What Helps TESOL Methods Students Learn: Using Q Methodology to Investigate Students' Views of a Graduate TESOL Methods Class

Linda Collins
The University of Akron

Maria Angelova
Cleveland State University

The direction of university courses is often guided by the results of traditional Likert scale student evaluations. Most of these focus on instructors' characteristics and frequently do not provide useful insights into students' learning preferences or feedback regarding specific activities and projects in the courses. This study, carried out in a Midwestern U.S. university, reports the use of Q methodology to capture students' views of 35 activities in a graduate TESOL (Teaching English to Speakers of Other Languages) Methods course as to which were most helpful and least helpful to learning course content. During the last class of the semester 19 students carried out Q sorts about different aspects of the methods course. Factor analysis showed how participants grouped onto 3 factors, expressing 3 unique views on how helpful the 35 different course activities were to their learning. The majority of the students were "group-centered learners" who learned best through various face-to-face interactions with classmates. Two were "self-centered learners" who learned best by working independently, then receiving feedback. One learned best through the course's online activities. Analysis of students' different views helped researchers determine whether to redesign various aspects of the course to meet different learning preferences.

Universities face many challenges in their desire to offer high quality courses that meet the needs of a wide array of learners. In an effort to collect student feedback, summative course evaluations have been essential elements of most college courses for many years. At some point in a university course, students typically complete evaluations which provide data regarding various features such as course design, quality of teaching, use of resources, and overall effectiveness (Jurczyk & Ramlo, 2004). According to Frick, Chadha, Watson, and Zlatkovska, (2010), "Course evaluations traditionally used in higher education have few items that are empirically related to student learning" (p. 116). These items yield few insights into student learning preferences or individual paths to achievement. An issue in the use of student rating for instructional improvement is that the feedback is often based on general items or is focused on the instructor, making it difficult to use data to improve the course (Pohlman, 1975). Indeed, higher education institutions have placed heightened attention on the need for alternate forms of student course evaluation (Amin, 1993).

Using Q methodology as part of course feedback can provide a vehicle for gathering students' opinions and uncovering insights into their views of the course and how it supports their learning, aspects often missed in traditional Likert scale course evaluations (Jurczyk & Ramlo, 2004). As noted by Brown (1986), the instrumental basis of Q methodology is the Q sort technique, which conventionally involves the rank ordering of a set of statements from *most unlike my view* to *most like my view*. Therefore, this methodology provides the way for uncovering and identifying the range of participant opinions regarding a specific course.

This mixed method study investigated the views of students enrolled in a TESOL (Teaching English to Speakers of Other Languages) methods and materials course regarding which aspects and activities of the course best helped them learn course content. The study utilized Q methodology, commonly referred to as Q, which provided the means for uncovering and identifying the range of participant opinions regarding a specific topic of investigation (Stephenson, 1953).

Literature Review

The importance of preparing teachers to address the needs of English language learners (ELLs) has been well documented nationwide but became acutely aware to the instructors of the course under study as a result of a survey conducted within the Midwestern state where this study was carried out. Responses to a teacher survey related to professional development research in the state where this study took place showed that 96% of teachers responding had ELLs in their classrooms (Newman, Samimy & Romstedt, 2010). This underscored to the researchers in this study the urgent need for high quality offerings for teachers in the state to learn about identifying and meeting the needs of English language learners. For this reason, researchers determined that finding out via a learner centered course evaluation which learning aspects and which activities were most helpful to these graduate students' learning would be the best way to find out in what ways the course matched their learning preferences.

Different approaches to evaluating courses have been suggested over the years with the argument that they provide clearer insights into identifying how students evaluate their courses and instructors. For example, Patrick (2011) has written that the five basic

instructor personality traits students rate strongly in their evaluations are neuroticism (emotional stability), extraversion, openness, agreeableness, and conscientiousness. Instructor openness and conscientiousness added significantly to students' ratings of their courses and professors' effectiveness.

Many universities, including the one where this study was conducted, use Likert scale course evaluations to gather students' overall impressions, but those generally provide few insights into aspects of the courses that support learning or specific dimensions that students find useful. Other sources of student feedback on courses may also include checklists. While instructors design courses based upon their ideas about how to make them effective, overall, little is known about the effects on learning that arise due to differences that exist between perceptions of learning held by university instructors and students (Lecouteur & Delfabbro, 2001), and researchers were looking for more information they could use to guide future presentations of the course under study. Recently, a novel approach for investigating students' opinions of different aspects of a given course has been used by several researchers (Jurczyk & Ramlo, 2004; Ramlo, 2008; Wheeler & Montgomery, 2009). This approach uses Q methodology which is considered "an appropriate choice whenever a researcher wishes to determine the various perspectives and consensus within a group regarding any topic" (Ramlo, 2008, p. 77). In a Q study, participants are presented with a number of statements about some topic (in this case, the helpfulness of different aspects and activities of a given course) and are asked to rank order them according to their personal opinion or feelings about these statements. The individual rankings of the different people's viewpoints are then analyzed using factor analysis (For explicit details of Q Methodology please see the "Description of Q Methodology" section). Q Methodology (often referred to as Q) was determined to be the best choice for this study in uncovering different points of view regarding the helpfulness of different course aspects and activities to the students. Q is an established research methodology used to study participants' subjectivity, or viewpoints, in a systematic way (Brown, 1991; McKeown & Thomas, 1988). Developed by Stephenson in 1935, Q has served as the foundation for the scientific study of subjectivity and showed that people's thoughts can be studied. Q is an appropriate choice when studying the perspectives of a small number of participants as they rank order a number of statements that pertain to the topic under study (Brown, 1986, 1991; Stephenson, 1953).

Jurczyk and Ramlo (2004) noted that using Q as a course evaluation leads to "a more complete understanding of students as individuals compared to the traditional Likert scale course evaluations" (p. 14).

In a subsequent study, Ramlo (2008) used Q to uncover students' views of their learning in a college physics course relative to the instructor's perceptions of students' typical and ideal views. While the majority of the student viewpoints aligned with those of the instructor, another perspective coming from Ramlo's study emphasized the need to understand how to improve his learning while a third perspective indicated that learning the content would either be immediate or unlikely. Overall, students in that study indicated that they did not utilize the professor's chosen textbook much, if at all.

