhibits creative and exceptional results using talents, abilities and varied resources Displays extensive use of detail	Exhibits effective results using talents, abilities and varied resources Displays effective use of detail	Exhibits creative insufficient results using talents, abilities and varied resources Displays minimum use of detail	Exhibits unacceptable or no results using talents, abilities and varied resources Lacks use of detail	
		Displays evidence of exceptional technical, creative &/or organizational skills	Displays evidence of effective technical, creative &/or organizational skills	Displays evidence of minimal technical, creative &/or organizational skills	Displays no evidence of technical, creative &/or organizational skills	
		Product demonstrates exceptional quality that exceeds 15 hours of time and effort	Product demonstrates quality that reflects 15 hours of time and effort	Product displays insufficient quality resulting from minimal time and effort (less than 15 hours)	Product displays no evidence of time and effort	
	No Product: Failed to Submit					
	No Product: Failed to Submit					
	No Product: Failed to Submit					
Total Points	<b>Scale</b> 32 – 28 = 4 27 – 16 = 3 15 – 12 = 2 11 – 8 = 1 7 – 0 = 0	<b>Overall Product Score</b> <b>(4, 3, 2, 1, 0)</b>				



# Presentation





# STUDENT GUIDELINES FOR ORAL PRESENTATIONS

1. Wait for a signal from the Review Board before you begin your presentation, or ask the Review Board members if they are ready.
2. Introduce yourself to the Review Board.
3. Remember that you will be making a formal presentation. Please dress appropriately. If you are not sure what constitutes appropriate dress, consult your mentor or English teacher.
4. Do not chew gum.
5. Be aware of your body language. Avoid nervous gestures that may adversely affect your presentation.
6. Maintain eye contact with the Review Board.
7. Do not read your presentation.
8. Write a letter of introduction to include in the portfolio. Panel members should read this letter before listening to your presentation.
9. Practice your presentation several times until you feel comfortable with its format and content. Also, time your presentation to be sure that you do not exceed the ten-minute maximum.
10. Practice imagining what questions your Review Board might ask you (or ask a parent or a friend to compose questions for you) and plan the answers you would give. Your board may not ask these exact questions, but this will give you an opportunity to practice answering questions. Remember that questions should address a clarification or extension of your topic. Review Boards will be trained regarding the nature of appropriate questions. However, if you are asked a question that you feel is not appropriate (e.g., a question that is purely personal), you have the right to reply politely that the question does not relate to your research.

## Sample Questions for Review Board Preparation

- Why did you decide to choose this research topic?
- What interested you in this research topic?
- What was the most interesting aspect of your research topic?
- What insight/experience did you gain from working with your mentor?
- How does your topic coincide with your future goals?
- What did you learn about yourself through completing this project?
- How has what you learned in school prepared you for completing this project?
- How have you grown through completing the NC Graduation Project?
- If you could change something about your project, what would it be?
- What questions do you have for the review committee?



# Graduation Project Presentation Practice Checklist

Student \_\_\_\_\_

- \_\_\_\_\_ 1. Presentation is between 5-7 minutes in length.
- \_\_\_\_\_ 2. Presentation contains visual aids.
- \_\_\_\_\_ 3. Speaker makes eye contact, uses appropriate language, speaks clearly with good volume.
- \_\_\_\_\_ 4. Speaker responds accurately and effectively to potential questions.

Check one:

\_\_\_\_\_ Student has rehearsed presentation with the student, and I find it is **ACCEPTABLE**.

Comments, suggestions, or concerns:

Parents' Signature(s) \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

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Check one:

\_\_\_\_\_ Student has rehearsed presentation with the student, and I find it is **ACCEPTABLE**.

