

Building Teacher Professional Judgement

Rayanne Shakra

Faculty of Arts and Social Science, Centre for Educational Measurement and Assessment (CEMA), The University of Sydney.

Abstract

The word 'assessment' is frightening to most student teachers since it carries with it many negative connotations. Schools of education around the world have stepped up in working on building confidence into preservice teacher candidates. Assessment and data literacy have now come to be common units of study within higher education. Many universities are still calling for a need to enhance these courses through more focus on psychometrics or statistics but missing from these courses is the essence of assessment and teaching in general, teacher judgement and voice. Building credible, reliable and valid teacher judgement begins within schools of education. This article presents a framework to enhance student teacher's voice within assessment practices. It builds on a Modern Assessment Theory perspective where teacher judgement is a key factor in understanding student learning and presents ways on how this theory of assessment intertwines within reflection and inquiry.

Keywords: *Assessment; Modern Assessment Theory; teacher professional judgement; Preservice teachers; Reflection; Inquiry.*

1. Introduction

There has never been a more demanding time for teachers to utilise their professional judgements to provide accurate predictions of how their students measure in the learning content that is taught. Policymakers worldwide have crafted many methods to ‘measure’ the ‘learning’ that is being undertaken within their countries, and only in some very rare cases have governments sought teacher judgements on this issue. Measuring student learning is not a straightforward task that can be done through testing. Nor can it be decontextualised so that the measures apply across varying districts, states, nations or hemispheres. The idea of measuring student learning through standardised testing creates a predicament where teacher judgements be required to follow the ‘what is considered valuable’ guidelines.

Teacher judgement has, as a consequence of this fractured measurement focus, become distorted and weak. This distortion ‘undermines the ability of teachers to be teachers and of schools, colleges and universities to be educational institutions rather than shops’ (Biesta, 2015, p.83). In this paper, a framework is presented to help schools of education work on elevating teacher professional judgement. To date research has argued for the need to take teacher professional judgement into consideration, but the gap in presenting a conceptual framework of building professional judgement at the beginning of the teaching journey, within schools of education, has not been developed. This paper will present a conceptual framework to build preservice teacher professional judgement founded in theories of assessment, reflection and inquiry.

2. Building Professional Judgement Through Schools of Education

At an age where being capable of interpreting student results has become crucial, schools of education have realized that teacher preparatory courses must not only provide support in content and pedagogical areas. Preservice teachers (PsT’s) are also in need of critically reflecting, inquiring and using their professional judgement to utilize their students’ assessments in constructive and meaningful ways that lead to valid and reliable interpretations (DeLuca, Chavez, & Cao, 2013). Hence, teacher preparatory courses have provided candidates with more opportunities to enhance their own learning in areas of assessment, such courses we now see offered entail assessment literacy, measurement, data literacy through a lens of reflection and inquiry. Even though these courses do much to enhance PsT’s professional judgements, nevertheless, still prevalent within the literature is that preservice teachers lack confidence in their own judgements (Mertler, 2004; Volante & Fazio, 2007). This is a problematic stance and one that needs dire attention on behalf of teacher educators and schools of education. The problem is that when these candidates are sent off to schools without both the proper levels of confidence in their own learning and the

ability to voice their judgements and interpretations, their own competence becomes frail (DeLuca, Chavez, & Cao, 2013).

Reflection (Schön, 1984) and inquiry (Dewey, 1910) have been introduced into teacher preparatory programs to help PsT's enhance their own critical thinking skills and overcome any biases towards their own teaching pedagogies or understandings. In most of these courses the link to student achievement data is made, hence courses on assessment literacy have also been mandated. However, the link between reflection, inquiry and assessment has not been looked at in terms of explicitly enhancing PsT judgements and voice. Moreover, most of the student assessment data PsT's use are tangible tests or tasks, not informal assessments such as classroom discussions.

Modern Assessment Theory (MAT) presents a way of looking at assessments that traverses tangible data. It is a new way of looking at assessment that can help to empower PsT's and teacher educators alike. The following framework shows how each one of the three spaces of reflection, inquiry and assessment can all build a foundation in teacher judgement, beginning within schools of education and subsequently having an effect in classrooms once these candidates become teachers.

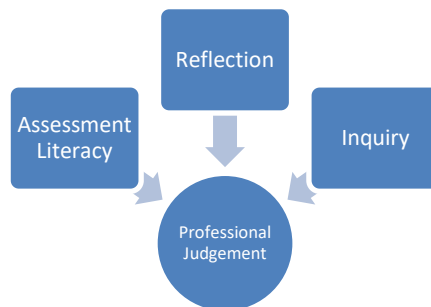


Figure 1. Framework for enhancing preservice teachers professional judgements of student achievement data.