Lecouteur and Delfabbro (2001) used Q methodology to compare instructors' and students' views of learning and discovered that "there was not a great deal of similarity in the accounts of teaching and learning produced by. . .teachers and students in this study" (p. 226). Those authors recommended further study of available repertoires of teaching and learning and how they apply to local contexts.

When community college students used Q to describe their views on learning math, they expressed their distinct perspectives through the relative placements of Q sort items and open-ended follow-up questions based upon their sorts more consistently than was possible using available Likert scales (Wheeler & Montgomery, 2009). Nevertheless, despite their three distinct views, students concurred that the teacher was the most important factor in learning math, a conclusion subsequently supported by further research. In a study involving teachers in a professional development workshop, Ramlo (2012a) determined that "Q methodology can provide a means of determining holistic views about learning at any point during the workshop" (p. 7). These workshop participants were all in-service teachers, and the authors in the current study generalized this observation to determine that Q would be an appropriate venue to explore perspectives of adult learners (mostly practicing teachers) enrolled in the graduate-level course under study.

With the intent of identifying the versatility of Q in higher education, Ramlo (2012b) wrote about three studies which underscore the usefulness of Q methodology. One study grouped students according to their views as they evaluated a newly developed course. Another study investigated students' views of their learning in a physics course, a study that replicated previous investigations. Results showed similar results in the studies, which used the same Q sort items each time. The third study investigated faculty perspectives as they carried out professional readings and professional development in the formation of a new school of technology at the university. Consensus and distinctions among faculty perspectives were highlighted in an inclusive setting. These three studies underscored the advantages of Q over traditional

surveys and Likert scales in collecting feedback and ascertaining individual participants' views and improving overall course quality.

Description of Q

A Q study begins by gathering a concourse, which is a collection of statements related to the topic under study. Imagine a professor interested in students' subjective opinion of her class. She wants to know which aspects of the class and which activities that students were engaged in during the semester were most helpful to them. The professor writes a list of all activities and adds statements related to different aspects of the class. For example: *methods quiz*, *feedback from the professor*, s*tudent-student interaction*, or *my desire for a good grade*. From this concourse, the researcher selects a Q sort which is placed on a set of numbered cards, each card showing an individual statement selected from the concourse. Participants force rank these individual items, frequently from (-5) *most unlike my view* to (5) *most like my view*. Ranking decisions are recorded on a Q grid data sheet, similar to Figure 1.

Q methodology is unique, and it differs from survey research even though both methods uncover participants' perceptions or viewpoints. Unlike surveys and Likert scales, Q sorting ensures that participants make explicit choices by ranking of each of the sort items relative to the other items while discriminating among them in a way they would not do otherwise (Corr, 2001; McKeown & Thomas, 1988; Ramlo, 2008). Such distinctions occur since using a forced distribution in the sorting process limits the number of items that participants place at each ranking level. Another unique feature of Q is that it can be accomplished and be effective with small numbers of people (Brown, 1986, 1991; Stephenson, 1953). The intense nature of Q methodology calls for small numbers of participants, or even single case studies, in order to explore the existing viewpoints and make them open to study (McKeown & Thomas, 2013).

An appropriate and adequate number of participants in a Q study could be small but must include enough participants to establish that a varied number of points of view exist regarding the topic under study (Watts & Stenner, 2012). Participants should be selected thoughtfully to be sure to incorporate individuals who have specific and relevant opinions on the topic (McKeown & Thomas, 2013).

Through Q methodology, operant categories are identified that represent functional, not just logical distinctions (Brown, 1991) among participants' perspectives. Capturing different perspectives allows a researcher to "understand a human experience rather than identify cause-and-effect relationships" (Broady-Ortman, 2002, p. 110), while finding out different opinions of group members and how many people in the group share specific opinions (McKeown & Thomas, 2013; Ramlo, 2008; Stephenson, 1953).

Q methodology follows subjective perspectives patterns across participants rather than patterns across variables. Thus, Q reveals correlations and factors among persons and their views while survey research reveals correlations and factors among traits. In Q, the correlations are based on the assumption that "persons significantly associated with a given factor ... share a common perspective" (McKeown & Thomas, 1988, p. 17).

Method

Setting

The setting for this study was fall semester in a graduate level course in TESOL methods at a large Midwestern urban university. Since it was the beginning of the school year, researchers recognized that course content would be available for teachers to apply to instruction in the current academic year, enabling study participants to apply and implement course content immediately and judge which course activities were most helpful.

This study was carried out by two researchers. One was the course developer/instructor, and the other was the instructor who taught the section of the course in this study. Their intent was to obtain the students' views of different aspects and activities in a graduate TESOL course to find out which were the most helpful and least helpful ones to learning the course content. Additionally, this was the first time this course was offered as a blended course (with some online content and discussion), and the researchers wanted to find out whether the students found the online components to be helpful as well. Currently, this is the only course in this university's TESOL endorsement program that does not have an online version. This is considered the cornerstone course in the program, so, based upon students' feedback, researchers intended to use the results of this study to aid in a possible redesign of the course to make it more meaningful for the students. The research question for this study was: What are students' views of the different aspects and activities in the TESOL methods course in terms of their helpfulness to their learning?

Description of the TESOL Methods and Materials Course

This course was designed to offer students opportunities to develop both content and experiential knowledge in teaching English language learners

