TWO EXAMPLES OF A RESEARCH PROPOSAL

1) **Topic: Environmental Studies at the Lower Elementary Level.**
   i) What should an elementary teacher teach environmentally to students at the kindergarten through third grade level?
   ii) What controversial issues exist pertaining to environmental studies at the elementary level?

2) **Issues**
   a) What lesson plans or activities are developmentally appropriate to teach to students ages kindergarten through third grade?
      i) Do environmental studies align with national standards, state standards, and the specific district’s benchmarks?
      ii) Can teaching environmental education be cross categorical among other interdisciplinary?
      iii) Is it possible to show and teach the students, at these young ages, their relationship with nature?
      iv) How do teachers approach environmental problems such as global warming or pollution, without causing the students anxiety or creating a bias?
      v) How does an elementary teacher present controversial information or information that may not be proven to the students?
   b) How do you approach teaching environmentally when conflicts of views may exist between teacher and parents/guardians? What other conflicts exist between teacher and the principal and between the teacher and other teachers in the school?
      i) How can teachers approach this issue in the beginning (start of the school year, term, etc.) to avoid future conflicts that may arise?
      ii) How does a teacher present information to parents/guardians in a nonbiased position?
      iii) How can the parents/guardians become involved in planning activities related to the issue? What are the restrictions pertaining to curriculum and standards that parents/guardians cannot influence or change?
   c) What costs are involved in teaching environmentally?
      i) How much money is needed to cover supplies and resources that the elementary school may not have or offer?
      ii) What developmentally appropriate activities are cost-efficient?

3) **Dimensions**
   a) **Science**
      i) Knowledge of basic environmental science used in elementary education
      ii) Knowledge of controversial scientific ideas and issues
   b) **Social science**
      i) Knowledge of political and social controversies regarding environmental science in elementary education and why they arise
      ii) Understanding of developmental psychology
   c) **Humanities**
      i) What kind of environmental values is it appropriate to teach children, if any?
      ii) What kind of philosophy is and should be at the basis of environmental education?
      iii) How should public schools deal with conflicting values between teacher and parents?

4) **Concerns**
   a) I am worried because I am simply a minor not a major. I feel slightly that the majors in the class will have the upper-hand and a better chance of succeeding on the paper than the minors. Obviously they have had more training pertaining to the environmental studies. Meanwhile, I’ve been learning how to teach math, social studies, science and reading to elementary students, learning classroom management strategies, learning how to teach gifted and talented students as well as special needs students, etc. Is my training sufficient?
TOPIC: Pollution of the Great Lakes.
I would like to explore both the past and present problems of pollution in the Great Lakes. This would consist of pollutants found in the lake through different time periods, dumped either legally or illegally. Any laws that have been, or should be in place to control what’s being put into the lakes. I will take ideas from past and present environmental thinkers along with scientists to come to some of my own conclusions about the pollution of the Great Lakes.

ISSUES:
- What pollutants exist in the Lakes?
- What are the laws governing this?
- How do the pollutants effect living organisms?
- Do the pollutants bio-accumulate?
- How much waste is dumped into the lakes?
- Is there a health risk for humans because of the pollutants?
- What is the government doing about this?
- How many people (states) depend on these lakes for fresh water?
- Are there any deformities in the wildlife?
- Are there any clean up methods?
- Is there legal dumping in the lakes?
- Is polluting the lakes a question of ethics?
- Are there restrictions on fish consumption?
- Are the wildlife populations declining?
- Are there odor problems related to the pollutants?
- What pollutants are causing beach closings?
- What lake is worst or best concerning pollution?
- How much income comes from these lakes?
- What percentage of the world’s surface water is concentrated here?
- Who’s responsible for cleanup?
- Where do the pollutants come from? What is the point source and non-point source pollution?
- Would Canada and the U.S. work together to clean them up?
- How do sewage problems affect the lakes?
- What social groups pollute more than others? What social groups are affected most by pollution?

DIMENSIONS
Science
- The nature of healthy ecosystems in Lake Michigan
- The nature, extent, and causes of pollution in Lake Michigan
- What remedial techniques are possible
- The limits of and conflicts with scientific knowledge concerning these issues.

Social Science
- The economics of pollution: why individuals, companies and municipalities have polluted; what the costs are to society; how to reconceive pollution in a way that makes it uneconomical.
- The role government has played in creating, limiting, and mitigating pollution. The different roles it could play. The roles it should play.
- The sociology of pollution: what social groups pollute; what groups are most negatively impacted; the possibility of racism in pollution

Humanities
- The philosophy of nature and ethical values that have lead to pollution.
- The different philosophies of nature and ethical values that could be applied to pollution
- The philosophy of nature and ethical values that should be applied to pollution.
- The role of aesthetics in dealing with pollution.

CONCERNS
- I’m concerned about organizing the information.
- The subject might be too broad or specific.
- If there’s enough information on the subject.