Involving Students in Tracking Discussions:

Learning Through Evaluation

he more widespread interactive teaching methods are, the more frequently we hear the question: How do we evaluate the "products" of these approaches? Teachers feel that such traditional methods of evaluation as exams, oral and written tests, etc., do not always reflect students' success completely and adequately as they are primarily designed to easily check the presence of concrete knowledge (according to the principle that the answer is either "correct" or "incorrect"). It is much more rarely that they help us evaluate the level of cognitive skills—analysis, synthesis, and argumentation. Moreover, by means of these methods it is practically impossible to evaluate many skills that are vitally important to communication and understanding.

Therefore, intuitively or consciously, many teachers try to apply new methods of evaluation that offer more opportunities than the traditional ones. However, teachers still worry whether these alternative approaches to evaluation will turn out to be sufficiently objective and authentic. We should certainly welcome any effort to achieve objectivity of evaluation and thus improve the teaching/learning process. I believe, however, that the key change required to really transfer this process onto a qualitatively new level is not the employment of new tools and evaluation procedures, but a change in the entire system of teacher-student relations. Without such change, which is based on mutual responsibility and trust, new procedures and tools will remain ineffective.

In this paper I am going to present a strategy for evaluating formal discussions that can prove useful when we want to evaluate the knowledge and skills of the students that become evident while dis-

cussing a specific topic. Before I start, however, I need to explain that the experience described here is the product of a "transition" period in our education. The system to which we were accustomed put a teacher into the key position—he/she was the one to determine the goals and methods of teaching, to establish evaluation criteria, and to make a final verdict of the level reached by a student. Now we are gradually moving to a different system in which teacher and student are equally responsible for the result and consequently take an equal part in goal setting and in monitoring the implementation of these goals. The author hopes that the ideas offered here will prove useful primarily to those teachers who use interactive methods and thus are engaged in changing the present system by encouraging new procedures and norms.

Discussion creates that authentic life context in which, according to the theory of constructivism, knowledge comes in contact with reality and becomes the genuine "property" of its participants.

Discussion has a number of characteristic features that supplement the purely verbal information, and thus allow the observer ("evaluator") to make much deeper conclusions about the level of knowledge and the participants' skills in using this knowledge. Observing the performance of participants, listening attentively to their arguments, we perceive not only what is said, but also *how* it is said: intonation, tempo, mimicry, gestures, and other paraverbal and nonverbal messages. These messages become a sort of "seasoning," allowing us to evaluate the real "taste" of the speeches delivered by the participants.

These properties of discussion make it very attractive to many teachers. To be honest, at times the same properties make this kind of evaluation much more subjective as compared with other evaluation methods (such as written work).

Thus, a creative teacher faces the problem of designing an evaluation process so that it keeps all the positive features of discussion as an evaluation tool and, at the same time, creates conditions for making this tool as objective as possible.

A teacher or faculty member who intends to use discussion as an evaluation tool needs, first of all, to follow certain main principles while preparing the procedure: to define the goals clearly, to formulate them using specific terms that determine the conditions of performance, and to describe the final "product" developed as a result of performing the task. While planning the use of discussion as an evaluation tool start by asking yourself:

- What knowledge should students demonstrate?
- In what form should they demonstrate this knowledge?
- How many speakers can be granted time to express their opinions?
- What skills should participants demonstrate?
- How much time will each participant have at his or her disposal for stating an opinion and for refuting opponents' opinions?
- How many times can one participant express his or her opinion during the discussion?
- How can we provide equal opportunities for all participants to state their ideas?

Answers to these questions will allow you to see/hear/feel how the discussion will likely develop in reality. If your vision is still not clear enough, continue to ask yourself questions until the desired nature of the "final product" becomes concrete and adequately meets the goals you have set.

When planning a discussion in the 10th grade of high school about the role revolutions play in the development of human

society, I set the following goals for myself as teacher:

- 1. To evaluate how well students know historical facts connected with revolutionary events in Europe and America in the 17th-18th centuries:
- 2. To evaluate students' level of critical thinking (ability to trace cause–effect connections, to choose an opinion based on a system of values, to assert their opinions and to respond to arguments of opponents);
- 3. To evaluate students' skills in presenting their knowledge and opinions before an audience.

At the same time I wanted the class to be as interesting for my students as possible and the situation in which they demonstrated their knowledge to be quite informal. A discussion format met these requirements perfectly, but its being so interactive and emotional bore a potential risk for the evaluation process, as it could turn out to be very complicated and subjective.

Barbara Miller's work (Miller, 2002) and my long-term experience training students for formal debate helped me overcome these challenges.

I chose Rubrics as a basic tool, allowing for the evaluation of both the knowledge and skills shown during a discussion.

