


# Using Machinima as Teaching and Learning Materials: A Nepalese Case Study

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## ABSTRACT

Machinima, screencast animated videos made in a virtual world, are still not a very well-known phenomenon, and there has been little research in relation to their use as a teaching material in English language classrooms. This study aimed to investigate the potential for and challenges in using machinima in the pre-intermediate English as a foreign language (EFL) classroom. Bespoke machinima were created for three classes in Nepal, and the lessons using them were observed. Two teachers and four students were given semi-structured interviews, and 20 students were asked to write a reflective note on their impression of the use of machinima. The findings of the study indicate that machinima are distinct from other materials in that they can be contextualized to address the needs, interests, and values of the learners. Student engagement is thus found to have been significantly higher.

## KEYWORDS

Contextualized Materials, Learner's Engagement, Machinima, Multiusers Virtual Learning Environments, Reaching and Learning Material

## INTRODUCTION

The increasing demand for technology in teaching and learning can be attributed to the ease with which it brings multimodality into the learning experience. Still images, colour, moving images, text, sound-effects, speech, music and so on can all work together to encourage and reinforce learning. A video resource can essentially have all these primary modes deployed in the service of language teaching and learning. Cisco, a computer networking company (2008) that studies the impact of multimodal learning (verbal and visual) reports that “students using well-designed combinations of visuals and text learn more than students who only use text” (p. 3). Thus, visuals or in this context, videos are seen to have a great potential for making learners understand more. They can be used in a range of ways: as an input for discussions, for writing assignments, for project work and so on (Sherman, 2003). They give access to people, places, and events that learners would not otherwise be able to experience.

In this research, the videos that are used are ‘machinima’<sup>1</sup>: screen captured episodes from a virtual world. The research explores the potential of machinima as teaching material in an English as a foreign language (EFL) classroom. Rainbow and Schneider (2014) claim that the ease of production of machinima make them an attractive option for language teachers who want to harness the power of video in the classroom. In our research machinima were created in the multi-user virtual environment (MUVE) called Second life.

DOI: 10.4018/IJCALLT.2019040103

## Defining Multi-User Virtual Environment

Rainbow and Schneider (2014) define ‘virtual world’ as “a 3D environment where people from all around the world join together in one space regardless of their geographical location” (Introduction, Virtual world, para. 1)<sup>2</sup>. It is a multi-user virtual environment (MUVE) that allows people to meet with a diverse community online without revealing their real identity. The graphical model that represents the visitor or resident in a virtual world is called an avatar. It is possible to be anyone or anything imaginable in a virtual world. A virtual world can thus be a rewarding place for language learners as they get the opportunity to mix with native speakers of the target language (Rainbow & Schneider, 2014). Panichi and Schneider (2012) also argue that virtual worlds offer the potential for interacting with remote learners, an aspect that has attracted educational institutions involved in e-learning and distance education. Amongst the range of available virtual worlds, Second Life launched in 2003 by Linden Lab (Savin-Baden, 2010) is still the most popular one.

## Defining Machinima

Machinima is a neologism using a blend of ‘machine’, ‘animation’ and ‘cinema’ having a typo in its original form (at first, derived from ‘machine’ and ‘cinema’ i.e., ‘machinema’) which led to the integration of the term ‘animation’ in its original form (Hancock & Ingram, 2007; Kirshner, 2005). Kirshner (2005) asserts that it is difficult to track the root of machinima; however, he says ‘Diary of Camper’ made by a group called ‘The Rangers’ is the first publicly distributed machinima having some storyline and dialogue. Kirshner further maintains that machinima are developed from a sub-genre called ‘Quake movies’ consisting of Speedruns and Frag movies. Since ‘Quake movies’ was a narrow term to describe videos made using a gaming software called Quake, the more inclusive term ‘machinema’ was later coined in 2000 (Kirshner, 2005). Machinima are screen captures of a real-time 3D virtual environment (Kirschner, 2005; Morozov, 2008). They are usually planned, scripted and edited to create short animated videos.

