Sandra Andersson

Teacher and student questions in the EFL classroom
A study of gender and interaction in three Swedish classes

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Abstract

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Författare: Andersson, Sandra

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Abstract: The purpose of this paper was to investigate how gender-equal three different Swedish 9th grade classes were when it comes to interaction with the teacher in the English classroom. There are beliefs that boys and girls are treated differently and act differently in the classroom and the differences between boys and girls in school is a much discussed issue today. The present study focused on questions asked by both the teacher and the students, and on the student answers given. This was investigated through observations in the three classes. An observation model was created to facilitate the observations where three different question categories were used. Unlike the results from many previous studies on the subject, the results show that the three classes are rather gender equal in terms of there being no major differences in student treatment from the teacher. Furthermore, the results also show that the majority of the student questions have to do with classroom management. In summary, in these three classes there were no gender differences when it comes to questions during the observations on which the study is based.

Nyckelord: teacher-student interaction, English language classroom, gender
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1. Introduction and aims

The gender issue is a constantly recurring subject in school debates today, and although schools are getting better at creating a gender equal environment, there is still a long way to go. Many teachers today probably believe that they treat boys and girls equally in the classroom. However, even though they might think that they treat their students the same way regardless of gender, this is not necessarily the case. International studies have shown that teachers, regardless of sex, give boys more attention than girls. These studies have also shown that girls wait longer for the teacher’s attention than boys and when they do get the teacher’s attention they are more likely to get a neutral or negative response (Houston, 1996:52). Consequently, teachers need to learn more about gender equality in order to establish it in the classroom.

Children and teenagers learn so much more than just about the topic that is currently taught in the classroom. One example is appropriate social behavior which they learn through classroom talk (Coates, 1998:186). This is crucial for teachers to know since it is mainly the teacher that mediates classroom talk. With this in mind, if the boys are stealing all the attention in the classroom, it is very likely that they do so because the teacher, consciously or unconsciously, lets them. According to several studies, it is common for teachers to separate their students by gender to facilitate the administration of the lesson. Also, pupils are often told that certain topics are ‘boys’ topics’ or ‘girls’ topics’.

There is no doubt that gender is an important and relevant issue in school today. The curriculum clearly states that schools should work actively to promote men and women’s equal rights and possibilities and that each school has the responsibility to discourage traditional gender roles. Furthermore, the curriculum states that each school should give students the right to test and develop their skills and interests regardless of gender (Skolverket, 2011:8).

The aim of this paper is to investigate gender equality in three 9th grade classes in a lower secondary school in Sweden. The main goal is to find out whether or not teachers treat their students differently depending on gender, and also to find out if the student-teacher interaction differs depending on the gender of the student.
2. Background

2.1. Teacher attention

As mentioned in the introduction, studies have shown that boys get more teacher attention than girls. This is also brought up by Sunderland (2000). In her article she explains that the results from such studies are often interpreted as evidence of male dominance (Sunderland, 2000:160). However, she also highlights how important it is for teachers to be aware of the tendency for male individuals to receive more attention than female individuals, and that by monitoring lessons, teachers can gain more awareness of what is really going on in their classroom. One way for a teacher to make sure that girls and boys get an equal amount of attention could be to alternate between the genders when it comes to asking or answering questions. She also says that perhaps girls and boys should not get an equal amount of attention in the classroom as long as the attention they get is equal in value.

A distinction must be made between amount of attention and kind of attention. Teacher attention in itself may not be useful; some attention, like being told off, could hinder learning./…/ If the teacher does feel that boys are getting more of his or her attention, he or she should thus not assume that this means the boys are getting better learning opportunities. (Though it may be that the girls are being deprived of such opportunities.) Kind of attention is likely, I would suggest, to be what counts. (Sunderland, 2000:161; italics in original)

According to Sunderland (2000), boys often get the kind of attention that includes instructions, questions that are on a higher level, a larger amount of academic criticism and slightly more plaudits than girls. However, the results of Sunderland’s study in a foreign language classroom show that the greater amount of teacher attention given to the boys was of a disciplinary kind, more like the attention parents give their children, whereas the girls were treated more as academic students. One conclusion the author draws from her study is the importance of dissociating amount of teacher attention from the nature of the attention. Even though it may seem like the boys get more teacher attention, and therefore dominate the classroom, it might be the girls that dominate.

Richards and Lockhart (1994:139) explain that even though a teacher tries to give every student an equal amount of attention, some students will most likely get more attention than the other students in the class. This phenomenon is called action zone. A teacher’s action zone involves the students that the teacher has regular eye contact with, the students that the
teacher addresses questions to and the students that are nominated to participate actively in the lesson. This means that the students within the teacher’s action zone will probably participate on a more active level than those students who are not in the teacher’s action zone. This zone mostly involves the students seated in the middle aisle if the teacher is teaching from the front of the class. Naturally, a teacher’s action zone is individual and may also vary from lesson to lesson.

Einarsson (2003:160-161) claims that boys get more teacher attention when the teacher is female while girls get more attention when the teacher is male. The students in upper secondary school are on their way to becoming young adults and that might explain Einarsson’s claim. The girls can express their femininity and the male teachers have to relate to this, which might be difficult for someone who has never had to experience it for himself. That might lead to more teacher attention for the girls since the teacher might feel that he has to do something to make sure that he does not discriminate anyone. The male teachers can also be attracted to some girls which might lead to more communication with these girls. Boys in upper secondary school might not be regarded as much as young adults as the girls since boys generally develop later. They might be regarded as boys rather than young men and that might raise maternal feelings rather than attraction and that can explain why the female teachers communicate more with boys.

