

Teacher candidate disposition: moral judgement or regurgitation?

Lisa E. Johnson^{*}

Winthrop University, South Carolina, USA

Developing teacher candidates who are able to make moral judgements to equitably resolve classroom dilemmas, conduct student assessment and allocate resources is critical for today's diverse classrooms and should be part of fostering professional disposition. However, one challenge of incorporating dispositions in teacher education and a valid argument for those opposing the trend is how to accurately assess growth in the development of in teacher candidates. This study investigates two measures of moral judgement and explores the congruence between these assessments. Findings indicate inconsistency in the congruence between the quantitative assessment (Defining Issues Test 2) of moral judgement and qualitative data (teacher candidate written assignments), suggesting an inaccurate picture of teacher candidate disposition. Patterns of incongruence are explored and linked to specific phases of moral judgement followed by suggestions for teacher education programs on building congruent assessments.

Introduction

Moral judgements are becoming the cornerstone of high quality teaching and effective disposition. Classrooms are more diverse, assessments abound and teacher time is a highly valuable commodity. Recognising the importance of such judgements, schools of education are developing new programs and integrating moral development into core courses. They are working to build what William James referred to as 'additional endowments' (Hamachek, 1968, p. 205)—moving beyond knowing subject matter and child development theory and internalising what it means to be a democratic, equitable educator. However, what seems to be the most difficult, and often controversial, task is the assessment of such core values. How do we measure disposition toward accepting diverse perspectives or holding humanistic views of student discipline? This study examines two methods of assessing teacher candidate disposition, one quantitative and one qualitative. Congruence of the two measures is examined, followed by recommendations for teacher education programs seeking appropriate and valid measures of moral judgement.

^{*}204 Withers Building, College of Education, Winthrop University, Rock Hill, SC 29733, USA.
Email: johnsonle@winthrop.edu

Reiman and Johnson (2003) define teacher dispositions as ‘attributed characteristics of a teacher that represent a trend of a teacher’s interpretations, judgements and actions in ill-structured contexts’ (p. 5). The work of Dewey (1904), combined with that of Reiman and Johnson, serves as a foundation for the current study in examining the moral domain as a key construct of teacher candidate disposition. Specifically, this study examines two questions: (1) is there congruence between quantitative and qualitative measures of moral judgement (parallel results); and (2) if incongruence (disparity) exists, is there an identifiable pattern based upon phase of moral judgement? Because of the complexity of the moral domain of disposition, multiple methods of assessment must be utilised. Conducting analyses of these methods is necessary to examine incongruence that might occur between assessment types. Such examination can lead to more specific, valid instrumentation and, thus, a more accurate picture of teacher candidate disposition in the moral/ethical domain.

Theoretical framework

Various studies on teacher effectiveness over time have listed characteristics, such as democratic, flexible, able to take in multiple perspectives and vary responses, reflective and effective at communicating, as key to teacher success (Witty, 1947; Hunt, 1976; Percy, 1990; Arlin, 1993; Reiman & Thies-Sprinthall, 1998). Fostering such characteristics in adults often requires a change in patterns of thinking known as cognitive development. One specific component of adult cognition is development in the moral/ethical domain. Neo-Kohlbergian theory was used in this study to interpret teacher candidate construction and understanding of moral/ethical problems in the classroom (Rest *et al.*, 1999a). Neo-Kohlbergian theory emphasises ‘basic human rights, equal individual moral status and rational, autonomous individuals who are free to enter into contracts and obligations’ and assumes ‘some ways of thinking are better at supporting respect for individual human rights than are other ways of thinking’ (Narvaez, 2002, p. 2).

A three-schema conception of moral judgement was employed. The integration of schema into the theory of cognitive development acknowledges the presence of other ideologies (i.e. religious or cultural) interacting with moral structures. The theory maintains that these socialised values act in conjunction with deeper cognitive structures versus acting independently. Three schemas have been developed as a way of understanding moral judgement development (Rest *et al.*, 1999a):

1. First, the ‘Personal Interest Schema’ describes individuals lacking in socio-centric perspective. Decisions are based primarily in the personal stake of the decision-maker, stressing notions such as survival and ‘getting ahead’ (Narvaez & Bock, 2002). Specific to education, this describes teachers striving for learner conformity with little willingness to make adjustments for individual needs.

2. The 'Maintaining Norms Schema' signifies an increase in an individual's ability to recognise society-wide cooperation. It emphasises rules that are clear and consistent and apply to everyone. The social system is imperative (i.e. the hierarchical nature of a school) along with maintaining the established norms. Teachers utilising this schema view equity as all things being equal.
3. Finally, the 'Postconventional Schema' is based on four specific components: (1) there is a primacy of moral criteria. Social norms are not set, but are alterable and relative; (2) idealised ways exist for humans to interrelate; (3) ideals are both shareable and open to justification and scrutiny; and (4) there is recognition of full reciprocity of social norms. They must be uniformly applied and unbiased. The postconventional schema is associated with teacher judgements, such as viewing the curriculum from multiple perspectives and considering the moral implications of instructional choices.