This is a perfect tool. Not only does it allow a teacher to evaluate students' work and to define the level of their academic achievements, but it also provides the same opportunities to students themselves. Rubrics give them information on what their academic achievements are and what needs to be done to lead these achievements to perfection. A typical rubric consists of three basic elements:

- Specified areas of academic performance (evaluation criteria).
- A scale of levels of academic achievements (expressed by definitions or grades).
- The description of each level of achievement (standards).

Evaluation criteria	Levels of academic achievement						
	Poor Satisfactor		Good	Very good	Perfect		
Criterion 1	Standard	Standard	Standard	Standard	Standard		
Criterion 2	Standard	Standard	Standard	Standard	Standard		
Criterion 3	Standard	Standard	Standard	Standard	Standard		

Creation of a rubric begins with defining the criteria according to which students' performance will be evaluated. Barbara Miller advises applying from two to four criteria (2002, p. 41-42). She claims that too many evaluative criteria make students less attentive and thus lead to lower quality performance.

After you have set the criteria, check their importance and usefulness by answering the following questions:

- Is there a chance that a student will perform the task meeting the criteria, but will not achieve the goal of the task?
- Is there a chance that a student will achieve the goal of the task without meeting the criteria?

If you answer these questions positively, the criteria need to be reconsidered.

The next step for designing a rubric is to define differing levels of academic achievement. It is challenging to name an exact number of levels. An ideal rubric will be the one which describes a sufficient number of levels so that the student can use them for further academic development. At the same time there should not be too many levels, otherwise they won't be readily differentiated and may jeopardize diligent performance of the task. The experience of various teachers shows that it is enough to describe 4-5 levels of achievement. Some teachers believe it is useful to describe the lowest level as absence of aspiration and the top level as ideal performance.

After criteria and levels of educational achievement have been set, start filling out the cells of a rubric, describing the desirable result. Use terms or characteristics which are easily observable. Describe what you expect, and not what is absent, i.e., avoid negation. For example, it is better to use the wording the student uses only one source instead of the student does not use various sources.

In describing different levels, avoid using value-laden adjectives or adverbs. For example, it is better to write the student mentions various facts to support his opinion, instead of the student shows good knowledge of factual material. The rubric should help a student to understand what he or she needs to do to achieve the desired progress; therefore instead of using normative terms, such as good, bad,

medium, etc., describe observable attributes of these terms. It will be much more useful for a student to read that stated ideas have no logical connection and it is hard for a listener to understand how the stated facts support the arguments than the performance lacks logical organization.

For my history class I designed a rubric which supported evaluation on the basis of three criteria (each of which corresponded to one of the set objectives) and five levels of academic achievement.

Once a rubric is ready, it should be discussed with students. This conversation is necessary so that students realize what is expected from them and may prepare accordingly. Besides, this talk allows for the collaborative editing of the rubric so that its meaning is understood by everyone in the same way.

While the students were getting acquainted with the rubric they wondered about the meaning of two phrases: formulates the value underlying an opinion and uses original ways for drawing attention. We discussed possible meanings of these phrases and found examples that helped students understand what was expected from them. Let's say that human life can be used as a value, and in this case all facts and arguments should show either strengthening of this value (e.g., opportunities for free development) or, on the contrary, ignoring this value (e.g., the killing of tens of thousands of people in the epoch of Jacobean dictatorship). Students proposed other values which can serve as a basis of a chosen opinion: economic well-being of a society, a principle of equality and freedom, independence of a nation.

Original ways of attracting attention and stressing important ideas were also illustrated through examples: using clear graphic schemes and figurative analogies; and beginning the talk with a vivid statement that may not be obviously connected with the topic of discussion, but the speaker shows this connection during his or her talk.

The next stage in preparing for a discussion is talking about its formal rules.

It was decided that the class would be divided into two groups: The students belonging to the first group (we shall call them *speakers*) will actively participate in the discussion, while all the others will be given