Figure 1
Sort Distribution Grid

Least helpful to my learning   Most helpful to my learning

| -5 | -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
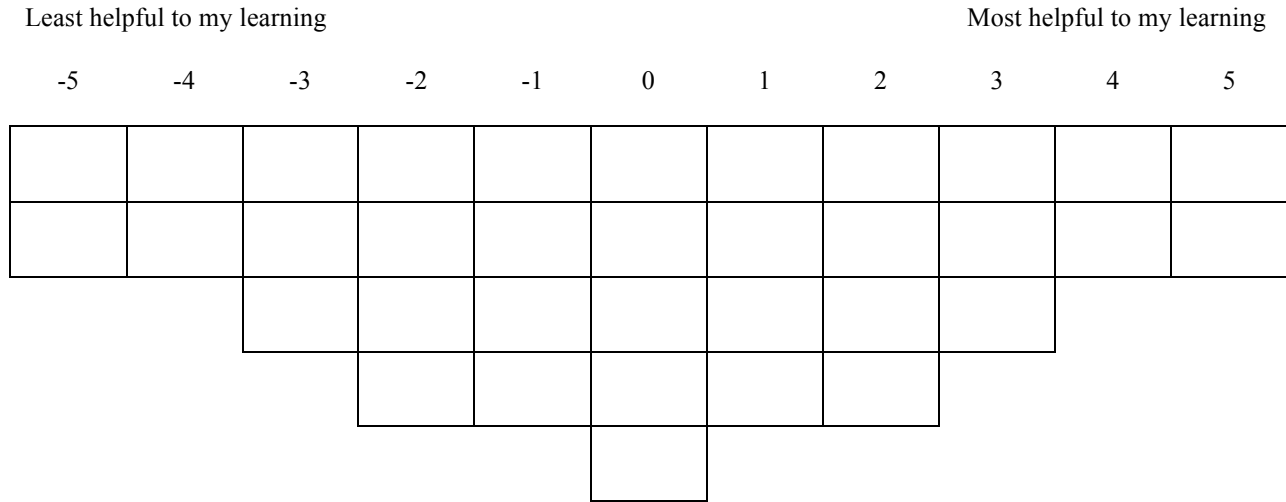
(ELLs). Through lectures, readings, class discussions and class activities, the course provides a critical exploration and analysis of current approaches to language teaching with an emphasis on the development of communicative competence. During the first half of the course students prepared group presentations on one of eight methods for teaching ESL, and they took a quiz on the different methods studied.

The second purpose of the course was to offer students opportunities to gain experiential knowledge through teaching mini-lessons. Each student chose one of six skills (reading, writing, speaking, listening, grammar, or vocabulary) as the focus of a mini-lesson. The mini-lessons were taught to the instructor and other students who acted in the role of ESL students. All observers provided feedback on each mini-lesson. Students also wrote personal reflections on their own lesson presentations. The final project for this class was to write a personal teaching philosophy paper regarding teaching ELLs.

Participants

Nineteen students (14 females and 5 males) who were enrolled in the TESOL methods course participated in this study and included one undergraduate and 18 graduate students. Eleven of those in the class had or were seeking licensure for elementary grades (up to grade eight) and seven for secondary or K-12, while one participant was preparing to work with adults. Fifteen students cited this course as a requirement, and four did not. While all were preparing to work with English language learners, their experience working with ELLs over the past two years varied. Seven had worked with nine ELLs or fewer, one had worked with 10-19, four had worked with 21 – 29 ELLs, two worked with 30-49 ELLs, and five had worked with more than 50 ELLs over the past 2 years. The amount of previous preparation for working with ELLs varied as well. Seven participants had had no prior course work in the area of teaching English to speakers of other languages. Four had completed one or two courses prior to this one, and six participants had completed three to five courses. Two participants had completed six or more courses and were nearly at the end of their TESOL endorsement program.

Instrument

An essential aspect of any Q study is the selection of the Q sample, or Q sort, which refers to the items selected by the researcher to be ranked by participants during the sorting process. In this study, the concourse consisted of all course activities as well as statements reflecting the students' personal perspectives like student motivation regarding the course. The Q sort was generated by the researchers from the course syllabus and literature reporting on other studies which investigated college courses using Q. Researchers started with 42 course related activities and aspects and after reviewing them selected 35 sort items for the final Q sort, listing the statements on separate cards. The sort included all activities and tasks completed throughout the semester (see Appendix) and some personal perspectives of students.

Data Collection

Data was collected through Q sorts (Figure 1) which were completed by each of the 19 participants

during the last class of the fall semester. During the sorting activity, students force ranked 35 statements into a quasinormal, symmetrical distribution to prioritize among the sort items for the research question (Figure 1). Participants sorted the numbered cards from *least helpful to my learning* to *most helpful to my learning* and then copied the numbers from their completed sort to a grid sheet. Then they answered follow-up questions explaining their sorting decisions for the highest (5, 4) and lowest (-5, -4) ranked statements along with demographic questions.

After ranking the statements, the participants were asked for follow up explanations of specific rankings which were used as qualitative data that provided insights into the various ways that different viewpoints were represented among participants (Corr, 2001). One researcher (also the course instructor) conducted the Q sort activity, facilitating the sorting process by explaining the data collection process to the whole class. Participation was voluntary, as details of the data collection process were shared with students a week before the sorting activity was scheduled to take place, giving students the option of not participating during the upcoming class meeting if they did not want to do so. All participants freely signed letters of consent, indicating that they were participating voluntarily. On the designated day, students sorted at their desks independently and submitted their grid sheets with no names into an envelope. To eliminate bias, students were assured that no data would be reviewed or analyzed until after final grades had been submitted. Responses were kept confidential as results were analyzed and reported.

Students sorted the cards first in three piles: (a) the aspects and activities they thought most helped them learn course content, (b) those they thought least helped them learn, and (c) the ones about which they felt neutral. Then they distributed the statements according to the individual cells of the sorting grid (Figure 1) and answered demographic questions as well as questions about their sorting decisions by writing brief explanations for the items they ranked as -5, -4, 5, and 4. They also had the opportunity to provide comments about the overall sorting process and the Q sample.

Data Analysis

The 19 Q sorts generated in this study were analyzed using the PQMethod 2.11 software program (Schmolck & Atkinson, 2002). The program accepts data entry and then correlates the Q sorts. Factor analysis was conducted to show how participants grouped according to their sorts. Centroid factor analysis was conducted as an initial analysis. Then manual rotation was used for more focused factor iteration. Participants with similar views shared the

same factor. In this study, the emergent factors represented the different ways participants' Q sorts grouped together regarding their views of helpfulness of specific items to their learning of course content. Participants with similar views shared the same factor (Brown, 1980).

The PQMethod software calculated the reported factor scores as well as how closely the factors correlated to each other. The software also aided in identifying distinguishing statements and consensus statements, underscoring ways that the three factors were distinct and similar. The resulting *representative sorts* expressed the overall perspectives of each factor. Participants' comments served to clarify or explain some of their sorting choices. In addition to the statistical analysis, each of the two researchers read the students' comments and explanations of their rankings to find quotes that were relevant to the students' choices. The selected quotes were compared by the two researchers, and the ones that best explained the participants' ranking of the items were used as a source for data triangulation and establishing credibility (Lincoln & Guba, 1985).

