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Displaying NSICP (Delaware Study) Data

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National Study of Instructional Costs and Productivity (NSICP, or “Delaware Study”) data from a major Midwestern U.S. public university system for a recent ten-consecutive-year period are summarized using statistical graphs. Considerations underlying the final choice of graphics are discussed.



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Outline

- Introduction
 - Project
 - People
- Motivation
- Graphs
- Summary
- Next Steps
- Q & A



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UM Departments with Historical NSICP Data

UM Campus	No. Departments
MU	51
UMKC	23
Missouri S&T	15
UMSL	24
TOTAL	113



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**[Insert Delaware “Sample Departmental Data”
page here.]**



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NSICP-Based Metrics

FS Total SCH

FS Total FTE *Instructional* Faculty

FY Total Direct Expenditures for Instruction

AY Total SCH supported by Department's Instructional Budget



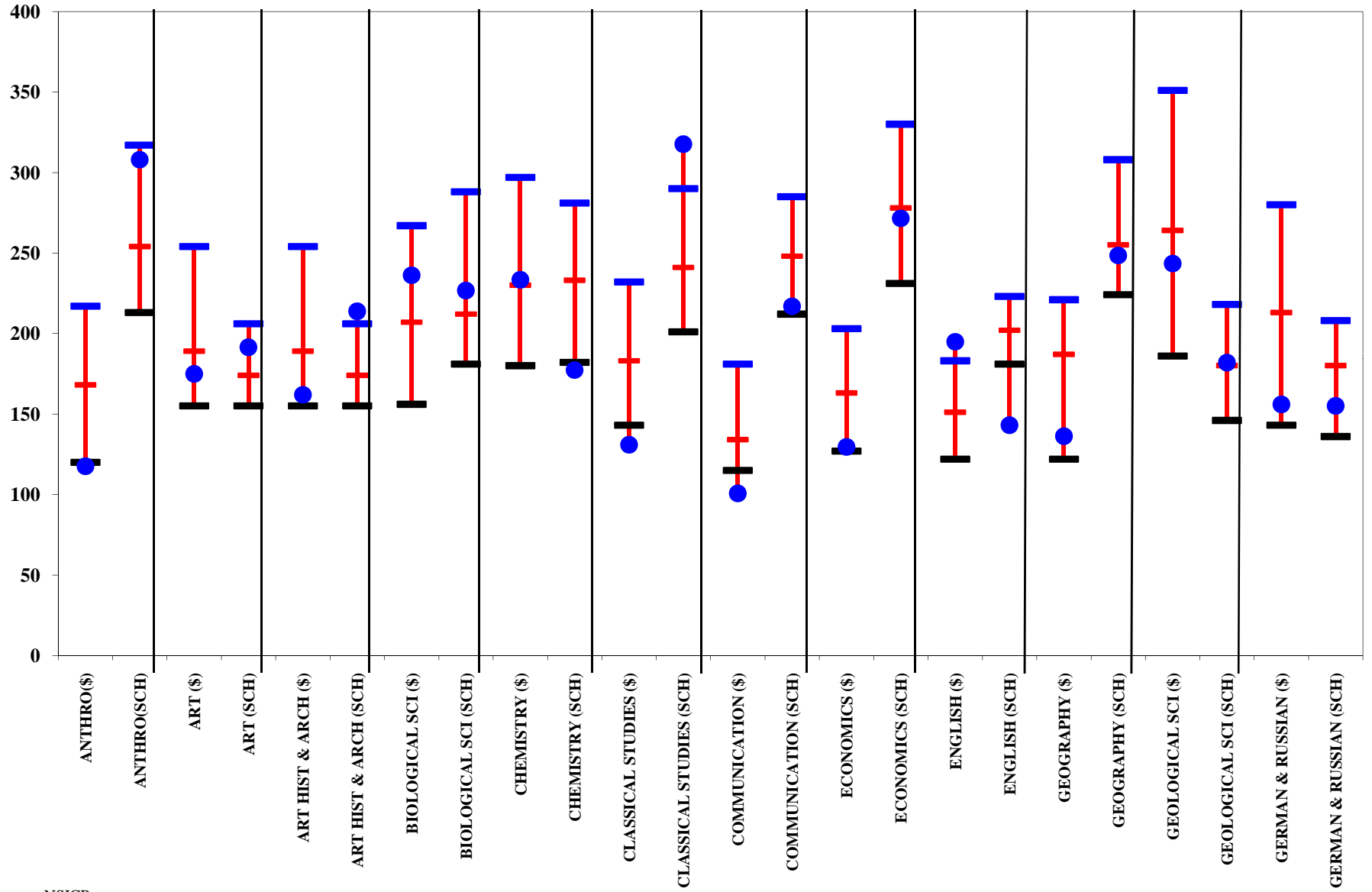
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**[Insert Delaware “Sample Departmental Data”
page showing example productivity and cost
calculations here.]**