Criteria	Levels of educational achievement								
	Poor	Satisfactory	Good	Very good	Perfect				
Knowledge of the theme	Names no more than two facts. Makes mistakes in chronology. Confuses events happening in different coun- tries. Does not use scholarly concepts.	Uses facts from the history of two coun- tries. Correctly uses the basic concepts of the theme. Makes discrepancies in chronology.	Uses facts from the history of England, France, and the USA taken from the textbook. Cor- rectly applies scholarly terms.	Uses facts from the history of England, France, the USA taken from at least two sources.	Uses facts from the history of England, France, and the USA, using three or more sources.				
Critical thinking	Position is not clear. Is not able to show connection between facts and the discussed position.	Formulates and presents no more than two arguments in support of a position. Uses elementary conclusions while proving the point. The facts from the history of different countries are not classified and are used at random.	Formulates a position and supports it by at least three arguments based on examples of historic facts. Formulates the value underlying his/her position. Formulates questions for getting more specific information.	Formulates a position and supports it by at least three arguments; while proving a point uses facts, analogies, references to expert opinions. Explains each argument basing points on the chosen value. Compares his/her arguments to the arguments of opponents and develops an idea of their persuasiveness. Poses questions to opponents and uses their answers to support own position.	Formulates a position and supports it by using a value criterion. Uses various types of arguments (more than three); reveals their strengths and weaknesses. Interprets proofs provided by opponents to his/her own advantage. Anticipates possible objections and responds to them. Explains the connection of the discussed theme with contemporary history. Sets question-traps and uses answers of opponents to own advantage.				
Presentation	Reads from notes more than 50% of the allotted time. Uses no more than 60% of the allotted time. Instead of criticizing ideas criticizes opponents personally.	Reads more than 35% of allotted time. Uses jargon language. Criticizes ideas using discourteous expressions. Infringes on the time frame by more than 10%.	Follows the structure Introduction-Main part-Conclusion. Uses his notes only for fact references. Addresses the audience, maintains visual contact. Infringes on the time frame by no more than 10%.	Follows the structure Introduction-Main part-Conclusion. Uses varied intonation and nonverbal messages for emphasis. Is courteous to opponents. Infringes on the time frame by up to 5%.	Uses original techniques for attracting attention. Observes the structure and the time frame. Is courteous to opponents.				

the task of watching the course of the discussion and evaluating the knowledge and skills of their classmates with the help of the discussed rubric (we'll call them *observers*). This procedure allowed me to see and formulate one more academic goal of discussion: to develop the students' skills of observation and evaluation.

Experience with the debate program had warned me against assuming that simple observation over the course of a discussion would guarantee understanding of the role each participant plays in it. Therefore, in order to improve the quality of evaluation, I added one more tool to the rubric. This tool is called *The Discussion Record Sheet* (in formal debate, the English term *flow sheet* is used). Observers got blank sheets on which every speaker was allotted a column; during my class seven students took part in the discussion.

Speaker 1	Speaker 2	Speaker 3	Speaker 4	Speaker 5	Speaker 6	Speaker 7

In the course of discussion the observer should write down the ideas he hears from speakers in a corresponding column. By means of arrows, he can specify how these ideas are related to ideas stated by other speakers earlier. Using this tool makes it possible to recreate the semantic course of the discussion after it ends and to separate the content from emotional impressions.

After it became clear to all participants by what means and criteria the speakers' performance would be evaluated, a natural question came up about how to create equal opportunities for all speakers to demonstrate their knowledge and skills.

After some consideration, we developed the following procedure:

Each speaker will have an opportunity:

- To formulate a position
- To support it with arguments
- To pose questions to other participants
- To answer questions

Time frame of discussion:

During discussion each participant can use no more than 5 minutes.

Obligatory presentations (the teacher signals the time allotments):

- Two minutes for the first representation (stating one's position and arguments)
- One minute for the concluding presentation (developing one's position and arguments, giving conclusions in view of the ideas offered during the discussion)

Optional presentations (the speaker decides when to join the discussion and how many seconds to use):

 Two minutes can be split for short presentations and for asking questions of other speakers

Time of obligatory and optional presentations cannot mutually compensate (it is not possible to use a minute you saved from the first obligatory presentation to extend optional presentations).

This complicated time frame made us introduce one more role in the forthcoming discussion—we chose a timekeeper.

To ensure high quality performance of his/her duties, the timekeeper needed not only a watch with a second hand but some additional *tools* such as signs indicating *30 seconds*, *one minute*, and *STOP*, and a sheet of paper on which to record the time used by each speaker.

	Time used									
	5 minutes		4 minutes		3 minutes		2 minutes		1 minute	
	30 sec.	30 sec.	30 sec.	30 sec.						
Speaker 1										
Speaker 2										
Speaker 3										
Speaker 4										
Speaker 5										
Speaker 6										
Speaker 7										

Having considered all the difficulties a timekeeper may encounter during a discussion, we developed some guidelines for this work.

Instructions for the timekeeper

Time is counted backwards so that it is easier, if needed, to let a speaker or an observer know how much time is left for the presentation.

As time goes by, shade the cells in the table corresponding to the name of each

Signs should be also put up in reverse order, to signify that a speaker has first "one minute" and then "30 seconds" left.

The "STOP" sign may be shown three

- After the end of the first obligatory presentation
- After a speaker uses the two minutes allotted for optional presentations
- After the end of the concluding obligatory presentation

After the end of discussion, declare the results of time expenditure to observers and speakers.

