

# Overhauling the NC Teacher Working Condition Survey

**Update to the NC State Board of Education  
November 2023 Planning & Work Session**

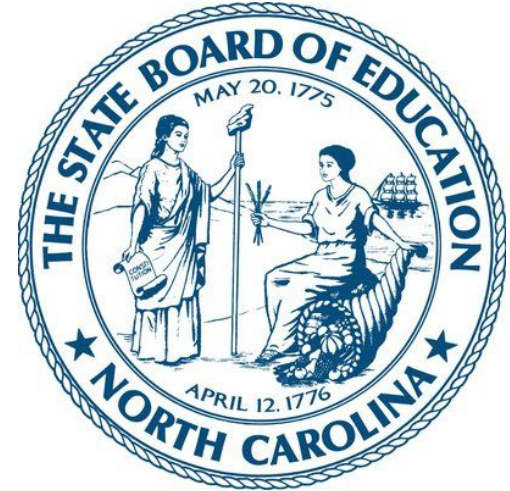
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# Responding to a Request

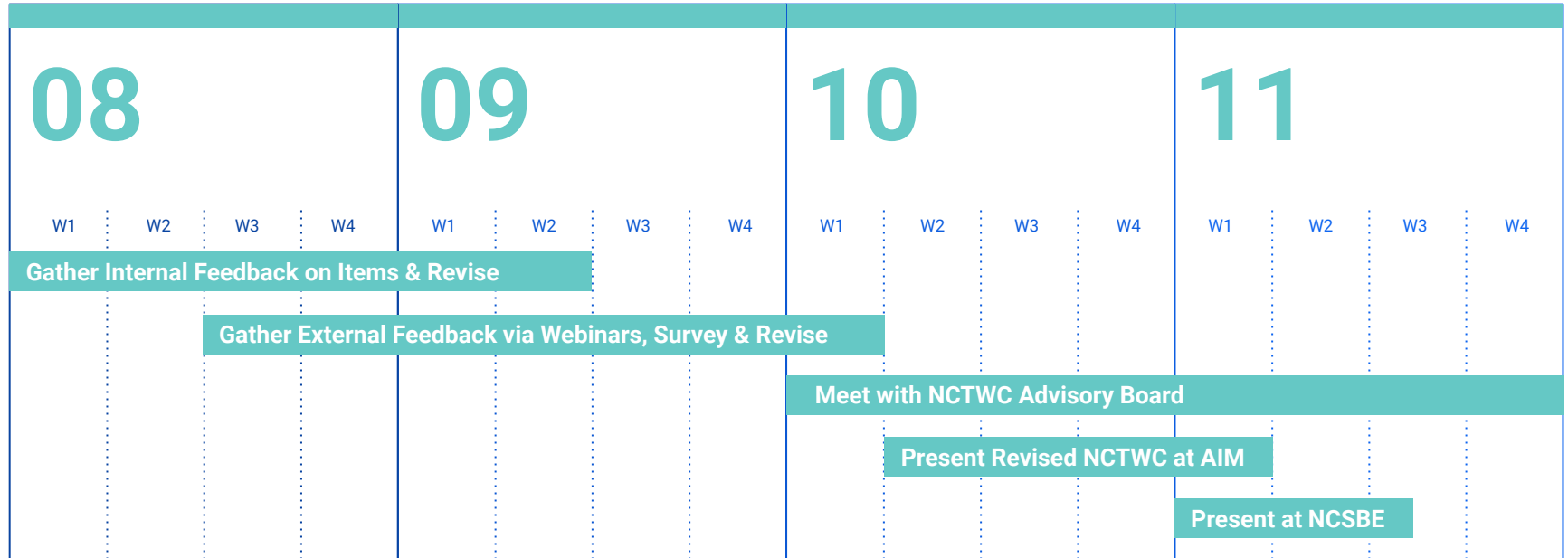
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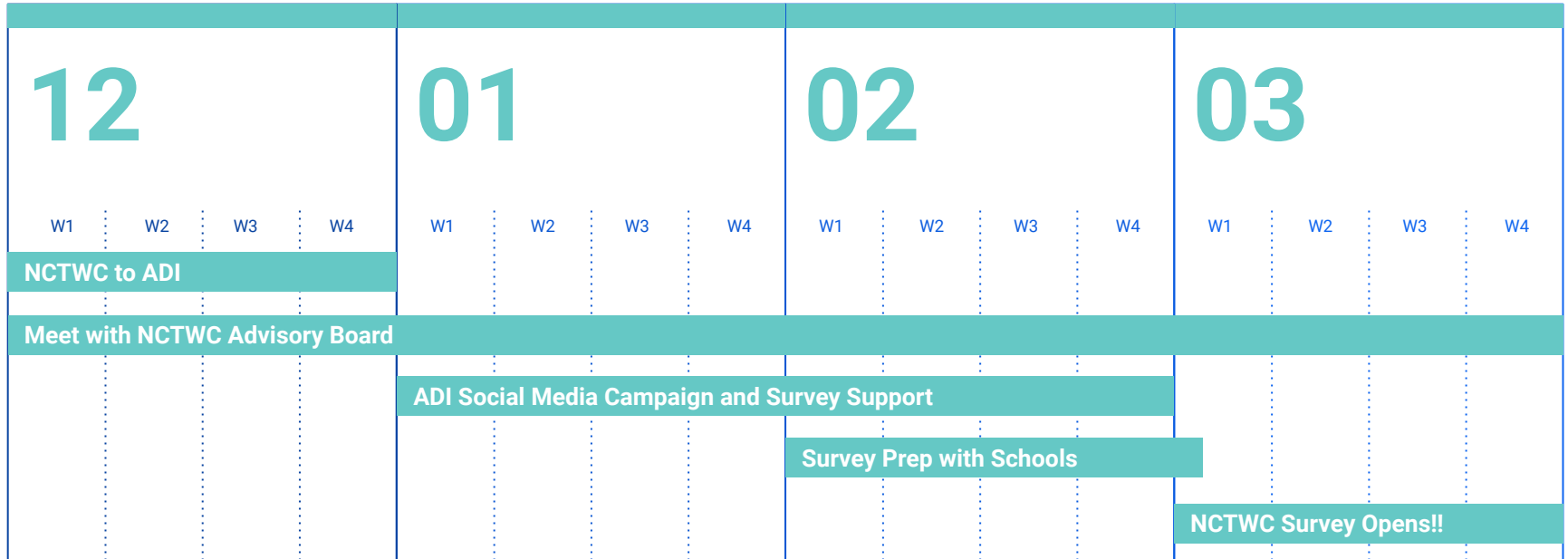
Dashboard and data discussions during State Board of Education Planning and Work Session in May 2023 led to a request for NCDPI's Office of Research and Evaluation to *revise and update the [NC Teacher Working Conditions Survey](#)*



