

Measuring Teacher Dispositions SOS-- Safety, Outcomes, and Standards

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Abstract

Use of appropriate measurement methods and the INTASC Principles to assess teacher dispositions provides a safety net against legal and political challenges while also providing useful information for outcomes assessment. This paper is a companion to our other presentation which discusses technical construction and reporting components of the DAATS assessment system.

Introduction

The NCATE Requirements, the INTASC Principles (Standards), and the NEA Code of Ethics

NCATE (2002) requires the measurement of dispositions as part of its accreditation requirements for teacher education programs. The first standard, entitled, "Candidate Knowledge, Skills, and Dispositions," requires that: "Candidates preparing to work in schools as teachers or other professional school personnel know and demonstrate the content, pedagogical, and professional knowledge, skills, and dispositions necessary to help all students learn. Assessments indicate that candidates meet professional, state, and institutional standards."

Fortunately, guidance is provided to the community by the common set of national standards developed by the Council of Chief State School Officers and promulgated by the Interstate New Teacher Assessment and Support Consortium (INTASC) in the form of ten principles. Each of the principles includes indicators written at the knowledge, skill, and dispositional levels, forming constructs that colleges are required to measure.

The supporting explanation for this Standard links NCATE and INTASC together, as the standards "of reference" in the following statement, making it clear that the INTASC Principles should be used as a major basis for designing assessment systems:

...NCATE and INTASC expect teacher candidates to demonstrate knowledge, skills, and dispositions¹¹ to provide learning opportunities supporting students' intellectual, social, and personal development. (p. 18)

¹¹ This list is based on the standards of the Interstate New Teacher Assessment and Support Consortium (INTASC). The complete INTASC document includes knowledge, dispositions, and performance related to each principle. It is available on the website for the Council of Chief State School Officers (CCSSO) www.ccsso.org/intasc.html

Regrettably, many institutions fail to consider the INTASC Principles when developing their processes for measuring teacher dispositions. Instead, they rely on generic traits, often linked to morality and ethics that leave them wide-open for attack in the measurement and legal worlds. This failure to attend to standards-based definitions and adequate due process procedures, when combined with a lack of solid data to diagnose and mediate, leaves institutions wide open for attack if they chose to deny graduation to a teacher candidate who exhibits dispositional deficits. This emphasis is due, in large part to a statement in the NCATE Supporting Information explaining the standard that refers institutions to the NEA Code of Ethics and a definition of dispositions that focuses on morality and ethics. The NCATE (2002) definition follows:

The values, commitments, and professional ethics that influence behaviours toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator's own professional growth. Dispositions are guided by beliefs and attitudes related to values, such as caring, fairness, honesty, responsibility, and social justice. For example, they might include a belief that all students can learn, a vision of high and challenging standards, or a commitment to a safe and supportive learning environment. (p. 53)

The NCATE (2002) supporting explanation that is linked to ethics follows:

Candidates for all professional education roles develop and model professional dispositions that are expected of educators. The unit includes as dispositions the ideal of fairness and the belief that all students can learn. Based on its mission, the unit may determine additional professional dispositions it wants candidates to develop. The unit articulates professional dispositions as part of its conceptual framework(s). The unit systematically assesses the development of appropriate professional dispositions by candidates.[1] Professional dispositions are not assessed directly; instead the unit assesses dispositions based on observable behavior in educational settings.

[1] *Codes of ethics* may be helpful in thinking about professional dispositions and are available from a number of professional associations, including the National Education Association (NEA).

The result, then, is confusion. On the one hand, NCATE links the measurement of dispositions to the INTASC Principles, but, on the other hand, it references institutions to an ethical code. They are not the same. The INTASC Principles provide positive statements about the beliefs and attitudes teachers should demonstrate about the skills addressed in the Principles. The Code of Ethics speaks to what teachers should NOT do.

