APPENDIX A

Survey Instrument
Factors that Influence the Enrollment of Minority Students  
In Agricultural Science Programs

Directions:
Please answer each question to the best of your ability. All information provided will be kept confidential.

Part I. Influential Factors

<table>
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<tr>
<th>Factor</th>
<th>SA</th>
<th>A</th>
<th>N</th>
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<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Personal decision</td>
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<td>Parents</td>
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<td>Other family members</td>
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<tr>
<td>Pastor and church family</td>
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<td>Friends</td>
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<td>Neighbors</td>
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<td>Former teachers</td>
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<td>College faculty member</td>
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<tr>
<td>Other, please explain</td>
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</tbody>
</table>

2. The following was an impact in my decision to select agriculture as a major:

<table>
<thead>
<tr>
<th>Impact</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stability</td>
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<tr>
<td>Money</td>
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<tr>
<td>Need for more minorities</td>
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<tr>
<td>Other, please explain</td>
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</tbody>
</table>

3. Were you a member of any agricultural clubs or organizations while in high school?  
   _____Yes  _____No

   To what level do you feel this influenced your decision to major in agriculture?  
   _____SA  _____A  _____N  _____D  _____SD

4. Were you enrolled in any high school or college summer agricultural intern programs?  
   _____Yes  _____No

   To what level do you feel this influenced your decision to major in agriculture?  
   _____SA  _____A  _____N  _____D  _____SD

5. Are you presently a member of any agricultural-related organizations?  
   _____Yes  _____No

   If so, which organizations? (check all that apply)

   FFA  _____Yes  _____No
   Alpha Tau Alpha  _____Yes  _____No
   MANRRS  _____Yes  _____No
   MAOP  _____Yes  _____No
   Departmental organizations  _____Yes  _____No

   Name of departmental organizations:  __________________________________________
Part II. Recruitment Factors

Please answer each question to the best of your ability.

6. Were you recruited by the department?  ____Yes  ____No
   If so, how?__________________________________________________________

7. Were you offered any financial assistance by the department?  ____Yes  ____No
   If so, what type? (check all that apply)
   Scholarship  ______
   Fellowship  ______
   Graduate assistantship  ______
   Work study  ______

8. Would you be enrolled if you were not receiving any type of financial assistance?  ____Yes  ____No

SA=STRONGLY AGREE  A=AGREE  N=NEUTRAL  D=DISAGREE  SD=STRONGLY DISAGREE

9. Receiving financial assistance impacted my decision to enroll ......................................... SA A N D SD

10. The department makes an effort to recruit minorities ....................................................... SA A N D SD

Part III. Student Experiences

11. The following treat me fairly within the department:

SA=STRONGLY AGREE  A=AGREE  N=NEUTRAL  D=DISAGREE  SD=STRONGLY DISAGREE
   a. Advisor ................................................................. SA A N D SD
   b. Professors ............................................................. SA A N D SD
   c. Teaching assistants .................................................. SA A N D SD
   d. Administrator ............................................................ SA A N D SD
   e. Other students .......................................................... SA A N D SD

12. The following are supportive of me within the department:

   a. Advisor ................................................................. SA A N D SD
   b. Professors ............................................................. SA A N D SD
   c. Teaching assistants .................................................. SA A N D SD
   d. Administrator ............................................................ SA A N D SD
   e. Other students .......................................................... SA A N D SD

13. Have you felt like you have been discriminated against within your agricultural department?  ____Yes  ____No
   Is so, what type of discrimination:
   Racial  ____Yes  ____No
   Gender  ____Yes  ____No
   Physical disability  ____Yes  ____No
   Other  ____Yes  ____No
   If other, give an example: ___________________________________________________________
Part IV. Student Perceptions

Please circle the appropriate answer using the following rating scale:

14. I am happy within my program. 
   SA   A   N   D   SD

15. I feel that I am getting a quality education. 
   SA   A   N   D   SD

16. I enjoy my experience within my agricultural program. 
   SA   A   N   D   SD

17. I would recommend my program to other minorities. 
   SA   A   N   D   SD

18. If there were more minorities, my experience would be more enjoyable within the department. 
   SA   A   N   D   SD

19. I would recommend a predominately white school over a predominately black school for agriculture. 
   SA   A   N   D   SD