Comments, suggestions, or concerns:

Teacher Signature \_\_\_\_\_ Date \_\_\_\_\_



Total Score \_\_\_\_\_  
 Scorer \_\_\_\_\_

## Graduation Project Presentation Rubric

Total Points	Evaluation Criteria	Distinguished <b>4</b>	Effective <b>3</b>		Insufficient <b>1</b>	Unsatisfactory <b>0</b>	
	<b>Communication &amp; Speaking Skills</b>	Consistently speaks with engaging volume, tone, and articulation	Speaks with effective volume, tone, and articulation		Has difficulty speaking with appropriate volume, tone, and articulation	Does not speak with appropriate volume, tone, and articulation	No Presentation: Failed to Submit
		Consistently makes appropriate eye contact	Frequently makes appropriate eye contact		Makes infrequent eye contact	Makes no eye contact	
		Consistently maintains excellent posture and uses appropriate nonverbal communication techniques	Maintains good posture and uses appropriate nonverbal communication techniques		Poor posture (slouches, fidgets excessively, does not face panel) and weak nonverbal communication techniques	Poor posture (slouches, fidgets excessively, does not face panel) and lacks nonverbal communication techniques.	
		Consistently exhibits poise, enthusiasm, and confidence; engages audience	Generally exhibits poise, enthusiasm, and confidence		Exhibits limited poise, enthusiasm, and confidence	Lacks poise, enthusiasm, and confidence	
		Consistently uses standard grammar	Uses standard grammar		Infrequently uses standard grammar	Does not use standard grammar	
		Visual aids creatively enrich or reinforce presentation	Visual aids effectively reinforce presentation		Visual aids ineffectively used in presentation	Uses no visual aids	
	<b>Content &amp; Coherence</b>	Expertly defines purpose of presentation, maintaining focus throughout	Effectively defines purpose of presentation, generally maintaining focus throughout		Insufficiently defines purpose of presentation and may lose focus	Does not define a main idea or adhere to its purpose	No Presentation: Failed to Submit
		Presents a logical and engaging sequence which the audience can follow	Effectively presents a logical sequence which the audience can follow		Presents an ineffective sequence confusing the audience	Lacks organizational sequence	
	<b>Extemporaneous Responses</b>	Effectively, confidently, politely, and accurately responds to judges' questions	Politely, and accurately responds to judges' questions		Insufficiently responds to judges' questions	Unable to respond to judges' questions	No Presentation: Failed to Submit
	<b>Time</b>	Adheres to time guidelines (6 – 7 minutes)	Adheres to time guidelines (5 minutes) or exceeds time		Insufficient time (3 – 4 minutes)	Insufficient time (1 – 2 minutes)	
<b>Total Points</b>	<b>Scale</b>				<b>Overall Presentation Score</b>	<div style="border: 2px solid black; width: 100px; height: 80px; display: flex; align-items: center; justify-content: center;"> <span style="font-size: 2em; font-weight: bold;">→</span> </div>	
	32 – 28 = 4 27 – 16 = 3 15 – 12 = 2 11 – 8 = 1 7 – 0 = 0				<b>(4, 3, 2, 1, 0)</b>		



# Portfolio



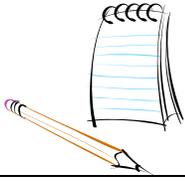


# STUDENT GUIDELINES FOR PORTFOLIOS

The portfolio should serve as a learning record of the process and progress as the journey unfolds through all the steps of the graduation project, including periodic reflections. This physical record of the process and progress will help you keep track of your work. Additionally, this record will help your mentor and academic advisor monitor your project as it develops.

Portfolio Guidelines are as follows:

1. The appearance and format should be neat and orderly
2. The portfolio should be organized using a table of contents
3. All forms and content should meet the requirements of the portfolio
4. The portfolio should demonstrate depth in academic and personal growth
5. The portfolio reflection should provide insight into how the student has anticipated and dealt with changes and contingencies
6. The portfolio construction should employ technology



## Graduation Project Portfolio Requirements

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### The Graduation Project Portfolio must meet the following guidelines:

1. The appearance and format should be neat and orderly.
2. The portfolio **must** be organized and contain a table of contents.
3. All forms and content **must** meet the requirements of the portfolio.
4. The portfolio should demonstrate depth in academic and personal growth (the portfolio should show the progression of the project from the junior and senior years and how the student has grown from completing the requirements of the graduation project).
5. The portfolio **must** contain a reflection that provides insight into how the student has anticipated and dealt with challenges and changes through the project.
6. Technology should be used to construct the portfolio (some possible options are: utilizing graphics, word processing, an e-folio or electronic portfolio in PowerPoint, or using a web application, or other using other forms of technology to compile the portfolio).

