

Undergraduate Education Students' Perceptions of Effective and Ineffective Course Experiences: What Counts as an Effective Experience?

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Pre-service teachers' conceptions of effective and ineffective instruction stand to inform their personal views of what constitutes effective and ineffective instruction, yet few qualitative studies have examined both conceptions of effective and ineffective instruction. The purpose of this study was to determine whether pre-service teachers described what happens in university courses primarily in terms of teacher characteristics, teaching practices, or instructional context. There were two research questions guiding the study. First, how are the dimensions of effective and ineffective instruction alike and different? Second, how do results correspond to similar qualitative studies? Nine distinct themes were inductively derived through open coding of 34 pre-service teachers' essays: (a) motivation, (b) student autonomy, (c) meaningful learning, (d) comfortable learning environment, (e) classroom management, (f) student-teacher relationship, (g) teacher's personal characteristics and manner, (h) lesson organization, and (i) teacher impact/student development. The results of this study support previous findings and add to the small number of studies that have examined pre-service teachers' descriptions of effective and ineffective instruction. Findings have also contributed a new category that has not appeared in previous literature: teacher impact/student development. Pre-service teachers' descriptions in this study confirm that the theoretical conception of what happens in classrooms must include the teacher's characteristics, teaching, and the context of instruction.

Les conceptions qu'ont les enseignants en formation de l'enseignement efficace et inefficace informent naturellement leurs points de vue personnels de ce qui constitue l'enseignement efficace et inefficace; pourtant, peu d'études qualitatives se sont penchées sur les conceptions de l'enseignement efficace ainsi que sur celles de l'enseignement inefficace. L'objectif de cette étude était de déterminer dans quelle mesure les enseignants en formation décrivent ce qui se passe dans les cours à l'université, notamment en fonction des caractéristiques des enseignants, des pratiques d'enseignement ou du contexte pédagogique. Deux questions ont guidé la recherche. D'abord, qu'est-ce que l'enseignement efficace et l'enseignement inefficace ont en commun et qu'est-ce qui les distingue? Deuxièmement, comment les résultats correspondent-ils à ceux d'études qualitatives similaires? Un codage ouvert de 34 dissertations écrites par des enseignants en formation a permis de recueillir, par induction, neuf thèmes distincts: (a) motivation, (b) autonomie des étudiants, (c) apprentissage significatif, (d) milieu d'apprentissage confortable, (e) gestion de la classe, (f) rapport étudiant-enseignant, (g) caractéristiques et manières

personnelles de l'enseignant, (h) organisation des leçons, et (i) impact de l'enseignant/progression des étudiants. Les résultats de cette étude appuient ceux des études antérieures. Cette étude élargit le nombre restreint d'études qui ont porté sur les descriptions par des enseignants en formation de l'enseignement efficace et l'enseignement inefficace. Les résultats contribuent également à une nouvelle catégorie qui n'apparaît pas dans les travaux antérieurs : impact de l'enseignant/progression des étudiants. Les descriptions par les enseignants en formation qui ont participé à cette étude confirment la conception théorique selon laquelle ce qui arrive dans la salle de classe doit tenir compte des caractéristiques personnelles de l'enseignant, de l'enseignement et du contexte pédagogique.

Teachers vary greatly in their effectiveness (Rockoff, 2004; Weisberg, Sexton, Mulhern, & Keeling, 2009). Pre-service teachers' prior educational experiences and the knowledge they develop through teacher training programs may influence their perceptions of the value of their current professional courses, as well as their own future instructional decisions and classroom practices (Balatti & Rigano, 2011; Brown & Borko, 1992; Devlin, 2006; Koehler & Grouws, 1992; Pajares, 1992; Sak, Tantekin Erden, Tuba Şahin Sak, & Esmeray, 2016; Stürmer, Könings, Seidel, 2015). The damage of an ineffective teacher lingers even when a student has more effective teachers in following years (Kodero, Misigo, Owino, Simiyu, 2011; Lasagna, Laine, & Behrstock, 2011). Many studies have reported that pre-service teachers' beliefs about instruction are stable, resistant to change, and reflect future teachers' own experiences of teaching and learning as students across all stages of education (Calderhead, 1988; Hollingsworth, 1989; Holt-Reynolds, 1992; Kagan, 1992). For example, Brown, McNamara, Hanley, and Jones (1999) reported that 80% of pre-service teachers found mathematics boring and difficult during their elementary or secondary schooling and the majority came into initial teacher training with negative feelings associated with mathematics. This disposition may influence (a) the creation of conditions to get pre-service teachers to actively participate in their mathematics training courses or (b) their willingness to accept that mathematics can be taught in more positive ways than they might have experienced (Liu & Bonner, 2016). Undergraduate education majors' beliefs about teaching also affect their interpretation of what they are presented in education courses (Dharmadasa, 2000) and how they participate and learn in those courses (Aulls, 2004; Gow & Kember, 1993; Kember & Wong, 2000). Knobloch and Hoop (2005) even found that pre-service teachers were unmotivated and frustrated when taught by teacher-educators holding different philosophies of teaching and learning than their own. Together, these studies suggest that the variability in effectiveness of preservice undergraduate students' formal schooling experiences has an influence on them. Moreover, these studies suggest that these experiences may shape the mental model preservice teachers hold of what happens in classrooms in terms of teaching and learning. What then might the major features of the shared model be which they use to describe both effective and ineffective courses?

In this study we assumed, based on the preceding empirical research, that pre-service teachers' conceptions of both effective and ineffective instruction would inform their descriptions of self-selected personal examples of situations regularly arising in an effective and ineffective course (see methodology section for details). We believed that these conceptions would be important because they could offer, to post-secondary educators, indicators of the themes used to distinguish between effective and ineffective instruction. Pre-service teachers may also employ these same distinctions in their future pedagogical practice.