Direct Expenditures per SCH and SCH per FTE Comparisons
 University of Missouri - XXXX
 FY2006 DRAFT 01/07/2008

— 25th Percentile — Median — 75th Percentile ● MU



Source: NSICP



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More NSICP-Based Metrics

FS Total SCH

FS Total FTE *Instructional* Faculty

FS Total SCH taught by Regular TTE [*Instructional*] Faculty

FS Total FTE Regular TTE *Instructional* Faculty

FY Total Direct Expenditures for Instruction

AY Total SCH supported by Department's Instructional Budget

FY Total Direct Expend for Separately Budgeted Rsrch & Service

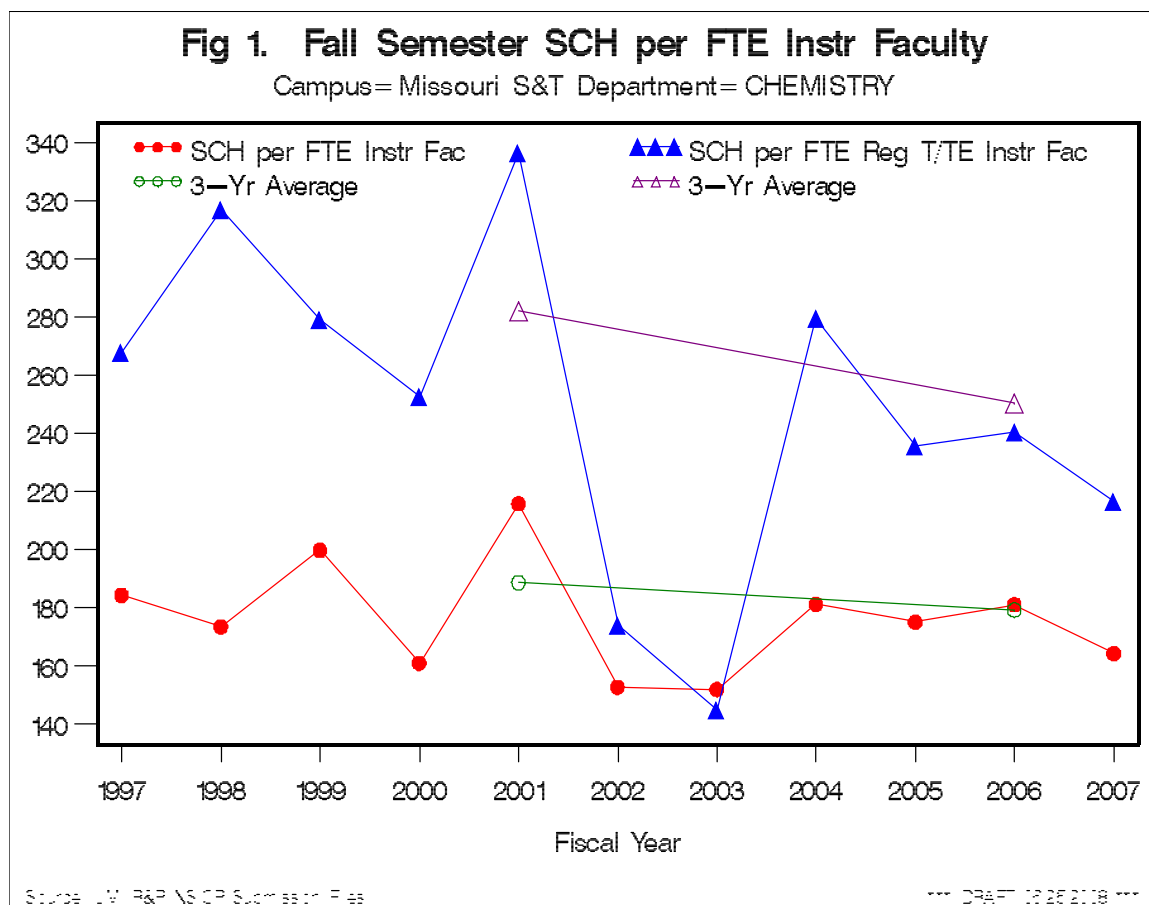
FS Total FTE Regular TTE Faculty



More NSICP-Based Metrics

FS Total SCH

FS Total FTE *Instructional* Faculty





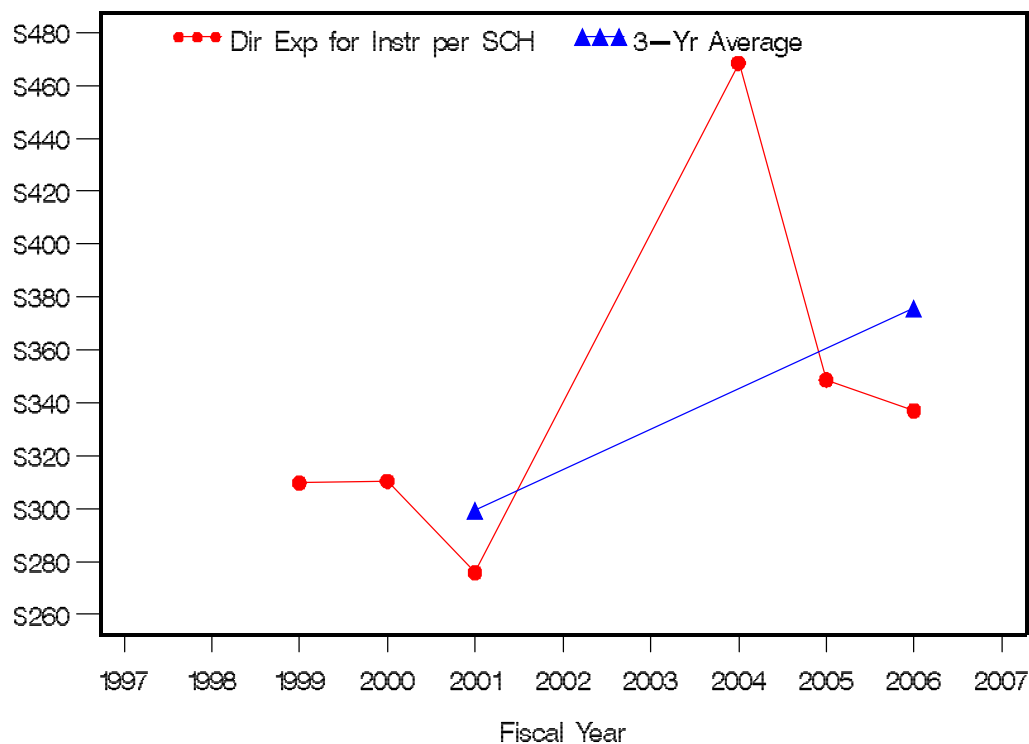
More NSICP-Based Metrics

FY Total Direct Expenditures for Instruction

AY Total SCH supported by Department's Instructional Budget

Fig 5. AY Rel Direct Instr Expend for SCH (in \$/SCH, infl adj)