3. Modern Assessment Theory

MAT defines assessment as involving ‘professional judgement based upon an image formed by the collection of information about student performance’ (Tognolini & Stanley, 2011 p.25). The definition brings together teachers’ professional judgement, information or evidence-based decisions, and student achievement data. It calls for the use of both qualitative and quantitative data to form an accurate measurement of ‘how much’ content a student has and whether it is suffice enough for the student to move on to more challenging content or whether some form of intervention needs to be put in place to help the student understand the current content. It calls on educators to collect and use a ‘wide variety of evidence-eliciting techniques’ (Popham, 2009, p.5) to understand their students’. The

definition allows educators, specifically teachers, to form a mental image of the student and to map this image accurately along the learning progressions.

3.1. The Image

Governments all around the world are now using standardised tests throughout both primary and secondary school years in order to track the progress of a certain cohort along a defined learning progression or continuum. In doing so, stakeholders are capable of tracking learners throughout their learning journey to understand ‘what they know’. Within a school setting, teachers form mental images of their students and track that image to a point on the learning continuum. As teachers provide students with ongoing content knowledge, they need to find valid and reliable ways of assessing their students’ learning. PsT’s do not have enough time with the students to track each of them on a learning trajectory and analyse where each student is. Thus, PsT’s must use their intuition through mainly informal methods of assessment and learn to analyse these mentally or within short timeframes to be able to adapt their teaching methods to suit their students learning needs.

3.2. A Continuum of Collecting Student Assessments

The methods of assessment in Modern Assessment Theory can be traced along a continuum from less formal to more informal as in Figure 2.

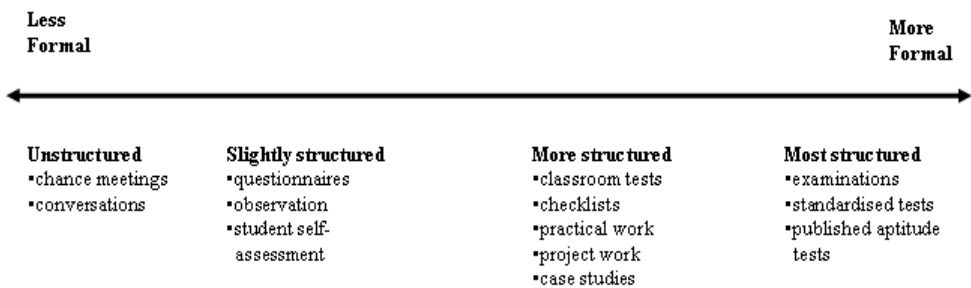


Figure 2. Methods for collecting information on student performance in MAT. Source:Tognolini & Davidson (2012).

At the ‘more formal’ end the assessments follow testing procedures that are highly structured and are tightly controlled and standardized produced by professional assessment experts, PsT’s are not expected to produce these forms of tests although they should be able to understand their structures and their results. Schools of education must provide student teachers with opportunities to understand and interrogate these tests, especially if they are placed in a classroom that has undergone standardized testing.

Formative assessment has been argued to be a crucial facilitator of student outcomes (Black & Wiliam, 1998). Unstructured or slightly structured assessments are also methods for

collecting information about students. They can provide information that is just as pertinent and relevant about a student as the more highly structured means of collecting information.

3.3. Building Teacher's Professional Judgement Through MAT

To be able to know where to locate a student appropriately on a continuum, teachers need to reference the students' performance to a predetermined standard. This involves, teachers combining relevant student data and with their professional judgements to form an accurate image of what a student can or cannot achieve and then comparing this image to predetermined standards of performance.

This form of intuitive 'measurement' of student 'image' must be made justifiable. These judgements of students' outcomes must also be accurate in order to support various instructional and professional decisions (Artelt & Rausch, 2014; Shavelson & Stern, 1981). For these judgements to be accurate teacher's need to build confidence in their ability to evaluate and measure student's performance (Tognolini & Shakra, 2021). Building this confidence takes time and begins within schools of education. PsT's need to be supported with assessment and evidence-driven decision making courses for them to build the confidence to have a 'voice' in assessing their students through judgements.