Only a few published qualitative studies appear to have attempted to ascertain pre-service teachers' descriptions of past experiences of effective and ineffective instruction. We question the validity of drawing inferences about instruction solely on the basis of descriptions of either effective or ineffective instruction alone. It is inappropriate to assume that effective and ineffective instruction should necessarily be defined by the same set of concepts or themes. Specifically, descriptions of effective and ineffective instruction may share characteristics, but the quantity of these shared characteristics as well as their quality and valence may vary. Moreover, descriptions of effective and ineffective instruction may also possess unique properties—properties that one (e.g., ineffective instruction) may have, but not the other (e.g., effective instruction). It is not at all clear from prior research whether pre-service teachers' conceptions of effective instruction are more influential than their conceptions of ineffective instruction on their thoughts and actions (as pre-service teachers). Moreover, empirical studies have demonstrated that conceptions about ineffective teaching are not necessarily the mirror opposite of the conceptions of effective teaching (Aulls, 2004; Walls, Nardi, von Minden, & Hoffman, 2002). Indeed, the presence of unique categories in essay descriptions comparing effective and ineffective course experiences is a strong form of qualitative evidence that pre-service teachers' understanding of effective instruction and ineffective instruction are categorically distinct.

What Happens in Higher Education Courses?

Prior research confirms that there are perceived and actual qualitatively different forms of teaching and learning in higher education classrooms. For example, teacher-directed learning involves the teacher transmitting knowledge to passive learners (Kember & Kwan, 2000), usually through lecturing (Kember, 1997). Lecturing is one of the most prevalent categories of the teacher- and content-centered approach to instruction (Cuban 1999; Neumann, 2001) that pre-service teachers are exposed to while attending undergraduate courses. Yet, it is one that undergraduate students rate as very undesirable and un-motivating (Terenzini, Cabrera, Colbeck, Parented, & Bjorklund, 2001). Student- or learner-centered teaching, as described by professors participating in large-scale survey studies in Australia and Hong Kong (Samuelowicz & Bain, 2001), shifts the responsibility for learning from the instructor to the student. Student-centered teaching actively engages students in learning while the teacher becomes more of a facilitator of the learning process (Barr & Tagg, 1995; Kember, 1997). Gow and Kember (1993) reported that undergraduate students responded more favorably to student-centered forms of instruction.

It can be difficult for undergraduate students to adjust to new learning environments intended to train them to become professional teachers. Kember and Wong (2000) found that students who held active conceptions of learning and those with more passive conceptions of learning had different ideas of what good teaching involved. The more active learners' expectations of good teaching entailed active student engagement, active promotion of classroom verbal interactions, teacher enthusiasm, stimulation of student interest in the academic content, and the use of multiple learning tools to engage students in learning. Passive learning advocates saw good teaching as involving organization, clear information, as well as class structure, clear objectives, fairly fast-paced coverage, clear communication, an easily manageable student workload, and distribution of content difficulty across a course.

New approaches to the preparation of pre-service elementary or secondary teachers are often based on constructivist learning theories (Engeström, Miettinen, & Punamaki, 1999; Vygotsky, 1986). Teaching approaches grounded in constructivist views of learning are student-centered

and process-centered and aim to promote both understanding and accurate recall of information. Dangel and Guyton (2003) conducted a review of research to identify the common elements of constructivist-based pre-service courses and their effects on pre-service teachers. Between 1990 and 2003, they found only nine studies of constructivist approaches that provided qualitative evidence of instructional effects on pre-service teachers. Their review identified two main effects for constructivist-based courses on pre-service teachers: changes in their beliefs about learning and teaching, and/or changes in their teaching practices. The key mediational experiences for learners included (a) meaningful learning experiences supported by the use of discourse, instructional conversations, peer discussion, and peer coaching during class; (b) a delicate balance of power between the students and the teacher in conjunction with students being empowered to reflect and talk about how they learned how to learn; (c) frequent opportunities for reflective analysis of effective teaching practices and learning; (d) opportunities to develop and reason about a personal theory of learning and teaching; and (e) student-centered teacher behaviors supported by respect, mentoring, and opportunities for partnership. The combined striving of teacher and students to connect the theory and practice of teaching by cooperatively reflecting on class lessons or field experiences provided a measure of support in these classrooms as well. However, in spite of these higher-level learning outcomes, it is not always clear, nor is there ample evidence, that students fully understand these “new” educational practices they encounter in their undergraduate teacher education courses (Jadallah, 1996; Schulz & Mandzukic, 2005; Segers, 1996; Simon & Schifter, 1991; Windschitl, 2004).

In our review, we identified five qualitative studies that described pre-service teachers’ descriptions of both effective and ineffective classroom instruction (Dayal, 2013; Fajet, Bello, Ahwee Leftwich, Mesler, & Shaver, 2005; Kember & Wong, 2000; Raymond, 2008; Walls et al., 2002). In these studies, the researchers used the following as the central units of analysis: *teacher characteristics*, *teaching*, *ineffective* and *effective teaching*, *good* and *poor teachers*, *good* and *poor teaching*, and *instruction*. We follow a conceptual distinction made by Anderson and Burns (1989) between *teaching* and *instruction*. Teaching is what the teacher does, whereas instruction includes teaching practice and the instructional context; that is, the social, cognitive, and affective dimensions that constrain and enable instruction. Context has the potential to inform a teacher’s pedagogical decisions in their own classroom.

Our comparison of the categories reported in the aforementioned studies is summarized in Table 1 and includes the following unique non-overlapping categories: (a) teacher characteristics, (b) teaching practices, and (c) instructional context (e.g., small group work or activities). Hence, studies were not solely concerned with teaching practices, or teacher characteristics and the more appropriate unit of analysis appears to be instruction, which subsumes all these dimensions.