Results

Three factors emerged from the analysis of the 19 sorts as displayed in Table 1. Correlations marked with an X represent defining sorts. Sixteen students, twelve females, and four males loaded to one of three factors. Factor loadings "are generally considered to be statistically significant if they are approximately 2 to 2.5 times the standard error" regardless of sign (Brown, 1991, Section 5). For this study, statistical significance was calculated at 0.334 - 0.422, signifying $p < .05$ or $p < .01$. Two sorts did not load on any of the factors as they were not statistically significant. One confounded sort loaded nearly equally on two factors, thereby not identifying with any one particular factor. These three sorts were not seen as specifically relating to any of the three factors.

Factor 1 represented the perspectives of 13 students, Factor 2 included two students sharing a different point of view, and Factor 3 represented one student's perspective (Table 1). Despite having just one sort, the third factor was retained because that sort presented a viewpoint quite different from the others, presenting a distinct perspective on the helpfulness of the different course aspects. Unlike other factor analysis techniques, Q is based upon "self-significance," or "importance to me" (McKeown & Thomas, 2013, p. 49). According to Brown as quoted by Van Exel and de Graaf (2005), "Since the interest of Q methodology is in the nature of the segments and the extent to which they are similar or dissimilar, the issue of large numbers so fundamental in most social research is rendered

Table 1
Factor Matrix with an X Indicating a Defining Sort Loading

Q Sort	Factor 1: Group Centered Learners	Factor 2: Self Centered Learners	Factor 3: Online Learner
1	0.5889X	-0.4311	-0.1604
6	0.5325X	-0.2716	0.1212
7	0.3564X	0.1587	0.0894
8	0.7958X	0.3926	0.1406
9	0.7210X	0.0033	0.0265
10	0.6227X	-0.0842	0.1156
11	0.5210X	-0.2400	0.0840
14	0.7079X	-0.2667	-0.1654
15	0.5626X	0.2932	0.3759
16	0.3831X	-0.0555	0.2235
17	0.6255X	0.2554	0.1616
18	0.4683X	-0.0548	-0.1400
19	0.6439X	0.3194	-0.2626
4	0.0952	0.5926X	-0.1938
5	0.1514	0.7739X	0.1801
2	-0.1905	-0.0760	0.4101X
3	-0.0052	0.1200	-0.0586
12	0.0743	0.2886	-0.0089
13	0.4821	0.4308	-0.1364

relatively unimportant" (p. 5). As Q methodology "aims to establish the existence of particular viewpoints" (Watts & Stenner, 2012, p. 73), the participants in this study expressed three clear perspectives, and researchers maintained the three factors that emerged in order to highlight those distinct views, even though expressed by just one or two participants. These participants' sorts met the threshold for statistically significant loadings and provided unique insights for the course developer and instructor.

The majority of the students were on Factor 1, named *group-centered learners*. These students learned best by working with other students and the instructor. They considered the experiential components of the class as the most helpful for their learning. They indicated that they learned best when they worked in groups and shared ideas with fellow students through class presentations, group activities and face-to-face discussions. In one student's words, "Coming to class is hands-on, and I like the interaction." Table 2 lists the six highest and lowest ranked statements for Factor 1.

The highest ranked (5 to 3) items for this group demonstrated that these group-centered students expressed a preference for in-class tasks such as modeling the different second language methods studied in class, which was a team project. Additionally, presenting the interactive mini-lessons they designed as well as observing their colleagues' presentations of their mini-lessons was very helpful to them. They also benefitted from discussing different

topics during class and being engaged in different class activities, most of which were done in groups. One student stated, "I feel that I learned a great deal from the class discussions and activities. I was able to grow as a teacher by hearing other people's ideas and strategies." Among the least helpful, or lowest ranked (-5 to -3) activities for Factor 1 were *working alone* and *reading assigned articles*. Also ranked low were researching and writing the final paper, all independent learning activities. One learner wrote, "I would rather sit in a classroom and learn from my peers."

Further clarifying this perspective, a student responded to the follow-up question, "Interaction and shared stories are the best way to learn methods. Hearing other hits and misses helped considerably." Another student wrote, "I really liked all the presentations. I'm more of a hands-on learner and being able to become a part of my peers' presentation created a lasting impression. It added to the reading. It made the reading come alive."

Factor 2, termed *self-centered learners*, were two students who presented a perspective that differed from the *group-centered learners*. Unlike their colleagues loading to Factor 1, the *self-centered learners* viewed working alone as helpful, and they focused heavily on their individual performance in class and events that benefitted themselves rather than being mutually beneficial to others also. Their work was driven by the desire for a good grade, and they also gave the item *feedback from instructor* the highest rank (5). Table 3

Table 2
Factor 1, Group Centered Learners: Most and Least Helpful Aspects and Activities

Rank	Item #	Statement	Z score
5	21	Observing others' presentations	2.173
5	6	In-class activities	1.736
4	24	Classroom discussions	1.613
4	29	Presenting micro-teaching lesson	1.242
3	22	My desire for a good grade	1.133
3	23	Presenting and demonstrating method for class	0.913
-3	5	Doing research for final paper	-1.009
-3	13	Writing personal philosophy–final paper	-1.211
-4	2	Online discussions	-1.215
-4	33	Methods quiz	-1.533
-5	32	Reading assigned articles	-1.544
-5	30	Working alone	-2.188

Table 3
Factor 2, Self-Centered Learners: Most and Least Helpful Aspects and Activities

Rank	Item #	Statement	Z score
5	22	My desire for a good grade	1.957
5	7	Feedback from instructor on quiz and assignments	1.688
4	35	Preparing micro-teaching lesson	1.524
4	6	In-class activities	1.404
3	29	Presenting micro-teaching lesson	1.389
3	18	Receiving feedback from colleagues on micro-teaching	1.270
-3	14	Preparing method presentation and handouts	-0.852
-3	23	Presenting and demonstrating method to class	-1.120
-4	34	Previous education courses	-1.136
-4	33	Methods quiz	-1.270
-5	25	Classmates' methods handouts	-1.688
-5	26	Working in small groups or with a partner	-2.091

lists the highest and lowest ranked sort items for Factor 2.