20. I feel that having more minority faculty would aid in the recruitment process. 
   SA   A   N   D   SD

21. I feel that I have received adequate guidance from faculty members within my department. 
   SA   A   N   D   SD

22. When I have a concern or problem, I feel that there is a faculty member or administrator in my department who I can talk to about it. 
   SA   A   N   D   SD

23. A serious effort is made by my department to award financial assistance fairly. 
   SA   A   N   D   SD

24. A serious effort is made by my department to recruit minorities. 
   SA   A   N   D   SD

25. I feel that I have been discriminated against in my department because of my race/ethnicity. 
   SA   A   N   D   SD

26. I often feel that I don’t “fit in” very well with other students in my department. 
   SA   A   N   D   SD

27. I often feel that I have to change some of my personal characteristics (e.g. language, dress) in order to fit in with others in my department. 
   SA   A   N   D   SD

28. I feel that my professors ignore my comments and questions in and out of class. 
   SA   A   N   D   SD

29. Diversity is good for the department and should be actively promoted by students, staff, faculty, and administrators. 
   SA   A   N   D   SD

30. The university is placing too much emphasis on achieving diversity. 
   SA   A   N   D   SD

31. The university has a climate that fosters diversity. 
   SA   A   N   D   SD

32. Faculty members at the university are fair to all students regardless of their race/ethnicity. 
   SA   A   N   D   SD

33. I feel that I have an opportunity to succeed at the university. 
   SA   A   N   D   SD

34. Did you consider an Historically Black College and University before you chose your present institution? 
   _____Yes   _____No
Part V. Demographic Data
Please circle the appropriate answer.

35. What group best describes you? (If more than one describes you, circle all that apply.)
   a. Black/African American
   b. White/Caucasian (excluding Hispanic)
   c. Hispanic
   d. Asian
   e. American Indian/Native Alaskan/Aleut
   f. Other, Please specify: _____________________________

36. What is your gender?
   a. Male                     b. Female

37. What is your age? __________

38. What is your academic classification?
   a. Freshmen
   b. Sophomore
   c. Junior
   d. Senior
   e. Graduate: Masters
   f. Graduate: Doctorate

39. What is your status?
   a. Full-time student       b. Part-time student

40. How many hours are you currently registered for? __________

41. What is your current GPA?
   a. 3.5 – 4.0
   b. 3.0 – 3.49
   c. 2.5 – 2.99
   d. 2.0 – 2.49
   e. below 2.0

42. Please indicate the college and department in which you are currently majoring. (Circle all that apply)
   a. Agriculture and Life Sciences
   b. Natural Resources
   c. Human Resources and Education
   d. Veterinary Medicine
   Department (s): _____________________________

43. Are you a first-generation college student? (First in immediate family to attend college)
   a. Yes   b. No

44. Are you the first in your family to major in agriculture or an agricultural related field?
   a. Yes   b. No

45. Do you plan to attend graduate school?
   a. Yes   b. No   c. Already attending

Thank you for completing this survey.
APPENDIX  B

Cover Letter for Pilot Study
Dear Minority Student:

I am a graduate student in Career and Technical Education at Virginia Polytechnic Institute and State University completing the requirements for the Doctor of Philosophy degree. As a result, I am conducting a study of the factors that influence minorities to enroll in agricultural science programs at 1862 land-grant institutions and their experiences within the department.

Your institution and agricultural department were chosen as a result of their working relationship with Virginia Tech. I am asking for your assistance in completing this survey and assisting in the screening for grammatical errors and items that you may not understand. Please feel free to include any recommendations that you believe would improve the effectiveness of this survey. Your responses will be kept in strict confidence and will be destroyed upon analysis of the data.

I appreciate your understanding and cooperation in this important matter.

Sincerely,

Terence Lynch
Doctoral Candidate
APPENDIX C

Cover Letter
Dear Minority Student:

I am a graduate student in Career and Technical Education at Virginia Polytechnic Institute and State University completing the requirements for the Doctor of Philosophy degree. As a result, I am conducting a survey for my dissertation on the factors that influence minorities to enroll in agricultural science programs at 1862 land-grant institutions, their experiences within the department with professors and other students, and level of satisfaction within the agricultural science program.

Your participation will be important in helping land-grant institutions such as Virginia Tech to increase the number of minorities within the agricultural sciences. Attached you will find a survey for you to indicate your perceptions regarding your experiences within the program. Your responses will be kept in strict confidence and will be destroyed upon analysis of the data.

