

The Lesson Plan For Grade 4 To Grade 6

Posted on January 27, 2020

Introduction

The topic that has been chosen for discussion is related to Science. The lesson plans to be discussed and analyzed are for school-going students roughly between grade 4 to grade 6. This particular topic has been chosen because it is something very commonly studied and taught to students. It has got many practical uses for the students. Furthermore, engineering designing usually involves practical work instead of written or oral as compared to most school subjects. The same is the case with other branches of Science, for example, chemistry. This would be better for analysis as it would bring forward a completely different side of education.

As the paper progresses to discuss the advantages and the disadvantages of the particular approaches used in each of the lesson plans and ways of improving it, the purpose and importance of Science to be taught in schools will also become clear. It is particularly beneficial for those students who want to pursue or are interested in science subjects, especially physics and chemistry, in the future. It is important to give the students awareness about such topics because, in the future, they will have to study these things as well as manage projects on their own. Making them aware of these things at this early level would give them an edge in the future. It would give them some familiarity concerning the field of science as well as different branches of it and thus make it easier for them. Science is a difficult, complicated and conceptual subject. Starting studying about it from an early age is, thus, very significant. (Hooks, 2015)

Lesson Plan 1:

The first lesson plan is designed for 45 minutes. The purpose of this lesson plan is to make the students find and come up with alternative ways of solving the same problem. The lesson plan is based on a practice that is to be conducted by the students on their own. The apparatus that is to be provided to them includes pipe cleaners and graphic organizers. The lesson is to begin by showing the classroom images of tall structures and reminding them of all the techniques related to such structures that they have studied. Then, move on to ask the students to name some of the tallest buildings that they have seen. (Bourdieu, n.d.)

This is to be followed by a brief lecture on how to construct a similar structure with ease. One student is to be chosen to create such a structure using ice cream sticks. This is to be followed by a class activity in which the students will be required to make a drawing of what a house made out of cards would look like. An alternative activity could be to make the students make a tall structure using paper cups. This activity can be done in pairs or groups. A similar but individual action is to be

followed by this in which each student will be given around 20 minutes to construct his or her structures. The one with the tallest and most stable structure wins. After the activities have been done, the groups, as well as individual students, are required to explain how they went about the making and creation of their respective structures and what are the particular techniques that they relied on. (Introduction: Pedagogy of the Oppressed: Anniversary Tribute for an Anniversary Series., n.d.)

All of these activities are expected to make the teacher understand and analyze the extent to which each student has understood what has been taught to him or her so far. (Bourdieu, n.d.)

Lesson Plan 2:

This lesson plan is for students to grade 6. It is also designed to last for about 45 minutes in which the students are required to work in pairs. This is also a practical activity in which the students are required to analyze and distinguish between the characteristics of solids, liquids, and gasses. The students will be told and encouraged to rely on their observation skills. They might do so by relying on the senses of seeing and touching (feeling.) The students would be provided with samples of solids, liquids, and gasses. This could include things like wooden blocks, juice, milk, an empty container (to represent air), etc. (Introduction: Pedagogy of the Oppressed: Anniversary Tribute for an Anniversary Series., n.d.)

The lesson is to be begun by the teacher showing the students the process of condensation. When the procedure has been completed, they will be required to tell what they observed. Furthermore, they will also be asked to discuss the differences in the characteristics of each of the states of water (solid/liquid/gas.) (Introduction: Pedagogy of the Oppressed: Anniversary Tribute for an Anniversary Series., n.d.)

The third activity is individual rather than collective. It is meant to analyze and understand the personal understanding of the concept of each student. The students are to be handed a sheet of paper listing many different things. The students are required to categorize each of the things as solid, liquid or gasses, along with their reasons for doing so. (Hooks, 2015)

Lesson Plan 3:

This lesson plan is very different from the ones explained above. Unlike them, this one is lecture-based, in which the teacher acts as a transmitter, whereas the students act as acquirers. The teacher is supposed to teach the students about the field of physics, what it is, and what distinguishes it from other branches and fields within the broader Department of Science. The teacher will then explain what physicists are and what they do. This will be done by mentioning the names as well as works of some famous physicists, their backgrounds, their histories as well as the importance of their works and contributions to the Department of Physics. (Introduction: Pedagogy of the Oppressed:

Anniversary Tribute for an Anniversary Series., n.d.)

The lecture is to be followed by a short written quiz. This is an individual activity and is meant to test the individual understanding of each student of what has been taught to him/her in the class. It also includes generic questions like what it is that the students would like to inquire about physics if they were ever to come across a physicist. (Bourdieu, n.d.)