# Timeline



# Timeline



# Enabling Legislation of NCTWC

The 2005 Appropriations Budget contained the enabling legislation that mandates our NC State Board of Education to:

- administer the survey on a biennial basis
- establish an advisory board to oversee implementation of recommendations from the survey, and
- provide analysis to incorporate into school improvement plans

## GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2005

SESSION LAW 2005-276

SENATE BILL 622

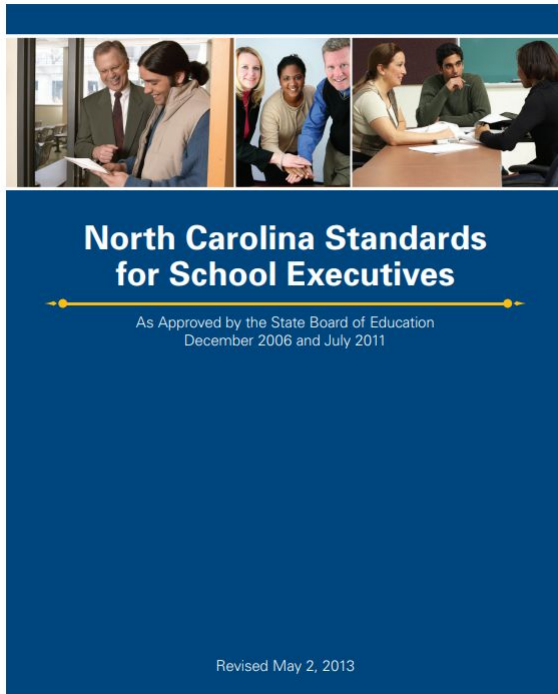
(SL2005-0276 Session Law 2005-276 Page 75)

### TEACHER WORKING CONDITIONS SURVEY

**SECTION 7.40.(a)** Funds in the amount of two hundred fifteen thousand dollars (\$215,000) for the 2005-2006 fiscal year and two hundred ninety thousand dollars (\$290,000) for the 2006-2007 fiscal year are appropriated in section 2.1 of this act to administer the Governor's Teacher Working Conditions Survey Initiative. These funds shall be used by the State Board of Education, in collaboration with the North Carolina Professional Teaching Standards Commission to (i) administer the survey on a biennial basis, (ii) establish an advisory board to oversee implementation of recommendations from the survey, and (iii) support the NC Network in providing customized analysis to incorporate in school improvement plans.