An extension of the three schema levels includes seven moral judgement phases, or types, describing periods of consolidation within a modal schema and transition between schemas. Utilising a consolidation–transition model in moral judgement research provides a more accurate picture of one's level of moral judgement (Rest *et al.*, 1999a; Derryberry & Thoma, 2005). The seven types are described below:

- Type 1: consolidation in personal interest schema
- Type 2: transition between personal interest and maintaining norms favouring personal interest schema
- Type 3: transition between personal interest and maintaining norms schema favouring maintaining norms
- Type 4: consolidation in maintaining norms schema
- Type 5: transition between maintaining norms and postconventional schema favouring maintaining norms
- Type 6: transition between maintaining norms and postconventional schema favouring postconventional
- Type 7: consolidation in postconventional schema

The seven judgement types follow three 'phenomena' supporting the critical nature of using moral schema to explain moral decision-making (Rest *et al.*, 1999b). Types are developmentally ordered, consolidation facilitates information processing and different schemas guide decision-making differently (pp. 314–317). Individuals in periods of consolidation are better able to access and utilise their moral judgement schema, while those in transition can be 'distracted by several competing schemata' (Derryberry & Thoma, 2005, p. 91). Periods of transition can often lead to difficulty interpreting and acting upon moral situations involving issues of fairness and justice. This can have significant influence in today's classrooms, where ethical issues arise daily (e.g. allocation of resources, discipline and curriculum modifications) and must be dealt with immediately. Teachers in a phase of consolidation have the advantage of being able to make decisions about such issues at a quicker pace and in a more deliberate manner (Thoma *et al.*, 2002).

Methods

Participants

The context chosen for this study involved 53 teacher candidates from a midsize Southeastern university in the USA in their senior year internship semester. The majority of the participants (66%) were majoring in elementary education, with the remaining 37% concentrating on secondary or special education. The mean age of the participants was 21.7 years. Four of the participants were male teacher candidates; 49 were female. The gender imbalance of 8% male is low, although schools in the Southeast tend to rank lowest in overall percent of male teachers, averaging 17.95%. This percentage is even lower (9%) when looking at male teachers at the elementary level (US National Education Association, 2006). Considering the majority of the participants in the sample were elementary majors, the gender imbalance is not alarming but is a limitation to the study. All of the participants were enrolled in a course as a co-requisite for their internship. The course was designed to explore reflective practice and educational leadership and was taught using the same readings and lecture materials across sections. Topics include teaching for social justice, examining issues of equity in teaching and assessing and addressing the needs of diverse student populations. Participants agreeing to be part of the study were administered the Defining Issues Test 2 (DIT2: Rest & Narvaez, 1998) during one of the final two class sessions. In addition, they provided access to their reflective writings throughout the semester. Written consent was provided by participants for their data to be used in the study. The protocol for design and consent was submitted and approved by the university Institutional Review Board.

Design

A case study design was used to explore the moral judgement disposition of each participant as well as trends in the sample as a whole. Yin (2003) describes case study research as ‘an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident’ (p. 13). Several steps suggested by Yin were taken to augment the validity and reliability of the current study. First, establishing theoretical foundations at the beginning of a case study separates its methodology from related strategies, such as grounded theory and ethnography. The theory guiding the research is essential for determining the case under study as well as in defining criteria for interpretation of data once it has been collected. Two theoretical propositions were maintained for this study: dispositions are based in deep cognitive structures (more specifically within moral/ethical judgement); and assessments of disposition should be congruent within individual cases examined. Second, Yin suggests that a means of linking the gathered data to the stated research propositions must be established prior to collection, hence increasing the validity of the findings and conclusion. In this study, data were linked using a method of pattern matching allowing for a comparison

between empirical and theoretical patterns (Campbell, 1975). This method is further explained in a proceeding section on data analysis.

Sources of evidence

Quantitative data. An updated version of the Defining Issues Test was used as a measure of moral/ethical judgement. Adapted from Kohlberg's stages of moral development, the DIT is an objective, multiple-choice test assessing participants' framework for processing and making decisions about ill-structured dilemmas. Supported by over 25 years of research, test-retest reliability and internal consistency has been reported at .75 (Rest *et al.*, 1999a). Used in over 40 countries, content validity of the measurement is moderate to high. Concurrent validity as reported by Rest and his associates has been at moderate levels for prosocial behaviour (.31) and political views (.40–.65). Gender accounts for only 0.5% of the P index.

