

A Transactional Model of College Teaching

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College teaching is a complex endeavor, which can be difficult to understand. Teacher reflection has become one means of comprehending the intricacies associated with teaching and learning. An abundant literature base examines individual elements of teaching, but looking at individual elements may encourage reflection on just a part of the process. The Teaching/Learning Transactional (T/LT) model provides a framework to guide reflection. This paper outlines the components of the model and provides a case study that represents its application. The T/LT model encourages teacher reflection that views teaching holistically. It is designed to encourage dialogue that frames teaching as a complex encounter of the human experience. Changing the language we use to discuss teaching may serve to deepen our understanding of this complex act, and in turn, improve our overall practice.

Teaching is a complex act. In an effort to identify the nature of this complex endeavor, teacher reflection has become a common approach to studying teaching (Bolton, 2001; Calderhead & Gates, 1993; Carr & Kemmis, 1986; Schön, 1983, 1987; Shulman, 1986; Strong-Wilson, 2006; Valli, 1992; van Manen, 1977; Zeichner, 1994; Zeichner & Noffke, 2001). Teacher reflection has focused mainly on the development of primary and secondary teachers. More recently, however, teacher reflection has been explored within the context of the scholarship of teaching in a university setting (Brookfield, 1995; Kreber, 2005; Lyons, 2006; McAlpine, Weston, Berthiaume, Fairbank-Roch & Owen, 2004; Richlin, 2001). Due to its interpretive nature, reflection can be a difficult process to teach to and model for others (Jay & Johnson, 2002; Ward & McCotter, 2004). Some authors contend that teacher reflection in higher education often lacks intellectual rigor and sophisticated analysis (Bleakly, 1999; Ecclestone, 1996; Rodgers, 2002; Rogers, 2001). The Teaching/Learning Transactional (T/LT) model proposes a framework for reflection that allows for a critical examination of teaching in higher education that is systematic yet sensitive to an aesthetic understanding of teaching and reflection.

Quality teaching requires a sense of artistry (Barrell, 1991; Dawe, 1984; Dees, 2000; Dees, Campbell, Jones, Pennock & Samad, 2003; Eisner, 1979; 2002; Gage 1978). Teaching artistry necessitates a "thinking-in-the-moment" mentality that is sensitive to the shifts and changes that occur within the classroom. Similar to other artistic endeavors, teaching artists reflect on their work before, during, and after the moment to inquire into aspects of the experience that are meaningful and transformative. When this reflective process is done well, there is an aesthetic dimension to teaching that heightens the experience for both teacher and student (Bundy, 2003; Eisner, 2002, 2006; Fenner, 2003). Thus, teaching artistry is cultivated through a

pre-, in-the-moment and post-event awareness of the educational experience. Likewise, teacher reflection requires this complex reflective thinking.

Russell Rogers' (2001) analysis of reflection in higher education notes that there is a common theme in the timing of reflection. He writes

There are two major time-aspects to the experiences upon which individuals reflect – reflection in the moment (called reflection-in-action or contemporaneous reflection) and reflection after the fact (called reflection-on-action or retrospective reflection)...most of the methods to foster reflection...in the literature of higher education are focused on retrospective reflection (p. 54).

Due to the ease of documentation, including journals and critical incidents, retrospective reflection has dominated much of the study of teaching in higher education. Reflection-in-action as identified by Schön (1983/1987), however, highlights an appreciation and understanding of the awareness of in-the-moment tacit choices that are so important to the artistry of teaching. Schön (1983) writes "reflection-in-action...is central to the art through which practitioners sometimes cope with the troublesome 'divergent' situations of practice" (p. 62). Making tacit knowledge known is difficult, and a model of reflection that encourages thoughtful inquiry before, during and after the event requires a unique frame for understanding the teaching/learning experience.

The goal of the T/LT model presented here is to provide a framework to guide teacher reflection before, in-the-moment, and after the event, that recognizes the complexity of the act of teaching, is sensitive to the aesthetic dimensions of both teaching and reflection, and provides a context to examine tacit decisions made during the act of teaching. The T/LT model is designed

to present a qualitative description of the key elements that occur during the teaching process, bring these elements out into the open, and then encourage reflection and discussion regarding the experience.