Purpose of the Study

The purpose of this research study was to determine whether pre-service teachers described what happens in courses primarily in terms of teacher characteristics, teaching practices, or instructional context, or whether their descriptions include all the above dimensions and could more appropriately be subsumed under the category of instruction. By asking pre-service teachers to describe effective and ineffective teachers, insights were also gleaned in terms of what does and what does not constitute effective instruction, which provides a more holistic and rich understanding than that which would be gained from building an understanding on the foundations of one in isolation from the other. We asked two research questions: (1) Are the

superordinate and subordinate dimensions of effective and ineffective instruction unique, alike, or different? And (2) How do our overall results correspond to similar qualitative studies?

Table 1

Categories of Instruction

Study	Social	Cognitive	Affective
Walls et al. (2002)	Student participation: (E) Had lots of hands-on activities; (I) Discouraged students from asking questions. / Rules and grades: (E) Wrote assignments on the board; (I) Was totally a my-way authoritarian.	Teacher Skill: (E) Always did creative things to make us learn; (I) Was disorganized. (E): Kept up on the latest stuff. (I) Always sat at his desk during the whole period.	Emotional environment: (E) Cared about me as a person; (I) Was nasty to all but her pets.
Raymond (2008)	(E) Respectful to students; (I) Disrespectful. (E) Fair in grading and evaluation of students; (I) Unfair in grading	(E) Makes classes interesting; (I) Are Boring. (E) Makes diff. subject easy to learn; (I) Cannot explain well. (E) Always organized and prepared; (I) Unprepared for class	(E) Cares about students succeeding in courses; (I) Doesn't care if students understand
Fajet et al. (2005)	Attitudes and behaviors towards students: (E) Relationships, having a personal relationship with each student, someone who can be considered a "friend", maintains balance between being a "friend" and a "teacher", Gets along with students, friendly, interested in students' personal lives, understanding, approachable (i.e., students feel comfortable talking with teacher), sociable/personable, relates to students; (I) poor classroom management ;Doesn't care about helping students, reprimanding/condescending/mean/rude, disrespectful /screams/bad temper, negative/insulting feedback, does not relate to/or interact with students. Attitudes toward job/teaching in general: (E) Professional (e.g., organized, hardworking, dedicated, plans well, respectable), available for students; (I) Does not enjoy teaching.	Pedagogy/classroom management: (E) Makes learning enjoyable, fun, and interesting, utilizes multiple methods to ensure all students learn, strict, considers strengths and weaknesses of individual students, holds high expectations for students, creative, teaches effectively, aware of students' diverse backgrounds, relates subject matter to students' lives, praises students; (I) Does not utilize multi-method instruction, , does not explain things well, disorganized/unprofessional. Knowledge of subject matter: (E) Knowledgeable; (I) Does not know subject.	Affective, personal characteristics: (E) Enthusiastic/energetic /passionate/motivating, builds self-esteem, caring, patient, engaging, open-minded, fair, down-to-earth/nice, possesses honesty/integrity; (I) Rigid, not personable, boring, not caring, unfair, passive, impatient, self-centered.
Dayal (2013)	(E) Student-centered, punctual coming to class, gives extra help; (I) Communication factors (e.g. poor language, not being helpful, favoring the smarter students); lessons structured,	(E) Preparedness, resourcefulness by using different teaching methods in different combinations, content knowledge, student centered, use of different activities which are challenging and authentic; (I) Not knowing subject, cannot answer students' questions, not prepared duplicating textbooks.	Affective characteristics: (E) Caring, nice, approachable, guide.
Kember & Wong (2000)	(E) Interactive, uses discussion and self-reflection. Well-organized, clear, consistent class structure.	(E) Diverse teaching and assessment methods,	(E) Enthusiastic, encouraged students to construct their own knowledge, could spend hours explaining.

Note. (E) = Effective, (I) = Ineffective

Method

Sample and Research Design

We employed an instrumental and collective case study design (Stake, 1995). This kind of design is intended to describe and analytically compare the relevant features in multiple cases and to generalize results to an existing model of the phenomenon of interest. In our case, the model of instruction advanced by Anderson and Burns (1989) was of interest. Low inference description was assured by keeping the first round of open coding categories based on the language used by students (in vivo) rather than the researchers. Consistency in coding was evaluated through inter-rater reliability using high standards of agreement and multiple coders.

Rich data were provided by the inductive analysis of every clause in every essay description and the use of verbatim quotes to illustrate to the reader the variability in elaborations of the major themes. Triangulation (Creswell, 1998) of the themes and subthemes evolving from this study was obtained by comparing them to the themes and subthemes in other studies and then to a model of instruction developed by Anderson & Burns (1989).

In keeping with the issue of what happens in post-secondary courses, the study participants were selected from an available sample of pre-service teachers enrolled in a course that was part of a teacher certification program from a large, public university in Central Canada. As a collective study, we compared the descriptions of effective and ineffective courses across cases produced by 34 pre-service teachers who were at different stages of progression through the four-year teacher-training program. Each student produced three essays: one description of an effective course, one description of an ineffective course, and one comparison of the two.

Procedures

This study drew its participants from a course that the second author taught. In the first class of the course, an explanation and discussion of the course learning goals, required assignments, and credit weighting was provided. Students received an explanation that they had two options for completing their participation credit for the course; the essay assignment that served as data for this study was one of them. Students were also told that they would have to sign an informed consent form providing their permission to use the effective and ineffective essays for research purposes if they chose to allow their assignment to be used for this purpose (not required). The other assignment students could complete in place of the essay assignment was not associated with research. Students were informed that they would be assigned anonymous participant codes to replace their names on the essays for research purposes. The instructor also requested that they use fictitious teacher names in their essays.