Campus= Missouri S&T Department= CHEMISTRY



Source: U.S. R&D NSICP Submission Files and US Dept of Educ

*** DRAFT 12/28/2008 ***



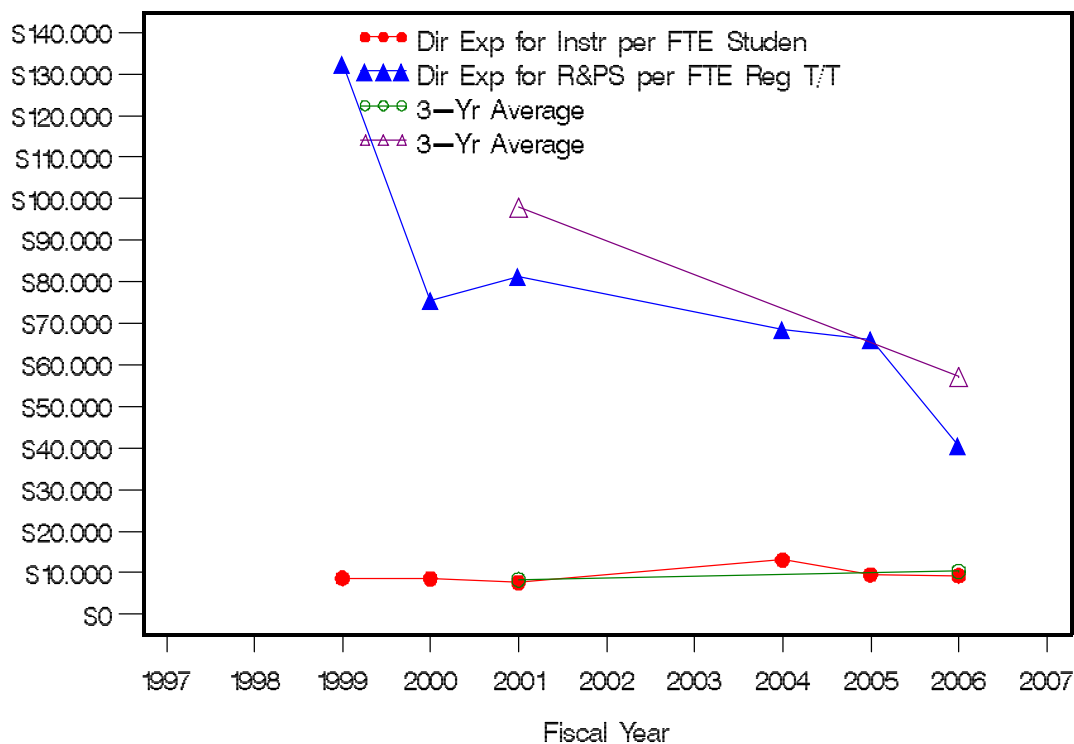
More NSICP-Based Metrics

FY Total Direct Expend for Separately Budgeted Rsrch & Service

FS Total FTE Regular TTE Faculty

Fig 6. AY Rel Direct Expend (\$/FTE Student, \$/FTE Reg TTE Fac, infl adj)