**SECTION 7.40.(b)** The State Board of Education may supplement these funds with gifts or other private funds donated for this purpose.

# School Executive Standards



## Standard 1: Strategic Leadership

- Utilizes data from the **NC Teacher Working Conditions Survey** in developing the framework for continual improvement in the School Improvement Plan;

## Standard 4: Human Resource Leadership

- Uses the results of the **NC Teacher Working Conditions Survey** to create and maintain a positive work environment for teachers and other staff

# NCTWC Advisory Board

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- Sectors: Governor's Office, NCDPI
- Ex Officio: POY, TOY, POY Charter, TOY Charter
- Regional Representatives: Superintendents, CAOs, HR Directors, Instructional Coaches, etc.
- Sponsors of Incentives: Carolina Teachers Alliance, NCAE, NCBCE, NCPAPA/NCASA, PENC, Bojangles

# NCTWC Response Rates

 **122,371**  
Invitees

 **112,529**  
Respondents

 **91.96%**  
Response Rate

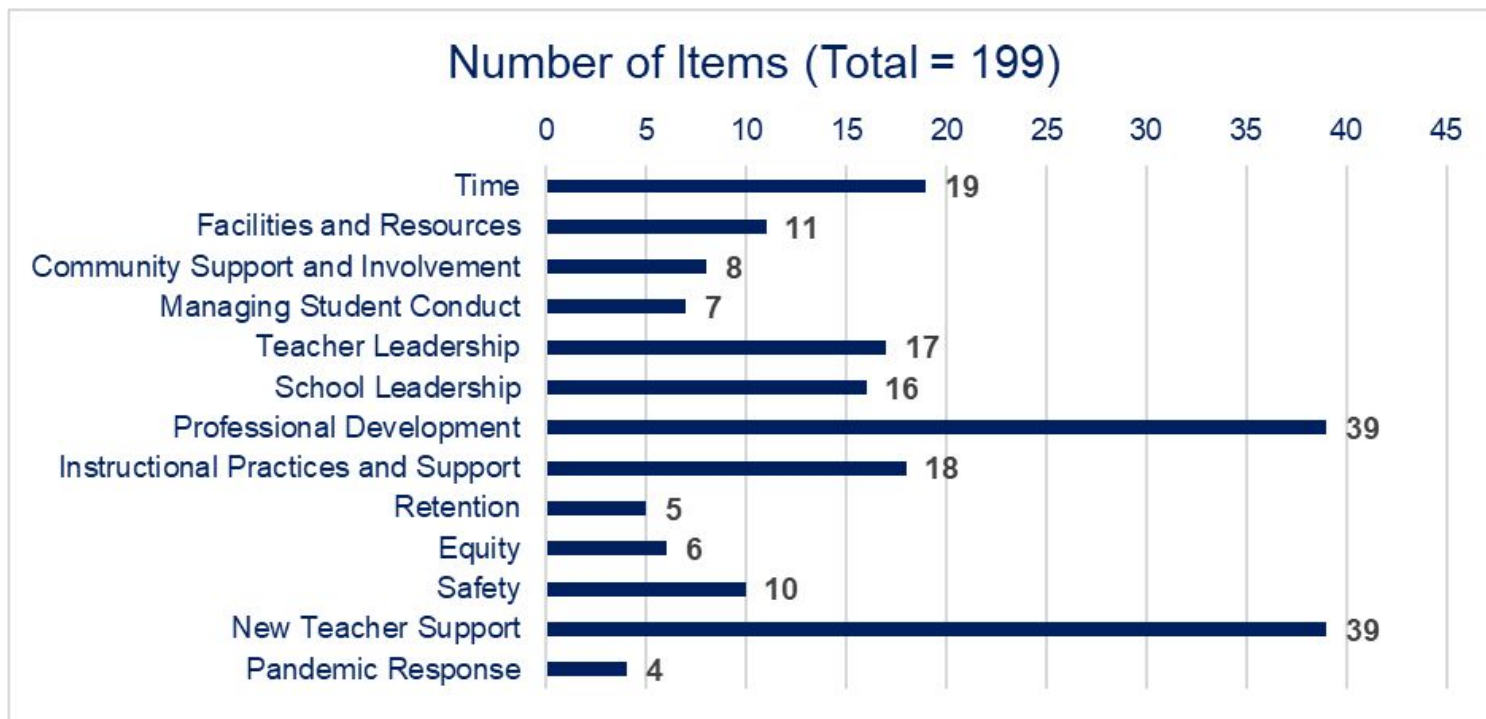
Survey Year	# of Respondents	Response Rate
2016	101,846	85.46%
2018	109,426	90.55%
2020	103,545	84.45%
2022	112,529	91.96%



In 2022, reports made available for all districts and schools with a minimum response rates of 40% and at least 5 respondents.



