

Update on Financial and Business Services Research Projects

Financial and Business Services is embarking on an initiative to create a team of Research Interns from area Universities and Colleges to help structure and conduct research to supplement and supply data for discussions related to procedural, process, and policy changes.

Objective

To create a research team that can supply DPI and the State Board with needed information to make policy or procedural changes.

- To help DPI to be considered a leader in policy research
 - To attract young and enthusiastic college graduates to bring energy to DPI
 - To hopefully become a recruitment tool to attract highly motivated/intelligent individuals that want to help us make a difference.
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Areas of Focus

Incorporating Research into Financial and Business Services' Operations

- Taking the data from the High School Financial Review (research being conducted by UNC) and helping to determine how the findings can be integrated into State Board policies and DPI operational procedures.
- Reviewing the results/data from the differential pay models being implemented across North Carolina (and other States) to determine how these results can be implemented effectively across the State. Initial review will be focused on Guilford County and the Math/Science pilot project implemented in three LEAs this fiscal year.
- Examine budgets/plans outlined by school districts for DSSF funding and determine the effectiveness of the plans implementation on outlined objectives. This will lead to possible implementation irregularities and policy changes to assure that effective practices are implemented.

Implementing Research into Financial and Business Services' Operations

- Funding model for North Carolina's Virtual Public School
- Proper funding levels for restructured and Learn and Earn high schools

Targeted Research on Initiatives Necessary to Accomplish the State Board's 21st Century Goals

- How to encourage teachers to teach in low performing schools
- What are effective teacher pay initiatives that will facilitate teacher recruitment and retention

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Targeted Research on Initiatives Necessary to Accomplish the State Board's 21st Century Goals (cont.)

- How can funding flexibility lead to more effective utilization of resources?
 - What is the impact of student population growth, and special student population growth, on student performance?
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Current Activities

We are establishing a position that will coordinate this program. Currently, Jackson Miller, a research assistant intern, is working with Financial and Business Services Leadership on developing this program.

- *Survey of Teachers:* Attachment 1 to this document outlines the questions/responses from a teacher survey conducted by DPI. The purpose of the survey is to determine how teachers react to a variety of possible policy changes. This information will help drive possible funding and policy changes and provide data that will help identify additional research projects.
 - *Research Partnership with Graduate Students attending Duke University's Terry Sanford Institute of Public Policy:* Attachment 2 to this document outlines the research project selected by the graduate students. The researchers will work with us to examine teacher absences. The students will try and determine if there is a pattern to teacher absences, why teachers are absent, and if a policy adjustment might reduce teacher absences.
 - Other University and College professors have also expressed an interest in smaller scale research projects for their students.
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Structure of Research Intern Team

- We are establishing a network with area Universities to enable us to interview and select graduate students to be employed as Research Interns. We are currently establishing a relationship with North Carolina Central University, University of North Carolina, Duke University, and North Carolina State University.
- The Research Intern program has not been completely defined; but our current plan is to have both full-time and part time Interns.
 1. The summer Research Interns will be employed full-time for a specific period of time (5-10 weeks), and will work as a team on specific research projects.
 2. The part-time Interns will work with DPI in conjunction with their school work at local colleges and universities. These interns will work two to three days a week on specific research projects.

Zoomerang Survey Results

NC DPI Teacher Recruitment Survey
Response Status: Completes
Filter: No filter applied
Feb 14, 2007 8:28 AM PST

1. Please indicate your teaching experience level:

0-2 years	1,040	11%
3-5 years	1,333	14%
6-10 years	1,911	19%
11-15 years	1,939	20%
16-19 years	2,260	23%
20+ years	1,374	14%
Total	9,857	100%

2. I teach in the following grade span:

K-5	4,404	45%
Middle School	2,078	21%
High School	2,551	26%
Other	824	8%
Total	9,857	100%

3. I believe that differentiated pay would be used appropriately for: (You may select more than one.)

Hard to serve schools	5,595	57%
Education level	5,934	61%
Years of experience	7,647	78%
Grade level	853	9%
Subject being taught	2,025	21%
None of the above	719	7%

4. It makes sense to pay teachers more if they agree to teach in low-performing schools.

Strongly Agree	2,761	28%
Agree	3,773	38%
Neither Agree nor Disagree	1,540	16%
Disagree	1,167	12%
Strongly Disagree	578	6%
Total	9,819	100%

5. What additional amount of annual pay would encourage teachers to accept teaching assignments in regions of the state that have a hard time recruiting teachers?