Campus= Missouri S&T Department= CHEMISTRY



Source: U.S. R&P NSICP Submission Files and US Dept of Educ

*** DRAFT 12/28/2008 ***



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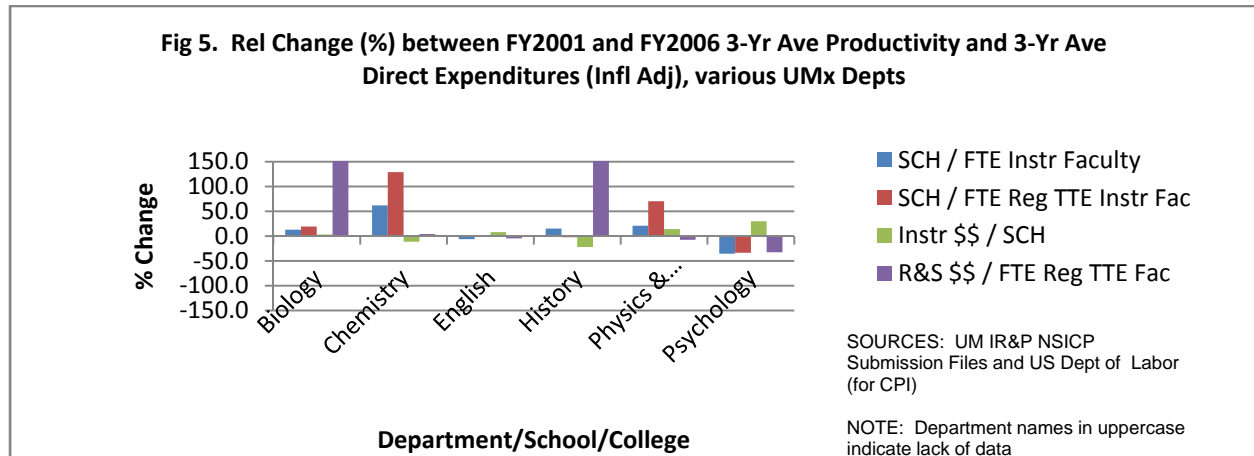
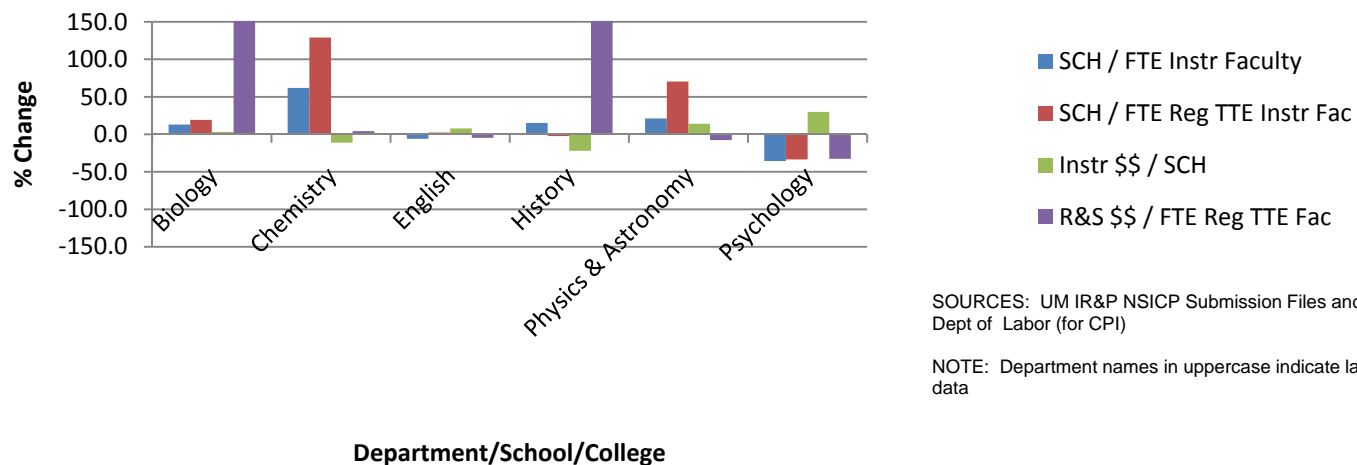