2.2. Classroom talk and language use from a gender perspective

Studies have shown that students of different genders talk differently to the teacher in both amount and value. The results from a study on foreign language classroom interaction from 1987 conducted by Julia Batters (cited in Sunderland, 2000:163) show that girls appear to be the more academic students and the boys tend to appreciate the oral parts of the lessons the most. The fact that girls tend to be more academic makes it important for teachers and researchers to not only be aware of the ‘more is better’ interpretation, but also to listen to what is actually said. This means that even though boys might talk more than girls it does not mean that boys are better than girls. The boys in Batters’ study tended to talk more than the girls but still they did not get as much useful talk done as the girls. The boys also talked less when it came to answering voluntarily in the foreign language.

There is an idea about individuals having agency (Sunderland, 2000:166-168). This idea
proposes that teachers’ and students’ gender identities are not merely reflected in their social practices but are in fact constructed by them. Reunamo (2007) describes agency in the following way:

Agency refers to action that has an effect on something. When we in the real world influence environmental change, it does not self-evidently restore itself. To restore the environment to its original state, we have to work with it again. However, as we are restoring the thing we have changed; our interaction causes further changes in the environment, because we do not act in an endless vacuum. To get things back as they were requires our resources, time and energy. In a broad sense, agency involves the real world consequences of actions in the environment. (Reunamo, 2007:12f.)

Sunderland (2000) claims that language use is one type of social practice, and a believer in the idea of agency might say that language use is not mainly a characteristic of gender; language use is more part of the influences that shape gender. This, along with the belief that each individual is an agent with at least some contesting behavior, means that the teacher’s response to an individual’s efforts can affect the individual’s interpretation of how he or she should act and therefore affect the individual’s apprehension of gender. That means that if a teacher gives a positive response to a certain behavior, that behavior will be perceived as “correct”. In other words, if a male student behaves in a way that is considered ‘male’ and gets a positive response from the teacher, he will probably continue with that behavior.

There is no doubt that gender roles exist. In fact, the existing gender roles are so strong that they are extremely difficult to erase. There are also people who want to keep these gender roles. Usually these people argue that gender roles are biologically necessary or necessary for the replication of our cultural values (Ayim, 1996:34). Davison and Frank (2006) try to explain why most people are so resistant to thinking that we do not need to categorize people when it comes to gender. The two authors claim that we have, from the beginning, ignored how complicated the differences really are and that it led us to the two categories we have today and since they have existed for so long we have come to believe that these categories are natural and inevitable.

Even though these gender roles exist, and even though the discussion about whether or not gender roles should exist could go on forever, one fact remains – gender roles are only a generalization of people’s behavior. That is why it is important to conduct thorough and specific research when it comes to gender. In one of Sunderland’s studies (2000:165f) there are two boys that get a great deal more of the teacher’s attention than the other students. If these two boys were to be excluded, the girls as a group would get about the same amount of attention as the boys. This shows that gender is not a simple binary and that there is diversity
in every classroom. The two boys could have just had personalities that unconsciously get more attention than other personalities. Even if a class consists of students of the same age and background, there will still be differences within the gender groups as well since individual characteristics play a part as well. To acknowledge this is important when studying gender and classroom interaction.

2.3. Categorization of teacher questions in the classroom

Teachers normally ask their students many questions during a lesson. These questions can be divided into different categories. In my own study, I have decided to make use of the categorization that Richards and Lockhart have done concerning classroom interaction. Questions are categorized into procedural questions, convergent questions, and divergent questions (Richards & Lockhart, 1994:185-187).

*Procedural questions* are the questions that have to do with what is going on in the classroom, i.e classroom management. An example of a procedural question could be if the teacher asks the students if they all have brought their books. Procedural questions do not involve engaging the students, making the students’ comprehension easier or promoting interaction in the classroom. *Convergent and divergent questions*, on the other hand, involve these factors.

The difference between divergent and convergent questions is that convergent questions require a short answer, usually ‘yes’ or ‘no’, or an answer that does not require much thinking from the answering person. Divergent questions encourage students to respond with a longer and more complex answer. Also, when the students answer a convergent question, the answer usually gives information that has already been presented. Divergent questions, on the other hand, encourage the students to come up with answers that provide new information. An example of a convergent question could be if the teacher asks a student if he or she has understood how to use the genitive. A divergent question could be, for example, if the teacher asks a student to analyze why a character from a book behaves in a certain way.

Even though Richards and Lockhart’s question categorization may seem like a perfectly good way to divide classroom questions, it is important to remember that their categorization is an oversimplified division of classroom questions. There are questions that may not fit into any of the categories and there are questions that may fit into more than one category. For example, if the teacher asks a student “How are you doing on your assignment?” the question can be interpreted as either a convergent or a procedural question. In a way it is procedural
since it has to do with classroom management, or more specifically, if the student is managing to do his or her assignment properly. In another way, the question might seem to be of the convergent kind since the question is probably asked with the intention of making the student’s comprehension easier if needed.