Student Essays

Students completed three essays, two with identical instructions. One essay required students to describe their experience of a poor course, the other a very good one. Directions were designed to guide students through a mental review and tour (Spradley, 1980) of a course they vividly remembered and recalled as a very good or poor course relative to other formal educational courses they had taken. Directions included two types of question. The first was a descriptive

question: “Imagine and describe the teacher in terms of how that person looked, acted and seemed to be.” The second was a structural question: “What happened on a regular basis in the class socially and academically?” The third essay asked the students to compare and contrast their positive and negative experiences: “What was the difference between the two teachers' courses in terms of how they affected your knowledge and emotions or in other ways?” These semi-structured questions were used to acquire detailed descriptions, as recommended for use in ethnographic interviews (Spradley, 1979). The questions intentionally directed the student toward the happenings in the classroom (i.e., the teacher’s actions, and events within the social and academic aspects of their classroom). The terms “teaching” and “instruction” were not used in the semi-structured questions to avoid influencing (i.e., biasing) students’ descriptions of their experiences in these classes. Essays were assigned during class. Fully completed essays were worth 15% course credit. Incomplete essays could be redone after students attended a short tutorial to resolve any problems preventing them from producing a detailed response to each question (ten percent of students revised their essays). Students were informed that their essays would serve as important content for subsequent courses. Specifically, the essays were intended to serve as a reflective summative exercise that would help shape their emerging teaching philosophies.

Data Analysis

Essays were first divided into topic and comment units (Clement, 1979). This was accomplished by identifying each clause, then segmenting it into topics and comments on topics. All of the student-produced essays were analyzed using the open coding procedure outlined by Strauss and Corbin (1990). This enabled the coders to fractionate the data, determine superordinate and subordinate categories for effective and ineffective instruction, and compare and contrast categories. The essay codes were then pooled into one dataset capturing all category levels. Frequency counts were tabulated for each entry in order to describe the relative emphasis students gave to each superordinate and its subordinate categories. The major themes (i.e., superordinate categories) were identified by the relationship between clusters of concepts and were labeled using the pre-service teachers’ or the researchers’ words. Researchers’ words were used at the superordinate level to help capture thematic relationships between subordinate categories when pre-service teachers’ words were insufficient in scope and specificity. The dimensions or subordinate categories more closely reflected the words of the pre-service teachers. During the coding of each set of data, agreement rates were calculated at the superordinate conceptual data categories. The statements on effective teachers (268/673; 40%) were coded by two coders and produced a pre-discussion agreement rate of 96.3%. The statements about ineffective teachers (202/721; 28%) were also coded by two coders and produced a pre-discussion agreement rate of 93%.

Results

How do Pre-service Teachers Describe Instruction?

The results of our qualitative analyses revealed nine distinct themes inductively derived through open coding of pre-service teachers’ essays describing one effective and one ineffective instructional episode. These themes include (a) *motivation*, (b) *student autonomy*, (c)

meaningful learning, (d) comfortable learning environment, (e) classroom management, (f) student-teacher relationship, (g) teacher’s personal characteristics and manner, (h) lesson organization, and (i) teacher impact/student development. The teacher impact/student development category has been a variable in previous studies (Rockoff, 2004; Weisenberger, Sexton, Mulhern, & Keeling, 2009) but has not appeared as a thematic category in the related studies summarized in Table 1.

Table 2 provides definitions for each of the thematic categories generated by the authors based on the subordinate dimensions which elaborate upon each theme. Definitions summarize the meanings pre-service teachers’ collectively associate with a thematic category and largely reflect their words and clauses. They represent the synthesis of student memories of both effective and ineffective instances of instruction. Superordinate categories contain between two and four first-order subcategories. Each subordinate category could be elaborated and contained between three and five further levels of codes also derived from students’ descriptions of instruction. The first-order subordinate codes were identified as the most appropriate level of analysis for capturing the different dimensions of each superordinate theme.

Table 2

Superordinate Categories

Categories	Definitions and Examples
Motivation	<p>Students perceived motivation as a goal-oriented construct. When they spoke about motivation they referred most frequently to its presence or absence; types of motivation, which could be experienced as positive or negative and internal and external; and sources of motivation, which included actors, situations / environments (external to participant), or states (internal to the participant).</p> <p><i>Effective:</i> “also the teacher had ways of motivating the students to push themselves as much as possible” (141).</p> <p><i>Ineffective:</i> “my motivation in Mr. Buns class was basically non-existent” (PN3).</p>
Student Autonomy	<p>Involving and providing opportunities for students to be actively involved in activities and the learning process, to expect students to have a voice in their education and to take on roles for which they are responsible.</p> <p><i>Effective:</i> “Important roles given to students. They were helpers and tutors as well as observers and learners” (PN141).</p> <p><i>Ineffective:</i> “or he would simply ignore our request so that his long lecturing could continue without any disruptions” (PN77).</p>
Meaningful Learning	<p>Meaningful learning is enabled through relating concepts, relating prior knowledge to new knowledge, relating new information to everyday life, and relating knowledge to the real world. Meaningful learning occurs when students can make concepts their own. Meaningful learning also happens when knowledge is transferable. Teachers who are able to explain concepts in several ways, who use examples, analogies and metaphors when explaining, and allow students to draw their own conclusions promote meaningful learning.</p> <p><i>Effective:</i> “she generally wanted us to be happy and learn something that meant something to us” (PN134).</p> <p><i>Ineffective:</i> “students took to trying to figure out the useless details that could possibly be asked by Mr. Jack in his attempt to trick us on the exams” (PN96).</p>