Measuring Dispositions

We use tests, products and live observations to measure knowledge and skills. Appropriate measurement methods for affect (dispositions) include scales, questionnaires and interviews, focus groups, observations, and apperception tests, as well as documentation of inappropriate behavior when it occurs. We will discuss these in more detail in the literature section of this paper, but for now, we note here that there is a long history of effective affective measurement beginning with Thurstone and Chave (1929) in "*The Measurement of Attitude*." We note further that NCATE states in its Supporting Explanation for Standard 1 that: "Dispositions are not usually assessed directly; instead they are assessed along with other performances in candidates' work with students, families, and communities." (p. 19)

The INTASC principles, when combined with appropriate measurement methods, provide a safety net that can allow college personnel to do what they need to do -- make decisions that are less likely to be successfully challenged while, at the same time, providing data that can be aggregated to improve the outcomes of their programs. The Principles allow us to focus on the positive. Proper measurement can lead to information about what students are learning and what they are not learning, so that program improvement is possible. The NEA Code of Ethics allows us only to locate ethical violations. Dispositions are different from knowledge and skills, and both require our serious attention.

Definitions of the Term Dispositions

Katz (1993) helps us to see that dispositions are both voluntary and a habit of mind – outside our conscious control with the definition provided in Box 1.6.

A pattern of behaviour that is exhibited frequently and in the absence of coercion and constituting a habit of mind under some conscious and voluntary control, and that is intentional and oriented to broad goals.

Our dictionary definition comes from Miriam Webster Online Dictionary (www.miriamwebster.com) and adds not only mood but a tendency to act in certain ways to our understanding.

A prevailing tendency, mood, or inclination; temperamental makeup; the tendency of something to act in a certain manner under given circumstances.

The draft revised NCATE definition, under public review as of this writing, is as follows:

The professional behaviors educators are expected to demonstrate in their interactions with students, families, colleagues and communities. Such behaviors support student learning and development and are consistent with ideas of fairness and the belief that all students can learn. Based on their mission, professional education units may determine additional professional dispositions they want candidates to develop. Institutions assess professional dispositions based on observable behavior in educational settings.

Note that this new definition removes references values, commitments and professional ethics and references to honesty, responsibility and social justice.

Our definition of dispositions (Wilkerson and Lang, in press) is as follows:

Dispositions are in the teacher education context are the aspects of teacher affect – attitudes, values, and beliefs -- that influence the application and use of knowledge and skills, as defined in accepted standards of teaching, e.g., the INTASC Principles. Teachers who have the affects required of good teachers will have reached the “valuing” level in the Bloom and Krathwohl taxonomy. The guiding question that focuses this definition is: “What does the teacher believe to be important about teaching and being a good teacher? How is s/he likely to act?”

Literature Review

Research-Based Measurement of Teacher Dispositions

The published literature on measuring teacher dispositions is sparse. This is probably at least in part because of the general assessment illiteracy that pervades our culture (Stiggins, 2000, and Popham, 2004). A recent study by Schulte, Edick, Edwards, and Mackiel (2004) confirms that little guidance is provided about measuring teacher dispositions. There is instead much in the literature that is skill based rather than values-based (Darling-Hammond, 2000). There are some exceptions, Wasicsko's (2004) 20-Minute Hiring Assessment, Holt-Reynolds' (1991) biographical and metaphorical assessments, and several discussions of portfolios applied to disposition assessment; all are cited in (Schulte, et al., 2004). The Schulte team developed and validated a Teacher Disposition Index (TDI), which is similar in some ways to one of the four instruments we model here. There are many differences, though, and chief among them is the limitation to a single instrument type.

The literature on affective measurement has in its roots the taxonomy developed by Krathwohl, Bloom, & Masia (1956). There are a number of methods available for affective measurement, and, as with cognitive assessments, multiple measures help to increase the confidence in decisions. Hopkins (1998) provides a useful list and discussion of affective measures, which are organized and summarized below with relevant references to the affective assessment literature:

Selected Response Methods: Selected response methods provide self-reported information that is based on the selection of a chosen response from a pre-determined pair or set of responses for each item. Here the respondent indicates a level of agreement, importance, or some other value-laden judgment for specified characteristics, e.g., a belief in children's capacity to learn. Scales are an important method for measuring affect in this way (Anderson, 1988a). There are four types of scales generally used: Thurstone agreement scales (Thurstone, 1928; Anderson, 1988b), Likert scales (Anderson, 1988c), rating scales (Wolf, 1988a), and semantic differential scales (Phillips, 1988).

Constructed Response Methods: Constructed response methods provide self-reported information also, but in this case, the response is written without pre-determined choices. The appropriate methods include questionnaires (Wolf, 1988b), interviews (Miller & Cannell, 1988), and focus groups (Flores & Alonso, 1995). Items in this category are easier to create, but scoring becomes more subjective and, therefore, more complex.