3. Methods

3.1. Design and sample

Since it is quite difficult, if not impossible, for a teacher to know what types of questions he or she asks the pupils and how often, the most suitable choice of method was observation rather than my other alternative, which was using a questionnaire. Using interviews as a research method was not an option since I wanted the results to be quantitative rather than qualitative. The choice of school and classes to observe was based mainly on convenience. To increase the reliability of the results, two people were needed to conduct the observations. That is why I asked a fellow student who was conducting a similar study on 7th graders, to be present and take notes during the observations. Another question to take into consideration concerning the reliability of the study was for how long the observations should last. Since it is difficult to concentrate for 40 minutes straight it seemed reasonable to observe each class for 15 minutes on three different occasions.

The decision to observe three different classes was made since the selected school had three different work teams with one English teacher per work team. In other words, there were no more English teachers available. The total number of students in the classes was between 15 and 16. In Class 1 there were 11 boys and 5 girls while in Class 2 there were 9 boys and 6 girls. In Class 3 the gender distribution was more even than in the other two classrooms with 8 boys and 7 girls.

3.2. Observations

3.2.1. Creating the observation model

The most difficult part of the whole observation process was to find the appropriate observation method. The questions asked in the classroom had to be divided into categories in order for the observations to go smoothly. To write down every question that was asked in the classroom would simply be impossible. After the discovery of Richards and Lockhart’s (1995:185-187) categorization, this process went much more smoothly.
With the definitions of Richards and Lockhart’s question categories in mind it was decided that even though they only use these definitions for teacher questions, the definitions could also be applied to the student questions. Some examples of procedural questions could be ‘Do you have a pen?’ or ‘Did everyone bring their books?’ Convergent questions asked by students could be ‘Can you help me?’ while convergent questions asked by the teacher may be questions that will help the teacher introduce a new subject, such as ‘Does anyone know who Charles Dickens is?’

We also wrote down if the questions were asked in English (E) or Swedish (S), since we have noticed that many students at this level do not speak as much English during their English lessons as one might wish.

Since this project is not very extensive, we decided to focus on a specific part of the lesson, in this case the beginning. This choice was made because it is reasonable to assume that the introduction of a lesson is the part that contains the most questions since that is when the teacher introduces the topic of the lesson. Taking attendance and bringing up topics and happenings from the previous lesson are things that might appear in the introduction of a lesson too. These things are usually brought up by asking questions such as “Where is Anna?” or “Do you remember what we did last time?” If the teacher introduces a new assignment the students will most likely ask questions after, or during, the introduction.

The observation model was drawn on a sheet with squares that made it look like a drawing of a classroom with the teacher’s desk in the front and rows of student tables facing the teacher desk. Above each square we wrote either G (for girl) or B (for boy) when the students had taken their seats before the lesson started. We left some space if we needed to add another table somewhere. In the squares we made a note each time a student asked a question, using our abbreviations. For example, if a student asked a procedural question in English, the abbreviation that we put down in that student’s square would be PE (see Table 1 below). When the teacher asked a question we wrote a number after the question and then wrote the same number in the square of the student that answered the question. For example, if the teacher asked a student a convergent question in English, the note in our scheme would be CE1 in the teacher’s square and a 1 in the square of the student that answered. The number after CE then indicated that answer1 was an answer to a convergent question. The observation scheme is included in the Appendix.
Table 1. Explanation of abbreviations for question categories.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>Procedural question asked in English</td>
</tr>
<tr>
<td>PS</td>
<td>Procedural question asked in Swedish</td>
</tr>
<tr>
<td>CE</td>
<td>Convergent question asked in English</td>
</tr>
<tr>
<td>CS</td>
<td>Convergent question asked in Swedish</td>
</tr>
<tr>
<td>DE</td>
<td>Divergent question asked in English</td>
</tr>
<tr>
<td>DS</td>
<td>Divergent question asked in Swedish</td>
</tr>
</tbody>
</table>

Some questions are asked without any expectations of getting an answer from the person asking the question. Those questions were still counted as questions and accounted for in the results. An example of a question of this kind is “Some students are missing, right?”

Sometimes a statement can be made that is really supposed to be a question. The phrasing might be in the form of a regular assertion while it is really supposed to be interpreted as a question. For example, a student might say “I need help”, but what he or she really means is “Can you help me?” The situation could also be reversed. Sometimes the teacher asks a question that is really supposed to be interpreted as a command or a statement. An example is if the teacher says “Sorry?” when she did not hear what a student said. Based on this we decided that all questions where one could actually put a question mark after it counted as questions. Anything else was not included in the frequency count. This means that we did not count “I need help” as a question but we counted “Sorry?” as a question.

The reason as to why this particular observation scheme was chosen is because it is also possible to see if there are one or more students who answer and ask the majority of the questions. Some students tend to require more of the teacher’s attention than other students. If that student asks the majority of the boys’ questions, for example, it would be an over-generalization to claim that those results represent all the boys in the class. By noting what each student asks or answers, over-generalization can be avoided. As Sunderland (2000:164) says, “[t]here will always be diversity within each gender group and in all probability overlap between them. Acknowledgement of this is crucial in any discussion or study of gender and classroom talk.”
3.2.2. Performing the observations and processing the material

Before performing the observations, a test observation was done. After noticing that the method chosen worked also in practice, the real observations were performed. From the back of the classroom, the beginning of a lesson was observed.