Thank you for your time, patience, and assistance. I appreciate your understanding and cooperation in this important matter.

Sincerely,

Terence Lynch
Doctoral Candidate
APPENDIX  D

IRB FORM
Title of Project:
Factors that Influence the Enrollment of Minorities in Agricultural Science Programs at 1862 Land-Grant Institutions

Investigator: Terence L. Lynch

Co-Investigator: Dr. John Hillison

Justification of Project

According to the National Research Council (1988), agricultural education has a long history in American education. Most Americans know very little about agriculture and its social and economic importance and significance in the United States. Based on the beliefs of students enrolled in the program, agricultural education remains one of the most widely praised secondary programs in the country. Although the field of agriculture is popular at the secondary level, the post-secondary sector has experienced problems of recruiting African Americans and other minorities in their programs.

The purpose of this research is to determine the factors that influence minority students to enroll in agricultural science programs at 1862 Land-grant institutions. Colleges of Agriculture at 1862 land-grant institutions have found it difficult to recruit and retain minority students within their programs. In the fall of 1999, there were only 4,209 African-American students of 119,034 enrolled in agricultural-related fields (Food and Agricultural Education Informational Systems, 1999). Many educators are trying to find ways to make minorities, particularly African Americans aware of the myriad options available in the field of agriculture. Enrollment numbers in programs across the country indicate that agriculture, as a major does not appeal as a profession to African Americans. Bohr, Pascarella, Nora, & Terenzini (1995) noted that the majority of African-American students pursue post-baccalaureate degrees and education at predominately white institutions (PWIs). University faculty and administrators are seeking ways to diversify their programs to include more minorities and help them to be aware of the potential opportunities that exist for them. PWIs are responding to this crisis by creating more innovative programs and offering special incentives to help with the recruitment and retention of minorities in the agricultural sector. There is little doubt that minorities are underrepresented in professional roles in the agricultural sciences and governmental agencies such as the United States Department of Agriculture (USDA). Needless to say, the factors influencing the enrollment of minorities into agricultural science programs at 1862 land-grant institutions is a concern for all.

II. Procedures

The data collection technique in this study will be completed through a survey instrument targeting minority students at Virginia Tech. The students selected in this study are members of the Minority Assistance Opportunities Program (MAOP) and MANRRS programs. Approval to speak with minority students apart of the programs has been extended by the directors of the program. The investigator has been extended an invitation to come and speak with minority students at the next monthly meeting. During that time, the researcher will be able to explain the need and importance of the study, and the significance that would occur as a result of them participating in giving their perceptions and input. It will be further explained that the no one is obligated to complete the survey, and anyone interested in participating would do so on a voluntarily and willingly basis. Furthermore, the researcher will distribute the instruments to
students and be present to answer any questions or concerns that students might have regarding the survey instruments.

The composition of students will consist of undergraduate and graduate students enrolled in the four different colleges (Agriculture and Life Sciences, Forestry Wildlife Resources, Veterinary Medicine, and Human Resources and Education ) where a component or entity of agriculture is taught. A copy of the survey instrument is attached.

III. Risks
There are no anticipated risks involved as a result of participating in this study

IV. Confidentiality/Anonymity
If an individual decides to be a participant in this study, their confidentiality will be maintained at all times during this research. Neither the participant’s name, nor any other information that might identify them will be reported in the results of the study.

V. Consent Form
A copy of the informed consent form for the individuals who plan to participate in the study is attached to this request.

VI. Biographical Sketch
The researcher in this study is Terence Lynch who is a doctoral student in the Vocational Technical Education program. Terence will be assisted by his advisor, Dr. John Hillison, Professor and Chair of Agricultural Education. Terence Lynch has an undergraduate degree in General Agriculture with a minor in Biology from Alcorn State University in Mississippi. In addition, Terence has a Master of Science from Alcorn in Agricultural Education. Terence has aspirations of becoming an agricultural educator at an 1862 Land-grant institution. He has attended and graduated from an 1890 land-grant institution and would like to see more minorities take advantages of the opportunities that exist for them at 1862 institutions and also to pursue agriculture as a major. It is assumed that by the end of this study, Terence will be able to have a better perception of the factors that influence minorities to enroll at our 1862 Land-grant institutions and be able to start a trend that will lead to an influx of minority students on the campus of these institutions.