Table 2, Continued

Categories	Definitions and Examples
Comfortable Learning Environment	<p>An environment that entails basic needs such as safety, belongingness, and emotional experiences of students, self-confidence, self-esteem, self-concept, and sense of success, which has to be related to the emotional/psychological condition of the students.</p> <p><i>Effective:</i> "Ms. Rose's classroom was warm and inviting" (PN122).</p> <p><i>Ineffective:</i> "students were afraid of her and feared getting put down" (PN112).</p>
Classroom Management	<p>The approach or orientation a teacher has in giving order to the classroom. A variety of classroom management techniques exist, but most can be broadly classified as either authoritarian or authoritative. Generally speaking, both are about power. Power is more likely to be shared in an authoritative approach, and not shared in an authoritarian approach. Other strategies that do not fit into this dichotomy include using humor and remaining calm in tense situations. Students behavior was seen as an outcome of the classroom management approach/techniques used.</p> <p><i>Effective:</i> "we always knew what was expected of us, and felt successful doing that, we were always busy" (PN3).</p> <p><i>Ineffective:</i> "We had no clue what to expect from her ... she made up her own rules, on the spot, with no pattern whatsoever, saying one thing one day and another the next" (PN83).</p>
Student-Teacher Relationship	<p>By necessity the teacher and the students co-construct the curriculum and as they do so they develop a social and academic relationship. Students view the social relationship as the foundation for the academic relationship. Several dimensions inductively derived of the student-teacher relationship frequently mentioned are (a) the teacher treating students with respect, (b) the students treating the teacher with respect, (c) perceiving the teacher to be a role model, (d) being human and demonstrating caring for students, and (e) sharing open two way communications. The academic relationship with students is embedded in the social relationship. Moreover, the teacher's presence contributes to the quality of the relationship.</p> <p><i>Effective:</i> "On the other hand, although to a great extent he behaved like a friend, he was NOT a pushover! /also knew when to be serious" (PN83).</p> <p><i>Ineffective:</i> "did not command any respect, only fear" (PN NS).</p>
Teacher's Personal Characteristics and Manner	<p>This term is used by students to refer to the consistent behaviors of a teacher that reveals how they conduct themselves and go about teaching. Manner includes (a) enthusiasm, (b) good listener, (c) tone of voice and gestures, and (d) being interesting to listen to.</p> <p><i>Effective:</i> "I was motivated by Mr. Bon's excitement" (PN75).</p> <p><i>Ineffective:</i> "he conducted himself like a factory worker who would punch in the morning, go through the day and punch out at night." (PN77).</p>
Lesson Organization	<p>This term refers to the organization of single lessons and sequences of lessons. The lesson structure reflects the reoccurring patterns of events making up a lesson or a unit of study including many lessons. Lessons are the defined structures that are made specific to participants and instruct them on what to do and how to do it. Different lesson structures are planned to accomplish different learning outcomes. For example, a teacher may structure information processing by assigning students to complete a semantic map or an advanced organizer. Lesson structure includes the role of the students and teacher and the nature of any assigned activities.</p> <p><i>Effective:</i> "took the time to make sure they understood everything" (PN A).</p> <p><i>Ineffective:</i> "instead, Mrs. Henderbeast taught several unlinked concepts at a surface level that never really made any sense" (PN103).</p>

Table 2, Continued

Categories	Definitions and Examples
Teacher Impact/ Student Development	<p>Teacher Impact refers to the scope and nature of the influence on students that they attribute to the teacher. For example, a student might announce that they have become a better student or a better person, they may say they learned to deal with their emotions, or that the teacher inspired a love of golf. A student may also explain that the teacher taught them how to accept and work with their peers; they may describe how the teacher shaped their morals, or that the teacher changed their self-efficacy or self-esteem. Teacher impact is sufficiently profound whether negative or positive to have a lasting influence on the individual student.</p> <p><i>Effective:</i> "taught us the important of working with/accepting our peers" (PN103).</p> <p><i>Ineffective:</i> "made me not want to be a teacher/almost made me want to change my mind as to whether or not I still wanted to be a teacher" (PN82).</p>

Note. PN corresponds to the participant. Number or letter corresponds to participants' anonymized assignment.

Table 3

Proportions and Frequencies of Students' Effective and Ineffective Course Statements

Themes	Effective Teachers		Ineffective Teacher	
	Frequency	Proportion	Frequency	Proportion
1 Motivation	56	.08	47	.07
2 Student Autonomy	60	.08	28	.04
3 Meaningful Learning*	105	.14	109	.16
4 Comfortable Learning Environment	41	.06	69	.10
5 Classroom Management†	24	.03	56	.08
6 Student-Teacher Relationship	72	.10	58	.09
7 Teacher's Personal Characteristics and Manner	28	.04	53	.08
8 Lesson Organization*	221	.30	179	.27
9 Teacher Impact/ Student Development	59	.08	39	.06
? Unknown	67	.08	34	.05
Total	733	1.00	674	1.00

* Represents the most common themes.

† Represents themes with the greatest difference (>5%) between effective and ineffective course descriptions.

Dimensions of Effective and Ineffective Instruction

In order to understand how the superordinate and subordinate dimensions of effective and ineffective instruction were alike and different, we first examined the frequencies and then the major qualitative differences across the two. We examined how often each of the aforementioned thematic categories was reflected in pre-service teachers' essay statements. Frequencies and corresponding proportions are reported in Table 3 for pre-service teachers' descriptions of

effective and ineffective course experiences.