There was some information about the classes that we got from the teachers before, during or after our observations. First of all, the teacher in Class 2 had assigned seats for her students. Second of all, the English skills of the students in Class 3 were unusually weak.

When performing a study with observation as the research method it is important to remember the ethical aspects. I chose the 9th grade to make sure that all students were 15 years old or more because if they were it would suffice to get the students’ permission to observe them. The observations were done during the spring semester which made the probability of the students being 15 or older even higher. However, to be entirely sure, I asked the three teachers if there were any students in the three classes who were under 15. If the students would have been under 15, I would have to get their parents’ signature and that would have required much more work. Before the observations in Class 2, the teacher asked her students if they allowed us to do the observations. None of the students said no. The teacher in Class 1 asked her students about this during our test observation and they all agreed to us being there. The teacher in Class 3 asked her students if they would allow two university students to observe them for three lessons during a lesson when we were not there. She told us that they all agreed. Neither the students, nor the teachers were told exactly what our research was about. We explained that it had to do with classroom interaction and gender but nothing else.

All that was left after the observations were done was compiling the material. This was done by simply writing down all the possible combinations of questions (PE, CS, DE etc.) and counting how many times each type of question was asked. As for the answers, I counted how many times a certain type of question was answered by either a boy or a girl. In the results section, the statistics are presented in charts.

4. Analysis and results

The main focus of the present investigation was to examine interaction in the classroom. Since I wanted to measure both who asks and who answers questions the results section has
been divided into two main sections. Section 4.1 will present the results on what language (English or Swedish) was used by the teacher and the students when they asked questions, what types of questions were asked (did they relate to the content of the lesson or not?), and who asked the most questions (the teacher, the girls or the boys). The results will be presented individually for each class. Section 4.2 will present the results on what language was used by the students when answering questions, what types of answers were given by the students, and who answered the most questions (the girls or the boys). Section 4.3 is an overall comparison of the results from sections 4.1 and 4.2, and section 4.4 will compare the results from the present investigation with the results from the previous studies presented in section 2. The number after “girls” and “boys” in the diagrams is the total number of each group in the classes. In Class 1 for example, there were 5 girls and 11 boys.

4.1. Types and frequencies of questions asked by teachers and students

Comparing the number of questions a teacher asks during a lesson with the number the students ask during a lesson can be interesting if you want to investigate who talks the most and what the reason might be for the results you get.

The teacher in Class 2 had assigned seats for her students. That means that the students were in the same spot every lesson. That made it possible to check if the questions asked by the students were evenly distributed. If one student asks the majority of the questions in a class, the results will be skewed. In the other two classes the students had no assigned seats.

4.1.1. Procedural questions

This first part of the results section will present the numbers and types of procedural questions that were asked during the observations. Procedural questions are the type of questions that concern classroom procedures, routines, and management. The results from each class will be presented along with a description of the climate in the classes.
The total number of procedural questions for the teacher in Class 1 was 26 while the number for the students was 20 (see Figure 1). The boys asked 14 procedural questions while the girls only asked 6. There were, however, more than twice as many boys as girls in this class so the fact that the boys have a higher number of questions does not have to mean that each boy asked more questions than each girl. The teacher used English mostly and the boys used both English and Swedish. The girls, on the other hand, only used Swedish when asking procedural questions.

Even though the teacher tried to speak English with the students in this class the students seemed very uncomfortable with speaking English themselves. Many times the teacher told the students that they should speak English. A student could start by asking a question in Swedish and after being told to speak English they asked the same question in English. For example, a student could ask “Do you have a pen?” in Swedish and then be forced by the teacher to repeat the question in English. This happened a few times with the boys. The girls mostly went quiet or repeated the question in Swedish again if they were told to speak English. If this happened and the student asked the question again but in the other language, the question was counted again but in the other category. That might explain why the boys have a higher number of procedural questions in English than the girls even though the most logical explanation is the higher number of boys in this class.
The students in Class 2 did not ask nearly as many questions as the teacher did (see Figure 2). The total number of procedural questions asked by the teacher was 69 (10 of them were asked in Swedish) while the students asked a total of 20 procedural questions. Worth noticing is that the students in Class 2 asked the same number of procedural questions as the students in Class 1 (see Figure 1) even though the teacher in Class 2 asked many more questions than the teacher in Class 1. The boys asked a few more questions with their 11 questions compared to the girls’ 9 questions, but considering that there are a few more boys than girls in this class there is no big difference between the two. Although the students asked more questions in Swedish than in English, the difference is negligible.

The situation in this class was quite different from the other two. In this class the sound level was much higher. The reason for this was that the students did not really listen to the teacher, and mostly talked among themselves, and the teacher did not seem to care that the students did not listen since she kept on talking about the assignments. The high sound level probably made it difficult for the teacher to hear the students when they actually did say or ask something. The result of this was that the teacher asked “Sorry?” almost every time the students said something. Another reason as to why the teacher said “Sorry?” so often might be that she acted as if she did not understand questions in Swedish since many students asked a question in Swedish first but switched to English when the teacher said “Sorry?””. That might be an explanation for the high number of procedural questions in English from the teacher since we decided the question “Sorry?” should be counted as a procedural question mainly because that was the category where it seemed to fit best. It is one of those questions that do
not seem to fit into any of the three categories but since it is difficult for the teacher to manage the class when she does not hear what the students are saying we decided it should count as a procedural question.