Please return your response to this request to:
Terence Lynch
P.O. Box 11051
Blacksburg, VA 24062
(540) 961-0820
tlynch@vt.edu
APPENDIX E

Informed Consent Form
Title of Project:
Factors that Influence the Enrollment of Minority Students in Agricultural Science Programs at 1862 Land-Grant Institutions

Investigator: Terence L Lynch

Co-Investigator: Dr. John Hillison

I. The Purpose of this Research
The purpose of this research is to determine the factors that influence minority students to enroll in agricultural science programs at 1862 Land-grant institutions.

II. Procedures
A survey instrument has been developed by the researcher to gather data on the factors that influenced them to enroll in agriculture science programs.

III. Risks
There are no anticipated risks involved as a result of participating in this study.

IV. Benefits of this Project
Due to the increase in minorities in the near future, there will be a major change in the racial makeup in our institutions of higher learning. In order to improve the recruitment of minorities, agricultural educators and others must understand what motivates students to enroll in agricultural science programs. Currently, there is no organized data that reveals the factors that influence the enrollment of minorities in agriculture science programs at 1862 land-grant institutions.

After the factors are identified, there should be some steps taken to try to correct the situation as to attracting minorities. The data will not only help 1862 land-grant institutions but all institutions of higher learning and some secondary programs. The data in this study are important in allowing current agricultural educators, administrators, and other faculty personnel to gain a better perception as to the recruitment process of minorities. Also, the study will help to alleviate the past problems of recruiting and providing a means to producing an influx of minority students in the near future in all agricultural programs.

V. Extent of Anonymity
Confidentiality will be maintained at all times during this research. The researcher will be the only individual with access to the names of the respondents who participate in the interview. The results of this study will only be reported in aggregate form. Neither the participant’s name nor any other information that might identify them will be reported in the results of the study. During the study, the data will be kept in a locked file cabinet at the home of the researcher and all data will be destroyed after the completion of the study.
VI. Compensation
There will not be any monetary compensation given for participating in the study. Your participation is greatly appreciated.

VII. Freedom to Withdraw
As a voluntary participant, you are free to withdraw from this research study at any time without penalty. You are free to not respond to any questions that you choose not to answer without penalty. In order to withdraw from this study, please return the informed consent and survey to the researcher.

VIII. Approval of Research
This research project has been approved as required by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University, and by the Department of Teaching and Learning.

IX. Subject’s Responsibilities
I voluntarily agree to participate in this study. I have the following responsibilities: (please agree by signing your initials in the space provided)

_________ I agree to complete the informed consent form
_________ I agree to complete the instrument (survey)

X. Subject’s Permission
I have read and understand the Informed Consent and conditions of this project. I have answered all of the questions and hereby acknowledge the above and give my voluntary consent for participation in this project. If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

_________________________________   _________________________
Signature                Date

Should you have any questions about this research or its conduct, you may contact:

Terence Lynch, Investigator   540-961-0820
John Hillison Faculty Advisor  540-231-8187
H.T. Hurd, Chair, IRB        540-231-5281
APPENDIX F

VITA
Academic Degrees
Ph.D. Virginia Tech, (Exp. May 2001), Career and Technical Education
M.S. Alcorn State University, 1999, Agricultural Education
B.S. Alcorn State University, 1998, General Agriculture

Work Experience
August 2000-present
Graduate Assistant to the Department Chairperson in the Department of Teaching & Learning, Virginia Polytechnic Institute and State University

- Assisted in the development of a marketing plan for special need populations
- Assisted in the marketing of web-based courses throughout the State of Virginia to vocational education teachers
- Established and maintained contact with prospective minority graduate students, and serving as a liaison between prospective minority graduate students and graduate programs
- Assisted in the development of a multicultural resource room for the Department of Teaching & Learning at Virginia Tech

August 1999-August 2000
Graduate Assistant to the Associate Vice-Provost for Retention and Academic Support Office of the Vice-Provost, Virginia Polytechnic Institute and State University

