

When Students Teach: Performance Based Assessment

Sylvia McLellan, M.A.

1. Abstract:

This article outlines the development and implementation of a set of performance based assessment (PBA) tools by an early childhood teacher educator in British Columbia. The importance of practicum in early childhood teacher education is examined as well as some of the difficulties of assessment in practicums. The process of developing and implementing this particular set of PBAs is explored and discussed. The implementation highlights issues on the use of PBAs in higher education in general. PBAs allow authentic assessment that promotes learning outcomes in several different domains. Their application across the educational sector is encouraged by teacher educators in the literature.

Key Words:

teacher education; student teaching; performance based assessment; early childhood education

2. Introduction

Many college programs require students to demonstrate learned skills. Instructors typically observe in a real or simulated setting, and document the students' achievement with a Performance-Based Assessment tool (PBA) (Fenwick & Parsons, 2000). This focused observation during an activity allows the instructor to notice personal challenges and the unique work style of the student, providing "a significant context for understanding and interpreting the competence of each learner" (p. 184). For skills in the psychomotor domain, checklists, rating guides and rubrics are clearly appropriate. Instructors should not, however, overlook the value of PBAs for assessing other types of student learning outcomes. They are valuable to assess the performance of complex tasks including the cognitive and affective domains, as well as the demonstration of procedural knowledge. In Early Childhood Teacher Education programs, these types of learning outcomes are generally assessed through the student teaching practicum. While pivotal to student learning, practicum remains one of the biggest challenges to early childhood teacher educators (Watt, 1998). This article is a personal reflection of the development and implementation of a set of PBAs by an early childhood teacher educator in British Columbia.

The Early Childhood Student Teaching Practicum Success in any Early Childhood Education (ECE) program is integrally connected to success in practicums (Cottons, 2004). Practicums provides an opportunity for students to participate as teachers and demonstrate the application of theory to practice. For some, it is their first time in an actual childcare setting. In British Columbia, each approved training institution is required to include 425 hours of practicum in a program that leads to a "Basic" certificate in ECE. (Linking Competencies, n.d.) This constitutes nearly half of the total number of hours of instruction required (47%). This, in itself is an acknowledgement of

the importance of practicums in teacher education. In research, “students across all disciplines typically rank the practicum/clinical component as the most valuable part of their professional education.” (Ralph et al, 2007, p.5). Assessment in ECE practicum is shared between the college supervisor and the co-operating educator in the center (also called: “sponsor educator”). Some programs include an aspect of student self-assessment. Many programs use a success dichotomy (pass/fail) for the practicum courses only, some require a letter grade for every course, including the practicum. Assignments include written documents (portfolios, journal entries, lesson plans, anecdotal records etc) as well as the performance of many different daily activities. Several areas prove difficult for assessment. The first area is assessing learning outcomes in the affective domain. These would include things like appreciating cultural diversity, demonstrating safety consciousness and valuing respectful interpersonal communication. These are difficult to assess objectively, but can be evaluated through a students’ ability to reflect on his or her own practice. Researchers Baum and King (2006) assert that ECE teacher candidates can learn to become self-reflective practitioners. The researchers found that initially, student teachers focused on making their own daily work more manageable and enjoyable. With guidance, they were able to examine how their personal characteristics influenced the decisions they made regarding the teaching and learning process. Through discussion in an environment of emotional and intellectual safety, students developed beliefs and values in a much more professional context. However, Baum and King (2006) conclude that assessing these behavioural and attitudinal changes is exceedingly difficult. They provide a list of guiding questions to inform the assessment process, but offer no solutions. The second area of difficulty involves the assessment of procedural knowledge. ECE student teachers are regularly called upon to demonstrate procedures over time (engage children in a meaningful art experience) or amongst children (promote social responsibility between peers). With this type of learning outcome, Riley and Roach (2006) found it more productive to ask questions regarding how teachers learn and grow rather than to simply focus on what teachers need to know. In their model of effective teacher training, they focus on finding the knowledge the teachers are already using and making it the basis of further learning. Observers make objective anecdotal records of teacher behaviours and then shape and generalize practices through interaction. They emphasize formative assessment as a step towards self-assessment. They make an initial attempt at defining a discrete set of procedural skills that can be learned, practiced and perfected. A final area of difficulty includes the assessment of complex tasks that integrate knowledge and skills from several learning domains. Sometimes we refer to these tasks as the “Art of Teaching,” or the “being” as opposed to the “doing.” How do we assess a student teacher’s ability to be “present but unavailable” at naptime? What form of assessment is meaningful to a teacher engaged in free play supervision? As we approach these issues, it is essential to recognize the contamination of our own assumptions. As teacher educators, we assume that observing good practice shows that a student is translating theory into practice. We assume that a student who responds to our questions in a journal is engaging in meaningful reflection. We assume that students come to seminars eager to explore the theory-practice relationship and engage in self-reflection. Rudick (1997) asserts that student experience shows otherwise. This leads to inherent difficulties in assessing