Figure 3. Procedural questions in Class 3.

Figure 3 shows that unlike the previous results on procedural questions, the students in Class 3 asked more questions than the teacher did (27 questions compared to 16). The teacher mostly used Swedish when asking questions while the students used Swedish only. The boys asked twice as many questions as the girls and since there were almost as many girls as boys in this class it is probably safe to claim that the boys actually asked more procedural questions than the girls in this class.

This is the class where the students’ knowledge of English was weak. That is probably why there was not a single question asked in English by the students. The teacher tried to speak English a few times but the students did not seem to understand very well when she did so. That is probably why she also spoke Swedish more than English.

For procedural questions, it seems that the students in general do not choose to speak English very much. Only in Class 1 were more questions asked in English than in Swedish and that is probably just because the teacher forced the students to repeat their questions in English if they asked them in Swedish. The teachers, on the other hand, seem very keen on at least making the students listen to English since they try to speak in English.
Looking at the total number of procedural questions asked by the students, the boys asked 64% of them and the girls 36%. The total percentage of boys in all three classes is 61% and the total percentage of girls is 39%. Comparing that to the total percentage of questions asked by each gender, it appears that the percentages are almost the same. The boys might have asked a few more questions per boy compared to the girls, but the difference is too small to draw any conclusions. Also, the girls’ percentage of questions asked in Swedish was higher than the boys’ (83% compared to 70%). The reason for that might be that the boys were not as afraid saying the wrong things and therefore they dared to speak English more than the girls.

4.1.2. Convergent questions

Convergent questions are questions that make the students’ learning easier, help the students interact in the classroom, and only require a short answer such as ‘yes’ or ‘no’. If the teacher asks “Have you all heard about the earthquake in Brazil?” it would count as a convergent question. This following section will present how many convergent questions were asked in each classroom.

The total number of convergent questions was not as high as the total number of procedural questions in this Class 1. The teacher only asked eight convergent questions and the students only asked five (see Figure 4). Considering the results from the procedural questions it comes as no surprise that the students did not ask any questions in English, even though the teacher used English for all the convergent questions. The distribution of questions between the boys
and the girls is quite even, despite the uneven distribution of boys and girls in this class. Mostly if the students asked a convergent question they asked if they had translated a word right. The question could be “Does ‘obstacle’ mean ‘hinder’?”

Figure 5 shows that all convergent questions asked in Class 2 were in English. The students asked more convergent questions than the teacher, which is very interesting since the teacher asked so many more procedural questions than the students. A total of 12 convergent questions were asked by the students while the teacher asked 5 convergent questions. There were three more boys than girls in this class and the boys asked two convergent questions more than the girls. In other words, there is no major difference between the boys and the girls in this class. The notes from the observation models for this class show that the convergent questions were asked by the same three students (two boys and one girl). If the three students had not been present there would not have been any convergent questions in this class. The total number of students in this class was 15. In other words, 12 out of 15 students did not ask questions that concerned their learning. One example of a convergent question asked by the teacher in this class is “Did you have a good weekend?”
As was the case with the procedural questions, the students in Class 3 asked more convergent question than the teacher (see Figure 6). And again, the student questions were all asked in Swedish. It seems as if the teacher tried to speak English since she asked at least some questions in English. The girls and the boys asked about the same number of convergent questions, although the girls actually asked one question more than the boys. One example of a convergent question asked by a student in this class was “Is Tasmania a part of Australia?”

What is interesting to see from the results for the convergent questions from all three classes is that the students asked more questions than the teachers did. Considering the fact that none of the teachers were starting a new assignment or topic during our observations this might not be as surprising. A teacher probably asks most of his or her convergent questions during the introduction of a new assignment or topic. If the students have already begun working on their new assignments the teacher will probably just let them work with it and wait for a student to ask a question, which was the case in the three classes during our observations.

Together, the three teachers asked 19 convergent questions, 15 of them in English, while the students asked a total of 32 convergent questions, 12 of them in English. 33% of the girls’ convergent questions were asked in English while the boys asked 41% of theirs in English. The girls asked 47% of the convergent student questions and the boys asked 53% of the convergent questions. Since there were 39% girls and 61% boys in all three classes it is probably safe to say that the girls asked more convergent questions than the boys.
4.1.3. Divergent questions

Unfortunately, but not very unexpectedly, not many divergent questions were asked in any of the three classes. Divergent questions are questions that make the students’ learning easier, help the students interact in the classroom, and require a longer answer. They usually require much more thinking from the person answering than procedural and convergent questions do and they are normally asked by the teachers with the purpose of making the students think.

Only one of the teachers asked divergent questions and that was the teacher in Class 3. The teacher addressed two divergent questions that concerned the same topic to the same student, who was a girl. These two questions were asked in Swedish. The teacher only got one answer to the two questions and that answer was given in Swedish.

Since there were only two divergent questions asked it might be interesting to mention what was asked. The student to whom the questions were addressed was working with an analysis of a book that she had read. The book was about a Swedish teenage girl. The student was supposed to compare the life of the girl in the book with her own life. The teacher asked “How is it for you?” and when she noticed that the student did not understand she asked “How is your life compared to the life of the girl in the book?”