The majority of their highest ranked items (5 to 3) showed that they were focused more on the preparation and presentation of the assigned mini-lesson, primarily individually initiated tasks and the major course assignment. They felt that feedback from both their peers and the instructor was helpful to their learning, and providing feedback to others was not ranked highly. They benefitted from working independently to prepare and present their micro-lessons as well as hearing the feedback, which was for completing and enhancing their own assignments. The demographic data showed that these two students were quite different from each other in that one was male, the other female; one was undergraduate, the other graduate; and one had worked with ESL learners and had taken several other TESOL courses, while the other had almost no experience with ESL students and this was his first TESOL course. As one learner put it, "I think working in small groups or partners. . .becomes too much."

The lowest ranked statements for these two students (-5 to -3) showed they felt that working with a partner or in groups was least helpful to their learning. One specific online assignment required group feedback be provided with participants observing a particular timetable. To ensure that each group member would have time to respond to all other group members, the recommended time frames were liberally assigned. A comment from one *self-centered learner* confirmed that the individual preferred learning on his own, even within the liberal parameters of the online tasks. That Factor 2 participant explained, "The online discussion was a hassle. Group work is a practice for team-building and should <u>NOT</u> be used on adults." Another of their lowest ranked (-3) items referred to one of the assignments, team preparation and presentation of one of the methods for teaching ESL. These two students' sorts indicated that they didn't think preparing for the methods presentation, doing the presentation, or reading their fellow students' handouts (-5) on the different

methods were helpful to their learning. The explanation that one of them gave was: "The methods activity wasn't as useful because I cannot see ever applying a single method in the way we learned them," again, focused on individual preference or need.

Factor 3, the *online learner*, represented only one student's viewpoint, a female who taught elementary level students and had taught fewer than nine ESL students in her classroom in the past two years. Her opinion of the helpfulness of the different aspects and activities was quite distinct from the rest of the class. This student ranked the online discussions very high (5) and valued what she had learned from previous education courses (5). A number of other courses in the TESOL endorsement program were online. In addition, she ranked high (3) being able to access additional resources provided on Blackboard learning management system (Table 4).

Table 4 also lists the six aspects and activities that the *online learner* considered least helpful to her learning. These indicated that coming to class regularly, presenting the mini-lesson, observing others' presentations were not as helpful to her as the online aspects of the course. Most of these lowest ranked items required that the students be together on campus to complete them. Her comment was, "I prefer online classes. . ."

Discussion and Implications

The results from the factor analysis showed three distinct views on the helpfulness of the different course aspects and activities to students' learning of TESOL methods. Three students did not load distinctly on any of the factors. The sorts of two of the students did not load on any of the factors as they were not statistically significant. The other student's sort was confounded because it loaded nearly equally on two factors, thereby not identifying with a factor. These three sorts were not seen as relating to any of the three factors as they did not share the perspectives of their colleagues. The researchers noted that all three of the nonloaders had limited prior experience in the TESOL field. This was one of the first TESOL courses they had taken, and they had worked with fewer than nine ESL students in the last two years. For two of them this course was not a requirement. Researchers also observed that they did not represent the typical population of students who enroll in this course, usually taken as a program requirement close to the end of the university's TESOL endorsement program. This led researchers to consider the possibility that this narrower TESOL background (compared to most classmates) may have influenced their perceptions of the course activities, setting them apart from their colleagues. A comment from one nonloader also illustrated a perspective different from

colleagues: "Working alone and working in a small group are very different, but I would learn either way." Others in the class had more specific learning preferences regarding interaction with colleagues. Another nonloader commented, "The text book is well written and easy to understand" and ranked high "Reading Larson-Freeman methods book," an item ranked very neutrally by others in the class having more TESOL background experience and knowledge. These kinds of comments also separated these nonloaders from the rest of the class and may have been a reflection of their more limited background in TESOL and experience with English language learners.

Sorts and comments of the 13 *group-centered learners* expressed that they learned better through the interactive aspects of the course. This led researchers to consider that the experiential aspects of the course were generally helpful to the majority of students regardless of amount of prior TESOL coursework and experience working with ELLs. The results of Factor 1's view coincided with earlier findings by Gándara, Maxwell-Jolly, and Driscoll (2005) that individuals preparing to work with ELLs preferred to learn effective TESOL strategies by observing other teachers, thereby confirming that the interactive parts of the course were positive aspects in the syllabus for a high proportion of these students.

The *group-centered learners* also gave a high rank to in-class activities and class discussions, which centered upon modeling effective TESOL techniques. This finding, too, concurred with research indicating that teachers cite learning about second language instructional techniques as what they most want to learn (Gándara et al., 2005; Karabenick & Noda, 2004) in order to enhance their confidence in working with ELLs.

As experienced ESL teachers themselves, the researchers also considered this course from the perspective of learning in a second language. This course intentionally incorporated activities in which students carried out a variety of tasks designed to model and allow them to experience learning through TESOL instructional techniques based heavily upon interactive tasks and carried out in a rich context. Many of the students in this class learned English as a second language themselves, a fact that may have contributed to why some of these "group centered learners" might have felt they learned better from these face-to-face interactive activities more so than lower ranked, less contextualized learning tasks such as reading and writing about the content or discussing their ideas online. Interactive tasks also highly engage all participants and offer information and feedback to all those participating in them rather than being directed more toward one person. Researchers felt that collectively, it was possible that students recognized

Table 4
Factor 3 Online Learner: Most and Least Helpful Aspects and Activities

Rank	Item #	Statements	Z scores
5	2	Online discussions	1.815
5	34	Previous education courses	1.815
4	18	Receiving feedback from colleagues on micro-teaching	1.452
4	22	My desire for a good grade	1.452
3	8	Resources, announcements posted to Blackboard Learn	1.089
3	4	Methods summary paper	1.089
-3	20	Coming to class regularly	-1.089
-3	11	Instructor's availability to explain-in person, e-mail, phone	-1.089
-4	5	Doing research for final paper	-1.452
-4	24	Classroom discussions	-1.452
-5	21	Observing others' presentations	-1.815
-5	29	Presenting micro-teaching lesson	-1.815

these activities as appropriate for ELLs, which gave the tasks a feeling of being familiar and inside their comfort zone.