Fig 5. Rel Change (%) between FY2001 and FY2006 3-Yr Ave Productivity and 3-Yr Ave Direct Expenditures (Infl Adj), various UMx Depts





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More NSICP-Based Metrics

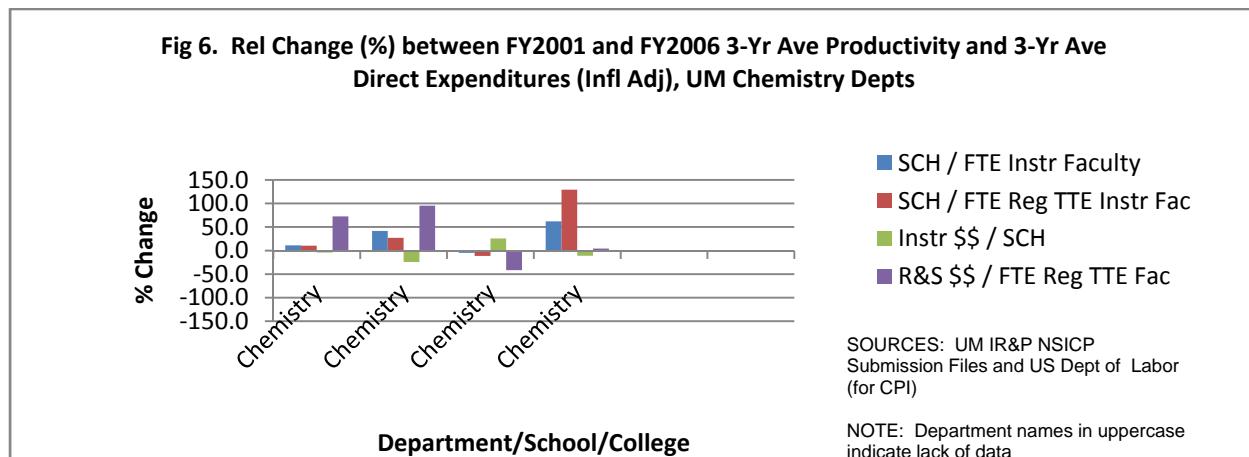
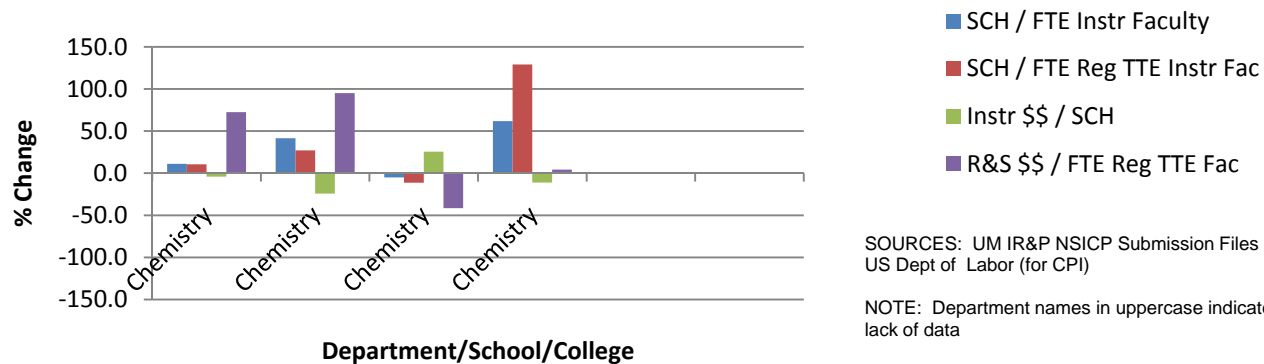