### The following documents **MUST** be present in ALL student portfolios to be scored:

- Title page (including the Graduation Project topic, school and student's name)
- Table of Contents
- Research paper rough draft
- Research paper final draft
- Progress checklists for paper, product, presentation
- Resume
- Letter to the review board
- Student project proposal
- Evidence of planning for presentation (e.g. outline, notecards, etc.)
- Outline of the presentation
- Reflection on the overall graduation project

### The following are **OPTIONAL** documents to be considered for addition to the portfolio:

- Mentor confirmation form
- Mentor log
- Research paper rough draft
- Reflection the process of completing the research and then writing the research paper (1 page minimum)
- Mentor reflection
- Work samples, pictures, sketches
- Communications (letters, emails, thank-you notes)
- Copy of presentation PowerPoint or other visual aids
- Letters of recommendation
- Time logs
- Documentation of research (note cards, drafts with comments)

# SAMPLE TABLE OF CONTENTS FOR PORTFOLIO

- Title page
- School information sheet and timeline for NC Graduation Project
- Progress checklist
- Résumé
- Letters of recommendation
- Letter of intent
- Student agreement and parent agreement
- Project information
  - Mentor information and agreement
  - Project proposal (abstract/proposal) and approval
  - Time logs
  - Work samples, pictures, sketches
  - Communications (letters, emails, and thank you notes)
  - Reflection journal
  - Evaluation rubric
- Evaluated research paper
  - Documentation of editing (drafts and comments)
  - Evaluation rubric
  - Reflection on the paper and process
- Presentation copy of PowerPoint or other visual aids
  - Letter to the review panel
  - Outline and summary of the presentation
  - Copy of PowerPoint or other visual aids

# GUIDELINES FOR THE LETTER TO THE REVIEW BOARD

1. The letter to the Review Board is an informative and descriptive summary of the Graduation Project. It should include a personal introduction, background information, and a discussion of the project. In discussing the project, the student should state the thesis, provide an overview of the research, and discuss additional knowledge gained through the research with a clear explanation of how the product is an extension of the research-based paper.
2. The original letter will be provided for the review board at the time of oral presentations.
3. The letter to the Review Board should follow standard business letter format.
4. A copy of the letter should also be placed in the student portfolio.

## OUTLINE of LETTER to the REVIEW BOARD

1231 Main Street  
Charlotte, NC 28211  
October 5, 2006

Judges, Graduation Project Boards  
Graduation Project High School (Your High School)  
5555 Any Boulevard (High School Address)  
Charlotte, NC 28200

Dear Judges:

- Paragraph I: Use this opportunity to introduce yourself and share what you learned from the Graduation Project and your senior year.
- Paragraph II: Personal Background: This is an optional paragraph where you may include a significant experience in your life, a brief personal statement, a focus on your growth in your senior year, or what is really important in your life.
- Paragraph III: The Project: Provide the thesis and overview of the research. Be sure to discuss additional knowledge gained through the research with a clear explanation of how the product is an extension of the research-based paper.
- Paragraph IV: How did the Graduation Project affect your junior and senior year? What did you learn? How will it help you in the future? (Remember the audience is the Review Board.)
- Paragraph V: Sentence of appreciation.

