

GENERAL ASSEMBLY OF NORTH CAROLINA



Session 2007

Legislative Fiscal Note

BILL NUMBER: Senate Bill 892 (First Edition)

SHORT TITLE: Salary/Teachers with Advanced Degrees.

SPONSOR(S): Senator Malone

	FISCAL IMPACT				
	Yes (X)	No ( )	No Estimate Available ( )		
	<u>FY 2007-08</u>	<u>FY 2008-09</u>	<u>FY 2009-10</u>	<u>FY 2010-11</u>	<u>FY 2011-12</u>
REVENUES:					
EXPENDITURES:	\$3,981,880	\$4,207,159*	\$4,445,184*	\$4,696,676*	\$4,962,395*
POSITIONS (cumulative):	N/A				
PRINCIPAL DEPARTMENT(S) & PROGRAM(S) AFFECTED:	State Public School Fund				
EFFECTIVE DATE:	The act becomes effective July 1, 2007, and applies to school years beginning with the 2007-08 school year.				

\* Note that these are inexact estimates and that incentives created by this bill could result in significantly higher costs in future years. See Assumptions and Methodology section for additional information.

BILL SUMMARY: The bill increases the rate of pay for certain certified personnel of the public schools.

Section one of the bill will make the advanced degree (sixth year) teacher salary schedule 5 percent higher than the salary schedule applicable to "M" teachers (those with master's degrees). Currently the advanced degree (sixth year) salary schedule is \$126 per month higher than the "M" teacher salary schedule.

Section two of the bill will make the doctorate degree teacher salary schedule 10 percent higher than the salary schedule applicable to "M" teachers (those with master's degrees). Currently the doctorate degree salary schedule is \$253 per month higher than the "M" teacher salary schedule.

ASSUMPTIONS AND METHODOLOGY:

1. Establish 2007-08 cost under current salary schedule

To examine the costs for the 2007-08 school year, each teacher<sup>1</sup> is moved up one step on the salary schedule from where they are in 2006-07 (this is what is known as a "step increase").

<sup>1</sup> This includes instructional support, who are traditionally considered "teachers" for purposes of pay.

This provides the base salary amount at each salary step. Additions are then made for longevity<sup>2</sup> and benefits<sup>3</sup> to provide total estimated wages for 2007-08 under the existing salary schedule of \$4,557,242,093.<sup>4</sup>

**2. Calculate costs under new salary schedule**

Next, one must calculate the cost of placing teachers on the new salary schedule proposed by this bill (i.e., advanced degree teachers earning 5 percent more than teachers on the “M” schedule, and doctorate degree teachers earning 10 percent more than teachers on the “M” schedule). The array of teachers from the 6<sup>th</sup> pay period of the 2006-07 school year is advanced one step – this time using the new salary schedule. Additions are once again made for longevity and benefits to provide estimated total costs under the *new* salary schedule, \$4,561,223,973.

The table below summarizes the comparison of costs for the 2007-08 school year:

**Proposed 5% Adv and 10% Doc Differential with Step Increase 2007-08**

	<u>Base Salaries</u>	<u>Longevity</u>	<u>Base Salaries + Longevity</u>	<u>Benefits</u>	<u>Total w/Longevity</u>
Current Salary Schedule (07-08)	\$ 3,887,860,281	\$ 82,208,621	\$ 3,970,068,902	\$ 587,173,191	\$ 4,557,242,093
New Salary Schedule (07-08)	\$ 3,891,230,379	\$ 82,307,361	\$ 3,973,537,740	\$ 587,686,233	\$ 4,561,223,973
\$ Increase	\$ 3,370,098	\$ 98,740	\$ 3,468,838	\$ 513,042	\$ 3,981,880

As the above table shows, the additional cost to the State in 2007-08 of converting to the new salary schedule for teachers with advanced degrees and doctorate degrees would be **\$3,981,880**.<sup>5</sup>

**3. Estimating beyond 2007-08**

*Factors affecting precision*

Only inexact estimates of cost can be made for subsequent school years. There is substantial growth and turnover in the teacher population, which over time can significantly alter the average years of experience and education levels of North Carolina’s teachers. Also, legislative increases (LI) to the salary schedule will make the cost of this bill higher in future years. For both turnover and LI, past experience might not be indicative of future changes.