Fig 6. Rel Change (%) between FY2001 and FY2006 3-Yr Ave Productivity and 3-Yr Ave Direct Expenditures (Infl Adj), UM Chemistry Depts



SOURCES: UM IR&P NSICP Submission Files and US Dept of Labor (for CPI)

NOTE: Department names in uppercase indicate lack of data



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Summary

- Objective: Longitudinally summarize Delaware data
- Key decisions:
 - Use statistical graphics
 - Use SAS
 - Choose meaningful statistics (etc.)
 - Choose appropriate graphs (etc.)
- Outcome: Obtained useful graphs (meant for “30K ft” view)



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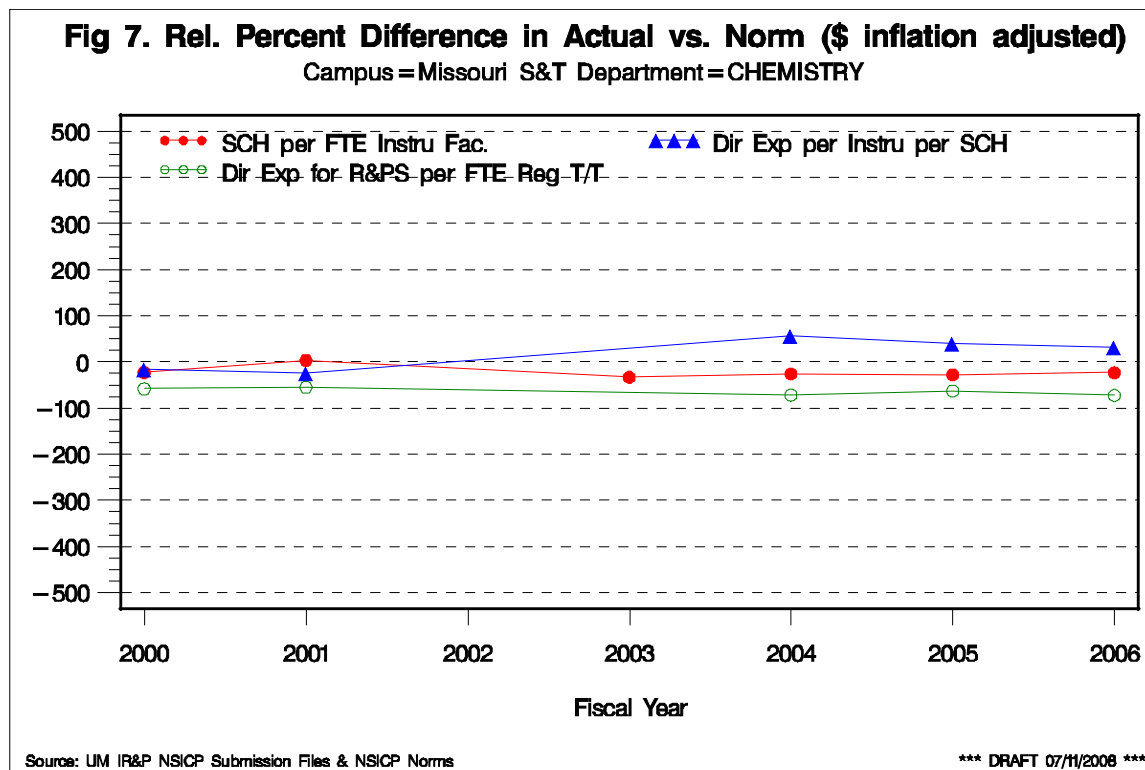
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Next Steps