Naming, describing, and understanding the many facets of teaching can be daunting. Historically, in an effort to deal with this task, some scholars of teaching have pulled the elements apart from the act as a whole and studied each specific piece in isolation. Literature on assessment, teaching style, and classroom environment can be found in abundance in bookstores, libraries, and professional journals. Although informative, this approach to understanding teaching may miss much of the complexity and aesthetic intricacies of the act as a holistic enterprise. Without question, to be an effective teacher one needs to understand assessment, instructional strategies, and many other topics. When one teaches and reflects on teaching, however, these elements are connected to many other issues that affect the overall process. Assessment, learning style, environment, content knowledge, and the rest, all interact in the teaching event. Increasingly, there is a growing interest in understanding that interaction and how teachers reflect on it (e.g., Palmer, 1998; Timpson, 1999).

The T/LT model encourages teacher reflection and research that view teaching as a holistic experience. Developed from the perspective that inquiry needs to appreciate the complexity of human learning, this T/LT model posits teaching as a transactive process in which all of the elements involved in the teaching event interrelate, connect, and influence the classroom experience (Dewey, 1933, 1938; Dewey & Bentley 1949; Eisner, 1994). The model promotes holistic inquiry into classroom occurrences. It challenges reflection that focuses on specific aspects of the art of teaching, and encourages inquiry that analyzes teaching from a more complex perspective that includes thoughts and observations before, during, and after the event.

The Transactional Model of Teaching

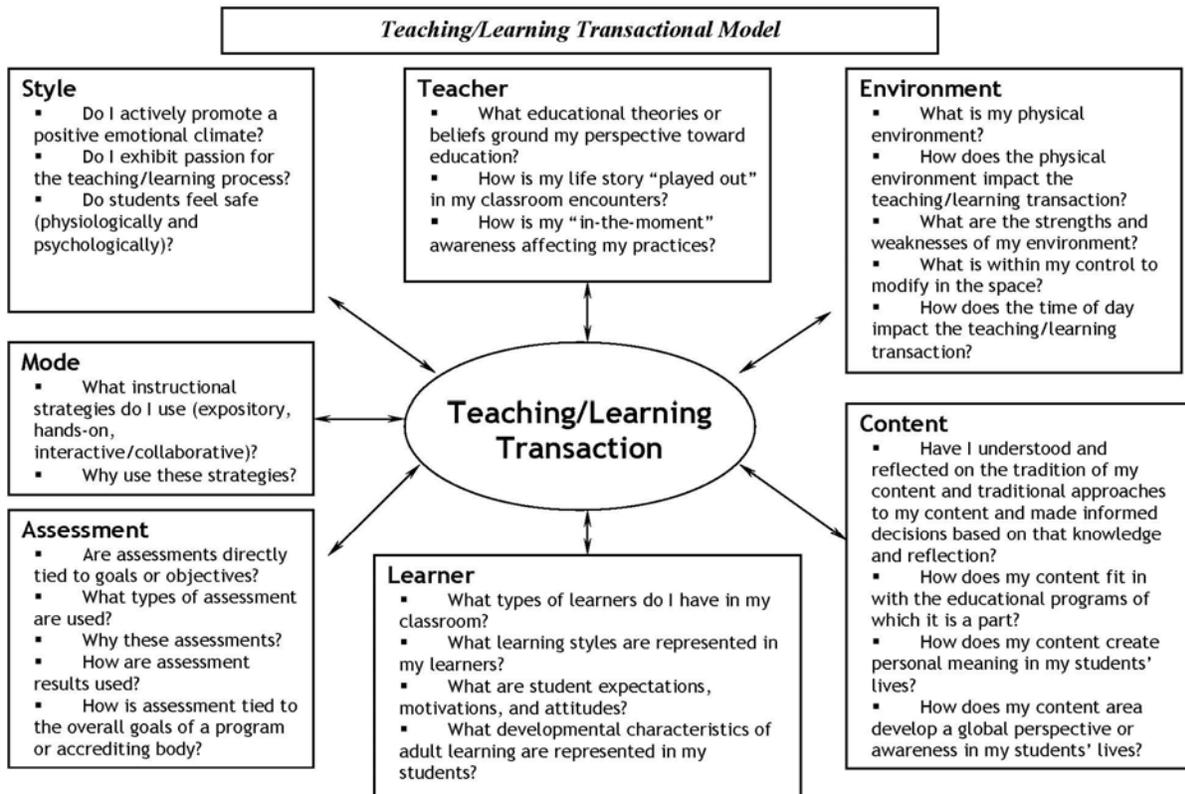
The teaching/learning transaction is placed at the center in our model (Figure 1). Here “transaction” means the “back and forth” or “to-and-fro” quality of the teaching/learning experience so that each element of the model is not treated as a discrete and disconnected piece. Instead, individual elements expand and contract in the teaching moment as the context and the experience change. If the overall instructional transaction is the container, then the relative size of each piece within the container expands or diminishes as the transactions themselves change and develop. The transactional quality of teaching is true of both face-to-face and online transactions. Although the starting

