Perception of the Philippine Normal University Undergraduate Students on Second Life: Virtual Lesson

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Abstract: The concept of a virtual lesson is proposed for transferring a teacher's skill to a student using haptic virtual reality technology. There is a shift afoot in education. The wind is changing. This new digital wind is hailing from a virtual world. Students today need to be immersed in what they are learning - not dealing only with static things like pictures, books, and to some degree even movies. An immersive world allows the student to move, talk, build, and connect with the very information that they are learning - they can be surrounded by it and then they can contribute to it. In real life (RL) you can’t take students out and let them swim in the ocean, listen to whales singing, touch sharks, see the Monterrey Bay Seashore National Park as only a few have seen it, but, in Second Life (SL) you can. Immersion brings greater, deeper, and fuller understanding of the subject matter. This helps the students quickly move to a synthesis level or higher of Blooms; the very level of understanding that teachers are striving for. Virtual worlds also offer students a way to experience learning auditorially, kinesthetically, and verbally - meeting the needs of all the learning styles at once. A survey was administered using a sample of 27 male students and 59 female respondents, with particular focus on the perception on Second Life: Virtual lesson. From the analysis a greater significant level for both female and male at Philippine Normal University shown a positive results on the implementation of Second life: Virtual lesson.

Keywords: Virtual lesson, level of understanding, verbally – meeting.

I. INTRODUCTION

Different kinds of multimedia learning systems have been developed with the advent of virtual technology today. One of which is the Second Life® Virtual World. Second Life Virtual World was developed by San Francisco-based company which is the Linden Lab – one of the pioneers of the creation of virtual worlds in the United States. Second Life® Virtual World was introduced to the market way back June 23, 2003. It was developed with Philip Roosedale as the chief executive officer of the Linden Lab. The Second Life® Virtual World as initially perceived is a game but actually, it is a virtual world without a theme. A player or a user can connect to this virtual world by creating an avatar or a character. It is a blank canvass that is yet to be occupied with user’s creativity and imagination.

Being open-themed, Second Life can be used in different real world applications and simulations. This opens a new paradigm in the field of learning as it can be used to catalyze different learning breakthroughs. Second Life enhanced and expanded the learning environment especially in terms of distant learning. Instead of having a group-chat online, learners and lecturers meet in the virtual world through their avatars – their Second Life personification. Thus, gives them a feel of proximity to other members and the teacher of their class. One feature of this new platform is that students can readily apply what they have learned by having options and controls to manipulate. Second Life works in a way that students can immediately transfer learning to meaningful applications.
As of today, different schools and companies are now partnering with Second Life to develop a specialized learning environment to their standards. The company list includes Moodle and Adobe Systems.

Despite of its promising solutions, Second Life may cost a user a lot. Aside from that, Second Life requires digital knowledge as in users may need to attend a ‘how to?’ course and a little of programming to be able to enjoy its benefits. Just like a regular game, online account registration is required before you can enter the virtual space. Cost occurs if you wish to purchase the virtual currency of Linden dollars or if you desire to be able to purchase or to purchase virtual land.

After the registration, you have to install the program on your computer. It is necessary to use a computer which has the minimum system requirements to use the Second Life software. Video graphic capabilities are especially important because Second Life’s virtual space does tremendous physics calculations.

Firewall configuration is required for Second Life software to function on a network. It is advisable to start small to begin with, starting out with an extra credit course perhaps. Permission to use virtual locations in Second Life on the NMC Campus may be requested from them. For regular use of a virtual location, renting land from NMC is 10 cents per square meter per year. This ranges from just $100 per year to about $800. New Media Consortium offers services to educational institutions.

The building of a virtual campus in Second Life is but a small financial investment for an educational institution. The first step is to purchase the land in Second Life. Cost for a small island of 65,536 square meters, which is approximately 16 acres, is currently $980.00 + $150.00 per month for usage fees. Thus, the cost from Linden Lab® is $2780.00 for the first year. Costs for additional years are less, which are about $1800.00. Please note that costs may be subject to change. Pricing for land use in Second Life, mentioning discounts for real world educators, may be found on the Second Life website.