The views expressed by the two *self-centered learners* on Factor 2 differed from those of the *group-centered learners* in that the *self-centered learners* were driven by external motivation, that is, their desire for a good grade guided them in their choices of most helpful activities. In fact, their other highest ranked item was feedback from the instructor – the one who ultimately assigns the grades. Receiving feedback is less active in nature than interactive tasks, which seemed to fit with the overall perspective of these Factor 2 learners.

These students ranked high their experience with mini-lessons presentations, the most heavily weighted course assignment which included the most extensive feedback, and, ultimately, their grade, which they deemed an important feature of the course. This was seen as reflecting their self-centered learning nature. Unlike the *group-centered learners*, these *self-centered learners* preferred to study alone, and they focused mostly on their personal performance in class, which could explain why they ranked feedback from their instructor and their mini-lessons the highest (5). Researchers wondered if these students may have thought that taking into consideration the instructor's feedback, particularly on the heavily weighted mini-lesson, would ultimately help them achieve a better grade. The students from the second factor were more *individualistic* learners as opposed to the *collectivist* team player type of learners from the first group. They preferred to study alone and to present their own work rather than collaborate with the others, but they also wanted to have the instructor's and peers' feedback so that they could be successful.

The *self-centered learners* did not find the assignments related to learning about or applying the different methods helpful to their learning. One possible

explanation of this low ranking in Factor 2 might be that these two students did not find the group activities to be helpful since the format of the methods assignment was to work and present with a partner. Nevertheless, researchers found this attitude toward the methods project to be a bit distressing since this course, "TESOL Methods and Materials," had such a strong basis in exploring different language instruction methods in order to identify one's own preferred methods. Yet, preparing, presenting and receiving feedback on the micro-lesson, which they planned and presented individually, helped them learn. This led researchers to consider that in the future, the course design might need to indicate more explicit connections between the assignments related to learning of different methods and classroom instruction by redesigning that aspect of the course.

These *self-centered learners* did not find the online discussions to be helpful either, which again might reflect their view of group work. To the researchers, these two students seemed to be very traditional, preferring transmissive instruction in their style of learning. They appeared to prefer a teacher-centered classroom in which they communicate mainly with the instructor whose feedback they value highly, receive feedback from colleagues, and learn content through independent work.

The only student on Factor 3, *the online learner*, expressed often cited reasons students mention for favoring online courses such as a busy schedule and preference for working alone rather than doing group projects. (Brown & Green, 2003; Carter, 2004; Harlen & Doubler, 2004). This student did not think observing others' mini-lesson presentations was helpful to her learning. This view could perhaps have been influenced by the fact that these were essentially in-class activities. She valued her previous education classes, a number of which were online, which may be based upon her

preference for working independently rather than collaborating with colleagues.

Factor 2, the *self-centered learners*, and Factor 3, the *online learner*, ranked receiving feedback among their top three items, indicating it was very helpful to their learning. These views underscored what was for them a strength in the course design since, in addition to traditional instructor feedback on their mini-lessons, students received three points of feedback from every classmate. The usefulness of feedback in the learning process is documented as far back as Bruner (1973) when he outlined the benefits of scaffolding learning with constructive feedback to guide learners to carry out a task independently and effectively. The course designer's intent was to make available a variety of perspectives and depth of feedback offered to each student. The helpfulness noted through the sorting activity confirmed that this was a valuable aspect of the course.

Those loading to factors 2 and 3 also appeared to prefer to work independently, although in different contexts. Factor 2 students appeared to be more externally motivated and found in-class activities to be helpful, while the Factor 3 perspective was more focused on the independence and flexibility allowed by the online learning environment. Researchers saw these perspectives as underscoring the importance of maintaining balance between collaborative and independent learning opportunities in the course structure. Such differences in learning preferences may also indicate that more choices in format or method of completing required course work are needed in future iterations of the course.

It is worth noting that 17 of the 19 participants in this course (13 on Factor 1, one on Factor 2, one Factor 3 student, and two of those not loading to a factor) did not view writing about their personal TESOL teaching philosophy as helpful to their learning. Researchers observed that the majority of the students were experienced teachers, and these perspectives and student comments brought the researchers to consider that possibly students had already written about their teaching philosophy in previous courses. Since the teaching philosophy paper was a major course assignment and 17 students ranked it very low, researchers turned to the students' explanations of their sorting decisions for clarification. A Factor 1 student confirmed researchers' thoughts by stating,

> As a current educator, it seems a bit pointless for me to discuss my personal philosophy regarding teaching. I already did this in undergrad and continue to do so every day I teach. To record that data for someone else no longer seems to be a beneficial learning experience for me.

The Factor 3 *online learner* commented, "I do many research papers – I do not [get] much out of them." This overwhelming negative view of the philosophy paper led the course developer to consider restructuring this final task for future implementations of this course or reviewing the context in which it is presented.

In order to further ground this work more firmly in established and accepted theory, researchers (who collectively had designed and taught the course) compared the foundation of the course design and participants' responses and comments to Merrill's (2002) "First Principles of Instruction," which outline a complete learning cycle. These features are common to various instructional design theories, and if any are missing, "learning will be negatively impacted" (Frick et al., 2010, p. 116). These five principles, as stated by Merrill (2010) are:

> (a) Learning is promoted when learners are engaged in solving real-world problems. (b) Learning is promoted when existing knowledge is activated as a foundation for new knowledge. (c) Learning is promoted when new knowledge is demonstrated to the learner. (d) Learning is promoted when new knowledge is applied by the learner. (e) Learning is promoted when new knowledge is integrated into the learner's world (p. 44-45).

Researchers found direct parallels between these features of an effective course design and the course under study, but they wanted to compare students' views with these principles as well. After collecting and analyzing students' perspectives on the course, researchers investigated how students' rankings of course tasks and comments coincided with these essential features of an effective instructional design. A review of all factors showed students' perspectives of the course design coincided readily with principles of instruction presented by Merrill (2002) as essential to instruction.

The generally high rankings given mini-lessons and other class tasks showed that students found them helpful in solving real classroom problems and demonstrating new knowledge. One self-centered learner even stated, "It was obvious that the interactive mock lesson was very helpful in implementing a real-world application of the lessons used in a classroom." Factor 3 (*online learner*) ranked activating previous knowledge high (5). Students acknowledged that the new learning was applied directly in their mini-lessons. As noted by another group-centered learner: "Presenting the micro-teaching gave me a dry run of applying our methods … The feedback that I received from my colleagues allowed me to refine my approach." Finally, students indicated that they were ready to introduce the methods into their classrooms.