Rainbow and Schneider (2014) discuss the machinima genre in relation to language teaching and learning. They claim that machinima can belong to several genres: documentary, poetry, storytelling, grammar or idiom explanation, conversation, heritage resource (based on historical events), humour, instruction, information, project, role-play, sketch (funny situation triggered through misunderstandings between avatars), intercultural training and advertising. These genres in fact, often overlap depending on the content they deal with. Sometimes, machinima are found beyond these genres too, for instance, machinima on teaching language functions do not fit the genres created by Rainbow and Schneider (2014).

## STUDIES IN MACHINIMA

Notwithstanding that machinima came into existence in around 2000, the use of this artifact in teaching and learning is still new. Moreover, there are only a few studies as regards the creation and use of machinima in relation to teaching and learning. Schneider (2016) carried out a study on the added value of machinima for language teaching and learning based on the courses run in a European-funded program, CAMELOT (2013-2015). This is the only comprehensive research carried out on machinima in relation to language teaching and learning as of now. In this study, which deployed exploratory case studies as a research design, Schneider investigated three broad areas: the added value machinima offer for language learning, the level of quality expected in machinima and the impact that time and effort have on machinima production and their acceptance. She primarily concentrated her research on the Machinima Open Online Teaching (MOOT) Courses 1 and 2.

With regard to her findings, she maintains that the added value which machinima offer is that learners take different roles such as script writing, voice recording and acting while producing machinima, and they learn better and faster being involved in the production process. Similarly, she

claims that participants gained a sense of belonging to the learning community during MOOT 1 & 2 and perceived each other as real-life people as in the physical world. Consequently, her study focused on students' involvement in creating machinima which is a different focus from the present study.

Harwood (2013) carried out a study on machinima-making as a practice-based approach. He highlighted the potential of machinima for the creative learning process. This study is based on interviews with five prominent machinima artists, and on the basis of the interview excerpts, the author coded the potential of machinima as a learning tool. Harwood highlights that machinima encompass both practice and production of animated content. He discusses how machinima-making can develop the creative digital skill of learners, arguing that machinima promote authenticity as learners have the opportunity to be creative and produce any kind of mashup digital form. The benefits of machinima-making seem to be equally transferable to teachers when they (teachers who are new to machinima creation) get engaged in the process of making machinima to create teaching learning materials. However, Harwood (2013) in his study, did not mention anything related to machinima as a teaching learning material in the language classroom.

In another pedagogic study, Donovan (2015) compared learners' experiences of recorded instructional videos (DVDs) with machinima in management skills training delivered to 32 learners. In his study, he found that participants prefer machinima as a learning delivery mechanism. He concluded that participants found the absence of body language or facial expressions and other mannerisms in machinima were actually the properties learners considered helpful so that they could focus more on the content. Although his research was not related to language teaching and learning, his findings show a new dimension of machinima, that is, learners being more attentive to the content being delivered since avatars do not usually have facial expressions or mannerisms. Since his research was with adults, it remains to be seen whether his findings hold true with younger learners.

In an auto-ethnographic study on creating game-based machinima, Spiller (2004) argues that "this new medium, (*machinima*) [added by author] may provide a way for language instructors to create their own learning aids" (p.3). He came to this idea as he found that machinima creation is relatively easy. In his paper, in an auto-ethnographic note, he describes how he could create game-based machinima at a low cost with the minimum technological expertise. He further asserts that "audio and video supplements allow reinforcement of new vocabulary, grammar and cultural concepts" (p.3). Audio and video supplements clearly help deliver the concepts of grammar and they make related activities engaging. Along with this, cultural notions can easily be explained with these materials. However, there is a need for more study as regards the effectiveness of the use of supplements or materials like machinima to facilitate new vocabulary, grammar and cultural concepts in learners.

In the above literature related to machinima, researchers such as Schneider (2016) and Harwood (2013) mostly talked about including students in creating machinima and making them learn a language or other literacies through their experience in machinima. It is true that learners can learn language being involved in the machinima-making process. Nonetheless, it is equally important to examine how effective machinima are in EFL classrooms particularly in places where only teachers have access to computers and the Internet. No comprehensive research has examined this potential of machinima.