Observed Performance: Observation assessment is another excellent source of data (Stalling & Mohlman, 1988). Included in this group are direct observations in the classroom, behavioural checklists (completed after multiple observations and products have been analysed), and event reports. Clearly, time is a factor for the observations and checklists. Event reports provide a unique approach, used to record (and hopefully remediate) ineffective behaviours.

Legal Issues

Failure to use appropriate measurement methods has resulted in at least three major challenges to institutions seeking to deny graduation to teacher candidates based on dispositional issues. In the case of Scott McConnell vs. LeMoyne University, the New York

District Court of Appeals upheld Mr. McConnell's right to continue seeking his degree after he was expelled for writing a classroom management plan in which he advocated for the use of corporal punishment and against multicultural education. This was such a "hot topic" that it yields 55,000 hits in a simple Google search, (e.g., York, 2006). McConnell prevailed on due process, since LeMoyne had no formal process to assess dispositions. His values "leaked out" during a class-based assignment. With no process in place to measure or advise, LeMoyne also has little opportunity to obtain program improvement level information regarding the outcomes of its programs.

At Washington State University, a similar decision was reached for a student, Ed Swan, who expressed views contrary to the defined dispositions requirements of the college. This case was targeted by an organization called FIRE (Foundation for Individual Rights and Freedoms), and was the subject of many articles on their site (e.g., <http://www.thefire.org/index.php/article/6832.html>). Unlike LeMoyne, which had no formal process for measuring or documenting dispositional deficits, WSU had an assessment form that was made up largely of subjective criteria. FIRE noted the extreme subjectivity of the form as well as the decisions made about Swann, and WSU eventually reworked the form, taking Swann back into their program. FIRE has not yet noted that the new form, too, has room for subjectivity in the decision-making process. WSU is, however, linked its revised form to INTASC Principles, and this seemed to satisfy the critics. Outcomes measures related to standards may be difficult, though, since there are Principles listed by number that exceed the number of INTASC Principles. For example, the first statement is linked to Principles 14 and 15, and the INTASC Principles end at number ten.

Brooklyn College, part of the City University of New York, also experienced problems when one of its faculty, E.C. Johnson spoke out publicly against their process of measuring dispositions, which, again, were not standards-based. He was particularly concerned with the issue of social justice and its measurement, pointing to 13 institutions which focus their conceptual framework on social justice. His application for tenure was sabotaged on the grounds of collegiality. He asserted his academic freedom rights, was defended by a conservative organization, and finally was permitted to continue his questioning of the morality basis of evaluating teacher dispositions. (Smallwood, 2003; Foundation for Individual Rights in Education, 2003)

Karen K. Siegfried withdrew from the University of Alaska because the faculty told her she did not have the right kind of attitude. She had bumper stickers, including anti-abortion, that caused her to park her car at remote locations. She had disagreed with one professor's contention that video games make children violent, evoking the response: "We don't need that kind of attitude." She had expressed her views on gun control and affirmative action. With a 3.75 GPA and one year in the program, after her professors told her that she lacked the "professional disposition" necessary to be a good teacher, she withdrew. They told her she was inflexible, not open to new ideas and non-responsive to other cultures. She suspected she was going to be suspended. (Wilson, 2005)

In addition to the New York Times and a large number of conservative smaller newspapers and magazines, coverage of these events is noted in the *Chronicle of Higher Education* and *U.S. News and World Report* (e.g., Leo, 2005; Wasley, 2006). These institutions now may also be targets for FIRE. It has been suggested that using the INTASC Principles as a vehicle to embed issues such as social justice into a standards-based assessment process can solve this problem (Wilkerson, 2006).

Method

The disposition indicators of the INTASC Principles were used as the constitutive definition of teacher affect, with a series of six instruments developed to define the construct in operational terms. The process used to develop the instruments was the five-step design model we call “Dispositions Assessments Aligned with Teacher Standards,” or DAATS. The steps of the model are:

- Step 1: Define purpose/use, content, and other contextual factors.
- Step 2: Develop a valid sampling plan.
- Step 3: Create instruments aligned with standards and consistent with the sampling plan.
- Step 4: Design and implement system.
- Step 5: Ensure psychometric integrity

The implementation of the model was carefully constructed using the *Standards of Educational and Psychological Testing* (AERA, APA, and NCME, 1999). These *Standards* are the foundation of all standardized and other test design. When legal challenges are made to testing decisions, it is these *Standards* that serve as the basis for making decisions about the validity, reliability, and fairness of the inferences questioned in the court. Thus, by using the *Standards* to guide the process, the instruments were created to withstand legal challenges. The integration of the DAATS design model and the AERA, APA, and NCME *Standards* is documented systematically (Wilkerson and Lang, in press).