The DIT contains six dilemmas. Participants are asked to evaluate 12 statements on a scale of one to five according to importance (five being 'great importance') to solving the dilemma. The 12 statements are then ordered from the most to least important. Final scores are calculated as a P score indicating the percent of postconventional reasoning participants are using when making decisions about moral/ethical dilemmas. Research by Rest and associates (1999a) has resulted in a reconceptualisation of moral judgement as a broad-based theory of three schematic structures: the Personal Interest schema (Kohlberg's Stages 2–3); the Maintaining Norms schema (Kohlberg's Stage 4); and the Postconventional schema (Kohlberg's Stages 5–6). For the purpose of this study, a second edition of the DIT, the DIT2, was used. The DIT2 is reported as a more up-to-date, reliable and valid form of its predecessor (Rest & Narvaez, 1998). Although it is shorter (five dilemmas versus six) quality is not sacrificed. Fewer results are discarded and directions are easier to understand. Although it has not been used as extensively as the original DIT, validity has remained strong with a correlation between the two tests reported at .79 (Rest, 1994).

Two different developmental indices were extracted and utilised for this study. First, scores are reported for each of the three schemas giving a general indication of the participants' Postconventional, Maintaining Norms, or Personal Interest schema use. The three schemas were a foundation for a scoring matrix for qualitative data and thus served as a baseline for congruency between the DIT2 and the teacher candidate essays. Next, 'Type Indicator' (signifying consolidation within or transition between schemas) was examined for possible patterns in the incongruence between quantitative and qualitative data. This indicator, explained by Rest *et al.* (1999b), is two-fold, first assigning each participant a predominant schema then describing the 'extent of schema mix' (p. 313) characterised by either consolidation (favouring one schema over the others) or transition (lack of differentiation in preferred schema use). Type was used because of the possibility that incongruence existed as a result of a participant being in a state of transition. As previously described, such a state can lead to uncertainty and confusion when making decisions involving morality since all three schemas may be interacting. Individuals may have

difficulty interpreting moral situations and revert to those in authority for the 'answers' thus portraying incongruence between empirical (observational data) and theoretical (DIT2 data) results.

Qualitative data. Professional judgements were also examined through artefact analysis centred on moral/ethical development. The first was a graded essay assignment in which students responded to the following prompt: 'Describe your moral/ethical responsibilities as an education leader in a democratic society'. The second artefact required participants to analyse a recorded video sample of their teaching in terms of instruction, assessment and classroom management. For example, one participant chose to examine her classroom management. Her reflection began, 'I also noticed that I must improve my personal management plan techniques. The video revealed that the students were out of control during the group activity. I must apply and follow through with rules and procedures to ensure all students are participating and working cooperatively.' Another participant focused on instruction, 'I asked a lot of questions, more than I thought I did. The lecture went very smoothly—I asked questions and they actually raised their hands or called out the answer when I told them to.' Later in the essay he reflected, 'My voice was boring, even monotone...the lecture seemed lethargic and boring even though I asked plenty of questions hoping to engage the students.' The artefacts for each participant were coded according to a list of indicators established from prior research in the moral/ethical domain. These indicators are illustrated in Table 1.

As seen in Table 1, the Personal Interest schema represents a decision maker's primary concern only with his or her own stake in terms of outcomes (Rest *et al.*, 1999a). Problems are perceived as external to the self. As persons move down the vertical column of Table 1, an increase in complexity occurs as represented by the Maintaining Norms and Postconventional categories. For example, at the Postconventional level there is recognition of others in terms of cooperation and a realisation that social norms are situational and must be open to scrutiny. The matrix was created by Johnson (2004) and has been used in research with beginning teachers (Johnson & Reiman, 2007) and mentor teachers (Johnson & Reiman, 2006), where inter-rater reliability for the matrix was reported at .73. Additionally, the matrix has been adapted for use in the field of science education (Dotger, Johnson & Dotger, 2008) and for assessing pre-service teachers (Vare & Evers, 2007). When applied to the previous examples, the first participant described a need for rules to provide equity in student response opportunity that would illustrate judgements made using a Postconventional schema. The second participant, although he was considering the perspective of the student, considered student engagement only as asking and answering questions characteristic of Maintaining Norms.

Data analysis

Qualitative data provided by each participant's writings were coded separately by two researchers knowledgeable about moral judgement theory and without knowledge of the participants' DIT2 scores. Inter-rater reliability between the two

Table 1. Overview of coding matrix for the moral/ethical domain*

Schema	Judgements
Personal Interest	<ul style="list-style-type: none"> • Defines ‘on task’ behaviour as being when learner is actively working on assignment given by instructor. • Sees role as an authority in the classroom/relationship. • Views rules for the purpose of maintaining order. • No mention of commitment to change instruction or discipline. • No mention of need to change focus from teacher to learner. • Views inequity/equity from teacher’s personal perspective only. • No evidence of responsibility to teach all children. • Views of effective classrooms reflect students being quiet and following directions given by teacher. • Strives for learner conformity.
Maintaining Norms	<ul style="list-style-type: none"> • Gives some consideration to learner perspective or internal motivation. • Views fairness as equality (same for all) rather than equity (based on individual needs). • Ideas are based on working within existing school or classroom structure to achieve equity. • Sees laws, rules and norms as applying to everyone. • Considers purpose of laws, rules and norms to provide safety and stability.
Postconventional	<ul style="list-style-type: none"> • Realises curriculum can be viewed from multiple perspectives. • Holds a humanistic-democratic view of learner discipline. • Considers rules as alterable and relative. • Considers purpose of laws, rules and norms to protect individual rights. • Views issues from perspectives of marginalised persons and groups. • Considers the moral/ethical implications of instructional choices. • Takes into account a variety of learners’ needs when planning instruction and assessments. • Plans actions that support equitable access within the classroom, school and/or community.