- Incorporate national norms on time series plots
- Incorporate national norms on relative change bar charts
- Create cost-productivity relative change scatter plots

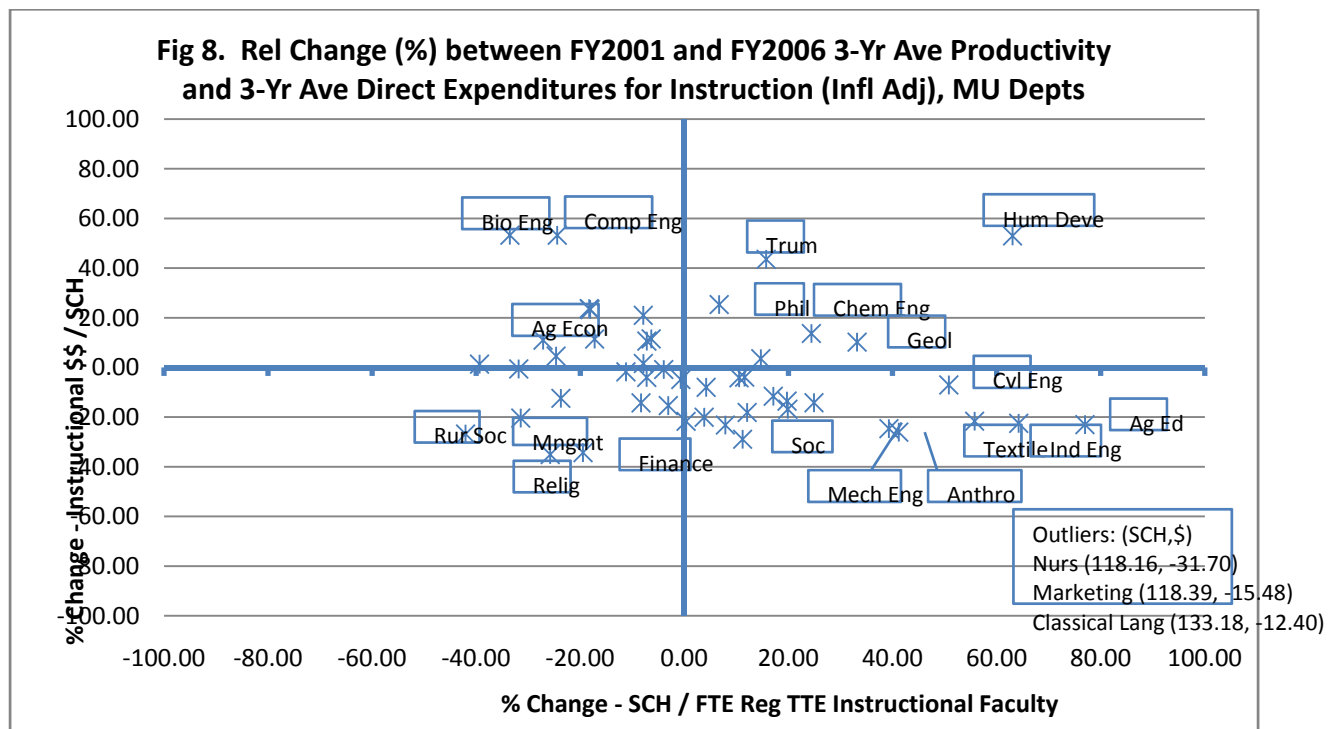


More NSICP Metrics Relative to Norms





More NSICP Metrics – Scatterplot





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[Q & A]