points and relative importance may differ, the set of elements that comprise a transaction is similar for each of these teaching situations. For example, an instructor may consciously focus on the fact that his or her students will be required to apply a specific concept during a professional assessment. At the moment when that concept is taught and discussed, assessment, style, mode, and content all interact and affect how the instructor will teach the given concept. Thus, there is a dynamic in-the-moment shifting of the elements as the teaching/learning transaction occurs.

In the T/LT model, teaching and learning are seen as two facets of one entity rather than as two separate entities. One of the primary aspects of quality teaching is the creation of an environment conducive to student learning. Without learning, teaching is merely an act of self-gratification. Quality teaching is the joining together of both teacher and student in the learning process. As educators, we learn both with and from our students. Thus, to characterize the interconnections between teaching and learning, these two concepts are represented together in an effort to capture the transactional nature of the quality teaching experience. In Figure 1, guiding questions that represent each individual category are presented. These questions are not necessarily the only questions we should consider within an element. They serve as starting points to begin the process of reflection. Individuals may develop and use their own questions that are relevant to their particular situation. The questions shown are meant to represent the inquiry perspective that encompasses a transactional understanding of teaching and learning.

Students have their own understandings and expectations of teaching and learning that may conflict, complement, or intersect with the teacher’s understandings and expectations. The teacher’s teaching/learning transaction model is a complex and interactive web that can interact with the students’ teaching/learning perceptions to create an intricate and interrelated network of joint understandings and expectations as the teaching event ensues. It also may be true that both the student’s and the teacher’s models will grow in complexity, subtlety, and power over time. As we develop ways to understand both teacher and student models, we may be able to examine these changes. It is often said that tertiary level faculty members may begin by teaching the way they were taught. Often, this translates into lecture classes dominated by teacher talk (Brookfield & Preskill, 1999). Similarly, students often come to college with limited and naïve expectations about the roles of students and teachers (Miller, Bender & Schuh, 2005). If we are thoughtful and dynamic in changing our models of the teaching/learning transaction, our changes should, over time, be reflected in changes in

FIGURE 1
Teaching/Learning Transactional Model



how our students view the learning/teaching process. Thus, this teaching model provides a guide to purposeful reflection that is aimed at increasing both our students’ and our own understanding of the teaching/learning event.

The T/LT model is designed to be used as a pre-, in-the-moment, and post-teaching event reflection guide. Before the teaching event, educators can use the model and the guiding questions to identify the complications and possibilities associated with teaching a certain concept in a specific manner within a given class. During the event, teachers can use the model as a way to monitor and categorize the individual thought processes and educational choices that occur while teaching. After the experience, the model is designed to serve as a guide for retrospective reflection encouraging the educator to consider the multiple and complex elements associated with the success or failure of a teaching experience. It can also serve as a guide for planning the next such experience.

The following section of this paper highlights the individual model elements. In each section a brief description of the element is given. Additionally, references are provided to guide the reader to further and more developed discussions of that particular issue.

However, it is important to remember that each element needs to be considered and reflected on with reference to the other components of the model.

The Model Elements

Teacher. The “teacher” element of the model includes the personal history, expectations, and beliefs of the individual teacher. This element is the self-reflective and autobiographical part of the T/LT model. Teacher beliefs are a primary element in any instructional transaction (Ayers, 1995; Cole & Knowles, 2000; Norton, Richardson, Hartley, Newstead, & Mayes, 2005; Schönwetter, Sokal, Friesen, & Taylor, 2002; van Manen, 1991). This element encourages reflection that focuses on how personal perspectives, history, and beliefs about higher education impact decision-making processes. For example, if I have been socialized to believe that the role of a professor is to disseminate the “truth” of my content, I will define my role in the classroom quite differently from when I see myself as a guide who provides learning experiences that encourage the construction of knowledge about the content by the students. Both perspectives have strengths and

weaknesses. The goal of the model is to encourage reflection on how your personal beliefs influence the teaching transactions that occur in your classroom.