In developing countries there is a need for context appropriate materials in language teaching. Although students can learn from globally produced materials, not all such materials fit the local cultures and practices (Howard & Major, 2004). A key criticism of commercial EFL materials produced for the worldwide market is that they are not aimed at any specific group of learners or any particular cultural or educational context. As a result, teachers are less likely to use those materials. Mann and Copland (2015) claim that locally produced materials are a better match with students than internationally produced materials particularly as regards the topic and cultural suitability. Such locally produced materials can ease learners' comprehension while learning a language. In this scenario, materials such as machinima can fill this potential gap.

## Research Questions

To address the above research gaps, the following questions were examined:

1. What are the benefits that machinima can bring to an EFL classroom as opposed to other video teaching materials?
2. To what extent are students engaged in the class when machinima is used as a teaching material? and
3. What are some of the challenges in using machinima as a teaching material in pre-intermediate EFL classroom?

## METHODOLOGY

This study uses qualitative enquiry, particularly the case study approach. The participants of this research were twenty students of pre-intermediate English language level and two teachers who are involved in the English Access Microscholarship program in Banke, Nepal. Banke is in the mid-western Tarai belt which is an urban area bordering India. As regards the Access program, it is an after-school program, run by the local teacher association that aims to develop English language and digital skills of 13-to-16-year-old public school students. The classes are held 5 hours a week. Another salient feature of this classroom is that it comprises only twenty students having a nearly equal gender balance and co-taught by one female and one male teacher.

The strategy that was used to select the population is convenience sampling. Six participants were selected as our research interviewees. They are four students and two teachers. Aside from interviews, reflective notes from all twenty students, who were involved in the lessons when a machinima video was being used in their classrooms, were collected.

The research tools used are recorded classroom observation, Skype interviews and the learners' reflective notes. Teachers were asked to provide both audio and video recordings of their classrooms and these were our classroom observation resources. As regards interviews, the semi-structured interview model was followed. Prompts helped to keep track of the issues that were being explored, but while interviewing, depending upon the responses of interviewees, the first author elaborated the questions and probed to get further details. All the interviews with four students and two teachers in the first phase and the same two teachers and one student in the second phase were done through Skype. The time for each interview varied from fifteen to twenty-five minutes during the first phase and three to five minutes during the second phase. The second phase interview was like a "retrospective interview" or "stimulated recall" (Dörnyei, 2007, p. 149) in which they were asked to recall and clarify further what they had said by using their words as prompts from the first interview. Gass and Mackey (2017) assert that stimulated recall "aids the participant in mentally reengaging with the original event" (p. 14). In our study, it helped the participants to recall the event or some concern about the event.

Reflective writing is another equally significant method for data collection in case studies. For the reflective writing, a short question both in English and Nepali that comprised some prompts was given to them, and they were asked to write a reflective note only once after all four machinima had been used. All twenty students wrote reflective notes. The reflective notes varied in length – the shortest having 48 words, the longest 112 words.

The data was collected in four phases. In the first phase, after having sent the YouTube link of machinima that we prepared for their lessons on the basis of teachers' lesson plan, their three classroom sessions were recorded. In the second phase, initially one of the teachers was interviewed. It was to check how the interviews might work, therefore it was more a pilot interview; however, having learnt its potential to provide sufficient data, it was used as a part of the data for analysis. The first author interviewed another teacher after three days from the first interview with the other teacher, and on the same day, the first author interviewed two learners who had already completed their reflective writing. The other remaining students completed their reflective writing the next day which has been

labelled here as the third phase. Two more students were interviewed the next day. Finally, during analysis, as some emergent issues in both teachers' and one of the students' interviews appeared that needed further clarification, the first author conducted short interviews with them which has been termed here as the fourth phase.

### Machinima Creation

In a class of twenty students of pre-intermediate level, four machinima were used for three different lessons which were roughly 90-minute classes. According to the lesson plans sent by the teachers, the first author wrote scripts, and he and two colleagues acted them out in different roles in Second Life Sims such as EduNation and Sagan Planetarium. They all were recorded using Camtasia, a screencasting software. The four machinima were a) The solar system; b) Making predictions 1 and 2; and c) Writing persuasive expressions. They were uploaded on YouTube and the links were sent to the teachers. So, the machinima were created based on the teachers' lesson plans.