- Coordinator for the Institute for African-American Student Development, a university-wide weekend retreat for undergraduate students of color to help deal with the issues that they face on the campus of Virginia Tech
- Assisted in the coordination of the Minority Graduate Student Preview Weekend, a university-wide weekend conference for prospective minority graduate students
- Assisted with the planning and coordination of off-campus study retreats, which included organizing retreat publicity and registration, supervising 30-40 students during each retreat, and recruiting and coordinating volunteers and tutors
- Assisted in the development of the recruitment materials for the Ronald E. McNair Post-baccalaureate Program
- Served as an Administrative and Technical Assistant to the Emerging Leaders Planning Committee for the Emerging Leaders Workshop
May 1999-August 1999
Graduate Research Assistant in the Department of Agriculture, Alcorn State University

- Assisted in the teaching of undergraduate classes. Subject areas included: Animal Science and Farm Mechanics
- Assisted in conducting research for the College of Agriculture on different university projects

**Other Work Experience**
August 1999-August 2000
Office of Vice-Provost, Virginia Polytechnic Institute and State University
Coordinator for the Institute for African-American Student Development

- Determined parameters of the program
- Formed planning committee of student affairs professionals, faculty and students to assist in the development of program
- Developed a marketing plan for recruiting students to participate in program and serve as facilitators for several program sessions
- Developed an assessment instrument to measure impact of the program

August 1999-August 2000
Administrative Assistant to the Emerging Leaders Workshop, Virginia Polytechnic Institute and State University

- Assisted with planning and solicitation of funds
- Collected quantitative and qualitative data and drafted reports of student and faculty outcomes from the annual workshop
- Developed a marketing plan geared at increasing the number of Historically Black Colleges and Universities (HBCU) participants and devising ways to publicize the annual workshop

**Professional Experiences**

- “Financing graduate education” (workshop)
  Minority Graduate Transition Retreat – VA Tech, October 1999
- “Basics to Applying” (workshop on applying to graduate school)
  Minority Graduate Student Preview Weekend – VA Tech, February 2000
- “The Minority Experience at Virginia Tech” (panelist)
  Minority Graduate Preview Weekend – VA Tech, February 2000
- “The Importance of Black Greek-lettered Sororities” (panelist)
  Black History Month Celebration – VA Tech, February 2000
- “The Transition from undergraduate to graduate school” (panelist)
  Minority Graduate Transition Weekend - VA Tech, October 2000
- “The Minority Experience at Virginia Tech” (panelist)
  Minority Graduate Preview Weekend – VA Tech, February 2001
Publications and Conference Papers


Author of an unpublished thesis entitled: An Analysis of farm injuries and safety practices in Mississippi, Alcorn State University, Alcorn State, MS, May 1998.

Author of an unpublished dissertation entitled: Factors Influencing the Enrollment of Minority Students in Agricultural Science Programs at 1862 Land-grant Institutions, Virginia Polytechnic Institute and State University, Blacksburg, VA, Exp. April 2001

Current Professional and Academic Association Memberships

Association for Career and Technical Education (ACTE)
American Vocational Education Research Association (AVERA)
Black Graduate Student Organization (VA Tech)
Future Farmers of America (Alcorn State)
Kappa Alpha Psi Fraternity, Incorporated
-2000-Charter Member, Blacksburg Alumni (2000)
-Intake Chairman
-Keeper of Exchequer, Gamma Pi Chapter (1997-1998)
Omicron Tau Theta Professional Vocational Education Society, Iota Chapter (VA Tech)
Phi Delta Kappa

Computer Experience

IBM personal computers and Macintosh computers, Microsoft Office 2000 Professional Series, Corel WordPerfect and Microsoft Works processing software, Statistical Packages in Social Sciences Version 10.0, and Macintosh computers, Internet and Eudora Light and Professional E-mail applications

References

Dr. Betty Heath-Camp, Professor and Program Leader for Career and Technical Education
Virginia Polytechnic Institute and State University
201 Wallace (0467), Blacksburg, VA 24061, (540) 231-8189
Email: heathb@vt.edu

Dr. Cary Ford, Associate Professor of Agricultural Education, Alcorn State University
1000 ASU Drive # 750, Alcorn State. MS 39096, (601) 877-6534
Email: cford@lorman.alcorn.edu

Dr. John Hillison, Departmental Chair and Professor of Agricultural Education
Virginia Polytechnic Institute and State University
270 Litton Reaves Hall (0343), Blacksburg, VA 24061, (540) 231-8187
Email: hillison@vt.edu