Quality teaching requires reflection as an on-going process. Thus, the teacher component of the model highlights the importance of reflection along several dimensions:

- a) Understanding how our own life stories impact our practice.
- b) Identifying our awareness of the in-the-moment factors that affect student learning.
- c) Identifying how an individual teacher defines the role of a teacher in the process of learning.

Each of these dimensions impacts the definition of our teacher self and continues to shift and change with life experience. Thus, the dimensions require continuous reflection.

Style. The classroom manifestation of the teacher element is style. In the T/LT model the style element identifies the overall interpersonal climate of the classroom that is created by the teacher's behaviors, actions, and overall personality (Fenstermacher & Soltis, 1992; Grasha, 1996; Heimlich & Norland, 2002; Lowman, 1995; Opdenakker & Van Damme, 2006). Like trying to define a work of art, this is a complex and intuitive process that has long escaped in-depth study in higher education. Due to the culture of higher education that privileges the content domain as the primary purpose of a professor's work, many scholars have not considered the importance of the "feel" and "tone" of the educational encounter. After spending an hour and fifteen minutes in a dreary, monotonous classroom, however, one quickly sees the impact that style can have on the teaching/learning transaction.

Teachers' beliefs, attitudes, and philosophies are revealed in our classroom transactions with students. How we use humor, how we react to student questions or challenges, and a host of other variables all make up the style element of the T/LT model. Together they challenge us to examine our humanness as witnessed in our classroom attitudes towards students, content, and education in general.

Mode. The "mode" element identifies how the teacher chooses to design the experiences through which the students can learn the material. By mode we mean how the teacher translates the content and other factors into strategies, activities, and other elements of teaching. Lecture mode may be far different from discussion mode or a problem-based learning mode. As teachers, we have a growing repertoire of teaching methods available to us (Barkley, Cross, & Howell Major, 2005; Davis, 1993; Halpern, 1994; Herrington & Herrington, 2006). We must identify instructional strategies, learn how to use them effectively, and

implement them. Although such instructional strategies are of critical importance to an instructional transaction, it is important to note that their ultimate effectiveness still depends on their interaction with the other elements of the teaching/learning transaction.

Content. The "content" element of the model addresses both the actual content of what is being taught (i.e. knowledge, information, and/or specific skills) and the pedagogical issues associated with teaching in a specific field of study. Most disciplines in higher education have traditions and knowledge about how they are best taught (Martin, Porsser, Trigwell, Ramsden & Benjamin, 2002; Shulman, 1986; 1987). In addition, educational research points to the fact that different kind of goals and objectives should be taught in different ways (Bain, 2004; Fink, 2003; Weimer, 2002). Basic concepts, for example, may be better learned differently from advanced problem solving in a field. The content element of the model examines the interplay between content knowledge and pedagogical practice.

Learner. The "learner" aspect of the model identifies issues of learning style, student expectations, motivation, and metacognition. The learners themselves are a key part of the instructional transactions. Students bring to a situation a set of styles, abilities, expectations, and attitudes that surely affect how the transaction proceeds (Dunn & Griggs, 2000; Gardner, 1983; Hativa, 2000; Kolb, 1984; Phillips & Soltis, 1998; Sarasin, 1998; Zull, 2002). Any teacher with more than minimal experience has found that what worked in a class in the morning can lead to a pedagogical disaster in a section of the same course in the afternoon. A different set of students may react completely differently to our most carefully laid plans.

Environment. The "environment" element deals with the space where the experience takes place. It includes a host of factors that may exist in the physical, social, or even virtual environment for learning and teaching. In the physical environment we may find factors such as the seating arrangements (whether the room allows the students to be grouped and arranged in a variety of ways, or is more rigid), the technology available (teacher's station with projector, Internet access, as well as wireless access and power supplies for student laptops), or basic human comforts, such as appropriate heating, cooling, or lighting (Bartlett, 2003; Douglas and Gifford, 2001; Niemeyer, 2003). The social environment may reflect the size of the class, its composition, and the relationships that develop among students and between students and instructor.

