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## Undergraduate Students' Perspectives on the Value of Peer-Led Discussions

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# Undergraduate Students' Perspectives on the Value of Peer-Led Discussions

## **Abstract**

With a view to improving the quality of class discussions of assigned articles, I implemented a new way of organizing small group seminars in an undergraduate early childhood education course. The seminars were led by student facilitators and had a balance of accountability and autonomy. Mid-way through the course, the students reflected anonymously on the experience of the seminars. They identified a variety of cognitive and social benefits of the seminars as well as key components that could be applied in a variety of post-secondary settings.

Dans le but d'améliorer la qualité des discussions de classe portant sur les articles que les étudiants devaient lire, j'ai mis sur pied une nouvelle manière d'organiser les séminaires de groupe dans un cours de premier cycle d'éducation de la petite enfance. Les séminaires étaient dirigés par des étudiants qui jouaient le rôle de facilitateurs et qui devaient concilier la responsabilité et l'autonomie. Vers le milieu du cours, les étudiants ont témoigné anonymement sur l'expérience des séminaires. Ils ont identifié une variété d'avantages cognitifs et sociaux que les séminaires leur avaient apportés ainsi que des composantes clés qui pourraient être appliquées dans toute une variété de milieux post-secondaires.

## **Keywords**

collaborative learning, student facilitation, undergraduate education

I teach an undergraduate curriculum course that is required for students pursuing a Bachelor of Early Childhood Education degree. I have taught 15 sections of this course over the last six years, and I have tried many learning strategies to increase student engagement with, and understanding of, the concepts in the course. The weekly three-hour classes consist of discussion of assigned readings, a short lecture on the day's topic, demonstrations of teaching strategies and resources, small group work, and student presentations. One aspect of the course that I have been particularly interested in improving is the discussion of assigned readings.

During the first few years of teaching this course, when I tried to have a whole group discussion on an article or book chapter, only a few students would participate. This could have been because they were shy to speak in a large group (i.e., 30-55 students), or that they had not read or understood the article. I tried to address the first possibility by dividing the students into small discussion groups. However, again, only a few in the small groups discussed the article, and some groups do not discuss it at all. When I asked for feedback on the small group discussions, some students said that they were frustrating because their peers had not read the article, or if they had, they did not have anything to say about it.

Recently, I decided to try a new approach. I arranged for my students to participate in six student-led seminars over the course of the term. Each student had a turn to facilitate a discussion with a group of five to seven peers on an assigned article. The facilitator's responsibility was to review the article, prepare questions that he/she believed would spark discussion, and facilitate the group discussion. The facilitator was then required to prepare a short paper for the next class on the experience of leading the seminar. The role of the group members who were not facilitators that day was to read the article and come prepared with a typed sheet of three points that were of interest to them, and about which they are prepared to speak. Following the seminar, the group members wrote a short reflection in class on the group discussion. I formulated the seminar groups ahead of time, trying to incorporate a range of personalities and strengths in each group. I changed the groupings every second seminar. During the seminar, I was present in the room, but I did not participate in the small group discussions. After the group members wrote their reflections on the seminar, I would conduct a whole class discussion on the article.

## **Objectives/Purpose**

From my perspective as an observer during the seminars, it appeared to me that the students were actively engaged in the discussions. The post-seminar whole class discussions were certainly more thoughtful and lively than class discussions on readings usually were. I believed that there was a great deal of learning value for pre-service teachers in peer-led discussions of relevant educational articles, but I was interested to find out if my students also believed that this was a valuable learning strategy. My research questions were:

1. Do the undergraduate Early Childhood Education students believe that student-led seminars are an effective way to increase their understanding of issues in the course?
2. If so, why do they believe they are effective?