Post-discussion reflections

If we want to achieve real qualitative changes in the knowledge and skills of students (and in our own, too) it is necessary to talk about the process of discussion and evaluation with them. Sharing feelings and emotions is also important, as well as reflections about the discoveries made and ways of better using them in the future. During this conversation the teacher should encourage an atmosphere of openness and trust, and help students formulate their ideas. For example, if someone says, "I liked it," make sure you ask what exactly it was that the student liked. Remember to stress that such common words and phrases as everything, good, bad provide no helpful information, and in some cases can even provoke conflict as they may be understood differently. Once students are comfortable and familiar with structured discussions, such as the one described here, they will be better prepared to manage and monitor more informal and free-flowing discussion formats.

Here is what was said after our discussion in the history class:

- At first I felt a certain pressure knowing that my words would be recorded and evaluated, but then the discussion became so interesting that I stopped thinking about it.
- For me it was important to say what I had planned, that's why I did not think about who would be writing down my words or how.
- Though I did not participate in the discussion directly, when they talked about executions of aristocrats in France—whether those were justified or not—I thought that these executions could be compared with a surgery, when an injured or malignant organ is amputated for the sake of a person's survival. I was very glad when one of the speakers mentioned this [same analogy] in his concluding speech.
- I have noticed how many superfluous words my classmates say, and I'll try more carefully to avoid them in my own speech.
- To me as an observer, at times it was hard to understand whose ideas are picked up by this or that speaker.
- Sometimes I had the impression that supporters of different positions did not hear each other. For example, when it was said that revolutions promoted technical progress, someone responded that many people were killed. I still wonder how these two ideas are connected with each other.
- At the beginning I admired the presentation of the first speaker: his confidence, aggressiveness, activity. But when I began using the rubric for evaluation I understood that many of his ideas had not been supported by facts; therefore I can assess his performance as only satisfactory.
- The rubric helped me to prepare for the discussion: I rehearsed my first presentation at home so that it corresponded to the "perfect" level. For this I had to use not only the textbook, but also materials from the collection of original sources. It turned out that two minutes is enough time to say a lot. My expectations coincided with the evaluation of my classmates.
- Though my performance was not evaluated as highly as I had expected, I came to agree with this opinion because my classmates commented on it on the basis of the rubric and the discussion flow sheet.

This conversation and my personal observations allow me to make some conclusions and recommendations.

When using discussion for evaluation purposes for the first time in a class, choose a topic that allows you to devote enough time to procedural issues. For more difficult themes, the skills of both speakers and observers should be rather

advanced. Accordingly provide more time for "debriefing" or "unpacking," i.e., for the analysis of the whole process (discussion plus evaluation).

To make the work of observers simpler (and ultimately, to make the actions of a speaker clear for everyone), it is recommended that each presentation begin with signal phrases such as:

- My position in this discussion can be formulated in the following way...
- *In response to the argument stated... I want* to offer...
- It has been said (citation). I want...(to refute / to agree and add / to ask a question)

Students need to have a clear idea of what an argument is and be able to distinguish arguments from simple opinion statements. Many of my students had experience in debate and consequently, we based our evaluation on the model of argument they were well familiar with.

It consists of four parts: claim—a short statement in which an opinion is formulated; warrant—the connection between evidence and a claim, sometimes explaining some concepts used in the thesis; evidence—supporting the claim with objective facts, logical conclusions, opinions of experts, etc.; and conclusion—a brief statement strengthening the main idea (Hanson, 1996).

While students are still familiarizing themselves with how to monitor the discussion and record their observations on the Discussion Record Sheet, you might find it valuable to organize discussion in such a way that each speaker has a personal observer. The observer's task in this case is limited to making records of one student's performance only. Note, however, that while the procedure in this case is easier, it also means that each speaker will be evaluated by only one observer, which may lead to subjectivity and offense.

The experience described by me is not offered as a proof of the universality of these strategies. However, I doubt that any teacher would claim that he or she knows a strategy that is effective in all cases.

The number of discussion participants when speakers will be evaluated should not be more than eight; otherwise their opportunities to demonstrate their skills equally and sufficiently for the purpose of evaluation decrease sharply.

At first, preparing for a formal discussion of this sort (developing rules, time frame, and rubrics) takes a lot of time and does not augrantee against unexpected situations and mistakes. But it's the same as learning to walk, skate, or cycle—you can hardly do it without falling.

Therefore, if you simply want to check whether your students have memorized certain information, just offer them a traditional test—within 15 minutes you will receive a whole pile of work. But, if your interests embrace not only the ability of your students to use their (and sometimes other people's) memory, but also other important skills, I think it is time to start experimenting (if you have not yet started).

And then together we will be able to find answers to questions posed by practice.

References

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