Converting a course to an online format does not remove the environment factor but does change it. The virtual environment may include the software and interface used to enable students to gather information and communicate. Different systems may work in very

different ways and, therefore, have effects on how a specific instructional transaction takes place. An example might be the differences in online discussions experienced through various systems, such as chat rooms, graphical chat rooms, and asynchronous discussion boards.

Assessment. The “assessment” component of the model clarifies how the ways we try to identify student knowing clearly impact the teaching experience. It is important, however, not to separate assessment too sharply from the learning/teaching transaction, as naïve teachers may tend to do. There are several reasons for this. First, student expectations of how they will be assessed and on what knowledge and skills, are critical factors in determining how they approach the learning process (McKeachie, 2006; Sander, Stevenson, King, & Coates, 2000; Taras, 2003). Second, a good assessment can be the place where students learn the most, especially if it is well integrated into the instructional transaction (Gronlund, 1998; Haladyna, 1997; Ooseterhof, 1996). In addition, how the teacher chooses to find out about student knowledge and learning can have profound effects on how he or she approaches the transaction itself, both in the planning and in the moment.

We contend that the T/LT model requires that we see its constituent parts together in their context. The model provides a conceptual framework from which to reflect on personal practice before, during, and after the teaching event. In an effort to demonstrate the application of this reflective process, an illustrative scenario is created to provide insight into the use of this model.

An Illustration of the Model in Action

Pre-Event Reflection

David is an Assistant Professor in education at a large Midwestern university, with thirteen years' experience. Over the past few months he has become keenly interested in a deeper understanding of the learning that occurs in his classroom. To begin his reflective process using the T/LT model, David considers the following questions:

- Which one of the teaching/learning transactional elements categories do I think is my strongest area?
- Why do I think this is my strongest area (education, personal background, etc.)?
- What evidence (student evaluations, intuition, etc.) do I have that this is my strongest area?
- In which of the teaching/learning transactional elements do I need the most improvement?

As David considers these questions, he notes that his strongest areas are the teacher and style components of the model. Having won teaching awards in the past and having consistently received positive student evaluations, David believes his students like him and respect his knowledge of the field. However, he has become concerned about how much his students are internalizing the course concepts and actually trying to apply these ideas to their professional and personal lives. He wants to identify how his students are internalizing the content. The model has made him realize that he needs to think more about the relationship between content, mode, and the learner. He considers the following question: How are my actions in class allowing students to internalize and create personal meaning with the course material? As he reflects on this question he decides to try a different approach in his next class session.

In-the-Moment Reflection

This class is a sophomore level teacher education course in which students are exposed to a variety of complex educational theories regarding public education. David has been frustrated in the past with the fact that students seem to be able to recall and identify which concepts are associated with which theorists, but they do not seem to be understanding how a theory leads to an educational practice. For this session, he wants to create an event that will explore this idea.

He begins the class with a mini ten-minute lecture that outlines the concepts and concerns of Paulo Freire. Freire's (1970) goal of personal reflection is to encourage oppressed individuals to become cognizant of their oppression and to identify the ways in which the structure of their environment has allowed this to occur. Students intellectually understand this concept and are very savvy at identifying Freire's ideas on a quiz or exam. But, do they really understand how to practice this level of awareness? David decides to try an activity to bring this concept to life.

After the short lecture, David informs the students that he wants them to view a video of an eighth grade science class in which the teacher is teaching "Newton's Law". David asks his students to imagine that they are either a student or the teacher in this video. His students' first goal in this activity is to create a list of words and/or phrases that represent what they believe the students and/or teacher think and feel as they explore Newton's Law.

David's students begin watching the tape of this eighth-grade classroom. The teacher in this video was utilizing a lecture approach, mixed with probing questions, as she teaches the content of Newton's Law. As the students watch the tape, David became

conscious of the fact that he was focusing on how his students are analyzing this video. He notices that when he is teaching, he really watches students' eyes and reactions to the material they are discussing. He begins to wonder if this is why he feels he is so confident in the "teacher" and "style" component of the model. Much of his awareness is on the students' emotional responses to activities and material.

After watching the video and creating a list of words and/or phrases that captures this experience, David then instructs his students to use this list as inspiration to create an imaginary dialogue between the teacher and the students in the video. David challenges his students to try to capture the voice of the student and/or teacher and truly represent what it feels like to be in this classroom or to teach in this manner. David allows the students to either work alone or in small groups as they create a dramatic interpretation that brings their chosen perspective (student or teacher) to life. Four of the students work alone and write monologues. The other students work in groups of two or three and utilize a more dialogic approach. All of the students, except for one, take the perspective of the students in the video.