## **Literature Review**

**Collaborative learning.** Collaborative student learning at the undergraduate level is a common occurrence in many programs and has received considerable attention by researchers. Osman, Duffy, Chang, and Lee (2011) define collaborative learning as “any of the variety of strategies employed by an instructor to promote students working together to advance their understanding of a subject matter” (p. 547). They note that the benefits of student learning in cooperative and collaborative groups has been well documented, particularly with respect to positive effects on student attitudes, better retention of information, more in-depth understanding of topics, and greater academic achievement. However, they also note that there is research that is critical of collaborative learning strategies. The tendency for “group think,” time spent off-task, a lowered sense of individual responsibility, and “freeloading” have all been documented in the research literature (see Osman, Duffy, Chang, & Lee, 2011).

**Student facilitation.** Several recent studies have focused on the role of students as facilitators or peer teachers in collaborative learning (e.g., Adriansen & Madson, 2012; Baran & Correia, 2009; Hew & Cheung, 2011; Johnson & Loui, 2009; McKenna & French, 2011). Using a structured and timed approach (e.g., five minutes allotted for an introduction, five minutes for silent reflection, 20 minutes for pair discussion, etc.), Adriansen and Madson (2012) trained students in a School of Education to facilitate small group study sessions for their peers. Through analyzing student questionnaires, interviews, and observations, the authors concluded that, “facilitated study groups improved interaction and engagement among the students and thereby improved the study environment” (p. 303).

In their study of undergraduate nursing peer learning groups, McKenna and French (2011) noted that both peer tutors and group members benefited from their experience in collaborative learning groups. The peer tutors, who were 3<sup>rd</sup> year students, appeared to benefit more than their 1<sup>st</sup> year peers. As a result of teaching nursing skills to their less experienced peers, the peer tutors increased their confidence, knowledge, and teaching skills that they would need in their future practice. Johnson and Loui (2009) had a similar finding in their study of student supervised study sessions in an engineering department. The peer leaders’ anonymous journals revealed that like the nursing students, they increased their confidence, as well as their teaching skills.

**Learning in collaborative peer groups.** Several researchers have explored the types of learning that occur in collaborative learning groups, and the factors that contribute to that learning. Young and Talanquer (2013) had pre-service teachers facilitate group activities for undergraduate science students. They found that activities that asked students to compare and contrast different ideas or systems were more often associated with students’ ability to apply knowledge and make sense of course content. In their study of online student-led discussion groups, Baran and Correia (2009) found that three facilitation strategies led to the generation of the most innovative ideas and motivated students to participate: inspirational; practice-oriented; and highly structured. Cheung and Hew (2010) also studied online student discussion groups. They found that the groups who exhibited the highest levels of knowledge construction were those in which the facilitator highlighted unanswered or unresolved issues. They also noted that a group size of about 10 was positively correlated with higher performing discussion groups.

In a later study, Hew and Cheung (2011) reported that higher levels of knowledge construction, such as negotiating and testing ideas and applying newly constructed meaning, were found when student facilitators of online discussion forums exhibited particular “habits of mind.”

Groups that were most successful were those in which undergraduate education student facilitators demonstrated that they were aware of their own thinking, were accurate and sought accuracy in others, were open-minded, and took a position on issues. They recommend that educators model these habits of mind with their students and make them explicit so that students would be more likely to incorporate them into their peer discussions. As we have seen, the literature illustrates many potential academic and social benefits to student-led collaborative learning, as well as many examples of strategies and factors that are more likely to lead to successful outcomes.

### **Method**

The research approach in this study was qualitative as defined by Merriam (2009) and Punch (2009). For example, a relatively small sample (33 students) was studied in some depth with regard to their experience of the student-led seminars. The writing prompts were largely open-ended and the themes emerged as the study progressed.

The study also employed a self-study of teacher education research approach. A literature review on self-study reveals researchers who seek to increase understanding of “oneself; teaching; learning; and the development of knowledge about these” (Loughran, 2004, p. 9). Self-study methodology, with an emphasis on learning through researching one’s experiences, offers teacher educators a way to explore, understand, describe, and raise awareness about the tensions embedded in the journey of becoming a teacher educator (Berry, 2007). In this study I explored the tension between giving students choice and autonomy in their discussion groups, and building in accountability measures and opportunities for reflection. Through this exploration there was the opportunity for me to grow, adapt, renew, and change my practice (Zeichner, 1995) as a result of reflecting on my students assessment of their learning.