## FINDINGS AND DISCUSSIONS

The findings based on the three research questions, namely, the potential of using machinima as a teaching material, learners' engagement while machinima is used and the challenges of machinima use, are discussed in the subsequent section. For this, the thematic analysis approach suggested by Braun and Clarke (2006) was followed. Three broad themes and four sub-themes under the first broad theme were identified. The three broad themes address each research question as presented below.

### Distinctiveness of Machinima

The following are the distinct features of machinima when they are used as a teaching learning material.

#### Contextualized Materials

Tomlinson (2011) argues that in the course of learning a language, learners can be more at ease if the texts and illustration in the materials relate to their own culture. He also asserts that the participation of learners is increased if the materials relate the world of the book to the world of the learner. In an interview with teachers, it was found that machinima helped them situate their own context and culture, as a result, students found it very interesting. This is shown in the following excerpt.

In this interview excerpt (Figure 1), the male teacher Mahesh (pseudonym) asserts that the materials he found from the researcher were stimulating, and they were functional since they were contextualized. He also mentioned that students liked them which hints that students were motivated towards content during language learning. Yet, since the term 'contextualized' was not explicit, he was asked further to clarify this in the second round of retrospective interview which he did as follows:

In the last line in turn 6, he points out how learners remained (Figure 2) within the content as machinima were produced based on the given content. So, he postulates that it could set the context within the content of the textbook to engage learners. This view also closely connects to the assertion

Figure 1. Interview excerpt from teacher

2.	M	So, I found so good. (...) It worked well inside the classroom. I mean that <b>the materials</b> that I found from your email that, it <b>was so interesting</b> that the students liked and umm, most importantly, it was <b>contextualized</b> umm (...) about the content. It was wonderful.
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Figure 2. Clarification from teacher

6.	M	[Hmm. I mean we too show the video and teach the lesson but the difference we find between the videos that we used earlier and here is that, for example, in persuasive writing the context created from the movie clip has shown how they can persuade. The learners are naturally attracted to the movie and this movie clip has been the evidence to persuade them for the movie and it has shown them how to convince others. In life out there as well, alien speaks and describes the planet. We might not find the similar videos in YouTube. Through machinima project we could create such videos which were closely connected to the textbooks and our content as a result students could not go out of the content.]
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of Howard and Major (2004) that: “materials should be contextualized to topics and themes that provide meaningful, purposeful uses for the target language” (p. 105). When he was further probed about the connection of machinima with learners’ local culture, he continues:

In turn 10 (Figure 3), he gives the example of one of the machinima that could embed local culture, that is, the culture of persuading friends by proposing a movie. This instance is close to the statement of Tomlinson (2011) as he claims that materials should relate the content to the learners’ context. Mahesh further claims that the video could localize their expectations, so learners felt close to the content that was associated with the local culture.

Through these excerpts, it can be inferred that, by the term ‘contextualized’, the teacher means that machinima can be close to the needs of the lessons and learners. The teacher also meant that the machinima fitted to their local context as some local values can be embedded in machinima. It must be noted that these machinima were made based on the teachers’ own lesson plans, so it seems

Figure 3. Interview excerpt from teacher

10.	M	[Rather than the local context of the learners, I wanted to link the context of the context. However, the video of persuasive writing is able to bring the local context too. As per our Nepali culture, to persuade the friends, we normally ask either for a visit or for the cinema and especially in teenagers they can be persuaded on three things: for a play or a visit or a cinema and in this video, as it embedded a movie clip, this video localized their expectations. So they could remain in what they usually do. These video clips enable them to stay at that boundary, therefore, I guess like it has also helped to contextualize linking the local culture.]
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obvious to find teachers stating that machinima gave them contextualized materials. More than that, what can be inferred is that even if their lesson plans did not state the expected materials explicitly (how the video should be and what typical content should be in the video), as a ‘machinimator’ (machinima creator), the first author generated them using local names for the characters and places, and embedding local cultures and values, for example, the use of a Nepali video clip that talks about local values. Such machinima proved to be effective and it was also found (as seen in excerpt 1 & 2) that the learners’ level of motivation increased with the use of such contextualized materials.