Table 3 shows that there were similar numbers of pre-service teacher statements (resulting from the segmentation of the essays into clauses) for the effective (733) and ineffective (674) instructional episodes. *Lesson Organization* and *Meaningful Learning* were the two themes given the most elaboration by all students. The least amount of elaboration was given to *Classroom Management* for descriptions of effective teacher's instruction. In the description of ineffective teachers, *Student Autonomy* evidenced the least elaboration. *Teacher Personal Characteristics and Manner* was given less elaboration in descriptions of effective instruction compared to ineffective instruction, and those in ineffective instruction descriptions were deemed only negative teacher characteristics. Finally, elaboration on the absence of a *Comfortable Learning Environment* was more frequent in ineffective course descriptions compared to effective ones. The remaining thematic categories had similar proportions for the descriptions of effective and ineffective instruction.

Overall, the findings suggest that pre-service teachers perceived the *Lesson Organization* of effective and ineffective teachers' instruction to be the most important theme by elaborating the most on it. Students commented on the prevalence of organization or disorganization in a typical lesson for a class, the specific types of organizational strategies used by a teacher (such as diagrams, lesson pace, clarity of explanations, extent of student engagement, the frequency of discussion, debate, lecture, questioning, and cooperative learning), and how well or poorly organized the teacher was.

Meaningful Learning was the second most common theme in student essays (effective instruction: 14%, and ineffective instruction: 16%). Students commented on whether it was encouraged or discouraged by the teacher, whether the learning outcome integrated new ideas with prior knowledge or on the nature of vicarious or actual real-life experiences provided in the classroom. Students also commented upon the degree of challenge associated with meaningful learning outcomes and whether an opportunity was provided for students to engage in learning through discovery or challenge.

Qualitative Differences Across Major Themes

The full coding trees are provided below for four of the nine themes that emerged from our analyses of essays on effective and ineffective teaching. We selected *Lesson Organization* and *Meaningful Learning* because of their prominence in student essay descriptions of both effective and ineffective teaching and learning experiences. We selected *Teacher's Personal Characteristics and Manner* and *Classroom Management* because these categories are associated with the greatest proportional differences in the frequency of thematic elaborations.

Lesson organization. Table 4 presents the hierarchy of subordinate categories for *Lesson Organization*. The table shows qualitatively different descriptions of effective and ineffective university instruction. Looking at the first-order subordinate codes it is apparent that pre-service students tended to use more general terms to describe their effective instructors' use of effective lesson organization and that very few ineffective instructors were characterized as well-organized. A similar pattern held for pre-service teacher statements regarding the use of organizational strategies. Ineffective instructors were characterized as deploying strategies ineffectively, the opposite was true for effective teachers. With regard to different types of organizational strategies, effective teachers were commonly characterized as using clear explanations and diagrams as well as fostering student engagement, discussion, debate, questions, group work, and cooperative

Table 4

Lesson Organization

Hierarchy of Subordinate Categories for Lesson Organization					Frequency		
First	Second	Third	Fourth	Fifth	Effective	Ineffective	
Prevalence: Organization/ Structure to the class	Was Organized				17	2	
	Was not Organized				2	8	
Organizational Strategies/Methods (generally stated)	Effectively Used				11	-	
	Ineffectively/ Not used				-	33	
Types of Organizational Strategies/Methods	Diagrams/ Visuals (concept map, diagram).	Used			13	-	
		Not Used			-	1	
	Lesson Presentation	Pace of Teaching	Well-paced			5	-
			Not			-	12
		Explanation Clarity	Clear			16	-
			Not			-	28
		Student [Engagement] /Involvement During Lesson Presentation	Engaged			28	-
			Not			-	29
		Lesson Structure Elements and Characteristics	Discussion	Yes		29	-
				No		-	9
			Debate	Yes		11	-
				No		-	-
Lecture		Yes		1	1		
		No		-	-		
Question Period		Yes		10	-		
		No		-	27		
Other (e.g., group work)	Yes		32	2			
	No		-	7			
	Cooperative Learning / Competitive Environment	Cooperative Learning Environment	Yes		44	1	
			No		-	14	
		Competitive Learning Environment	Yes		1	4	
			No		1	-	
Total					221	179	

learning environments. On the other hand, ineffective instructors were characterized as having poor lesson pacing and explanation clarity, as well as failing to foster student engagement and seldom (or not at all) providing opportunities for discussion, questions, and cooperative learning.

Table 5

Meaningful Learning

Hierarchy of Subordinate Categories for Meaningful Learning			Frequency	
First	Second	Third	Effective	Ineffective
Meaningful Learning	Was Encouraged		40	-
	Was not Encouraged		-	71
Outcome of Meaningful Learning	Integrating Ideas with Prior Knowledge	Promoted	15	-
		Discouraged	-	13
	Integrating Ideas with Real Life	Promoted	18	-
		Discouraged	-	16
Conditions of Meaningful Learning	Challenge	Promoted	9	-
		Discouraged	-	1
	Discovery learning	Promoted	22	1
		Discouraged	-	7
Total			104	109

We observed clear differences between effective and ineffective instructors across thematic categories. There was very little overlap in the thematic description of types of instructors (i.e., effective/ineffective) with the exception of for the promotion of competitive learning environments. Competition is described as healthy or positive in effective courses.

Regarding *Lesson Organisation*, students commented on (a) the prevalence of organization or disorganization in a typical lesson for a class; (b) the specific types of organizational strategies used by a teacher (such as diagrams, lesson pace, clarity of explanations, extent of student engagement, the frequency of discussion, debate, lecture, questioning, and cooperative learning); and (c) the quality of lesson organization. The following are examples of pre-service student statements about the instructor's preparation of lessons: "The teacher is prepared" (PN25¹); "he was always very prepared when he came to class" (PN55); "high degree of future preparation" (PN3); "prepared when coming to class" (PN19); "... so, what was left for us to see was a visual diagram of the construct of the moral issue" (PN119); "so, he used short lessons to tell the students what they needed to know" (PN121); "students need visuals to learn" (PN82); and

Mr. C's chalkboard, let me remind you, was a piece of art. A circular and incestuous tableau of ideas with arrows and asterisks and circles and underlines that served as a visual aide to the vocal lesson being delivered. Only a fool would have duplicated what was on his board (76).