Since the number of divergent questions was so small no charts will be included in this section. For the same reason, there will not be a separate subsection on divergent questions in Section 4.2.

4.2. Types and frequencies of student answers in the three classes

Sections 4.2.1 and 4.2.2 present the results for how many answers the students gave the teacher. This part is included since it is important to see if the students answer the teachers’ questions or not. If the teacher asks 50 questions and does not get answers to any of them there is not much teacher-student interaction going on, and one of the main points of this study is to see if there is any difference in teacher-student interaction depending on gender.

4.2.1 Students’ answers to procedural questions

Figure 1 showed that the teacher in Class 1 asked 26 procedural questions. Figure 8 shows how many answers the teacher got to her procedural questions.
Figure 7. Answers to 26 procedural questions in Class 1.

There were many more boys than girls in this class, and the boys answered many more questions than the girls (23 compared to 8). The boys answered mostly in English while the girls answered solely in English (see Figure 7). 4 of the teacher’s 26 questions were asked in Swedish and 5 student answers were given in Swedish which means that almost every time the teacher asked something in English she got an answer in English too. A total of 31 answers were given in this class to the teacher’s 26 asked questions, which means that she got more than one answer for some of her questions.

Figure 8. Answers to 69 procedural questions in Class 2.

Figure 8 shows that the distribution of answers was quite even between the girls and the boys in Class 2. As in Class 1, the girls answered only in English while the boys answered in
Swedish too. The teacher from Class 2 asked 69 procedural questions (10 of them in Swedish) and got 20 answers (4 of them in Swedish). That means that the majority of the teacher’s procedural questions did not get answered. This is probably because the teacher was sitting in front of the class going through the material and the students were talking to each other and did not listen to teacher. The teacher did not seem to care either since she rarely made a serious attempt to get the students’ attention.

Since there were not many answers given to the teacher’s procedural questions in Class 3, no chart will be included. The boys answered twice in English while the girls answered twice in Swedish. Comparing these results to the results in Figure 3, one might notice that the teacher asked 16 procedural questions and only got four answers. Why the teacher in this class got so few answers is difficult to tell, but maybe the students did not care much about answering or maybe they did not understand the teacher the first time she asked a question and therefore the teacher had to rephrase her question and ask again.

The total number of procedural questions answered by the students was 55. 68% of the answers were given by the boys. As mentioned earlier, the total percentage of boys is 61% and the total percentage of girls is 39%. The boys answered more than 61% of the teachers’ questions but the difference is still very small between the boys and the girls. Both the boys and the girls gave most of their answers in English (74% for the boys and 90% for the girls). Also worth noticing is that there were very few student answers compared to the amount of teacher questions. The teacher in Class 2 for example, asked a total of 74 questions and only got 17 answers.

4.2.2. Students’ answers to convergent questions

This section will not present any diagrams at all since the number of answers was so small. The results will instead be integrated in the text.

Both genders in Class 1 answered about the same number of convergent questions. The girls answered three convergent questions, all of them in English. The boys answered two convergent questions, both of them in English. The fact that the girls actually answered one question more than the boys is interesting since there were more than twice as many boys in this class. As shown in Figure 4, the teacher in Class 1 asked a total of eight convergent questions. All eight of them were asked in English. This means that three of her questions probably did not get answered. This teacher had a tendency to ask the same question more
than once if she did not get an answer the first time. That can probably explain the difference between questions asked and answers given. What is interesting in this case is that the students actually answered in English. It is also important to remember that even though there are more than twice as many boys as girls in this class, the girls actually answered one question more than the boys. It is difficult to draw any major conclusions though, since the sample size is so small.

As for Classes 2 and 3, no answers were given to convergent questions at all even though the teachers asked convergent questions.

4.3. Overall comparison of results

In Class 1 the teacher asked more questions than the students did. The total number of questions asked by the teacher was 34 while the same number for the students was 24. Out of the 25 student questions, 8 were asked by girls. This means that the boys asked about twice as many questions as the girls. Even though this might seem like a big difference it is really not since there are about twice as many boys in this class. Most of the questions that were asked in this class were procedural questions. The boys and the teacher switched between English and Swedish when they asked questions while the girls only asked questions in Swedish.

As for the situation in Class 2, the students did not ask nearly as many questions as the teacher. The total number of questions for the teacher was 74 while the total number for the students was 32. The majority of the questions asked were procedural questions. For example, out of the 74 questions that the teacher asked, 69 were procedural. Also, if the three students that asked all the convergent questions were not in this class there would not be any results for the convergent questions in this class. The distribution of questions between the boys and the girls in this class was rather even. Both the teacher and the students used English more than Swedish.

The students in Class 3 asked more questions than the teacher. The total number of questions asked by the students was 42 while the total number of questions asked by the teacher was 24. However, none of the questions that the students asked were asked in English. The teacher asked a few questions in English but used Swedish most of the time. Although the majority of the questions that were asked were of the procedural kind, the girls actually asked about the same amount of convergent questions as they did procedural ones. On every filled out observation model for this class there is always one boy that asks about 50% of all the student
questions. Unfortunately, it is not possible to tell if this is the same boy every time since the students in this classroom did not have assigned seats.