Flaws With The Lesson Plans

The first and the second lesson plans are pretty similar to one another regarding their approaches being progressive. However, they do have some lackings and voids which will be discussed in this section. The third lesson plan is the most problematic out of all three. This is so because it follows a strictly traditional pedagogy. In this section, I will analyze all three of the lesson plans in detail and discuss their flaws. I will also make suggestions of my own regarding what needs to be added and what should be subtracted to make all of them closer to a critical pedagogy instead of progressive traditional pedagogies. (Hooks, 2015)

Before I proceed to the next step, I think it is important to give a brief explanation of what each of these pedagogies is and how they are different from one another. Traditional pedagogy is considered to be the oldest (and now obsolete) form of pedagogy. It includes the one-way transfer of information from the teacher to the student. It automatically makes the student assume and feel that the teacher is somehow superior to him/her, and thus, a hierarchical relationship between them is formed. In such a scenario, Bernstein has called the teacher the 'transmitter' and the student the passive 'acquirer.' The source of information is the text present in the books. This particular pedagogy has been found to be the least productive because it makes the student rely on everything that the teacher is saying. He/she is not given the space to question what is being said, nor the space to give in their own input.

Progressive education has been found to be more productive regarding the learning of the student as compared to traditional pedagogy. It, according to John Dewey, involves the learning of various things through the act of physically performing certain tasks. They can be done in the form of projects or science experiments. Thus, we can see that both the first as well as the second lesson plans form a progressive pedagogical model. (Bourdieu, n.d.)

The most important and most productive form of pedagogy regarding the learning of the students has so far been found to be critical pedagogy. It is a form of pedagogy that is not present in any of the lesson plans mentioned and discussed above. Critical pedagogy is different from both traditional as well as progressive pedagogy in the sense that it gives the students space, in fact, encourages the student, to be critical of what is being taught to him/her. He/she is made to feel that he/she has intellect that must be used to make sense out of, and thus question the validity of whatever is being taught to him/her. Critical pedagogy has many advantages for the students. It makes them look at everything from a critical perspective and actively use their critical thinking. (Bourdieu, n.d.)

This is extremely important, beneficial as well as healthy for the brain because it makes the students think. When a student, or any person for that matter, is critical of a theory or a concept or anything at all, that person does come up with an alternative(s). Thus, another healthy exercise for the student would be to think about better alternative theories or explanations for the same observable phenomena, especially in the field of science. (Hooks, 2015)

Ways To Make The Lesson Plans Incorporate Critical Pedagogy

In the case of the first lesson plan, critical pedagogy can be incorporated into the plan by making the students do all of the designated activities individually. When the required structures have been formed, they should be made to analyze each other's structures and find flaws or defects in them. They could then probably offer their suggestions to each student on how to make their structures more stable as well as taller and how to accomplish the task in a shorter amount of time. The same could be done with the drawings made by the students of the House of Cards. Others could offer their suggestions as to how to make the structures more stable and taller. Students could also be encouraged to find flaws with the theories that they have studied during the course and suggest alternative, perhaps more effective theories of their own. Perhaps it would be productive to give them homework about this so that they can think the process over. (Bourdieu, n.d.)

In the case of the second lesson plan, the students could be made to think critically by firstly checking whether or not each group has identified the states of each of the objects correctly. If they have, their reasons should be made to be crosschecked by other students, and students could perhaps be made to find flaws with them. Furthermore, they could be encouraged to challenge the theories and explanations of a solid being a solid and a liquid being a liquid. They could provide their alternative opinions and explain why they think the existing theories are incorrect or faulty in one way or another. (Hooks, 2015)

The third lesson plan is the one that needs to be changed the most to make its pedagogy critical. First and foremost, the lecture part of the plan must be removed altogether. This is done so that the students do not rely on what is being told to them by the teacher. Instead, the students could be given a list of all the theorists and physicists and told to do their research regarding them and then share it with the class. Each person or each group of a fixed number of students could be assigned one personality. They could also be made to challenge the theories proposed by these physicists. The methods that these physicists relied on could be scrutinized and questioned, and errors could be found in them. (Introduction: Pedagogy of the Oppressed: Anniversary Tribute for an Anniversary Series., n.d.)

Another approach would be to draw comparisons between the theories of these physicists and analyze which one of them seems to be the most convincing and true. After that, the students could be asked to explain as to why they think this is so. Why do they think one physicist might be right and

another might not? This approach would be very productive in enhancing and improving the learning of the student as he/she would not solely rely on his/her teacher for information. His/her critical thinking skills would also be greatly improved. (Bourdieu, n.d.)

References

Hooks, B. (2015). *Ain't I a woman: Black women and feminism*. New York: Routledge, Taylor & Francis Group.

Introduction: Pedagogy of the Oppressed: Anniversary Tribute for an Anniversary Series. (n.d.). Echoes from Freire for a Critically Engaged Pedagogy. doi:10.5040/9781472552884.ch-001

Bourdieu, P. (n.d.). The Forms of Capital. *Readings in Economic Sociology*, 280-291. doi:10.1002/9780470755679.ch15