those complex tasks mentioned above. She suggests making observational goals explicit and sharing them with students. She promotes the use of journals to develop the process of thinking, and the inclusion of students in preparing for a shared and meaningful dialogue in seminars. Each of these focal points can help in developing authentic assessment tools for the complex tasks of ECE student teaching practicum.

The Preschool Teacher Observation Scale During the ten years that I taught practicum and other ECE courses at a college in British Columbia, I encountered all of these difficulties. In our program, a student who failed a practicum had one other opportunity to try again in a different placement center but if students were not successful, they were counseled out of the program. The stakes were high in practicums. I was also required to give a letter grade for the practicum course. My first experiences with the students revealed that their focus was almost entirely on doing what was necessary to pass the course. Rudick (1997) also found that, instead of emphasizing the process of becoming excellent teachers, students focused on “the paper work, the assignments, and appearing busy when the supervisor [was] present. Students [seemed] to interpret busy as physically moving about and appearing active so the supervisor [would] see the student working hard.” (p. 174) I struggled with providing authentic assessments to enhance the students’ learning while downplaying that kind of “busy work.” My ultimate response to these obstacles was to develop and use the “Preschool Teacher Observation Scale” (PTOS). The PTOS is a set of performance based assessment tools that I used to document student achievement during my observations. Depending on the goals set mutually with the student, I would use a checklist for language, music or movement activities (group time), a rating scale for art activities or a time sampling instrument for the supervision of free play. The tools were very well received by the students and sponsor educators, and provided an excellent communication format for our conferences. They were formative (used during the learning process and not tied into any letter grades), and they were available to students and their sponsor educators to use at other times as well. To my knowledge, very few sponsor educators actually used them because of time constraints. A checklist is not difficult to design. Figure 1 shows the beginning of the checklist I developed for the observation of group time. Together with a group of students, I listed the criteria for success in the activity. Beside each one, I put a box to check YES or NO. In the case of procedural knowledge, it may be important to list the steps in sequence. For our purposes, it was not. Therefore, I put the disclaimer at the top stating that elements could be observed in any order. With observation it became apparent that sometimes, certain behaviour management skills were not necessary. In that case, it was appropriate for the student teacher NOT to demonstrate that skill. For that reason, I added the extra column of boxes “not necessary.”

Checklist of Effective Group Management Strategies			
Student Name: _____		Date: _____	
# of Children present _____		Observer _____	
<i>Directions: Observe student leading a group time activity with a group of young children. Please indicate in the boxes provided below if the skill was performed. Check on all skills from 1 – 16. Check YES if student performed the skills, NO if the student did not perform the skill when it would have been appropriate to do so and NOT NECESSARY if no opportunity to perform that skill was present. Skills may be performed in any order.</i>			
	Yes	No	Not Necessary
1. presents strong, active opening activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. scans entire group visually	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. speaks clearly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. speaks with appropriate volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. varies volume, voice tone etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. gives supportive cues *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. keeps attention on group **	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. varies active and quiet activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. asks questions to stimulate learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. shows excitement, enthusiasm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* eg. "sit down on tapes, eyes to the front" etc ** limited glancing at cue cards is allowed			
...and so on, add other features as the team decides appropriate			

Comments:

Observer's name (printed) and signature

Student's signature

Figure 1: Checklist of Effective Group Management Strategies

During the demonstration of the skill, I observed and checked off boxes as appropriate, adding notes of clarification when needed. Afterwards, I summarized the observation in writing and used the completed form in discussion with the student and the sponsor educator. The completed form served several purposes: It clarified for the sponsor educator the shared expectations the student and I had developed. It allowed

the student to represent him or herself with concrete examples. It guided our conference in a positive direction, yet provided an objective means to note any serious lack of skill. Of course, it need not have dominated the discussion if other things were important, but it was there to support our goals if we wanted it. At the end, a copy of the form was given to the student to continue the learning process. It was not graded and did not form a part of the summative assessment for the course.

Rating Scale of Meaningful Art Experiences with Children				
Student Name: _____		Date: _____		
# of Children present _____		Observer _____		
<i>Directions: Observe student leading an art experience with a group of young children. Ideally the student has designed the activity him or herself. Please indicate the degree to which the student performs the objective by circling the appropriate category on the scale. Check on all objectives from 1 – 11. Objectives may be performed in any order.</i>				
*encourages fine motor activity (cutting, grasping, controlling small objects)	Never	Occasionally	Frequently	Always
*allows child to explore material in his own fashion and in his own time	Never	Occasionally	Frequently	Always
* finds opportunities to build social bridges with child and between peers	Never	Occasionally	Frequently	Always
*promotes sensory experience	Never	Occasionally	Frequently	Always
* provides sufficient space for each participant	Never	Occasionally	Frequently	Always
* modifies presentation as appropriate to allow full participation by all children	Never	Occasionally	Frequently	Always
* and so on as decided...				
.....				
Comments: _____				

Students signature		Observers signature		

Figure 2: Rating Scale of Meaningful Art Experiences with Children

Art experiences were not as straightforward to assess as group times. They included group management skills as well as one-on-one interaction. They also provided for

children's learning outcomes from social and emotional domains as well as psychomotor skills. For this reason, I chose the rating guide format. It is more subjective than a checklist but allows greater flexibility for assessment. Figure 2 shows the beginning of the Rating Scale for Art Experiences. Once again, I set the parameters with input from the students.

It should be clear that this is not an instrument designed to assess the art activity itself. Rather, it is designed to assess the *process* of the *student teacher engaging with the children during the art activity*. Within our field, this is more meaningful for enhancing the learning of student teachers. The rating scale form is completed during observation and used in conferencing the same as the checklist.

Supervising free play is by far the most complex skill performed by a student teacher. Eraut (2002) describes very accurately these types of 'hot-action' situations, where teachers must handle competing demands for their attention. In an extended day setting, free play supervision may occupy the majority of a teacher's productive time with children. During free play supervision, a teacher

- will circulate and scan to monitor safety concerns and social interactions.
- may or may not decide to intervene (along a scale of varying degrees) in problem areas.
- may join children in activities or remain apart and observe.
- may decide to modify the environment to improve opportunities for children's learning outcomes.

This complex teaching skill is typically assessed with anecdotal records, either student generated or observer generated. I wanted something less subjective and more goal oriented, so I developed a time sampling instrument to use in the observation of free play supervision. It is shown here in figure 3.

possible score in this row is in the first column. Balbir: I take it “this row” mean the row that has been added, but then what is in the first column? This is vague, and I can’t fix it with what I have. (Adding this row represented a reflection of reality - not good practice.) After the observation, I summarized the results and used the completed form in conference. In conferences with students? Students were always very interested to see the results of this observation, perhaps because it is so difficult to engage in self-reflection while multi-tasking. Sometimes we disagreed on the labeling of a particular incident, but since there was no expectation of a right or wrong notation, our disagreements simply led to collegial discussions on style and subjectivity.

The use of these performance based assessment tools was helpful for every student, but it was particularly helpful for two different kinds of students. When a student was in jeopardy of failing a practicum, objectivity became more important. During those very difficult observations, having a form to use helped me remain objective and also provided evidence for whatever decision was made. On the other hand, when a student exhibited high levels of competence in teaching skills it was often hard to give specific feedback. The method of supervision that I used, called Contextual Supervision, helped structure those conferences (Watt, 1998). However, it was the performance based assessment tools discussed here which provided the specific examples that optimized student learning.