Meaningful learning. Table 5 presents the hierarchy of subordinate categories for *Meaningful Learning*. Overall, the pattern between effective and ineffective instructors is similar, where effective and ineffective instructors are distinguished with opposing valences within categories. For example, a large number of statements indicated that effective instructors encouraged meaningful learning, whereas it was noted that ineffective instructors did not. Regarding the other subordinate categories, effective instructors were described as promoting the integration of ideas with prior knowledge and connecting classroom concepts with real-life, ineffective instructors did neither. Effective instructors were also described as promoting

meaningful learning through the use of challenge and discovery learning in comparison to ineffective instructors who typically did neither.

The following are examples of pre-service student statements that characterize the meaningful nature of classroom learning: “... involved much more than simple rote memorization” (PN78); “promoted integrating ideas with prior knowledge” (PN14); “integrating ideas with prior knowledge by the way he taught” (PN123); “relates concepts to what we already know” (PN100); “relates academic topics to everyday life” (PN55); and “she generally wanted us to be happy and learn something that meant something to us” (PN134). These are all examples that emphasize the teacher’s actions in relating the course content in a way that connected with students’ available knowledge. The phrases “promoted integrating ideas,” “relates [new] concepts to what we already know,” and “wanted us to learn something that met something to us,” highlight that learning went beyond rote memorization.

Teacher’s personal characteristics and manner. Table 6 presents the hierarchy of subordinate categories for *Teacher’s Personal Characteristics and Manner*. Overall, the pattern between effective and ineffective instructors remained consistent with the aforementioned categories. Effective teachers were described as valuing politeness and possessing enthusiasm and appropriate self-presentation. On the other hand, ineffective teachers were characterized as not valuing politeness, nor possessing enthusiasm or effective self-presentation. The latter two dimensions accounted for two-thirds of all statements across effective and ineffective instructors classified as teacher’s personal characteristics.

Classroom management. Table 7 presents the hierarchy of subordinate categories for *Classroom Management* and shows that the pattern between effective and ineffective instructors remained consistent with the aforementioned categories, where effective instructors had their classroom management described in positive terms and ineffective instructors had theirs spoken of in disparaging ones. The most important theme that emerged in classroom management was the use of power-based classroom management, where ineffective teachers were overwhelmingly described as using authoritarian techniques, whereas effective instructors were (though less often) described as using authoritative techniques.

Table 6

Teacher’s Personal Characteristics and Manner

Hierarchy of Subordinate Categories for Teacher’s Personal Characteristics		Frequency	
First	Second	Effective	Ineffective
Teacher’s Politeness	Valued	5	-
	Not valued	-	4
Teacher’s Enthusiasm	Present	16	-
	Absent	-	25
Teacher’s Self-presentation	Appropriate	6	-
	Inappropriate	-	24
Total		28	53

Note. One of the student-teacher’s segments for the effective teacher was coded at a higher level than the above dimensional table captures (speaking in a more general manner about the value of teachers’ good manners and behavior). As such it was excluded from Table 5, but represented in the frequency count of Table 3.

Table 7

Classroom Management

Hierarchy of Subordinate Categories for Classroom Management		Frequency	
First	Second	Effective	Ineffective
Classroom Management (General)	Effective	5	-
	Ineffective	-	10
Power-based Classroom Management	Authoritative Orientation / Techniques	12	-
	Authoritarian Orientation	1	44
Other / Non Power-situation-ally based Classroom management techniques	Appropriate	6	2
Total		24	56

Discussion

Kennedy (2010) argued that too much emphasis has been given to teacher characteristics in attempting to explain how student perceptions about learning and their actual learning outcomes are related to what happens in university classrooms. Anderson and Burns' (1989) model of instruction includes teacher characteristics and teaching practices as important dimensions in explaining student learning, but their model also includes the social, cognitive, and affective context dimensions surrounding teaching. The results of this study support Anderson and Burns' (1989) model of instruction because the nine themes emerging from the analysis of student essay descriptions of effective and ineffective postsecondary teachers elaborate on teacher characteristics (two themes: *Teacher Personal Characteristics and Manner* and *Student-Teacher Relationships*), teaching (*Meaningful Learning*), and the context surrounding teaching (six themes: *Motivation; Student Autonomy, Comfortable Learning Environment; Classroom Management; and Lesson Organization*). *Meaningful Learning* and *Lesson Organization* were two context themes that explained half of the total variability in the pre-service teachers' essays. *Teacher Impact* was a theme found in effective and ineffective course descriptions although the impact was negative in ineffective courses and positive in effective course descriptions. Moreover, impact directly refers to student learning outcomes which are more lasting than the process of instruction.

We identified several relevant empirical studies that did not use a design directly comparing effective and ineffective instruction but are relevant to interpret in the replicability and scope of our results. Kember and Wong (1993) compared views of effective and ineffective teaching for college students who held an active and passive view of learning. The more active learners' expectations of good teaching entailed active student engagement, active promotion of classroom verbal interactions, teacher enthusiasm, stimulation of student interest in the academic content, and the use of multiple learning tools to engage students in learning. Passive learning advocates saw good teaching as involving organization, clear information, as well as class structure, clear objectives, fast-paced coverage, clear communication, an easily manageable student workload, and distribution of content difficulty across a course. The active learner's reports included conceptions of good teaching which occurred in this study: *Motivation* and *Meaningful Learning*.

The passive learners reported one major theme in this study, organization, and a sub theme of the *Teacher-Student Relationship* theme, clear communication.