PsT's lack confidence in their own professional judgements, specifically in the area of assessments (Maclellan, 2004; Mertler, 2004; Volante & Fazio, 2007). This is in part due to the limited assessment education (DeLuca, Klinger, Searle, & Shulha, 2010). Professional judgement has been a focus during the assessment phase of teaching and learning (Bruniges, 2007) and so the focus on assessment literacy in teacher preparatory courses is key for future teachers to start building confidence in their judgements. PsT's confidence may have a 'ripple' effect into the other two crucial factors that underpin education, curriculum and pedagogy.

Schools of education need to start focusing on building PsT voice and confidence in their own professional judgements. They need to structure courses and frameworks that centralise around developing credible, valid and reliable teacher judgement. This may be achieved by linking assessment literacy, reflection and inquiry in both theoretical and practical courses. The framework in figure 1 may be considered as a starting point.

4. The Role of Reflection in Building Professional Judgement

Teacher preparatory courses must be capable of understanding the beliefs and conceptions PsT's hold, especially when approaching teacher education through a cognitive/constructivist approach to learning. These courses should be set up in ways that allow the lecturers or course designers to track how teacher educators develop and change as they progress through their training (Hill, Cowie, Gilmore & Smith, 2010). Reflection in this case can be a powerful tool.

Problems which arise in the classroom cannot be easily solved (Reiman, 1999). Reflection as Dewey (1910) explains allows teachers and student teachers to make meaning of a situation by putting facts and beliefs pertaining to a certain problem and rigorously analysing these pieces of evidence to come to a solution. Similarly, Schön (1984) identifies reflection as a process that is driven by a ‘problematic situation’ that leads to an interrogation of a practitioners existing knowledge (p.63). The definitions are not very far from the theoretical underpinning of MAT where teachers must make sense of the information they have through assessments and build an image of where the students are in their learning, if the image does not fit into the attributing standard, then a problem is presented and reflection to judge on why this has happened needs to take place intuitively. If teachers are not prepared for this sort of intuitive analysis, they will not be confident in voicing their judgements, and this may cause a threat to student learning.

Teachers need to possess reflection as one of their characteristics (Darling-Hammond, 1998). Additionally, reflection is considered as a key element of a teacher’s professional judgement. Therefore, it should be adopted by schools of education as a goal for their student teachers to purposefully analyse their professional actions. As the field of education moves towards a standards referenced system, so too has the model of evaluation moved from an input to an output model. Teacher preparatory courses are to demonstrate that their candidates have the ability to exercise their professional judgements to ‘critically analyse student work in terms of how it is meeting standards’ (Ward & McCotter, 2004, p.244) and henceforth showcase their capability to make a positive impact on student learning (Ward & McCotter, 2004; Ridley, Rowe, Borkowski, & Hikida, 2022).

At the heart of reflection lies the aim of creating a rigorous emphasis on student learning mindset. PsT’s who are aware of basic assessment literacy skills will have a valid and reliable basis on which to reflect. MAT posits that PsT’s reflect constantly on the ‘image’ that they have built by continuously and consistently adjusting the location of their students on the learning progression through the continuum of assessments that they use. This will allow teacher preparatory programs to understand how PsT’s situate their thinking within the practicum contexts, still a missing piece of reflection frameworks to date (Ward & McCotter, 2004).

5. The Role of Inquiry in Building Professional Teacher Judgement

MAT places ‘collecting information’ at the heart of its definition. Information is formed when teachers collect and assign meaning to any formal or informal piece of student assessment data. The data may be quantitative or qualitative. The build up of information from student data leads to evidence and the use of this evidence to plan actionable positive change in student learning is deemed data literacy (Mandinach & Gummer, 2013). It has been found

that teachers lack the competency and skills for data literacy, because these courses were not offered correctly to them by their faculties (Mandinach & Gummer, 2013).

The aim of inquiry for Dewey (1910) was to allow teachers to use their judgements to think about how they can enhance their students learning opportunities. Dewey (1910) believed that PsT's should be adequately supported in enacting these transformative pedagogies.

Inquiry can build the data literacy skills of PsT's. In doing so it can lead to more confidence in their own judgements. Building an inquiry habit of mind for PsT's by asking them to use the data that they have, turn it into information to build images of their students learning and understand where they are on the learning progression, where they need to be and to formulate an action plan of how to get them there. Inquiry does not occur in isolation. PsT's need to voice their concerns to a knowledgeable other. In doing so, they build their professional judgements.

Schools of education have come to recognise the foundational role that inquiry plays in PsT preparation and have included inquiry courses, however these courses are at best a semester long. This time restriction, while understandable in a university setting, will not suffice to disseminate an inquiry mindset (Lammert, 2020). Inquiry should be teamed up within assessment and data literacy courses from the beginning of a PsT's journey, by allowing the student teachers to constantly collect data, reflect on their students learning and collaborate with peers, lecturers and supervising teachers.

