

Lei Wang

IST 617: Motivational Aspects of Information Use

Assignment 2: Choice #7 (Research Study)

Title: The Effects of Students' Motivation towards Science Learning and Academic Achievement
in an Immersive Virtual Reality-based Classroom

Assignment 2: Choice #7 CRITERIA	Below Par to Unacceptable	Satisfactory Range	Good to Very Good	Excellent	SCORE
Organization	0 – 1.5	2.0 – 2.75	3.0 – 3.5	4.0	4.0
Creativity	0 – 1.5	2.0 – 2.75	3.0 – 3.5	4.0	4.0
Importance of topic to specified field	0 – .25	1.0 – 1.25	1.5	2.0	2.0
Clarity	0 – .25	1.0 – 1.25	1.5	2.0	2.0
Appropriateness (type of article or proposal)	0 – 1.5	2.0 – 2.75	3.0 – 3.5	4.0	4.0
Accuracy (of statements but includes grammar and spelling)	0 – 1.5	2.0 – 2.75	3.0 – 3.5	4.0	4.0
Coverage of the motivation topic (thoroughness, theory support)	0 – 2.5	3.0 – 3.75	4.0 – 5.0	5.5 - 6.0	6.0
Professionalism	0 – 1.5	2.0 – 2.75	3.0 – 3.5	4.0	4.0
Citations and References (sufficient to support argument; quality of references)	0 – 2.0	2.5 – 3.0	3.5 – 4.0	4.5 – 5.0	5.0
TOTAL SCORE					35

Additional Comments:

Lei,

I am very impressed with this submission. I am assuming that you conducted the study prior to this class but didn't analyze or write up results until taking this course. Am I correct? This would otherwise be a lot to accomplish in one semester.

You've done a stellar job of writing an article that has wide implications for both technology and learning motivation in students. I think your journal choice is a good one but you might also want to consider the Virtual Reality journal (I think that's the title) as it specializes in just that. I'd try submitting to the Journal of Computer Assisted Learning first, of course. I love that you

are doing research into the potential of IVR to motivate science learning as it is such an important challenge (motivating science interest) and thus a wonderful topic for research.

IVR with HMDs is particularly exciting because of its potential to really put a child into a whole new environment by virtue of cancelling out all distractions. I agree with your premise that other teachers in different disciplines may also benefit from the knowledge garnered from studying IVR learning experiences in science classrooms.

You provide a good background in IVR and related technologies and then bring attention to the need for more IVR with HMD's in education; so, this is very well laid out for the reader. You then carefully introduce the motivation aspect of your study and the critical need to increase intrinsic and extrinsic motivations of students to study science. I was very interested in how you carefully depicted the differences in science learning that is intrinsically versus extrinsically motivated. You included many citations including studies we've discussed in class to support your argument, so, well-done!

The methods section is detailed and contains all required information. Results indicated significant differences in both achievement and motivation in the experimental group in favor of the immersive virtual reality experience. Excellent discussion of limitations and implications for education. Great study with significant results. When are you submitting to journal?

GRADE: 35 (A)