### **Participants**

The participants in this study were all students in a 4-year undergraduate degree program in Early Childhood Education at a large urban university in Canada. All 33 students in a third-year undergraduate course in curriculum agreed to participate in the study. All of the students were female (which is common in this program), and they were between the ages of 20 and 27. They represented diverse races and cultures. Most students lived within an hour’s drive of the university. Three students were international students from China. This study had institutional approval and all students gave written consent to have their data included in the study.

### **Context**

During the 2010/2011 academic year, I planned a series of peer-led seminars in order to try to increase the students’ engagement with and understanding of the curriculum issues in the course. Six seminars were scheduled to take place over the 12- week course. On the first day of class, I presented the students with the description of the seminar process and a list of the articles and the dates on which they would be discussed. The students were invited to sign up for the seminar that they wished to facilitate. Each student would facilitate one small group discussion over the course of the term. As facilitators, their job was to read the assigned article, do some extra research on the topic if they wished, and create a list of three to five questions that they believed would engage their peers in discussion of the issues in the article. On the day that they

led a seminar, they would be provided with a group of five to seven peers (chosen by the instructor) and were responsible for facilitating the discussion for 20-30 minutes.

Following the seminar, students were required to write a brief reflection paper containing answers to the following set of questions (due the following class): (a) What happened in the seminar? (e.g., what issues were their peers most interested in discussing, what were the points of agreement and disagreement, what new learning occurred, etc.); (b) How did the facilitation experience related to other teaching and learning experiences or with educational theory?; and (c) What did you learned about the topic of the seminar and yourself as a teacher/facilitator?

For the five seminars for which they were not facilitators but seminar group members, the students were required to read the assigned article and type a one-page reflection on three points in the article that they found interesting and about which they were prepared to speak in the seminar. After the seminar, the group members were asked to turn over their paper and write an on-the-spot answer to a reflection question posed by the instructor (e.g., What new perspectives or understanding did you glean from today's discussion? What surprised you in today's discussion? What ideas/issues would you like to explore further?). Therefore all students prepared for each seminar by reading the assigned article, choosing issues or topics within the article that they wanted to discuss, and writing a reflection afterward. When they were seminar leaders, they took on the added responsibility of facilitating the seminar and writing a longer and more detailed reflection paper. All reflection papers were graded.

The article that the students responded to for this study was *Reflection is at the Heart of Practice* (Hole & McEntee, 1999). This article discusses the importance of reflecting on everyday incidents in teaching in order to understand and adapt teaching practice. It outlines two protocols for reflecting on teaching and gives examples of how they can be used either individually or collaboratively with other teachers.

## Data Collection

After the third of the six seminars, instead of the typical reflection questions I asked the students to answer the following questions anonymously on blank sheets of paper that I handed out:

1. Has your understanding of the topic changed as a result of participating in the student-led seminar? If it has, explain how.
2. Was this student-led seminar and effective learning strategy for you? Why or why not?

## Data Analysis

I collected the 33 student written responses and put them aside until after the course was completed. To analyze the written responses, I read them several times to identify codes and themes related to the study. As I analyzed the findings, I kept going back to the materials for constant comparison with the themes, continuing to add, delete, merge, and modify themes.

## Results

In response to the two reflection questions, all of the students wrote that their understanding of the topic had either changed or deepened. They also all reported that the

student-led seminar was an effective learning strategy for them; however, they had a range of explanations for why this learning strategy was beneficial for them. Their responses are grouped into three areas: (a) cognitive or learning benefits, (b) social or emotional benefits, and (c) key components necessary for the success of the strategy.