6. Conclusion

As educational policies worldwide move towards performance or standards referenced systems where student outcomes only have meaning when teachers ensure that the curriculum content, learning outcomes and the assessments they develop for their students are aligned. Teacher's professional judgement is a central contributing factor within these systems since they are the ones who can accurately align their students' work to the standards (Bennett, Tognolini, Pickering, 2012). Insights into how student teachers' value and conceptualise assessment learning experiences will inevitably provide more foundational evidence for teacher preparatory courses.

References

- Artelt, C., & Rausch, T. (2014). Accuracy of teacher judgments: when and for what reasons?. In *Teachers' professional development* (pp. 27-43). SensePublishers.
- Bennett, J., Tognolini, J., & Pickering, S. (2012). Establishing and applying performance standards for curriculum-based examinations. *Assessment in Education: Principles, Policy & Practice*, 19(3), 321-339.

- Biesta, G. (2015). What is education for? On good education, teacher judgement, and educational professionalism. *European Journal of education*, 50(1), 75-87.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: principles, policy & practice*, 5(1), 7-74.
- Bruniges, M. (2007). Teacher professional judgement in teaching and learning decisions. In *Learning and teaching for the twenty-first century* (pp. 233-254). Springer, Dordrecht.
- DeLuca, C., Klinger, D. A., Searle, M., & Shulha, L. M. (2010). Developing a curriculum for assessment education. *Assessment Matters*, 2, 20-42.
- DeLuca, C., Chavez, T., & Cao, C. (2013). Establishing a foundation for valid teacher judgement on student learning: The role of pre-service assessment education. *Assessment in Education: Principles, Policy & Practice*, 20(1), 107-126.
- Dewey, J. (1910). *How we think*. D.C. Heath & Co. <https://doi.org/10.1037/10903-000>
- Hill, M., Cowie, B., Gilmore, A., & Smith, L. F. (2010). Preparing assessment-capable teachers: What should preservice teachers know and be able to do?. *Assessment Matters*, 2, 43-64.
- Lammert, C. (2020). Becoming inquirers: A review of research on inquiry methods in literacy preservice teacher preparation. *Literacy Research and Instruction*, 59(3), 191-217.
- MacLellan, E.(2004). Initial knowledge states about assessment: Novice teachers' conceptualisations. *Teaching and Teacher Education*, 20(5), 523-535.
- Mandinach, E. B., & Gummer, E. S. (2013). A systemic view of implementing data literacy in educator preparation. *Educational Researcher*, 42(1), 30-37.
- Mertler, C. A. (2004). Secondary teachers' assessment literacy: Does classroom experience make a difference?. *American secondary education*, 49-64.
- Popham. (2009). Assessment Literacy for Teachers: Faddish or Fundamental? *Theory into Practice*, 48(1), 4–11. <https://doi.org/10.1080/00405840802577536>
- Reiman, A. J. (1999). The evolution of the social roletaking and guided reflection framework in teacher education: Recent theory and quantitative synthesis of research. *Teaching and teacher education*, 15(6), 597-612.
- Ridley, J., Rowe, L. W., Borkowski, M., & Hikida, M. (2022). From reflection to analysis: Languaging literacy teaching and learning. *Teaching and Teacher Education*, 112, 103634.
- Schön, D. A. (1984). *The reflective practitioner: How professionals think in action* (Vol. 5126). Basic books.
- Shavelson, R. J., & Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, decisions, and behavior. *Review of educational research*, 51(4), 455-498.
- Tognolini, J., & Davidson, M. (2012). Assessment, standards-referencing and standard setting. In *Self-directed learning oriented assessments in the Asia-Pacific* (pp. 23-41). Springer, Dordrecht.
- Tognolini, J., & Shakra, R. (2021). Give teachers a stronger voice in assessment. *Independent Education*, 51(1), 16-18.
- Tognolini, J., & Stanley, G. (2011). A standards perspective on the relationship between formative and summative assessment. *East Asia: British Council*.

- Volante, L., & Fazio, X. (2007). Exploring Teacher Candidates' Assessment Literacy: Implications for Education Reform and Professional Development. *Canadian Journal of Education*, 30(3), 749-770.
- Ward, J. R., & McCotter, S. S. (2004). Reflection as a visible outcome for preservice teachers. *Teaching and teacher education*, 20(3), 243-257.