Note: *Johnson & Reiman, 2007; Vare & Evers, 2007.

researchers using the matrix in Table 1 was .79 using Pearson’s test for correlation. After the observed patterns in judgement were analysed, yielding one of the three modal schema scores as illustrated in Table 1, they were compared to the theoretical predicted patterns (quantitative data) obtained from the DIT2. Analysis for congruence was conducted using a system of pattern matching which includes, in the case of this study, comparing observed patterns with theoretical ones, as illustrated in Figure 1 (Campbell, 1975; Trochim, 1989).

Through such analysis it is assumed that the judgements of the participants are not random but, rather, exist in a systematic form described as a pattern. Pattern matching suggests that operational patterns can be predicted based upon patterns that are theoretical when the constructs are parallel. As seen in Figure 1, the theoretical patterns are described in the top section and are derived from the neo-Kohlbergian work in moral judgement manifested through the DIT2. Described on the opposite end are the operational patterns of moral judgement examined in this

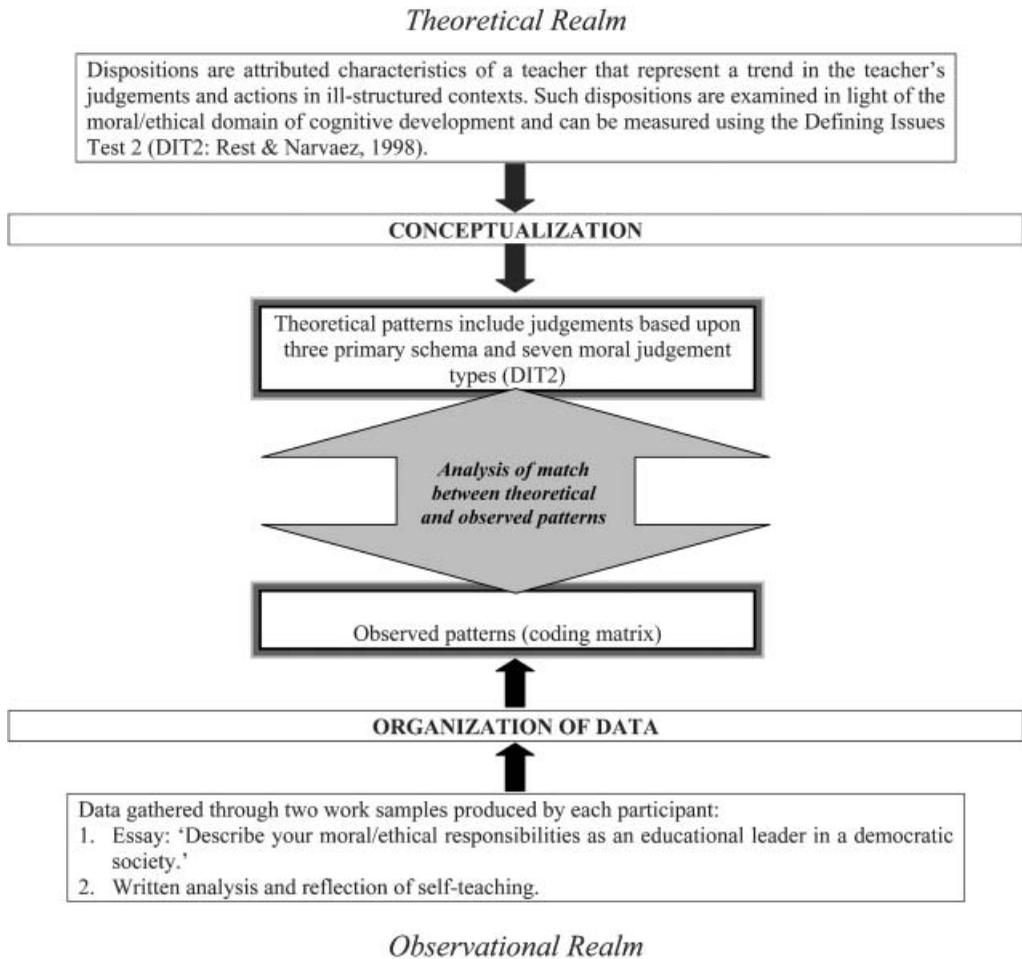


Figure 1. System of pattern matching for the moral domain

study through participant course work assessed with the coding matrix illustrated in Table 1. As signified by the double arrow in the middle of Figure 1, patterns attained are then analysed for degrees of similarity denoted in this study as *congruence* (schema from artefact analysis parallel schema from DIT2) and *incongruence* (disparity in resulting schema). The pattern matching logic greatly increases the internal validity should a match occur (Yin, 2003). Further, construct validity is enhanced through acknowledging the existence of a nomological network linking theoretical and empirical frameworks (Cronbach & Meehl, 1955). As suggested by Davis, the nomological network is used to provide evidence 'that there is an interlocking system of principles which constitutes a theory and established relationships between theoretical constructs and observed measurements' (Davis, 1989, p. 31). It should be noted that where pattern matching enhances research and theoretical validity, especially in quasi-experimental design, it does not eliminate the existence of other plausible theoretical patterns that may have influenced the outcome.

Finally, additional data analysis was conducted on individual cases by charting each participant's DIT2 Type with whether or not congruency existed between the quantitative and qualitative assessments. Frequency of alignment between cases of congruency and consolidation/transition (e.g. incongruent/transition, incongruent/consolidation, congruent/consolidation, congruent/transition) was calculated for each judgement type and examined in hopes of answering the question of whether or not being in a state of consolidation or transition impacted congruency of assessments.

Results

Findings are reported in reference to the two sources of data: DIT2 assessment and main operating schema determined by qualitative analysis. First, overall trends were examined, followed by specific examples of congruence and incongruence between quantitative and qualitative assessment referenced by DIT2 Type. Of the 53 participants, the mean P score on the DIT2 was 37.31, with a standard deviation of 12.36. Using the three primary judgement schemas, the majority of participants showed preference towards Maintaining Norms and Postconventional. In terms of the overall matrix score, the majority of participants scored Postconventional. Specific data are illustrated in Table 2.