As a self-centered learner said: "I really appreciated getting legitimate feedback which I felt will personally help me reflect and improve my teaching." A group-centered learner noted, "I gathered a plethora of teaching materials and activities for my kids." All of this reinforced to the researchers that the majority of the in-class work was beneficial to the students' learning and overall, Merrill's (2002) First Principles of Instruction had been included in the course design.

After being taught more than 20 times and evaluated through the university's traditional Likert scale feedback, researchers uncovered students' distinct views of which aspects of the course were most helpful to each of them. It must be noted that this study has its limitations as it is a single case. However, Q methodology was designed for small numbers of participants and even single case studies (McKeown & Thomas, 2013). Also, the use of Q methodology helped the researchers find out what all students agreed upon by identifying the consensus statements for all three factors. The results showed that nearly all students thought that the two textbooks used for this course were not very helpful. This led the researchers to wonder if there was something about the textbooks that limited their helpfulness or if the way they were incorporated into the lessons made them less helpful than other aspects of the course. Future implementations of this course might be enriched if varied ways of using the texts were tried or students were questioned more in depth about their perspectives regarding the texts. It is also possible to change the textbooks for different ones. Additional studies using the same methodology should be done in the future after making the suggested changes based on the results from this study in order to find out if these changes would be considered beneficial by the students.

In conclusion, using Q methodology for this study helped the researchers/course designer/instructors to examine the different views students held about the helpfulness of different aspects of the course and activities completed in the class when following a blended face-to-face and online design. The majority of the students seemed to find the hands-on activities, mini-lesson presentations, in-class discussions and feedback from their instructor and colleagues to be most helpful to their learning. Many did not feel that the online component of the course was as helpful to their learning. One specific activity the students felt helped them the most in learning about different methods and approaches to teaching ESL were the lesson demonstrations.

More advanced uses of technology would be involved in redesigning the course to be totally online, as the other courses in the TESOL endorsement program are, and may need to be considered. As the course designer considers whether an online format would be feasible for this course, it seems that incorporating the mini-lesson presentations into an online course could be challenging. To achieve this, students could possibly videotape themselves teaching, perhaps in an isolated setting, in which case they would not be experiencing a classroom environment with their fellow students acting as ESL students. Thus, the teaching would be less authentic. It would be more difficult, perhaps impossible, to have a discussion immediately following the presentation and receive feedback, course aspects which students ranked as very helpful to their learning. One solution might be to restructure this class but continue as a hybrid class to accommodate more types of learners with readings, activities and discussions online and mini-lesson presentations with feedback in a face-to-face setting. Giving students more choices in activities or format might also support the varied learning preferences of different students.

In this "post method era," results also seemed to indicate that several assignments might benefit from revision. Some students appeared to think that it was not necessary to give methods presentations and take a quiz on the same material. Perhaps replacing the quiz with a different way of assessing knowledge and understanding of the different methods and approaches is in order. In addition, it seems that the final paper on the teaching philosophy could also be replaced by a reflection paper on one's preferred methods for teaching ESL students or another assignment to synthesize and enhance the application of different methods of second language instruction. The course might be enriched by adding case studies of ESL lessons and experiences in ESL classrooms which could offer additional hands-on experience, the experiential component of the course that so many of the students considered most helpful to their learning. Finally, the instructors might need to re-examine the use of the textbooks and technology for this course.

This study demonstrated how instructors can examine students' different views of the activities that helped them the most in learning the content of a course. As noted by Jurczyk and Ramlo (2004) and Ramlo (2012b), clearer insights into student viewpoints on learning can be captured through Q than through traditional Likert scale course evaluations.

Evaluations at the university in this study consist of Likert scale surveys, rating items from 1 (least effective) through 5 (most effective). This allows students to rate different aspects of the course and the professor, although no items directly address student learning preferences. The resulting score is an average of the ratings of all students, which can often provide a somewhat inaccurate picture of the course (Jurczyk & Ramlo, 2004). For example, if half of the students rate the instructor's communication skills as 5 and half rate

these skills as 1, the final report rating would be the average of those scores, or 3. This score would indicate that the students found the instructor to be an average communicator. Yet that is far from what their individual scores indicated, and students' views were not fully expressed or heard.

Using Q methodology to study students' opinion of the helpfulness of different activities and projects in the course gave the instructor and researcher a chance to understand which activities students found most and least helpful. Such was the case with the final paper about students' personal teaching philosophies and the different tasks surrounding the ESL instruction methods which had never been brought to the researcher's/course developer's attention before. Specific feedback such as what was provided through this Q study is much more valuable to faculty in making decisions about the content and format of their classes than the traditional Likert scale evaluations that produce global observations and that are frequently used at the end of each course (Frick et al., 2010).

Differences among students' perspectives of courses which only use Likert scales for evaluation might go undetected if just final average scores are reported to the university administrators and the course instructor. Additionally, reasons for these differing scores might never be brought to the surface, denying the opportunity to understand better how the course might be more closely matched to the needs of all students, as using surveys often does not permit individual voices to be represented (Lecouteur & Delfabbro, 2001; Ramlo, 2008).

As a possibility for other course developers and instructors, the researchers suggest they design Q studies to evaluate their own courses. Their sorts and research design could be based on the questions they have about their courses and reflect different aspects of the course as well. Their Q sort items would be unique to their specific course, would provide insights about their students' perspectives of the classes they teach, and would allow them to make informed decisions for their future course implementations, as "this research enables improved student input regarding teaching and learning." (Jurczyk & Ramlo, 2004, p. 3).

References

Amin, M. E. (1993). Correlates of course evaluation at the faculty of letters and social sciences of The University of Yaoundé. *Assessment & Evaluation in Higher Education*, *18*(2), 135-41.

Broady-Ortmann, C. (2002) Teachers' perceptions of a professional development distance learning course: A qualitative case study. *Journal of Research on Technology in Education, 35*(1), 107-116.

Brown, A., & Green, T. (2003). Showing up in pajamas (or less!) The realities and fantasies of on-line professional development courses for teachers. *The Clearing House, 76*(3), 48-151.

Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*. New Haven, CT: Yale University Press.