Sincerely,

Signature

Your Name





Total Score _____
Scorer _____

## Graduation Project

# Portfolio Rubric

Total Points	Evaluation Criteria	Distinguished 4	Effective 3	Insufficient 1	Unsatisfactory 0	
	<b>Student Reflection</b>	Reveals mature & critical insight into how student anticipated changes and dealt with contingencies	Reveals effective insight into how student anticipated changes and dealt with contingencies	Reveals insufficient insight into how student anticipated changes and dealt with contingencies	Reveals no insight into how student anticipated changes and dealt with contingencies	No Portfolio: Failed to Submit
	<b>Repeat Student Reflection Score</b> Enter Student Reflection score from 1 <sup>st</sup> row. This dimension is weighted double for the portfolio.					
	<b>Student Growth</b>	Demonstrates deep, ongoing academic &/or personal growth	Demonstrates effective academic &/or personal growth	Demonstrates insufficient academic &/or personal growth	Does not demonstrate academic &/or personal growth	
	<b>Technology</b>	Technology used skillfully to enhance construction of portfolio	Technology used to enhance construction of portfolio	Technology used minimally in construction of portfolio	Uses no technology in portfolio construction	
	<b>Format &amp; Appearance</b>	Portfolio appearance is flawless	Adheres to most guidelines for portfolio appearance	Adheres to some portfolio guidelines for appearance	Does not adhere to portfolio guidelines for appearance	
	<b>Organization</b>	Exhibits outstanding organizational skills in compilation of portfolio and table of contents	Exhibits effective organizational skills in compilation of portfolio and table of contents	Exhibits insufficient organizational skills in compilation of portfolio and table of contents	Exhibits no organizational skills in compilation of portfolio and table of contents, or does not contain table of contents	
	<b>Completeness</b>	Exceeds minimum requirements for portfolio contents	Meets all requirements for portfolio contents	Meets some requirements for portfolio contents	Does not meet requirements for portfolio contents	
Total Points	<b>Scale</b> 28 - 25 = 4 24 - 21 = 3 20 - 17 = 2 16 - 7 = 1 6 - 0 = 0		<b>Overall Portfolio Score (4, 3, 2, 1, 0)</b>			

# FINAL Graduation Project Grade Calculation

In order to receive credit for the Graduation Project as part of the English IV grade, students **must complete all three** required components (product, presentation, and portfolio) and have demonstrated that they completed the required research paper.

The **product, presentation, and portfolio will count as 20% of the second quarter grade in 18 week English IV courses and 40% of the fourth quarter grade in 36 week English IV courses.**

The student's overall project score will be calculated by adding the scores for the product, presentation, and portfolio. For example, if a student earns a score of "2" on the presentation, a score of "3" on the product, and a score of "3" on the portfolio, then the final composite score would be calculated as follows:

$$2 + 3 + 3 = 8$$

The following conversion table will be used to convert the student's overall score to a numerical equivalent that can be averaged into the student's grade (see above) on a 100 point scale.

Composite Score	Numerical Conversion
1	NS – Student must resubmit
2	NS – Student must resubmit
3	60
4	65
5	70
6	75
7	80
8	85
9	88
10	92
11	96
12	100
13* (mentor bonus point(s))	103
14* (mentor bonus point(s))	105

Overall <b>Product</b> Score (4, 3, 2, 1, 0)		
Overall <b>Presentation</b> Score (4, 3, 2, 1, 0)		
Overall <b>Portfolio</b> Score (4, 3, 2, 1, 0)		
Optional Bonus <b>Mentor Points</b> Score (2, 1, 0)		
<b>Total Composite Score</b> (Total Product, Presentation, Portfolio, Mentor Scores)		
<b>FINAL Graduation Project Score</b> (Numerical Conversion of Composite Score – See Conversion Table to right)		

\* Students can receive an extra 2 points for obtaining a mentor, if the following guidelines are met:

- The student must have a completed mentor confirmation form contained in the portfolio.
- The student must have a completed mentor contact log contained in the portfolio, documenting on-going contact with the mentor. The contact can be face-to-face, via email, or phone.
- The student must have a written reflection (suggested length 1½ pages) discussing how the mentor has enhanced his or her overall project, contained in the portfolio.

In NC Wise, the Graduation Project will be recorded as 20% of the 2<sup>nd</sup> quarter grade in a semester (18 week) course and as 40% of the 4<sup>th</sup> quarter grade in year-long (36 week) course. The final calculation is equal to the above amount. Teachers must create a new Prep Category titled "Graduation Project" upon setting up their grade book with the weight calculated as either 20% or 40% based on the course length.