As seen in Table 2, noteworthy incongruence existed between the schema results for quantitative and qualitative data for the Maintaining Norms and Postconventional levels. Participant artefacts were scored at a much higher level than the DIT2 results indicated their primary judgement schema. For example, according to the DIT2, only 23 participants were utilising Postconventional judgement as a primary schema, however artefact analysis resulted in 39 participants scoring at the Postconventional level.

Considering that research suggests individuals are more apt to apply their moral judgement schema when experiencing consolidation, transition between schemas may be linked to resulting incongruence (Derryberry & Thoma, 2005, p. 91). This was explored in Table 3. Types 1, 4 and 7 indicate phases of consolidation while Types 2, 3, 5 and 6 are transitional. Data in Table 3 represent the frequency of congruence and incongruence based upon moral judgement type.

As seen in Table 3, phases of transition averaged only 27.8% congruence while those in consolidation averaged 62.7%. This suggests individuals in a phase of consolidation having increased probability of utilising their primary judgement schema when responding to moral dilemmas. Those in transition may have found it

Table 2. Schema distribution for quantitative and qualitative results

	Personal Interest	Maintaining Norms	Postconventional
DIT2 (quantitative)	5	25	23
Artefacts (qualitative)	3	11	39

Table 3. Congruence and incongruence by moral judgement type

	Frequency	Congruence	Incongruence	Congruence (%)
Type 1 (consolidated Personal Interest)	2	1	1	50
Type 2 (transition between Personal Interest and Maintaining Norms; favouring Personal Interest)	3	0	3	0
Type 3 (transition between Personal Interest and Maintaining Norms; favouring Maintaining Norms)	11	4	7	36
Type 4 (consolidated Maintaining Norms)	8	3	5	38
Type 5 (transition between Maintaining Norms and Postconventional; favouring Maintaining Norms)	6	0	6	0
Type 6 (transition between Maintaining Norms and Postconventional; favouring Postconventional)	12	9	3	75
Type 7 (consolidated in Postconventional)	11	11	0	100

difficult to respond to issues of morality while experiencing different and often competing schematic signals. Research has even suggested that individuals in transition look for models outside of the moral domain because of the lack of accessibility of a specific schema (Thoma & Rest, 1999). For example, participants responding to prompts regarding social justice and equity may have utilised an 'alternative interpretive system or systems', such as responsibility or care, since a consolidated schema was not available for processing sociomoral information (p. 331).

While the consolidation/transition model may have some explanatory power as to why incongruence existed between the quantitative and qualitative assessments, factors external to the individual's moral judgement may have had additional influence. Looking at the data in Table 3, it is evident that the degree of consolidation was quite different for those in Type 7 versus Type 4. In addition, the rate of congruence for Type 4 (38%), a phase of consolidation, is only two percentage points higher than Type 3 (36%), a phase of transition. The five instances of incongruence in Type 4 were all a result of a Postconventional rating on the qualitative matrix. Of the seven instances of incongruence in Type 3, six were a result of a Postconventional rating on the qualitative matrix. Type 6 also disproves the idea of transition being the sole reason for incongruence considering it is a phase of transition with 75% congruence. Supported by Table 2, qualitative data are being scored at a higher moral judgement schema than indicated by the DIT2 regardless, at times, of consolidation or transition.