Furthermore, changing the salary schedule for teachers with advanced and doctorate degrees will create new incentives and behavioral changes that would affect the composition of the population of teachers with advanced or doctorate degrees going forward. For example, since this bill enhances pay for teachers with advanced or doctorate degrees, it is possible that many

<sup>2</sup> Longevity payments are based on experience, and calculated as follows:

<b>Years of State Service</b>	<b>Longevity Pay Rate %</b>
10 but less than 15 years	1.50%
15 but less than 20 years	2.25%
20 but less than 25 years	3.25%
25 or more years	4.50%

<sup>3</sup> Benefits are calculated at 2006-07 rates of 7.65% for FICA, and 7.14% for retirement.

<sup>4</sup> This assumes that there are no legislated increases to the salary schedule for 2007-08.

<sup>5</sup> Costs include additional pay for non-instructional support whose salary schedules are linked to the “M” teacher schedule.

teachers would return to school to attain advanced or doctorate degrees. Also, existing advanced degree and doctorate teachers might opt to continue teaching longer than in the past, due to their higher pay levels. These factors make it difficult to forecast the costs beyond 2007-08 with great certainty.

Assumptions

It is possible, however, to make inexact estimates of costs beyond 2007-08 using historical averages of average daily membership (ADM) growth, and average salary growth.

- **ADM growth:** The number of teachers is a function of ADM. Therefore, as ADM grows, so does the number of teachers. *Assuming that teachers with advanced and doctorate degrees continue to account for the same proportion of teachers going forward as they do in the 2006-07 school year, the number of teachers receiving salary supplements for advanced or doctorate degrees will grow along with ADM.*<sup>6</sup>
- **Average salary growth:** Because the salary supplement paid to advanced and doctorate teachers is based off the salaries paid to teachers on the “M” salary schedule, future costs will increase whenever there are legislative increases to the teacher salary schedules. At the same time, going forward there will be turnover in the teacher population, which will cause the average years of experience to change from year-to-year. *Assuming that future legislative increases and turnover mirror the experience of the past ten years, average salary growth can be used to account for future legislative increases and turnover in the teacher population.*

Calculation

Over the past ten years, ADM has grown by 1.77 percent annually, and average teacher salary has increased 3.82 percent annually.

Currently, there are 2,505 full-time employees (FTE) that would receive salary increases under this bill. The average salary increase per FTE under this bill is \$1,589. Given this information, ADM growth and average salary growth can then be used to project future costs of this bill. The FTEs receiving the benefit grows each year by ADM growth (1.77%). The average salary increase grows each year by the average salary growth number (3.82%). The table below demonstrates how these variables are used to derive future costs of this bill:

<b>ADM growth</b>	<b>1.77%</b>
<b>Average salary growth</b>	<b>3.82%</b>

	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
<b>FTE</b>	2,505	2,550	2,595	2,641	2,688
<b>Avg. Sal. Increase</b>	\$1,589	\$1,650	\$1,713	\$1,779	\$1,846
<b>Cost (FTE x Sal. Increase)</b>	\$3,981,880	\$4,207,159	\$4,445,184	\$4,696,676	\$4,962,395

<sup>6</sup> The increased pay for advanced and doctorate degrees under this bill would likely lead to an increasing share of advanced and doctorate teachers going forward, meaning that these predictions likely understate future costs.

**SOURCES OF DATA:** Department of Public Instruction

**TECHNICAL CONSIDERATIONS:**

**Implementation of new teacher schedule will likely create additional costs for principals and assistant principals**

This bill proposes only to change the existing salary schedule for teachers with advanced or doctorate degrees. As such, the analysis above has only looked at the increased costs incurred paying teachers. Currently, the State's principals and assistant principals receive monthly salary supplements of \$126 for an advanced degree, and \$253 for a doctorate degree.

If this bill were to pass, the General Assembly would need to consider whether to retain the long-standing pay relationships between school based administrators (SBAs) and teachers. If corresponding changes were made to the pay of principals and assistant principals, *there would be an additional cost to the State of \$1,890,680 for the 2007-08 school year.*

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