As David listens to the groups create their dramatic interpretations, Brookfield's (1995) challenge rings in his head. In Brookfield's text, he notes that when teachers "check in" on groups it may send a signal that the teacher does not trust the students to do the work on their own. This practice may also intimidate some students or encourage them to perform for the teacher. David sits back and waits. He wants to jump in and add to the discussion of the groups. He wants to see what the students are writing. But he waits.

As he waits, he notices a strange emotional response within himself. He is excited and anticipates getting back to the class discussion. He remembers that this is the same feeling he had before he entered the stage as an actor years ago. Waiting backstage for your entrance is both exciting and fear inducing. As an actor, David wanted to just run on stage and become a part of the show. But, waiting for the right cue is crucial. He begins to think that maybe the reason he has not missed acting or directing plays is because he is getting an artistic and creative fulfillment through his classroom encounters. Has his classroom become his theatre space? He jots a note to himself to think on this further after class.

After a few minutes the students read and "perform" their dialogic creations. Without question, they capture the voices of the students. As the class listens and enjoys the performances that are very critical of this teaching style, David asks them probing questions to identify how they are internalizing this information in terms of their future professional practice. For example, one exchange was as follows:

David: Why do you suppose the teacher would use lecture as her primary mode of instruction?

Student One: Because of the time crunch...teachers only have 45 minutes to teach concepts in this class...so she has to lecture to cover everything.

Student Two: Or maybe it's the achievement tests....this teacher has to make sure she has covered everything so the students can pass the test.

Student Three: Yes, I mean, she has to cover all of these standards and outcomes that will be on these tests...she is trapped.

This discussion was very pleasing to David. His students recognize how outside pressure and social structures influence and affect classroom practices. As the conversation continued other students note there may be social pressure to conform to teaching in specific ways. The students also address how money and social efficiency may influence the design of our schools and, in turn, impact how we are able to teach. The discussion of these issues allows David to identify how his students are analyzing the impact that social structures have on personal practice. The students recognize how the structure of the environment, if oppressing, can lead to oppressive practices. Additionally, the students realize that if they become aware of this structure, they may be able, through thoughtful practice, to teach in a manner that is not as restrictive. From the conversation that followed the video analysis, David feels that his students not only understand the ideas of Freire, but they now recognize how applying a theoretical perspective can lead to a change in professional practice.

Post-event Reflection

David was very happy with the tone and feel of the class. He felt that the students had an understanding of the ideas and concepts of Freire and were able to connect this perspective to their future practice. When using the model for pre-reflection, David had realized he needed to consider the connection between student learning and content. By focusing on these elements within his classroom he began to consider a different and alternative mode to connect the elements in the teaching/learning transaction. In the post-reflection, he feels very confident about the success of the video analysis.

Using the T/LT model for post-reflection, David is now able to look at the classroom from a more holistic perspective. As he considers the event, he begins to see that there is a structure to this mode of practice: he began with content coverage (mini-lecture), moved to a real experience (tape of teaching), then to student

application (student monologues and dialogues), and finished with a reflective summary. As he used the T/LT model to guide his post-event reflection he realizes that this pedagogical approach encouraged a broader range of experience and reflection for his students. He also realizes that the T/LT model is encouraging him to consider multiple elements of the teaching event. As David reflects on all of the model elements he recognizes that he did not consider issues of assessment. In the future he must reflect more on how assessment is connected to the teaching event. He also sees in his post-event reflection that he did not consider and reflect on the environment of the classroom, and that in the future more consideration needs to be given to this element. However, the elements David considered (learner, content, mode, style, and teacher) did provide some informative insights into his overall teaching.

From the learner perspective, David realizes that this activity addresses various learning styles at different points of the event. From the content perspective, he addresses the reflective question of creating personal meaning in the students' lives. In the domain of mode, he has reaffirmed his belief that in many ways, how we structure the event can dictate what students experience and remember. Within the style component, David recognizes that he has a passion for this way of teaching because he believes in creating meaningful aesthetic experiences in students' lives. This passion was clearly seen in his activities today. Finally, as he reflects on the teacher element, David is drawn by his in-the-moment reflections that focused on theatre and student connections. This element he will reflect on even further.