Table 2. Percent of teacher questions according to category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural</td>
<td>76%</td>
<td>93%</td>
<td>67%</td>
<td>84%</td>
</tr>
<tr>
<td>Convergent</td>
<td>24%</td>
<td>7%</td>
<td>25%</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>92%</td>
<td>98%</td>
</tr>
<tr>
<td>English</td>
<td>88%</td>
<td>86%</td>
<td>29%</td>
<td>77%</td>
</tr>
<tr>
<td>Swedish</td>
<td>12%</td>
<td>14%</td>
<td>71%</td>
<td>23%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2 shows that procedural questions were by far the most commonly asked questions by the teachers in the present study. Convergent questions were asked, but divergent questions were rarely asked. It is also clear that the teachers mostly asked their questions in English. What language the teacher used the most seems to depend on the students’ knowledge of English. The teachers in Classes 1 and 2 asked most of their questions in English while the teacher in Class 3, whose students were supposedly less proficient in English than the students in the other classes, used Swedish more when asking questions. The students are likely to be more confident in student-teacher interaction in English if they have a higher English proficiency. This seems even more possible if the results from the students’ answers are considered as well. The students from Classes 1 and 2 answered most of the questions in English (see Section 4.2) while the students in Class 3 answered half of their questions in Swedish.

1 Divergent questions not included
Table 3. Percent of the questions asked by boys and girls according to category.

<table>
<thead>
<tr>
<th></th>
<th>Classroom 1</th>
<th>Classroom 2</th>
<th>Classroom 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys (69%)</td>
<td>Girls (31%)</td>
<td>Boys (60%)</td>
<td>Girls (40%)</td>
</tr>
<tr>
<td>Procedural</td>
<td>82%</td>
<td>75%</td>
<td>61%</td>
<td>64%</td>
</tr>
<tr>
<td>Convergent</td>
<td>18%</td>
<td>25%</td>
<td>39%</td>
<td>36%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>English</td>
<td>47%</td>
<td>0%</td>
<td>67%</td>
<td>64%</td>
</tr>
<tr>
<td>Swedish</td>
<td>53%</td>
<td>100%</td>
<td>33%</td>
<td>36%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4. Percent of the total number of questions according to category (overall).

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural</td>
<td>94%</td>
<td>84%</td>
</tr>
<tr>
<td>Convergent</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>English</td>
<td>75%</td>
<td>88%</td>
</tr>
<tr>
<td>Swedish</td>
<td>25%</td>
<td>12%</td>
</tr>
</tbody>
</table>

As was the case with the teacher questions, the predominating question category was the procedural one. There is a small difference between what type of questions the girls asked more often and what type of question the boys asked more, but the difference was too small to make any difference. It is clear, however, that procedural questions were most frequently asked both by the students and the teachers. Convergent questions occurred, but divergent questions were practically non-existing. Furthermore, Table 3 shows that the boys had a higher percentage of questions asked in English where 33% of all the questions asked by boys were asked in English compared to the girls’ 23%. Since my general impression is that boys are less concerned with making mistakes than the girls it was not surprising to see that the boys asked more questions in English. They are probably not as afraid to make a mistake as the girls. The girls might be more afraid to ask questions that might make them seem stupid.
An intriguing thing about the distribution of genders in the three classrooms compared to the total percentage of questions asked by the boys and the girls is that the percentage of boys is 61% and the percentage of girls is 39% (as shown in Table 3). The boys asked a total of 60 questions in this study and the girls asked 39 questions. When calculating the percentage, the results were that the boys asked 61% of all the questions and the girls 39%. In other words, the total percentage of the gender distribution was exactly the same as the total percentage of questions asked by the girls or the boys. This means that even though it might seem as if the boys asked more questions, since they have higher columns in the diagrams, that was really not the case. There were just more boys in the classes.

4.4. Comparison of results to information from secondary sources

As mentioned in section 1, teachers tend to separate their students by gender to make the administration of the lesson easier (Coates, 1998:186). The notes from the observations show that the girls tend to sit on one side of the classroom and the boys on the other side. Only in Class 2, where the teacher had assigned seats for the students, were the students mixed at least a bit. There were still many more girls on one side of the classroom and vice versa. According to the teacher she had placed the more unruly students on the opposite side of the classroom among students that the unruly student did not know very well. That way they were not as likely to mess with the students around them and disturb the peace. Even though it may be the case that the students have grouped themselves this way without any influence from the teacher, the teacher can still try to mix the genders more and try to break the students’ tendency to group by gender.

The notes from the observation models also indicate whether the teachers seem to have an action zone or not. The teacher in Class 3 walked around much so if she has an action zone that would shift as she moved. The other two teachers, however, stood or sat in the same spot almost the whole time during every observation. From the observation sheets from their classes it is possible to tell if they have an action zone or not. It turns out that one of them actually has an action zone, namely the teacher in Class 1. She was standing a little to the left of the middle of the classroom and her action zone seems to be in a straight line from where she is standing. That means that the students sitting within the teacher’s action zone have a better chance of getting more of the teacher’s attention than the students outside of the teacher’s action zone. Richards and Lockhart’s theory (1994:139) about teachers having
action zones, accounted for in Section 2.3, seemed to be true in some cases. Perhaps every teacher has an action zone but some of them are more difficult to detect.