### **Cognitive Learning Benefits**

In terms of cognitive learning benefits, all 33 students mentioned the importance of being able to hear, consider, and understand the perspectives and interpretations of their peers. For some, this was important because it confirmed their own understanding (e.g., “My understanding of the topic didn’t change so much as it was enriched because I had the chance to talk about it with other students”). For others, it provided the opportunity to hear ideas that they had not previously considered (e.g., “It provided me with other perspectives and ideas that I did not think of on my own”). This, in turn, allowed them to discover new ways to approach the topic of teacher reflection (e.g., “We thought that daily reflection is a great idea but for most teachers once a week would be more realistic.”). In addition to hearing the perspectives of others, many students valued the opportunity to share their own knowledge and opinions (e.g., “I am an interpersonal learner and I learn better when I can talk with others about my ideas”).

Students also valued the opportunity to share practical experiences related to the topic. They were able to build on the examples in the article with examples from their own personal and professional lives (e.g., “I was only thinking about school settings, but a student in our group talked about how she could relate it to her work in childcare”). This enhanced the understanding of the group, and also created a body of practical knowledge and strategies that would not have been possible if the assignment had been an individual one. Furthermore, hearing the practical experiences of peers prompted some students to reflect more deeply on their own teaching practice (e.g., “This method of group learning led to rich and meaningful practical knowledge that we can apply in our individual practices”).

For the students who had had difficulty understanding certain aspects of the article, the seminar provided an opportunity to ask for clarification from their peers (e.g., “Some things in the article were unclear to me but discussing it with my peers helped me to understand”). They found it more beneficial to ask for clarification from peers who had similar knowledge and experience than from a professor (e.g., “It is easier to understand when a student rather than a teacher explains a topic because we are at the same stage in our learning”). For those for whom the article was clear, the seminar provided the opportunity to enrich their understanding of the topic of teacher reflection through group discussion. About one-third of the students commented that their discussions went beyond a sharing of the knowledge and perspectives that each brought to the group, and included new ideas and perspectives that the group arrived at as a result of the discussion. (e.g., “We had some disagreements about the reading. Coming up with solutions helped us to think differently and more deeply than the ideas we brought to the group”). This included different approaches to teacher reflection, and a realization that other aspects of their personal and professional lives could be reflected upon in a similar manner.

Several students mentioned that being able to talk about their understanding of the topic was more beneficial than simply writing about it, or listening to a lecture. For others, it was important to share ideas with peers in an interactive discussion in order to consolidate their understanding (e.g., “If I just wrote about the article, I wouldn’t have been challenged by my

peers' understanding. In the seminar I heard different perspectives and was able to respond to them").

Many students wrote about the key role that the student facilitator's discussion questions played in deepening their understanding (e.g., "The questions that the facilitator created took the learning experience to the next level"). The types of questions that were valued were those that led to critical thinking, required the students to relate the topic to their own experiences, or asked about their feelings and opinions. "Good" questions led to lively discussions and prompted thinking about new questions.

The topic of the article for this seminar, teacher reflection, was seen to be particularly relevant for this learning strategy. Many students commented on the fact that as a group of teachers in training, they were being asked to reflect on the topic of teacher reflection, and then to reflect in writing on their group discussion for me. One group even decided to act out the Critical Incidents Protocol during the seminar, one of the reflection strategies advocated in the article.

### **Social and Emotional Benefits**

The second theme that I identified in the students' responses was the social and emotional benefits of the student-led seminar. Many students commented on how much they enjoyed having time to discuss course material with their peers in small groups (e.g., "This is a great way to learn about people in the class and what they think rather than just people I usually talk to"). They enjoyed being able to share knowledge, perspectives and experiences in an informal setting (e.g., "It was very interesting and interactive, which made the experience much more engaging and pleasant in comparison to an essay or lecture"). They felt comfortable asking their peers to help them understand anything that was unclear about the article. This was seen to be less intimidating than asking me privately, or asking during a whole class discussion (e.g., "I don't always feel comfortable approaching a prof. with a question. The seminars allow me to feel more comfortable approaching my peers instead").