Results

In its current stage of development, there are six instruments, each of which has been field tested. These are discussed in more detail by Lang and Wilkerson (2007) and presented in very briefly below:

Disposition Event Report:

Description: This form provides a record of the teacher’s demonstration of a negative disposition, sometimes correlated with the Code of Ethics, sometimes with a lack of valuing of skill-based attitudes.

Status: This form is used intermittently to document problems and remediation efforts. It is not, therefore, subject to traditional field-testing procedures.

Belief Scale: This is a self-report 50-item Thurstone agreement scale., aligned with each of the INTASC Principles.

Description: This is a self-report 50-item Thurstone agreement scale., aligned with each of the INTASC Principles.

Status: This form has been field tested more extensively than any of the other forms, at four different institutions with about 2,000 examinees. The results have been calibrated using the Rasch model of Item Response Theory, with results indicating that the scale yields both valid and reliable results.

Questionnaire:

Description: This self-report requires the teacher to respond to eight questions aligned with various INTASC Principles and is designed to elicit specific instances of behaviour that reflect the targeted Principles.

Status: This form has been tested at three universities and results have been calibrated as in the belief scale.

K-12 Focus Group:

Description: This process allows children to present their views of the teacher's affect, based on specific questions targeted at various Principles.

Status: This form was field-tested and found to be too complicated. It was rewritten to be more closely aligned with the INTASC Principles. Results have been analysed judgmentally with accuracy confirmed.

Situation Reflection Analysis:

Description: This psychological technique provides for teachers to reflect on provocative pictures that yield inappropriate responses for teachers who have dispositional deficits.

Status: This form is being pilot tested in order to identify anchor responses for rubric development and future scoring.

Teacher Observation:

Description: This behaviour checklist focuses on a variety of INTASC Principles with a heavy focus on professionalism, including timeliness, dress, and other professional attributes, as well as respect for diversity, effective communication, and other INTASC Principles.

Status: This form is in draft form and has not yet been field tested.

Discussion

This work demonstrates the use of evidence that is standards-based to meet assessment and accountability requirements with safety and utility. If institutions were to develop credible instruments and procedures to measure dispositions, then they would have a stronger and more credible voice in state and federal policy making, where legislators and state officials are particularly concerned with accountability, standards, and outcomes assessment. This model demonstrates an integration of the professional standards for teachers, including their values, attitudes, and beliefs about teaching (CCSSO, 1992); the nationally recognized standards for sound measurement (AERA, APA, and NCME, 1999), and appropriate measurement techniques that have withstood the test of time. If challenged in court, this provides a sound backdrop for the use of professional judgment in making credible decisions using accepted practice. That is very different from going to court with the judgment of a few faculty based on informal and unsystematic observations.

Beyond that, data are useful for improving programs and helping them to prepare educators who can teach children effectively, since the data can be aggregated in either raw and standard scores. When institutions discover that there are areas of the curriculum (e.g., parental involvement), of which candidates are not convinced of the necessity or value, institutions can redesign their programs to help candidates learn to value such dispositions. Without a systematic approach to measuring each disposition in the standards, such information can be missed. Since diversity is one of the INTASC Principles, measures of candidates valuing of diversity can also help improve their ability to serve these populations.

At a policy level, institutions and accreditors need to think about the fundamental basis for measurement of dispositions. Is it morality and ethics alone, INTASC Principles alone, or a combination of both? We advocate for the combination, but with standards taking precedence, since morality and ethics are more controversial and can be easily embedded in the Standards. This fundamental decision is a difficult one and is, therefore, necessary at various policy levels – local, state, and national. We advocate for, and model, a combination of qualitative and quantitative evidence to inform decision making about candidates and programs.

Institutions interested in this process may add to, or revamp, their approach to measuring dispositions. Such work can also add to the development of new research and new policies. Policy makers may begin to focus on standards, helping to solve the imminent legal challenges facing those institutions which do not apply standards to their measurement process. Additionally, many NCATE reviews find weaknesses with the validity and reliability evidence of their institutional reports.

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