# Current NCTWC “Domains”



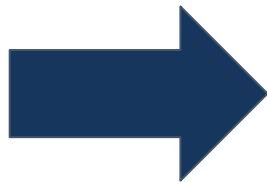
**Response Options:** Agreement (SA-A-D-SD-DNK), Time, Multiple Choice \* 3, Yes/No, Roles, Rank

# Goals for Improving Data Quality

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Improve the validity and reliability of the survey while retaining the existing domains.



Significantly reduce the number of TWC items and simplify the number of different response options.

# Summer 2023 Analysis

## Phase 0. Prepare two data sets

- Randomly split the responses from 2022 TWC (n=112,529) into two data sets and include school-level variables such as level, size, locale, and region.
- One data set is used for revising the existing measure in Phase 1.
- The remaining responses will be used for validating the revised measure in Phase 2.

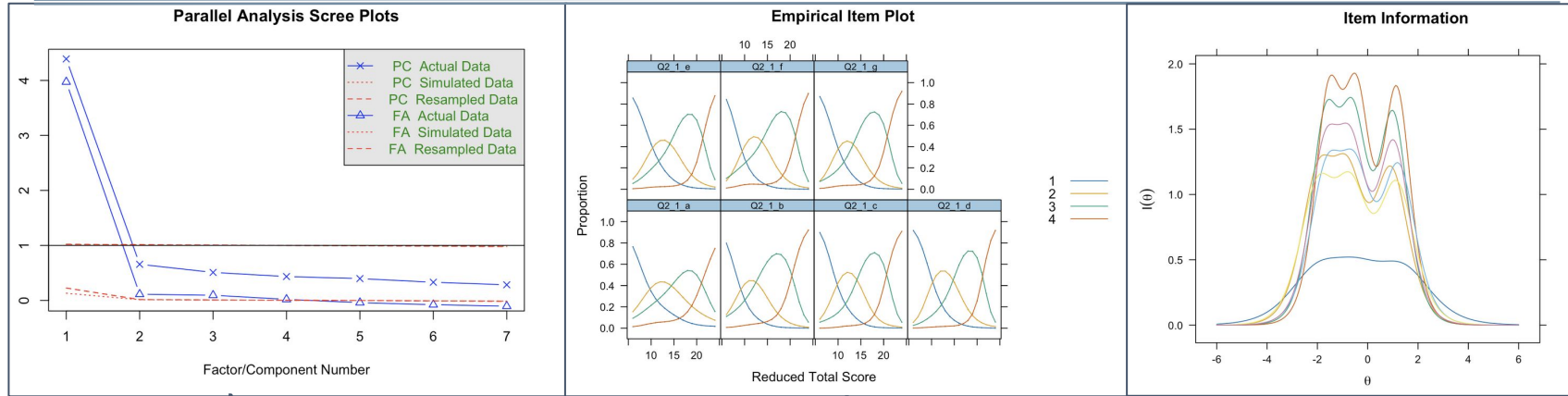
## Phase 1. Revise the individual domains

- Use Item Response Theory (IRT) to screen items within existing 12 domains
  - floor/ceiling effects
  - low correlation with domain
  - IRT-based item fit
- Select from screened items to achieve high overall reliability and ensure domain coverage

## Phase 2. Validate the revised measure

- Use Confirmatory Factor Analysis (CFA) to combine data across domains
  - validate domain structure
  - correlation among domains
- Ensure the measure performs similarly across school level, size, locale, and region

# Item Screening



Item	Floor	Ceiling	Low rho	Low rel.	Item misfit
Q2.1.a			X	X	
Q2.1.b					
Q2.1.c					
Q2.1.d					
Q2.1.e					
Q2.1.f					
Q2.1.g					

"Red flags"



# Evidence of Disengaged Responding

Question	% all "Agree"	% all "Str. Agree"	Total %
Q2.1	9.20	4.52	13.72
Q3.1	12.79	7.45	20.24
Q4.1*	20.30	8.28	28.58
Q5.1*	20.30	9.00	29.30
Q6.1*	24.51	12.36	36.87
Q7.1	16.28	11.84	28.12
Q8.1	18.93	6.12	25.05
Q9.1a-h	18.10	5.64	23.74
Q9.1i-p	28.02	11.28	39.30
Q13.1	28.57	11.86	40.43