Because a case study methodology was employed, individual cases were examined further for trends in qualitative responses that might help explain the phenomenon of incongruence. Those artefacts scored as Postconventional presented similar, if not

exactly the same phrases. One case of incongruence was a participant identified by the DIT2 as Type 2 (Personal Interest; transitioning to Maintaining Norms) with a qualitative rating of Postconventional. In her description of moral/ethical leadership the participant stated, 'It is my moral and ethical responsibility to treat children as individuals...to adjust to the needs of the students to help them learn best.' The participant explained in a self-analysis the need to adjust teaching methods to meet the needs of her students. These data were quite similar to a participant identified by the DIT2 as Type 7, consolidated in Postconventional, with the same qualitative rating. When reflecting on self as teacher, the participant stated, 'I need to work on planning for individual differences.' She saw her moral responsibility as 'creating equal opportunities for all students [through] differentiating instruction and creating individualized assignments.' Other similarities between artefacts rated Postconventional regardless of DIT2 schema included the use of phrases such as 'treat students equitably, not equally', 'promote diversity', 'accommodate...to ensure all needs are met' and 'fair does not mean equal'. Even those artefacts scoring in the Personal Interest or Maintaining Norms schema contained similar phrases ('A democratic society is one in which equality and respect is provided for the individual.'). It was not until reading further into the artefacts to the point at which participants described specific action steps to operationalise their moral ideals in the classroom that varying schema emerged in some of the writings. Overarching themes in these essays versus others were teaching students 'right versus wrong' or maintaining a controlled environment in which established procedures are followed. For example, one participant stressed the importance of creating a 'caring and equitable learning environment' but went on to describe a discipline policy where 'every child will be disciplined with the same plan'. Another participant described her future classroom: 'I will be my student's employer, they will be my employees and going to school will be their job.' This followed a discussion of developing a democratic classroom where all children can learn. These examples of maintaining a controlled environment in which one discipline plan fits all students and stressing the importance of maintaining a hierarchical classroom structure is characteristic of Maintaining Norms although the artefacts obviously illustrated multiple schemas. Considering the coding matrix only allowed for one of three schemas, these essays were scored Postconventional. An artefact that illustrated Postconventional throughout included this explanation, 'Fair is, simply, giving every child what they need in order for them to be successful. Each student will be learning the same concepts in different ways and on different levels. Each student may have a different management plan set up just for them.' This participant viewed students as individual learners for which both academics and discipline had to be viewed from multiple perspectives.

Discussion

The purpose of this study was first to report on the congruence and incongruence between two types of moral judgement assessments as methods of measuring teacher

candidate disposition. Second, the study investigated the incongruence that occurred between the assessments based upon a model of consolidation and transition, suggesting those in consolidation may be better equipped to access and use a primary schematic structure when faced with issues of social justice (Rest *et al.*, 1999b; Derryberry & Thoma, 2005).

Initial analysis based solely on the three main schemas, Personal Interest, Maintaining Norms and Postconventional, presented evidence that incongruence was occurring with qualitative matrix ratings resulting in a higher schema than assessed by the DIT2. This incongruence was then examined using Type as an indicator thus providing data on each participant's state of consolidation or transition. Results signified participants in a state of consolidation were more likely to show congruence between assessment ratings than those in transition. However, data revealed a trend towards qualitative incongruence being Postconventional over other schemas; where incongruence occurred, qualitative ratings were higher than the participants' DIT2 judgement score. This suggests other factors outside the consolidation/transition model influencing incongruence.

Considering these results, two possibilities of interaction were explored—an explanation based upon King and Kitchener's (2004) model of reflective judgement and the notion of regurgitation versus judgement.

Reflective judgement

It could be suggested that, because the dilemmas presented in the qualitative data (moral/ethical leadership in education; self as teacher) were based on content with which the participants were familiar, the scores were higher than on the DIT2. This is supported by the reflective judgement model that acknowledges the role task and environment play in one's ability to reason about ill-structured problems (King & Kitchener, 2004). Influenced by the work of Fischer, the model suggests that the degree to which individuals receive support during assessment activities influences the outcome of such assessment (Fischer & Pipp, 1984). Logically, those receiving higher levels of support, through scaffolds such as formative feedback, access to information and peer assistance, will more likely score above his or her modal judgement level. Qualitative data used in the current study represented assessments receiving a high level of support. According to course instructors, before submitting the written assignments, all participants received lectures, engaged in discussion with professors and classmates during class sessions and read articles supporting ideals characteristic of Postconventional schema (same readings across course sections). Such support could be a significant factor in assessing participant artefacts at a more advanced schema than was measured by the DIT2. Additionally, data reported by King and Kitchener (1994) suggest that individuals of college age experience difficulty with uncertainty and thus look to 'authorities for firm, unqualified answers' (p. 54). This proposition leads to the second possible reason for incongruence.