Brown, S. R. (1986). Q technique and method: Principles and procedures. In W. D. Berry & M. S. Lewis-Beck (Eds.) *New tools for social scientists: Advances and applications in research methods.* (pp. 57 – 76). Beverly Hills, CA: Sage Publications.

Brown, S. R. (1991). A Q-methodology tutorial. Retrieved from http://facstaff.uww.edu/cottlec/QArchive/Primer1.html

Bruner, J. (1973). Organization of early skilled action. *Child Psychology, 44*(1), 1-11.

Carter, K. (2004). Online training: What's really working? *Technology & Learning*, *24*(10), 32-36.

Corr, S. (2001). An introduction to Q methodology, a research technique. *The British Journal of Research Technique*, *64*(6), 293-297.

Frick, T.W., Chadha, R., Watson, C., & Zlatkovska, E. (2010). Improving course evaluations to improve instruction and complex learning in higher education. *Educational Technology Research & Development*, *58*(2), 115-136.

Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). *Listening to teachers of English Language Learners: A Survey of California Teachers' Challenges, Experiences, and Professional Development Needs.* Santa Cruz, CA: The Center for the Future of Teaching and Learning.

Harlen, W., & Doubler, S. (2004). Online professional development: Science inquiry in the online environment. *International Journal of Science Education, 26*(10), 1247-1267.

Jurczyk, J., & Ramlo, S. (2004). *A new approach to performing course evaluations: Using Q methodology to better understand student attitudes*. Paper presented at International Society for the Scientific Study of Subjectivity Conference, Athens, GA.

Karabenick, S. A., & Clemens Noda, P. A. (2004). Professional development implications of teachers' beliefs and attitudes toward English language learners. *Bilingual Research Journal, 28*(1) 55-75.

Lecouteur, A., & Delfabbro, P. H. (2001). Repertoires of teaching and learning: A comparison of university teachers and students using Q methodology. *Higher Education*, *42*(2), 205-235.

Lincoln, Y. S., & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

McKeown, B., & Thomas, D. (1988). *Q Methodology. Series: Quantitative Applications in the Social Sciences*. Newbury Park, CA: Sage Publications.

McKeown, B., & Thomas, D. (2013). *Q Methodology.* Series: Quantitative Applications in the Social Sciences (2nd ed.). Newbury Park, CA: Sage Publications.

Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research and Development*, *50*(3), 43–59.

Newman, K. L., Samimy, K., & Romstedt, K. (2010). Developing a training program for secondary teachers of English language learners in Ohio. *Theory into Practice*, *49*(2),152–161.

Patrick, C. L. (2011). Student evaluations of teaching: Effects of the big five personality traits, grades and the validity hypothesis. *Assessment & Evaluation in Higher Education, 36*(2), 239–249.

Pohlman, J. R. (1975). A description of teaching effectiveness as measurement by student ratings. *Journal of Educational Measurement, 12*(1), 49-54.

Ramlo, S. (2008). Student perspectives on learning physics and their relationship with learning force and motion concepts: A study using Q methodology. *Human Subjectivity*, *2*(1), 73-90.

Ramlo, S. (2012a). Inservice teachers' views of a professional development workshop and their learning of force and motion concepts. *Teaching and Teacher Education, 28*(7), 928-935.

Ramlo, S. (2012b). Determining faculty and student views: Applications of Q methodology in higher education. *Journal of Research in Education, 22*(1), 86-107.

Schmolck, P. (2002). *PQMethod manual*. Retrieved from http://www.rz.unibw-muenchen.de/~p41bsm k/qmethod/pqmanual.htm

Stephenson, W. (1953). *The study of behavior: Q-technique and its methodology.* Chicago, IL: The University of Chicago Press.

Van Exel, J., & de Graaf, G. (2005) *Q methodology: A sneak preview*. Retrieved from http://qmethod.org/articles/vanExel.pdf

Watts, T., & Stenner, P. (2012). *Doing Q methodological research: Theory, method and interpretation.* London, UK: SAGE Publications Ltd.

Wheeler, D. L., & Montgomery, D. (2009). Community college students' views on learning mathematics in terms of their epistemological beliefs: A Q method study. *Educational Studies in Mathematics, 72*(3), 289-306.

_____

DR. LINDA COLLINS is currently working as the Project Manager for a statewide evaluation of the Formative Instructional Practices professional development project in Ohio, USA and teaching teacher education courses at the graduate level. In addition to teaching English as a Second Language, her areas of expertise include teacher professional development, online facilitation, the development of online courses, and Q Methodology. Dr. Collins has presented and published her studies locally, nationally, and internationally.

DR. MARIA ANGELOVA is an Associate Professor in Teaching English as a Second Language (TESOL) at Cleveland State University in Cleveland Ohio, USA. Her area of expertise is ESL writing, TESOL Methods, Pedagogical Grammar, and Applied Linguistics. Dr. Angelova has numerous publications and presentations at national and international conferences. Her articles have appeared in a variety of educational and linguistics journals.

Appendix

List of sort items used in study:

1. Reflection on micro-teaching
2. Online discussions
3. Rubrics
4. Methods summary paper
5. Doing research for the final paper
6. In-class activities
7. Feedback from instructor regarding quiz and assignments
8. Resources and Announcements posted to Blackboard Learn
9. Interacting with instructor outside of class time or during breaks
10. Giving feedback to colleagues regarding their micro-teaching
11. Instructor's availability to explain what I did not understand (in person, e-mail, online, in class, phone call, etc.)
12. Personally choosing skill for micro-teaching
13. Writing personal philosophy paper (final paper)
14. Preparing method presentation & handout
15. Instructor's lectures, PowerPoints
16. Reading the Larson-Freeman Methods book
17. Lesson plan template for micro-teaching
18. Receiving feedback from colleagues on micro-teaching
19. Discussing with peers how to present method
20. Coming to class regularly
21. Observing others' presentations
22. My desire for a good grade
23. Presenting & demonstrating Method for class
24. Classroom discussions
25. Classmates' Methods handouts
26. Working in small groups or with a partner
27. Reading H. Douglas Brown text book
28. My personal interest in the topic of the course
29. Presenting micro-teaching lesson
30. Working alone
31. Syllabus
32. Reading assigned articles
33. Methods quiz
34. Previous education courses
35. Preparing micro-teaching lesson