There has been limited research on the use of PBAs in early childhood teacher education. Adams and Wolf (2008) developed and used PBAs as a form of summative assessment in special education teacher training. Their experiences mirror my own in the way the assessments have been well received by the ECE community. However, their work differs in several significant ways. First of all, they include ten different summative assessments that students need to perform successfully in order to pass the course. In my experience, this leads to the “busy work” that has been an anathema in our field (Lombardi, 2008; Rudick, 1997). Secondly, they rely heavily on portfolios, having devised rubrics to assess various written work such as lesson plans and written reflections. I used other forms of assessments for written work such as lesson plans. My goal in using PBAs was to capture *the essence of the implementation of the lesson plans*. In practice, portfolios meet with mixed reviews as to their meaningfulness (see Lombardi, 2008 and Fenwick & Parsons, 2000 for example). Finally, their development of the rubric does not follow guidelines for best practice in student assessment. Many of their descriptions are too general to be observable. Using terms such as “skillfully implements” and “creates environment” are not specific enough to be a true PBA. Furthermore, although they start with four categories in their rubric, they drop the lowest one since no teacher candidates ever scored at that level after two years of collecting data. For the three categories that remain, they state that the highest level is rarely achieved during student teaching practicum. Upon examination, it becomes apparent that this is actually a “pass/fail” dichotomy, rather than 3 levels of achievement. All of the descriptors in the lowest level indicate what should not be present. However, even with these difficulties in the method, their achievements are worth noting, being the first documentation of the use of PBAs in early childhood teacher education.

Issues in Implementation A number of issues in the implementation of these PBAs have already been mentioned. They [I am not sure what they refers to. If it refers to “A

number” that does not make sense, given the rest of the sentence] highlight the use of PBAs in higher education in general. For instance, PBAs document student achievement in practical situations; therefore, they can be helpful to screen out students who are not suited to the professional field. This is especially important when students have a high GPA but cannot apply their knowledge to real life situations. Arthur Wise (2000) documented several state programs of teacher education that were already using various forms of PBAs well. He situated the use of PBAs within an overall planned system of accountability. The need for this has been noted in the ECE field. Darcelle Cottons (2004) states that “A higher percentage of practicum students are coming to the practicum less prepared and less invested in the work” (p.16). She attributes this to government funding cutbacks and the pressure of cost-effectiveness on colleges. PBAs that have been developed together with the student are perhaps most useful to measure progress (or lack of) because they promote ownership of the learning and increase students’ sense of responsibility (Fenwick & Parsons, 2000). This self-evaluation can be more productive than any teacher’s judgment. Secondly, there is a need to document the achievement of what has been called teaching dispositions (Howard, 2007). A student may have knowledge and skills but may not be disposed to use them in practice. This is tied to the previous argument regarding a student with a high GPA (who, in this case, *will not* apply his or her knowledge to real life situations.) In teacher education, dispositions generally either fall in the affective learning domain or involve multi-domain skills. In the same way that simply learning how to read does not make one a *reader*, learning how to teach does not necessarily make one a *teacher*. A *teacher* is one who has the knowledge and skills and uses them effectively. In ECE research, Saracho & Spodek (2007) found that the way students are taught to teach can affect their teaching dispositions. They analyzed forty different studies that compared the quality of teacher preparation with quality outcome measures such as positive initiations towards children, providing creative activities and responsiveness to child needs. High quality outcomes were all indicators of teachers’ positive attitudes, or dispositions. These are observable, so are best documented with PBAs.

Finally, there is a growing understanding of the value of formative assessments in higher education (William, 2006). Formative assessments occur during the learning process for the purpose of promoting students’ learning and behavioural change. They are often not included in letter grades. William (2006) discusses several different uses of formative assessment, noting that excellent teachers will make adjustments to their teaching based on the outcome of formative assessments: “At this point [after administering a formative assessment], the teacher has created a *moment of contingency* – a point in the instructional sequence where the instruction can change direction in light of evidence about the students’ achievement, thus allowing her to adapt the instruction to better meet their learning needs” (p. 285). In ECE student teaching practicums, this can be promoted by allowing students to choose alternate assignments for the summative assessment. For example, my students were graded on their lesson plans for art experiences. However, it was their choice to use either the lesson plans, which were observed in action, or other ones, which had not been observed. During the post observation conference, I directed student thinking towards evaluation of their own role as a teacher. We discussed the amount of effort they had put into planning the activity as well as their own feelings of confidence towards the tasks. In doing so, I

hoped to develop their self-reflection skills (Baum & King, 2006), thereby promoting learning and behavioural change.