Regurgitation versus judgement

Instead of the levels of support providing participants, 'a larger repertoire of responses from which to *choose*' (King & Kitchener, 2004, p. 11), the levels of support may have provided students with a standard set of responses to *regurgitate*. As previously described, college-age students often look towards instructors as more knowledgeable others accepting the information they provide as certainty. This may be especially true for individuals in phases of transition or experiencing significant disequilibrium between their consolidated phase of moral judgement and ideals to which they are being exposed in education courses. Patterns found in the artefacts and described in the results help exemplify this proposition. Regardless of DIT2 score, many essays utilised similar phrases such as 'promoting diversity' or 'fair does not mean equal'. It is obvious that participants were using syntax gathered from similar presentations, readings or suggestions given on directions/guides. Enough support may have been provided to create artefacts reflecting a Postconventional schema regardless of actual phase of moral reasoning, thus portraying incongruence in assessment scores.

Research implications

In summary, two means of assessing teacher disposition were shown to be incongruent with qualitative data being rated higher than quantitative. Because the model of consolidation/transition proved somewhat beneficial in explaining incongruence as well as some artefacts illustrating more than one schema, it is suggested that future rating of qualitative data is guided by a matrix that is defined by seven types versus three schemas. This will give raters the opportunity for increased precision when assessing moral judgement and possibly increase congruence. In addition, using an expanded matrix may provide teacher educators with a better understanding of why individuals are making certain decisions and when shifts in reasoning are likely to occur (Derryberry & Thoma, 2005).

While these are easy recommendations to make based upon the data presented in the study, it is more difficult to suggest a future direction based upon the external factor of providing support. According to the model of reflective judgement, these supports are necessary for optimal functioning. However, it is difficult to adhere to such a proposition when participants may not necessarily be building a repertoire with the support, but simply parroting what they think is expected in times of uncertainty. Several suggestions should be considered. First, for research and assessment purposes qualitative data that are more varied (dilemma responses, article critiques, samples of classroom teaching, etc.) and not part of the participants' course grade should be used. Such assignments may be more likely to activate a students' true moral schema. Support is provided through classroom activities and feedback without the high-stakes outcome of a major graded assignment. Along these lines, King and Kitchener (1994) suggest teacher educators 'show respect for students' assumptions, regardless of the developmental stage(s) they exhibit' (p. 55). They should use the information gained from the artefacts to

design specific, developmentally appropriate interventions to enhance judgement growth. Second, teacher educators should examine how information is being presented to students. If provided through professor perspective only, students will not develop the cognitive structures necessary to make shifts in judgement schema, but simply regurgitate information presented. Dispositions develop over time in deliberate professional education programs focused on assuming new roles and reflecting on actions in relation to self and to others (Reiman & Johnson, 2003). Instead of having students respond to a prompt to access their moral judgement, they should be reflecting on their actual observations of and engagements with diverse learners. For example, students could examine and respond to teaching videos of others or, at best, themselves, for actions and behaviour they deem critical to having a democratic classroom.

Implications for moral education

The current study explored moral judgement as a key construct of teacher disposition. Considering that today's classrooms are growing in diversity, issues regarding equity in instruction, assessment and discipline will be in a teacher's everyday decision-making process, thus they should be a key focus in colleges of education. Although few would argue this point, findings from this study have several implications for moral education. First, teacher educators must recognise the multi-faceted dimensions of moral judgement. Using one of three schemas to assess students may not provide the entire picture needed to make evaluation and/or program decisions. Students whose judgements are characterised by transition may engage in moral decision-making in varied ways, not necessarily based upon schema status but more from being in a state of confusion (Derryberry & Thoma, 2005). Rubrics used to assess the moral judgements of students through qualitative artefacts should reflect this finding and be extended to include intermediate levels versus just the three primary schemas. Second, the findings of the study should impact teacher educator behaviour when engaging in moral education. Allowing students to use their own experiences from which to derive meaning of moral dilemmas may give teacher educators a more realistic picture of student moral judgement versus having students parrot back what they think professors want to hear. It is when this picture of authentic student moral judgement level is clear that the most appropriate program decisions can be made.

References

- Arlin, P. K. (1993) Wisdom and expertise in teaching: an integration of perspectives, *Learning and Individual Differences*, 5(4), 341–349.
- Campbell, D. T. (1975) Degrees of freedom and the case study, *Comparative Political Studies*, 8(2), 178–193.
- Cronbach, L. & Meehl, P. (1955) Construct validity in psychological tests, *Psychological Bulletin*, 52(4), 281–302.

