

How Can a Paper Airplane Show Me the Difference Between Intrinsic Motivation and Extrinsic Motivation? A Classroom Activity.

Linwood B. Clayton
Clemson University

The greatest challenge in teaching our Recreation and Social Theories class at Clemson University is to keep students awake and attentive. The subject matter has the reputation of being rather dry and abstract and our students generally dread the prospect of lectures dealing with behavioral models and theoretical constructs.

Our text for the course is “A Social Psychology of Leisure” (Mannell & Kleiber 1997). Throughout the course we often talk about the concepts and theories in terms of our own behavior and preferences. The difficulty with that is that sometimes the students are less than honest with themselves in reflection. Some of the concepts have more appeal because of their name and therefore they want to identify themselves with the more flattering category. For example, when the students learn of internal versus external locus of control, they sometimes equate internal locus of control with being outgoing and confident. While they associate external locus of control with being indecisive and easily manipulated. Because of this, I do a variety of simple exercises and activities just before or after I introduce the concept in order to have some behavior to illustrate the concepts.

The concepts of Intrinsic and Extrinsic Rewards, and Perceived Freedom can be demonstrated through one activity. Intrinsic rewards are the psychological satisfactions that come from participating. Satisfaction of a job well done is an example. Extrinsic rewards are ulterior motives for behavior. Peer recognition, trophies, and money are examples. Perceived freedom is the participant’s idea of the amount of choice and flexibility offered within the activity or as a choice of activities. It is important to note that many students do not initially see any difference between Perceived freedom and Actual freedom.

The activity starts with my handing everyone a blank sheet of white paper. I then tell them that they have 3 minutes to make a paper airplane. They may only make the airplane, playing with it comes later. They can make any airplane they want, but I will not help them nor give instructions. At the end of 3 minutes, they then have 5 minutes to play with the airplane. They must play for the full 5 minutes, they may not stay in their seats, and I do not give instructions for how to play or what that means. Generally students throw their planes around aimlessly but sometimes some students will get together and create a purposeful game of aiming for a specific target (usually another student).

When the 5 minutes ends I ask everyone to pick up their airplane and either save it in their notebook or put it in the trashcan.

Once everything is cleaned up and everyone is back at their desk, we begin part two. Now I pass out a printed airplane design from World Record Paper Airplane Company (1270 Clearmont Street N. E. Palm Bay, Florida 32905). There are several designs and they come with folding instructions for construction. Once again I tell the students they have 3 minutes to make their airplane, and this time they must make it according to the instructions provided (dashed lines fold in, dotted lines fold out) with one tenth of a bonus point awarded for the best crafted airplanes (I'm not very generous). I provide no other assistance. This is often the source of much frustration and grumbling. At the end of the 3 minutes I quickly assess their craftsmanship and distribute points to the best planes. Next I get everyone to line up along one wall of the classroom and inform them that anyone whose airplane actually hits the far wall receives one tenth of a bonus point. In groups of 3 to 5, they throw their airplanes at the far wall and I award the points appropriately. When everyone has thrown their plane, we either put them away or throw them away and the students return to their desks.

Now we turn our attention to the concepts in class. I first ask them to divide into two groups according to whether they preferred the lack of competition and rewards from the first activity or the inclusion of competition and rewards from the second activity. Then we discuss the differences between the intrinsic rewards of the first activity and the extrinsic rewards of bonus points for the second activity. I also ask them to explain their preferences and identify other things they do that follow that pattern. This can also serve as a platform for introducing self-determining behavior. How much influence did the bonus point reward have on the participation in the activity or the preference for the activity?

Next I ask them to divide into two groups according to whether they preferred the lack of structure and rules for the first activity or the inclusion of structure and rules for the second activity. This time I ask them about the amount of freedom they had in their preferred activity. Usually a fair number in both groups perceive that they have a lot of freedom in their preferred version of the activity. As they discuss the freedoms and restrictions of each activity, they discover that there are those who believe the unstructured activity did not provide enough freedom because they were required to participate for 5 minutes. Others believe that the structured activity offered plenty of freedom because they could take their turn whenever they wanted and they could choose any model of airplane they wanted from the patterns provided. This works to provide some indication of the difference between perceptions of freedom, and actual freedom as everyone has the same rules, restrictions, and choices, but some feel restricted while others feel free to do as they wish. This can also begin to demonstrate the difference between internal locus of control (the first activity) and external locus of control (the second, more structured activity).

The most useful warning I can provide is to be sure and close the door to the classroom when you do this activity, and clean up the abandoned airplanes. Faculty members who pass by in the hallway, and the class that follows yours in the classroom, may get the mistaken impression that you don't take your theories class seriously and that you're trying to boost your evaluations by filling your class time with pointless fun and games. The serious business of paper airplanes is seldom understood.

References

Mannell, R. C. and Kleiber, D. A. (1997). A Social Psychology of Leisure. Venture Publishing, State College, PA.