David is fascinated by how much of his reflection in the moment is based on the "experience" that students are having in his class. When he focuses on student learning, he keys into their expressions in the teaching/learning transaction. As he considers his own work, he notices that he was identifying his own emotional response to the experience and relating back to his theatrical background. Could it be that his teaching has filled this artistic void in his life? This is an in-the-moment question he wants to explore further.

To David, theatre is about experience. The role of a theatrical encounter is to take a given piece of content (script) and to create an environment where the meaning and interpretation of this content comes to life. For him, this classroom approach accomplished this task. He was able to take the content of Freire and create a real experience, that, in turn, the students were able to engage with, and create their own aesthetic response to the event. This aesthetic mode of reflection has always been important for David, and now he sees that when he teaches this way he is more comfortable, and in turn, feels he creates a better learning experience

for his students. From his post-event reflection, David realizes he needs to be committed to teaching in this manner. He needs to provide a framework for the content, create an experience for the students that brings the idea to life, and then find a way to have the students reflect on this experience as they connect the content to their personal lives. David also realizes, through this reflective process, that his background and passion for theatre explains why he is so confident in the style and teacher elements of the model. Theatre is about creating passionate connections to the material (style) and also reflecting and identifying "in-the-moment" what is being communicated in the space (teacher). David's pre-, during, and post-reflection has encouraged him to continue to create these educational "events" in his classroom. Using the T/LT model as a guide for reflection has also reminded David that he needs to think more about assessment and environment in his future practice.

In this illustrative case study, the elements of the T/LT model interconnect and interact with one another even as we focus on individual components. When teaching is viewed from this perspective, we can begin to re-frame the relationships between elements involved in teaching while developing new questions to consider. Through the reflective process encouraged by the model, David has recognized and scrutinized some of the tacit decisions affecting his teaching practice. He has also developed possible explanations for his strengths in teaching while also recognizing areas of improvement.

Conclusion

The teaching/learning transactional model represents a shift in perspective in the study of teaching. Rather than focusing on individual elements of the teaching process, this model challenges educators to view teaching as a holistic process. In addition, the model provides a framework to guide pre-, in-the-moment, and post-teacher reflection. We are currently exploring the use of the model in a variety of settings.

First, in order to encourage deeper reflection about teaching among higher education faculty, we have developed a peer review process to guide pairs of colleagues in working together to examine teaching. It focuses on one person at a time and provides a process and a set of starting questions for the duo to reflect on together before one of them observes a teaching transaction led by the other. After the observation, the two come together again to reflect more on what was observed before the reviewer writes a reflection to capture her/his understanding of the reviewee's teaching as holistically as possible. Not only is this process expected to deepen and strengthen the peer review that goes on, we also hope that it will draw more

people into the adventure of understanding teaching. We are currently gathering data on the use of the process, which will lead to new case studies and other reports on a variety of professors and their teaching/learning transactions, both successful and unsuccessful.

Second, we have begun to use the model in other ways as a faculty development tool. Learning communities at the authors' home institution, Kent State University, have begun to use it to discuss teaching ideas. Often these discussions are followed by pairs of members reviewing one another's teaching using the process mentioned above. Later group discussions are enriched by the reflections and ideas that result.

Third, this paper focused on using the model to guide the reflections of faculty members about their teaching. The T/LT model, however, is meant to emphasize both the teaching and the learning. The student is an element of the model every bit as important as the teacher. We are looking at examining the teaching/learning transaction from the point of view of students as well, through focus groups and other means. As we gain in our ability to understand the teaching/learning models of both faculty and students, we may be able to research how their understanding interacts and changes over time.

Finally, we are exploring the use of the model in understanding K-12 teaching and in preparing teachers for that arena as well. These efforts have just begun, but they should lead to more understanding as well as further reports in the literature. The next step will be to examine whether reflecting on teaching using this model as a guide leads to better teaching and, especially, better learning.

Through all these efforts we hope to improve and deepen the model and the reflection and review processes that are coming from it. The model is not meant to solve all teaching problems, but it can serve to change our understanding of the teaching/learning transaction, to change the language we use to discuss teaching, and to allow us to take on new perspectives. The T/LT model is designed to encourage a dialogue that frames teaching as it is: a complex encounter of the human experience. We invite comments and improvements on the model as it develops.

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