Many students reported that they felt more motivated to speak in the seminar setting than in a whole group setting or other types of small group work because everyone's thoughts and opinions were welcomed and they did not feel judged (e.g., "Because of this informal setting, we are able to openly discuss our thoughts and opinions without feeling judged"). Some students felt less pressure when participating in the seminar as compared to a written assignment (e.g., "I did not feel there was as much pressure on me as I would have experienced writing a paper every week.").

Learning more about their peers, including what they think and how they interact with others, was seen as a major benefit for many students. Many appreciated that they had an opportunity to get to know a wider range of students and to discover that they had more in common than they thought (e.g., "These groups give me the chance to talk to people that I didn't think I had much in common with, but I do!"). A few students who described themselves as shy said that they felt encouraged to discuss their ideas in the seminar setting, and they appreciated the opportunity to practice their group discussion skills (e.g., "It allowed me to practice my own discussion and conversational speaking which is always a plus. I often hesitate to ask for help or join in discussion in a big group").



## Key Components

Students identified several components of the student-led seminars learning strategy that they saw as key to its effectiveness. Several identified the importance of the sequence of events. First, the students believed that it was important to have the opportunity to reflect on the article individually and form their own opinions. Next, during the seminar, they appreciated having the experience of sharing and building upon one another's understanding. Finally, they appreciated hearing me, as the instructor, sharing thoughts on the topic after the seminar. One student said,

I think it is a good format because first we get to form our own opinions, then our peers “shed a new light” on the topic in the discussion. After the seminar we have a whole class discussion with [the professor] adding in her ideas.

The students reported that in another course in the program that used small group discussions, the lecture came first, followed by the individual student response, and finally the seminar. In that class, the students tended to repeat the instructor's views rather than share their own; this made for a less interesting seminar.

Small groups of students, not more than seven or eight, were seen to be most desirable. Students believed that groups smaller than this would be awkward, and larger groups could erode the sense of intimacy and safety. In addition, groups that are comprised of students with a range of views on the topic, and a mixture of shy and more outgoing students, were seen to be most effective.

In terms of the role of the student facilitator, students valued facilitators who encouraged an interactive discussion, rather than a question and answer format. Facilitator questions that asked about students' feelings, opinions and experiences were considered most effective in sparking lively discussion and engagement. While all students should be encouraged to participate, they believed that no one should be put on the spot.

In terms of the role of the instructor, key factors that the students valued were choosing interesting and relevant articles, creating varied student groupings, allowing sufficient time for the seminar to take place, and then refraining from joining in or commenting on the seminars when they were in progress. Several students reported that the fact that I was not involved in the discussions helped create a more relaxed atmosphere, and allowed students to take more risks in sharing their ideas (e.g., “I don't feel pressured since [the professor] is not intrusive in the seminar”, “Without the teacher there, we can openly discuss our thoughts and opinions without feeling judged”).

## Discussion

The findings in this study reinforce those found in several recent studies. As Adriansen and Madson (2012) found, my students reported improved interaction and engagement with each other. They reported getting to know each other better and learning through sharing and hearing one other's ideas and perspectives. Moreover, my students found that they went beyond sharing ideas to constructing new and more in-depth understanding of the discussion topic, as has been reported in the literature (e.g., Osman, Duffy, Chang, & Lee, 2011). As both Hew and Cheung (2011) and Young and Talanquer (2013) discovered, my students reported that the student facilitator's questions and strategies were key to a successful discussion. Facilitators who

prompted their peers to think critically and to apply their learning were most successful in guiding the group to a deeper level of understanding. The findings from this study also suggest, as Baran and Correia (2009) found, that student-led collaborative learning can help to overcome instructor domination. One of the key advantages reported by my students was that I was not present and therefore they felt more comfortable to ask for clarification or to raise potentially controversial opinions.