For Further Research The extended application of PBAs to higher education holds other possibilities as well. Research could explore what students might be expected to gain from experimenting with and studying their own practice. Eraut (2003) elaborates the term 'competence' to denote a 'moving target'. He describes how emotions, experiences and memories continually interact within a student's mind, to shape perceptions, expectations and reactions. He asserts the need for a set of progression charts that will embrace the element of continuity of learning. Could PBAs be used in this way? Rubrics describe a continuity of learning. Any completed assessment form could be chosen by students to denote milestones in the progression of their learning. They could be a meaningful addition to a portfolio for example. This also supports the use of PBAs in formative assessment, as described earlier. Students could gain an understanding of their own learning progression with this application. Catherine Scott-Little and her colleagues (2006) found it essential to take into account the effect of beliefs and attitudes when assessing performance over time. They assert that teachers' beliefs and attitudes are important predictors of their behaviours and should be assessed as a separate entity within the whole. "With an emphasis on observable practices and demonstrated knowledge, it is possible that an important element in teachers' abilities to provide high quality early care and education may have been overlooked or deemphasized..." (p.388). Compound this with teachers' candid admissions that contextual constraints often lead to inconsistencies between their beliefs and their practices (Ertmer, 2005). Research could investigate the ability of students to represent their own beliefs. Could PBAs be used as tools to assist students in exploring a possible incongruence between their beliefs and their actions, or between their actions and the standards of the field? A rating scale filled out beforehand by a student considering his or her "ideal self" could be compared with an identical observational assessment. This could produce a truly reflective journal entry. It also has a direct impact on teaching dispositions, as discussed earlier. Further research could also examine the possibility of using media to enhance these observations. Lee and Wu (2006) discuss the implications of having students videotape their own teaching experiences and then having others observe and comment. The development of the skill of self-reflection was aided by the contents of the video. Students did not have to rely on recall alone. Multiple observers could comment on the same teaching situation (which would be a way of determining test reliability for the PTOS) and peers could learn from each other. One major issue that was not addressed by Lee and Wu (2006), however, is ethical. The videotapes in their study were posted online and clearly included students in them. How do we videotape ECE student teachers without including the children they work with? There are clear ethical implications for posting videotapes of children online.

3. Conclusion

Several limitations to this application of the PTOS should be noted. First of all, there was no attempt to establish inter-rater reliability since there was only one observer. Greater significance could be attached to the observations, if the tools were validated with a measure of inter-rater reliability. Second, the work could be interpreted as putting

an over-emphasis on the objectivity of observations. It has been clearly established in research that it is the nature of relationships in practicum supervision that promote changed behaviour (Ralph et al, 2007). In practice, I balanced the use of PBAs with a structure for supervision that is very relationship oriented, Contextual Supervision (Watt, 1998).

In this authors' experience, PBAs allowed a more authentic assessment of student learning outcomes in early childhood teacher education. They were useful to document proficiency in applying knowledge to authentic situations with children. They incorporated the skills of teaching dispositions – both those in the affective domain and those that involved multi-domain learning objectives. They provided a means to approach the formative assessment of procedural knowledge, performed both over time and between children. And they provided a format to address the performance of complex tasks – a way to capture the essence of the art of teaching. They must be balanced with other methods of supervision to incorporate the subjective elements of relationship. Overall, performance based assessment tools provide a promising approach to the assessment of student learning in higher education.

Author's contact Information

Sylvia McLellan, M.A.
Shaughnessy Street Early Learning Center
2250 Shaughnessy Street
Port Coquitlam, British Columbia, V3C 3C8
email: boxers@telus.net

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