- Davis, J. E. (1989) Construct validity in measurement: a pattern matching approach, *Evaluation and Program Planning*, 12, 31–36.
- Derryberry, W. P. & Thoma, S. J. (2005) Functional differences: comparing moral judgement developmental phases of consolidation and transition, *Journal of Moral Education*, 34(1), 89–106.
- Dewey, J. (1904) The relation of theory to practice in education. In *The third yearbook of the National Society for the Scientific Study of Education. Part I The relation of theory to practice in the education of teachers* (pp. 9–30). Chicago: University of Chicago Press.
- Dotger, S., Johnson, L. E. & Dotger, B. (2008) The applicability of science to decision making: moral and reflective factors, paper presented at the *Annual Meeting of the National Association of Research in Science Teaching*, Maryland, MD, 30 March–2 April.
- Fischer, K. W. & Pipp, S. L. (1984) Processes of cognitive development: optimal level and skill acquisition, in: R. J. Sternberg (Ed.) *Mechanisms of cognitive development* (New York, Freeman).
- Hamachek, D. E. (Ed.) (1968) *Human dynamics in psychology and education* (Boston, Allyn and Bacon).
- Hunt, D. E. (1976) Teachers' adaptation: 'reading' and 'flexing' to students, *Journal of Teacher Education*, 27(3), 268–275.
- Johnson, L. E. (2004) *Congruence between professional judgment and professional action as disposition: a case study of mentors and beginning teachers*. Unpublished doctoral dissertation, North Carolina State University.
- Johnson, L. E. & Reiman, A. J. (2006) Studying the disposition of mentor teachers, in: J. Dangel (Ed.) *Research on teacher induction: teacher education yearbook XIV* (Lanham, MD, Rowman and Littlefield).
- Johnson, L. E. & Reiman, A. J. (2007) Beginning teacher disposition: examining the moral/ethical domain, *Teaching and Teacher Education*, 23(5), 676–687.
- King, P. M. & Kitchener, K. S. (1994) *Developing reflective judgment* (San Francisco, Jossey-Bass).
- King, P. M. & Kitchener, K. S. (2004) Reflective judgment: theory and research on the development of epistemic assumptions through adulthood, *Educational Psychologist*, 39(1), 5–18.
- Narvaez, D. (2002) *Moral judgment and theory*. Unpublished manuscript, University of Malaya, Kuala Lumpur.
- Narvaez, D. & Bock, T. (2002) Moral schemas and tacit judgement of how the Defining Issues Test is supported by cognitive science, *Journal of Moral Education*, 31(3), 297–314.
- Percy, R. L. (1990) The effects of teacher effectiveness training on the attitudes and behaviors of classroom teachers, *Educational Research Quarterly*, 14(1), 15–20.
- Reiman, A. & Johnson, L. E. (2003) Promotion teacher professional judgment, *Journal of Research in Education*, 13(1), 4–14.
- Reiman, A. J. & Thies-Sprinthall, L. (1998) *Mentoring and supervision for teacher development* (New York, Addison Wesley Longman).
- Rest, J. R. (1994) Background: theory and research, in: J. Rest & D. Narvaez (Eds) *Moral development in the professions* (Hillsdale, NJ, Erlbaum).
- Rest, J. R. & Narvaez, D. (1998) *Guide for the DIT-2* (Minneapolis, MN, Center for the Study of Ethical Development).
- Rest, J., Narvaez, D., Bebeau, M. J. & Thoma, S. J. (1999a) *Postconventional moral thinking: a Neo-Kohlbergian approach* (Mahwah, NJ, Lawrence Erlbaum).
- Rest, J., Narvaez, D., Bebeau, M. J. & Thoma, S. J. (1999b) A new-Kohlbergian approach: the DIT and schema theory, *Educational Psychology Review*, 11(4), 291–324.
- Thoma, S. J., Narvaez, D., Endicott, L. & Derryberry, W. P. (2002) Developmental phase indicators and moral information processing, paper presented at the *Annual Meeting of the American Educational Research Association*, Louisiana, 1–5 April.

- Thoma, S. J. & Rest, J. R. (1999) The relationship between moral decision-making and patterns of consolidation and transition in moral judgment development, *Developmental Psychology*, 35(2), 1–16.
- Trochim, W. M. (1989) Outcome pattern matching and program theory, *Evaluation and Program Planning*, 12, 355–366.
- USA National Education Association (2006) *National Teacher Day spotlights key issues facing profession*. Available online at: <http://www.nea.org/newsreleases/2006/nr060502.html> (accessed 4 April 2008).
- Vare, J. & Evers, R. (2007) Pre- and inservice teachers' beliefs and conceptions: equity and social justice implications for teacher education. Paper presented at the *Annual Meeting of the American Educational Research Association*, Illinois, 9–13 April.
- Witty, P. (1947) An analysis of the personality traits of the effective teacher, *Journal of Educational Research*, 40(9), 662–671.
- Yin, R. K. (2003) *Case study research: design and methods* (Thousand Oaks, CA, Sage).

Copyright of *Journal of Moral Education* is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.