Looking at the results from this study, it seems as if the boys and the girls get a fairly equal amount of attention. There might however be a difference in kind of attention. As described in section 2.1, studies show that the type of teacher attention is different for boys and girls. This study indicates that the boys get more attention of the procedural kind and girls more attention of the convergent or divergent kind. In other words, boys get more attention that has to do with classroom and lesson management while the girls get more attention that has to do with learning. The boys do, however, use more English than the girls, both when asking and answering questions. The results from this study do seem to agree with the results from the Sunderland (2000:161) study (described in section 2.1).

Sunderland’s (2000:160) study also showed that there were two boys that got a great deal more of the teacher’s attention than the other students. If those two boys had been excluded from the study, the girls and the boys would have gotten about the same amount of teacher attention (see Section 2.3). In this study there were two boys and one girl in Class 2 that asked all of the convergent student questions. If they were to be excluded there might not have been any convergent questions asked at all in that class. There might also have been one boy in Class 3 who asked more questions than the other students. Since the students did not have predetermined seats in Classes 1 and 3 there is no way to tell if there were a few individuals that affected the results in any way. Individuality was not something that was considered when the observations were performed and therefore nothing was done which made it possible to tell if one individual affected the results in any way.

5. Discussion

If the average number of questions per girl and per boy is calculated it is clear that the girls answered more questions than the boys. The girls answered 1.4 questions per girl while the boys answered 1.3 questions per boy. The same calculation can be made for the student questions and again the girls’ number is higher. The girls asked 2.2 questions per girl and the boys asked 2.1 questions per boy. Even though there is a slight difference between the girls and the boys it is not big enough to draw any conclusions from. The fact that there is basically no difference between the genders in this study is quite interesting since many other studies show that there is a difference.
What is important to remember is that even though the results from this study show that there are no major differences between the genders when it comes to classroom interaction with the teacher, it does not mean that this is the case in other studies. The small sample in this study makes it less reliable and more difficult to draw any general conclusions. Jane Sunderland has researched and compared several studies on the subject of gender in the foreign language classroom and one of her conclusions was that “clearly, what happens in a secondary school classroom may not happen in higher or primary education; classrooms in different cultural contexts with different discourses surrounding gender are themselves likely to be gendered differently from each other” (Sunderland, 2000:164). What she means is that the results of studies of this kind cannot be generalized since there are so many different variables to account for.

Also, it is quite clear that the three teachers have quite different teaching methods. One teacher goes through the lesson content in English and seems to let the students themselves take responsibility for listening while another teacher uses a great amount of Swedish to make sure that her students understand what to do. The third teacher is a mix of the two; she goes through the lesson content, mostly in English, and tries to make sure that the students are listening and that they understand what to do. This shows that how to create gender equality in the classroom is not obvious. Every case has to be dealt with in its own way. Barbara Houston (1996) suggests a strategy that might make it easier to eliminate gender bias:

The difference between a gender-sensitive strategy and a gender-free one is that a gender-sensitive strategy allows one to recognize that at different times and in different circumstances one might be required to adopt opposing policies in order to eliminate gender bias (Houston, 1996:60)

The gender-sensitive perspective does not give the teachers clear-cut instructions on how to achieve a gender-free education. It functions more as a reminder for teachers to question how teachers and students make out and react to a sexist culture. The teachers have to determine by themselves what actions to take in particular cases to abolish gender bias. That way, new and unsuspected bias will not be as big of a problem since the teacher then has experience in finding his or her own solutions to problematic gender bias. If the teacher eliminated gender bias with clear cut instructions and new problematic bias appeared where no instructions were to be found it would make the new problem much more difficult to get rid of.

Looking at the differences between the three question categories rather than the two genders is something else. Here we can see a big difference. Procedural questions were asked much more than convergent and divergent questions, and since the number of convergent and
divergent questions from the students was so small, does that suggest that the students are so bright that they do not need to ask the teachers any academic questions or does that suggest that they do not care about their learning? Perhaps the more academic questions occur at a later stage of the lesson.

6. Conclusion

The main aim of the present study was to find out how gender equal the English classroom is in the 9th grade of a Swedish school. Two questions were asked: Does the teacher treat girls and boys differently? and Do the students interact differently with the teacher depending on gender?

The results from this study show that the teachers did not treat girls and boys differently and that the students interacted in almost the same way regardless of gender. What is important to remember, though, is that these results cannot be generalized. First of all, the size of the sample is very limited. Second of all, even if this study shows that there is no difference between the genders when it comes to classroom interaction one cannot say that the same goes for all other classes in Sweden. It is not even possible to say that one would get the same results with the same teachers but other classes or the same teacher and class only during a later part of the lesson since we are in fact dealing with people and each person is an individual. What works for the teacher in Class 1 might not work for her in any of her other classes. However, the fact that these three classes are fairly gender equal is positive since other studies usually show the opposite results. Reaching a gender equal situation in the classroom requires efforts from all involved.

There are a few things that could have made this study better that were excluded mostly because of lack of time. The question categories can be developed even more to make them less general, there could have been more observations, perhaps during different parts of the lessons and the observations could have included not only questions but everything that was said in the classroom (although that would have required recording equipment). This study has studied teacher-student interaction and it makes me wonder about student-student interaction. How do the students treat each other? If they treat each other differently, does that depend on gender or not? That is something that can be investigated in another study.
References


Houston, Barbara. 1996. Gender Freedom and the Subtleties of Sexist Education. In Diller et al. (eds), 50-63.