# Data Analysis Summary

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- Disengaged responding → too long
- More items than necessary for acceptable reliability on % agreement
  - Need to interpret with caution due to disengagement
- Some domains with multiple response formats, unclear how to report out
  - e.g., agreement, frequency, duration, true/false
  - Conceptually “all over the place”
- Overall conclusion: cut items aggressively
- But, cuts should not be based on just the data analysis

# Stakeholder Feedback

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- Facilitated external feedback sessions with teachers, principals, charter leaders, CAOs, superintendents
- Deployed an external survey (n=2,416) included item-by-item review and open-ended items
- Met with other state leaders and national experts to understand best practices for large-scale teacher surveys
- Leveraged an internal NCDPI Working Group and NC TWC Advisory Board

# Current State of the DRAFT Survey

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## Process

- Reduced the number of items from 199 to 98!!!
- Maintained domain structure
- Emailing a survey link with unique code directly to teachers with regular reminders but maintaining school-level TWC Coordinator as main Point-of-Contact
- Added optional demographic items (including race/ethnicity, content area, licensure status, credentials)
- Increasing minimum response rate to 50%
- Partnering with NCPAPA and NC Principal Advisory Committee to create a “NC Principals Working Conditions Survey”



# Current State of the DRAFT Survey

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## Content

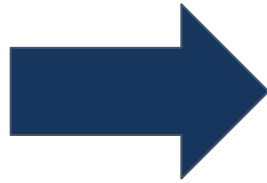
- Reordered domains so *Retention* and *School Leadership* are first
- *School Safety* shifted to *Safety & Wellbeing*
- *Facilities & Resources* is now about whether a school's physical environment is sufficient for quality instruction.
- *Professional Learning* is now asking about top three needs for areas for professional development
- *Instructional Supports & Practices* are now about top three needs for support and the NCEES process
- *Teacher Leadership* is now aligned to Standard 1 (Teachers Leading in the Classroom and School)

# Goals for Improving Data Use

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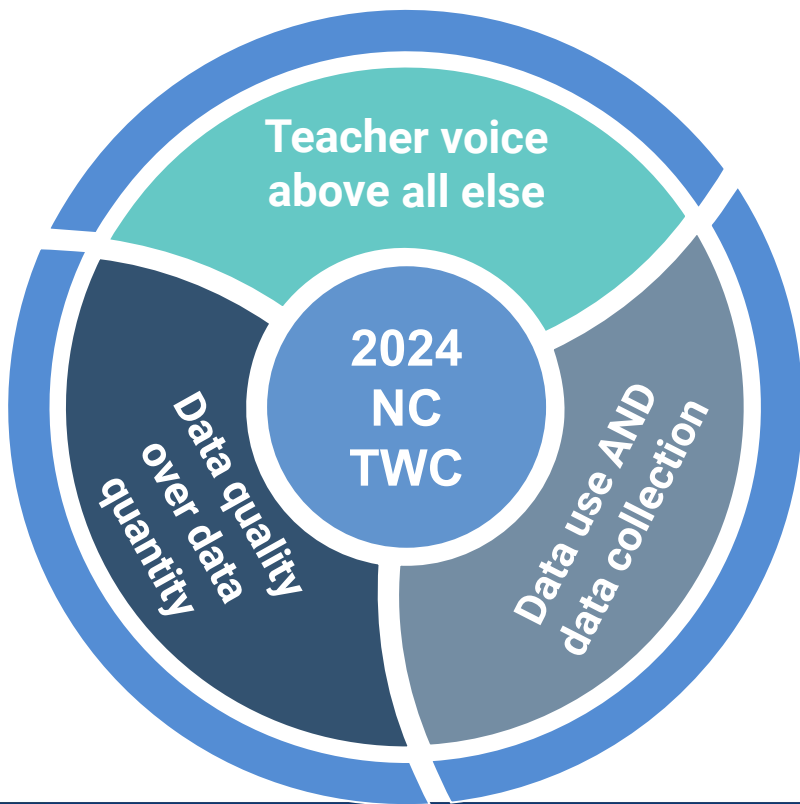
Continue to work with NCTWC Advisory Council and representative group of external stakeholders



Finalize items and consider best strategies to maximize data collection, analysis, and reporting for the 2023-24 school year.

# 2024 Shifts in Focus

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- Introducing the revised survey and continued commitment to anonymity
- Clear messaging about changes in purpose, content, logistics, new incentives
- Gather input and share resources on how schools, districts, and the state use the NCTWC data

# Questions?