There are small, but cumulative, upload and download fees. Virtual items already created may also be purchased in Second Life far less expensively than their real life counterparts. It will take approximately six weeks to obtain an island. During that time, ideas for the virtual campus may be refined. This is much like building a website. There are the related components of graphics, quality, and content. Costs for development vary depending on the scope of the virtual campus required and what is desired to be built there.

Once the scope for the virtual campus is defined, the project for the building of the virtual campus may be announced through the internet. Bids may be received from those desirous to take the project. There are various experience levels and differing skill sets for such in Second Life. Quality of developers’ work may be evaluated by viewing their completed projects in Second Life.

Development costs for a virtual campus on an island usually range from $20,000 to $25,000 if done by a commercial firm. These costs are generally lower if done by a non-profit organization, approximately $15,000 to $20,000. Individual consultants can range dramatically in both skill and rate. Development costs are separate from and in addition to land pricing and usage fees. It is recommended, therefore, that $25,000 be budgeted for costs to build a virtual campus in Second Life. The popularity of this interactive virtual environment will provide a fertile ground for higher enrolment and will economically justify the expense.

A. Statement of the Problem:

The purpose of this study is to identify how the Philippine Normal University students view the Second Life® Virtual Lesson and its possible adoption to the Philippine educational setting.

1. To determine the difference between Male and the Female in the proportion on who agree or disagree in the implementation on Second Life:Virtual lesson at Philippine Normal University?

2. To find out from this survey if the students at Philippine Normal University their awareness on Second Life:Virtual Lesson?

Significance of the study:

This study is conducted to know whether the students of the Philippine Normal University are familiar with the Second Life® Virtual Lessons. It will focus on the perception of PNU students on the Second Life® Virtual Lessons.
Moreover, the study will serve as a basis to determine whether the future teachers are aware of the developments in the education specifically with the advancement of technology in connection to education.

2. REVIEW OF RELATED LITERATURE

Since the debut of Second Life® Virtual World to the market, it has been open for expansions and has been a hot subject of research especially in terms of education. In that light, different books from guides and walkthroughs to learning manuals were published in support of the said program and the users.

One example is the…

Second Life: The Official Guide is the perfect book for anyone interested in Linden Lab's fascinating Second Life metaverse. This book explores in detail every aspect of Second Life's rich and multilayered virtual world, explains how it works, and offers a wealth of information and practical advice for all Second Life residents.

The first part of the book, 'Getting a Second Life,' acquaints potential and new players with the Second Life world. It describes the metaverse's geography as well as its society, explaining the written and unwritten rules.

The second part, 'Living a Second Life,' deals with the practical and economic aspects of Second Life: creating and customizing an avatar, building objects, scripting, and making money.

The third part of the book, 'Success in Second Life,' discusses ways to enjoy Second Life more. This section includes profiles of successful Second Life residents, discusses fascinating in-world events, and examines how some are using Second Life for business, training, and other purposes.

The accompanying CD-ROM features special animations, character templates, and textures created by Linden Lab exclusively for this book. The disc also guides new users through installation and includes a code that grants a special object their first time entering the metaverse.

…that talks about the description of the virtual world and how you are actually going to do things using it.

Second Life® is widely used in the field of education, especially in the field of languages and sciences. Sapp (no date), created a powerpoint presentation to show the significance of Second Life® in developing English specifically for second language learners.

“With their realistic animation, complex scenarios and impressive interactivity, computer simulation games might be able to provide context-rich, cognitively engaging environments for language learning” (Ranalli, 2008, as cited by Sapp)

In his presentation, Sapp pointed out the significance of integrating technology in education, particularly with English language teaching. Aside from the language content is the development of the learners affective domain because students, although using an avatar to interact, can still practice their gestures, voice intonation, and the like which they would normally be shy to do. Moreover, the student-teacher interactive relationship will also develop since students may wish to incorporate some ideas regarding the use of the virtual world and the language taught.