Dangel and Guyton (2004) reviewed nine studies reporting themes separating constructivist-based courses and non-constructivist-based instruction. They inferred from the nine studies reviewed that the key meditational experiences were (a) meaningful learning experiences supported by the use of discourse, instructional conversations, peer discussion, and peer coaching during class; (b) a delicate balance of power between the students and the teacher; and (c) student-centered teacher behaviors supported by respect, mentoring, and opportunities for partnership. All of these experiences are represented in the pre-service teachers' descriptions of effective teaching by subordinate concepts from the themes *Meaningful Learning* and *Lesson Organization*. However, our findings deviated from those of Dangel and Guyton (2004) wherein our pre-service teachers did not describe teachers in either of the following two categories: (a) providing frequent opportunities for teacher reflective analysis of effective teaching practices and learning, and (b) providing opportunities to develop and reason about a personal theory of learning and teaching. This difference is perhaps explained by the fact that our purposive sample of pre-service teachers' educational experiences did not allow them to actually observe teachers doing these cognitive activities because (a) they occurred outside the classroom, and (b) teacher cognitions are not directly observable.

Several of the results produced by this study are also supported by prior quantitative research reported by Young (2006). She found that motivating students, course organization, and effective teacher communication explained 83% of the global ratings of teacher effectiveness using a nine-point scale. In our study, essay statements on *Lesson Organization* in effective and ineffective courses shows that the effective teachers influence student engagement and learning through discussion, debate, questions, and group work. Our results also indicated that specific aspects of lesson organization which occurred in descriptions of ineffective instruction did not occur in effective course descriptions: the pacing of lessons was often too rushed for students to follow, lessons were repetitive, and activities given to students lacked variety and were uninteresting. Whereas in the case of *Meaningful Learning*, we found that "learning how to learn" was highly elaborated in descriptions of effective instruction, yet was never mentioned in descriptions of ineffective instruction. In contrast, ineffective instruction included two subordinate categories that did not occur in effective instruction and negatively influenced students' learning from their perspective. "The teacher failed to relate information in the textbook or lectures to real life...she made no effort to relate historical content or offer to prepare content analogies and many examples," as one participant said. Young (2006) also found that a comfortable learning environment, concern for student learning, and a genuine respect for students distinguished teachers given high from those given low teaching ratings on course evaluations.

In our results, *Comfortable Learning Environment* also occurred in descriptions of effective instruction and it contrasted sharply with ineffective instruction, where the learning environment was described as uncomfortable rather than comfortable. In addition, both "concern for student learning" and "genuine respect of students" were referred to and elaborated as mirror opposites in effective and ineffective course descriptions.

The *Teacher Impact/ Student Development* theme occurred in both descriptions of effective and ineffective courses. *Teacher Impact/ Student Development* was positive in valence and elaborated in the effective instructional essays. It was not presented as a one-dimensional theme, but rather as a multi-dimensional concept referring to enduring influence of the instruction on the individual, their declarative knowledge, problem solving skills, how to integrate existing

knowledge with new knowledge, how to learn from a model, how to think critically, meta-knowledge, feelings, professional goals, and learning outcomes. For each *Teacher Impact/ Student Development* theme present in an essay, there were between three and six elaborations for effective instruction, but only one subcategory had two elaborations. For example, with regard to the subcategory “feelings, descriptions of ineffective instruction,” essays included statements such as *being afraid*, *being confused*, or *being frustrated*. Descriptions of effective instruction included *pride in accomplishments*, and *being successful*. Student statements making up *Teacher Impact/ Student Development* demonstrate that, for persons seeking to become teachers, some have been deeply affected by what they consider to be an effective course experience. However, the proportion of all courses described in the study where the instructor made an impact on the pre-service teacher is relatively small, which may suggest that opportunities for teachers to have a lasting impact—that their students are aware of—may be somewhat rare. However, it remains unclear whether this is due to the teacher’s personal characteristics, teaching practices, or to the instructional context. Yet, it remains important to the evaluation of the teaching as a profession that persons planning to become teachers and those responsible for educating future teachers be aware of the powerful influence that some pre-service teachers attribute to being a participant in effective instruction.

Limitations, Strengths, and Future Directions

The results of this study are limited in part because we exclusively relied on one data source: statements that pre-service teachers included in essays describing effective and ineffective post-secondary courses they participated in. The study did, however, offer rich data (Creswell, 1998) due to cross-case analysis and triangulation with multiple investigators, comparison of themes and subthemes with studies of similar design, and determining if the themes identified would be congruent with the conceptual features of a respected theoretical model of instruction.

The essays were written as two course assignments. It is possible that some participants may not have wanted to share certain perspectives in this context. However, the strong opinions and, in some cases, emotions shared in students’ essays suggest that most, if not all students, felt comfortable responding honestly to the essay directions. Written essays are an appropriate type of data for research questions that strive to understand perceptions because these phenomena are psychological rather than behavioral (unlike classroom practices, for example). Given the three-page average length of the essays and the requirement for essays to be thoughtfully written, it appeared that the students took the assignment seriously.

The open coding of essay data was inductive and based on the voices of the students rather than starter codes selected by the researchers, which strengthens the trustworthiness of the findings. Frequency of themes mentioned and their elaborative subthemes allowed a proportional comparison of what themes pre-service teachers elaborated most on and therefore reflected what themes and subthemes they considered to be most important.

Future research might use the themes generated from this study to create items for valid and reliable survey that could be used with undergraduate students in education and other disciplines. Using a similar case study design and methods, both students and their instructors could be compared in order to determine how alike, different, and unique their understandings of instruction appear to be.

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Notes

1 The first and second authors contributed equally to this manuscript.

2 Bracketed numbers with “PN” following quotes represent anonymized participant numbers (PN). These numbers are used to illustrate that statements come from different participants.

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