The students in this study did not report the problems with collaborative learning that have appeared in the literature (e.g., Osman, Duffy, Chang, & Lee, 2011). For example, no one complained that everyone agreed about everything (group think), that their peers were off task, that it was a waste of time, or that some people were freeloading. I posit that the particular balance of autonomy and structure in this form of collaborative learning may account for this. Although Adriansen and Madsen's (2013) student facilitation model was more structured than mine, my students also worked within a structure of written preparation, student facilitator questions and guidance, and a graded written post-discussion reflection. However, my students had more autonomy with respect to the process and content of their discussions than Adriansen and Madsen's (2013) participants. Facilitators in my class decided how they wanted to conduct the session, and both the facilitators and group members chose the topics within the article that they wished to discuss. As the instructor, I chose the articles and the student groupings, and facilitated a large group discussion afterwards, but stayed out of the way when the seminars were in full swing.

In their study, Osman, Duffy, Chang, and Lee (2011) interviewed 10 students in a teacher education program to determine their perspectives on small group student discussions. These students did not find the discussions beneficial. The results of that study may be different from the present one because of the characteristics of the student participants involved in each study. The students in the Osman, Duffy, Chang, and Lee (2011) study were all very high achieving, vocal students on the school advisory board. My students represented a range of academic abilities and comfort levels with whole class discussion. It may be that the benefits of small group discussion are most relevant for middle and lower achieving students and/or students who are hesitant to speak in large group discussions.

Clearly, the majority of my students shared my initial observations that this particular approach to collaborative peer learning was effective. However, I am still left with many questions to consider. For example, there was a range of opinion on the value of the article itself. Some said it was difficult to understand, others that it was so simple it read like a magazine article. How do I choose reading material to meet the range of learners?

Furthermore, should I be concerned that some students feel too intimidated to ask me questions or to speak in whole class discussions? Are there ways that I could make the class a safer place for them? Should I be concerned that one of the positive features of this learning strategy is that I am not directly involved? Or is it inevitable that some students will prefer smaller group and/or peer settings in which to share ideas and ask questions?

I ask my students to reflect often, sometimes three or more times in a three-hour lecture. Is this a good use of their time? Can you have too much reflection? The students clearly have a good time socially during the seminars. Would this alone justify their use in a teacher education program? Will these seminars contribute to their "readiness" to teach? How well can we prepare teachers in a university setting, and to what degree is it a learn-on-the-job kind of profession? As with many research studies, this one provides some insights and also raises many questions for further research.

## Limitations

This study is limited by several factors. The study was small, just 33 students in one undergraduate education classroom. Although the data analyzed were anonymously written responses, as both professor and researcher I may have unwittingly influenced my students' responses. They may have been trying to please me by telling me what they thought I wanted to hear. On the other hand, the fact that I was their professor, and therefore very familiar with the context, allowed me to bring my detailed "insider" knowledge of the context to bear on my analysis.

A further limitation is that the data consists almost exclusively of the students' perspectives of their learning. I did not perform any tests or other external measures of their learning following the seminars.

## Conclusions

This research study contributes to our knowledge of what students value in collaborative peer learning, and also includes details of a learning strategy that other teachers and teacher educators may want to try. Although the study is very small, only one class of 33 education students, the findings may be useful to other teacher education classes, other university courses of study, or perhaps even high school classes.

There are three main implications for this study. First, student engagement and understanding may be increased through participation in student-led seminars in many areas of education, not just undergraduate education classes. Second, the process of investigating students' thinking about their learning can be very enlightening for teachers. Third, combining student reflections on what is important in their learning with teacher observations can lead to effective planning for student learning.

Recommendations that flow from the results of this study are that educators should use pedagogical strategies that allow students to take leadership and to learn from each other in more relaxed small group settings. Furthermore, they should build in reflectiveness and accountability by having students prepare in writing before seminars, and reflect in writing afterwards. Finally students should be asked about their perceptions of their own learning, and their responses should be used to inform further learning and teaching approaches.

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