With respect to Howard Gardener’s Multiple Intelligences (1983), the integration of the Second Life® and other field of specializations help develop the learner as well as the teacher’s digital literacy. In fact, Sapp(2002), in his presentation, pointed out that Second Life® promotes the use improved and traditional digital skills.

On the other hand, Arrison (2004), in her article ‘Second Life’ Lessons from a Virtual World used learning of Economics with the aid of the virtual world. Arrison stressed the feature of Second Life® as being able to market and gain products using various strategies as in the real world of marketing and economics. The idea of creating your own house, putting up your own business, among others gives one the chance to own – thus the inculcation of intellectual properties.

Aside from being able to sell and buy products, one should also be able to protect his or her own properties.

“A digital economy teaches that intellectual property matters, that value comes from perceived worth, and that commerce is a tool for humans to obtain happiness. Capitalism, an economic system based on private property, voluntary exchange, and individual choices, matters a great deal, even in one's ”Second Life.” (Arrison, 2004)
Arrison also wants to argue that it is not only academic intelligence but also emotional intelligence can also be developed using Second Life®. She stresses that trading goods and maximizing one’s profit is just one way to ensure contentment as well as learning in the virtual world.

One of the first users of Second Life® is the University of San Martin de Porres of Peru. The integration of the virtual world with their studies focuses on the construction of buildings (architecture). Moreover, it aims to train their teachers with the new paradigms of education, particularly in the advancement of technology in teaching.

Antonacci and Modaress (2005, as cited in Seng and Edirisenghe, 2007) identified the fields of education wherein Second Life® is applicable. These are the arts, sciences, and health education. Antonacci and Modaress (2005) also said that the integration of the virtual world and its adoption with the subject areas is indeed a part of the teaching and learning process.

Despite of its great contribution to technology advancement and educational paradigm, Second Life® also gained criticisms, particularly addressing the social issues. One of which is emphasis on minority groups. In games, avatars are classified as to what they do (musicians, workers, money earners) wherein there is an unequal number of workers over the money earners.

In addition, there are also some questions on legality, specifically on the age appropriation of the users. There are no concrete laws which cover the age bracket of users – thus implying that everyone can be into the Second Life®. However, there has not been a criticism of Second Life® in lieu with education.

3. CONCEPTUAL FRAMEWORK

The possibility of adoption of Second Life Virtual Lesson in the Philippines is determined by a simple framework where we can virtually see if our teachers are SLVL-ready. Content and Pedagogy has been a primary requirement for teachers before they can teach. This entails having mastery in a particular subject matter and also having a very good familiarity between different approaches and techniques to address the learning needs of the students.

Digital Intelligence is a new addition to Howard Garner’s Multiple Intelligences. Its emergence started in mid-90s and has been rapidly being recognized through the years of expanding technological innovations (i.e. from LCD Projectors to SMART Boards). Digital Intelligence also entails being able to adapt easily with the rapid updates in technology and being able to use it, for example a smart phone, to its full functions.

In terms of the adoption of Second Life Virtual Lesson, the fusion between these two factors is integral. A teacher that is a master of his content without any digital knowledge will not be able to teach using the Second Life platform and vice versa. Since Second Life is considered to be blank canvass, teachers should be digitally intelligent enough to adapt with the new programs and interfaces within the SLVL program. This means that a teacher should not only be a master of his content but also a master in using Second Life as his mode of instruction.

In order to fulfill this required intelligence to our teachers, Teacher Education Institutions may follow this sample framework and include it in their curriculum.

In addition to the ICT program of the pre-service teachers, Basic Programming is included as there are minor program creation and manipulation in the SLVL platform to create a particular plan of instruction.

As student-teachers mastered the SLVL pedagogies and applications, they should undergo practice which includes demonstrations using the SLVL interface. They should be able to handle a real SLVL learning environment.

With this continuum, we can be sure that TEIs will be able to produce competent SLVL teachers/instructors.