Up to \$2,000	643	7%
\$2,001-5,000	2,867	30%
\$5,001-10,000	3,727	39%
\$10,001-15,000	2,308	24%
Total	9,545	100%

6. Twelve-month contracts (with 180 days of student contact, 1 month of staff development, 1 month of planning time) for teachers would be beneficial for planning, curriculum development and professional development.

Strongly Agree	1,980	20%
Agree	2,474	25%
Neither Agree nor Disagree	1,652	17%
Disagree	1,963	20%
Strongly Disagree	1,741	18%
Total	9,810	100%

7. With a 12-month calendar, the additional two months would be best used for. (Please select 2 from the following list.)

Structured staff development	2,717	29%
Planning time	5,283	56%
Extended student calendar	987	10%
Curriculum development	2,546	27%
Summer school/Student tutoring	3,238	34%
Personnel growth opportunities	4,362	46%

8. Increasing the number of instructional days would be helpful for both my students and me.

Strongly Agree	791	8%
Agree	1,717	18%
Neither Agree nor Disagree	1,972	20%
Disagree	3,171	32%
Strongly Disagree	2,138	22%
Total	9,789	100%

9. A specific student dress code would have a positive impact on all North Carolina public school students' academic performance.

Strongly Agree	3,932	40%
Agree	3,071	31%
Neither Agree nor Disagree	1,517	15%
Disagree	911	9%
Strongly Disagree	378	4%
Total	9,809	100%

10. The availability of Internet-based courses (NC Virtual Public School) would be an effective way of ensuring that every North Carolina public school student has equal access to advanced courses.

Strongly Agree	2,568	26%
Agree	4,541	46%
Neither Agree nor Disagree	1,637	17%
Disagree	822	8%
Strongly Disagree	238	2%
Total	9,806	100%

11. The current standard course of study for my course/grade places the appropriate amount of emphasis on memorization.

Strongly Agree	417	4%
Agree	3,843	39%
Neither Agree nor Disagree	3,255	33%
Disagree	1,820	19%
Strongly Disagree	432	4%
Total	9,767	100%

12. The current standard course of study for my course/grade places the appropriate amount of emphasis on conceptualized learning.

Strongly Agree	616	6%
Agree	5,655	58%
Neither Agree nor Disagree	1,875	19%
Disagree	1,355	14%
Strongly Disagree	271	3%
Total	9,772	100%

13. I use podcasting to supplement instruction in the classroom:

Never	4,360	45%
Rarely	650	7%
Sometimes	651	7%
Frequently	77	1%
I don't know what podcasting is.	4,011	41%
Total	9,749	100%

Research Project with Duke Graduate Students

I. Policy Question:

How does exposure to substitutes or absences from a student's normal teacher impact student performance? Do teachers take off a lot of unplanned days during the school year? What are the reasons teachers are absent? What should schools do to resolve the problems associated with teacher absences?

II. Background and Rationale:

Like most of us, teachers will miss work days throughout the school year. However, unlike the rest of us, a teacher's duty to educate children can not be set aside while they are away. Research has shown an inverse correlation between teacher absences and student performance, thus student performance suffers when teachers miss school days. Additionally, the data indicates that most teachers will use all of their available days. It is important to understand the reason teachers miss school days, so that a policy initiative can be recommended that will help change the trend of excessive teacher absences and help improve student performance.

III. Examples of Possible Policy Issues

It could be determined that because teachers are not allowed to schedule time off when students are in school, the teachers take unplanned time off which would lead to unprepared substitutes or possible alternative student learning opportunities. A policy solution to such a finding could be to allow teachers to schedule/plan to utilize their earned annual leave when students are in school.

IV. Field Work

If our proposal is selected, the team of graduate students would gather information by talking with teachers, students, and administrators to answer a number of key questions regarding the effect that teacher absences have on students. Some of the key questions would be:

1. How do teachers access certified substitutes?
2. Is there a gap in achievement between the schools that employ certified substitutes and those schools that do not?
3. Are schools utilizing permanent substitutes?
4. How are substitutes instructed to run the classroom while teachers are away?
5. Do teachers prepare specific lesson plans (that are standard for specific subjects) drawn up before every semester, so that in case of a teacher absence the substitute will have a clear understanding of where the students are in their course of study?
6. What do students think about substitutes? Do they view it as a free day? Do they still feel compelled to perform well?
7. Why are the teachers absent?
8. Is there a pattern of absences in low performing schools that is different from high performing schools?
9. Are teacher leave balances (annual and sick) lower than other local school employees (indicating a higher use rate)?

V. Tools available

- Teacher working condition survey
- The number of absences by school
- Certified and non-certified substitutes by school
- Student performance data