4. SCOPE AND LIMITATION

This study is limited to the responses of the students at the Philippine Normal University. Moreover, the respondents are confined to the undergraduate students of the said university.

This research is also limited to the perception of the PNU undergraduate students on the Second Life® Virtual Lesson.
5. SUMMARY OF FINDINGS AND CONCLUSION

Based on the survey conducted among the chosen sections of college students in PNU, many of them have had experienced participating on computer-based role playing games and learned lessons from those. Though more than half of the correspondents do not know the concept and principles revolving virtual lesson, both male and female students agree that learning can take place virtually, and that they believe that it can meet the learning demands of the students. However, the correspondents were almost equally divided with their view regarding its implementation in the Philippines. With these findings, the researchers saw how the experiences of the correspondents in playing computer-based role playing games affected their view about the effectiveness of virtual learning; the learning experiences gained the lesson virtually.

We used the CHI- SQUARE TEST to determine if there is a difference in the proportion of male and female students at the Philippine Normal University who agree and disagree with the implementation of Second life :Virtual Lesson.

CALCULATION:

1. There were 27 Male and 59 Female students at the Philippine Normal university who correspond to the survey on the implementation of Perception on Second Life :Virtual Lesson.

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
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<tbody>
<tr>
<td>Male</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>26</td>
</tr>
</tbody>
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Interpretation:
The first step is to state the null hypothesis and an alternative hypothesis.

Ho: Male and Female are agree
Ha: Male and Female are disagree

Analyze Sample Data

<table>
<thead>
<tr>
<th>AGREE OR DISAGREE</th>
<th>SEX</th>
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<tbody>
<tr>
<td>YES</td>
<td>50</td>
</tr>
<tr>
<td>NO</td>
<td>36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>86</td>
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<table>
<thead>
<tr>
<th>SEX</th>
<th>AGREE</th>
<th>DISAGREE</th>
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</thead>
<tbody>
<tr>
<td>MALE</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>FEMALE</td>
<td>33</td>
<td>26</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>36</td>
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</tbody>
</table>

Significance Level:
Use a 0.05 level of significance.
* 0.01  
* 0.05  
* 0.10

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<thead>
<tr>
<th>SEX</th>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>17(15.7)</td>
<td>[0.11]</td>
</tr>
<tr>
<td>FEMALE</td>
<td>10 (11.3)</td>
<td>[0.15]</td>
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<tr>
<td>TOTAL</td>
<td>27</td>
<td></td>
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<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
<th>Marginal Row Totals</th>
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<tbody>
<tr>
<td>MALE</td>
<td>33 (34.3)</td>
<td>[0.05]</td>
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<tr>
<td>FEMALE</td>
<td>26 (24.7)</td>
<td>[0.07]</td>
</tr>
<tr>
<td>TOTAL</td>
<td>59</td>
<td></td>
</tr>
</tbody>
</table>

The Chi-square statistic is 0.3762. This result is not significant at p < 0.05
For Male:
To calculate the % of Male that are agree and disagree in our study:
17 / 27 total Male = 0.63 X 100 = 63% of Male were agree
10 / 27 =0.37 X 100 = 37% of Male were disagree

For Female:
33 / 59 total Female = 0.56 X 100 = 56% agree
26 /59 = 0.44 X 100 = 44% disagree

Interpretation of the results:
Since the P = value 0.539631 is greater than the significance level (0.05), we cannot accept the null hypothesis. Therefore, we conclude that there is a relationship between the gender and preference. Both Female and Male students at the Philippine Normal University shown positive results on the implementation of Second Life: Virtual Lesson.

6. RECOMMENDATION
Virtual lesson, being a new strategy in the field of education is needed to be formally introduced to the teachers, same with the pre-service educators through lectures and seminars conducted by educators already implementing it in their institution, and documentations showing the pilot schools of virtual education. By doing any of the suggested methods, Filipino educators can see its advantages and disadvantages if ever to be implemented in the country knowing the nature of the learners the country now has.

REFERENCES