Unique Presentation

Rainbow and Schneider (2014) claim that machinima can range from very simple, just a recording of scripted narration, to very elaborate, using several film clips or images interwoven together. Machinimators can embed some real-life footage and other elements as needed. In the reflective notes and interviews, the learners point out the potential of embedding some real-life footage in the machinima which helps ensure the uniqueness of the presentation. In the reflective writing, one of the learners says,

The student mentions the small video clip (51 seconds long) which was added in the machinima entitled ‘Writing persuasive expressions’ and claims that this short trailer of the Nepali movie was the interesting bit for him (Figure 4). It also resonated in one of the learner’s interviews (Figure 5):

In this interview, the student, Sanjaya (pseudonym) says that he found that the movie clip was gripping. He further elaborates that it dealt with a social issue of his own society, such as a plan for manipulating voters in the local election which is shown in the short video clip. In the meantime, he also highlights the presentation of the first video, that is, the way an alien appears and goes close to different planets and explains them. Savin-Baden (2010) maintains that machinima can be used to show ‘hows’ or demonstrate processes/incidents. The first machinima was meant to introduce the solar system. In that case, the alien was giving information about the planets to another character, Basanta. In this study, a number of learners mentioned the way the alien comes into Basanta’s dream, takes Basanta into space, and lets Basanta observe the planets and learn about them. The learners emphasized this unique feature, that is the fictional element easily added in the machinima.

Machinima as an Attention Grabber

Unlike other teaching material, according to the teachers’ and learners’ reports, machinima were found to be an attention grabber for language teaching and learning. This is due to the interface of the 3D-animated figures which have a cartoon-like representation. Machinima connect closely to the

Figure 4. Excerpt from learner's reflective note

*"In third video, it was about persuasive writting, we watch the video of Kabbadi trailer, it was exiting...[Sic]."*

Figure 5. Interview excerpt from learner

52.	S	<div>[There were no boring videos because at first, we felt interesting as alien were in different planets and describing about them. And in the second video, the Kabaddi movie was interesting.]</div> <div>It was (..) about the social cause (xxx) social living in our society.</div>
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learners' habit of watching cartoons. The learners in this project, visualized the animated figures as cartoon characters which is explicitly seen in the responses they have given in both reflective writing and personal interviews.

In this conversation (Figure 6), in turn 48, a male student, Kedar (pseudonym) states that they are accustomed to watching cartoons ever since their childhood, and because this has been their habit, they love cartoons and other kinds of animation which look like cartoons. Gawlik-Kobylińska (2015) posits that “the cartoon-like moving pictures may not be appealing to all students – what is related mostly with their preferences” (pp. 6856-6857). Contrary to this suggestion, it was found that, students' engagement was significantly higher due to the machinima's close connection to their usual viewing habits. In both the learners' interviews and reflective notes, it was found that they treated these animated videos as cartoons. It shows that for this pre-intermediate level, machinima can be an effective tool for language teaching.

### Appropriate Support to the Learners

The success of the teaching materials also depends upon their affordances for adaptation to the teaching context, that is their potential to engage learners in the pre- and post-machinima activities, and to create an opportunity for the learners to learn through visual objects that are not possible to bring in the real classroom. Gawlik-Kobylińska (2015) argues that machinima can “help with dynamic aspect of learning and enrichment of the course books and their content” (p. 6855). This is possible by mounting activities onto the videos as pre- or post-video activities and making some necessary adaptations. In the observation of classroom activities when machinima were being used, it was found that learners got involved in several pre- and post-machinima activities, such as, predicting the weather conditions by observing pictures, talking about planets, retrieving some points from the videos, developing persuasive statements about the movie shown in the video, making persuasive statements about their own hometown, and expressing possibilities of their friends joining them for some sports.

Figure 6. Interview excerpt from learner

48.	K	[I find much difference. Since we are accustomed to watching cartoons ever since our childhood, our entire attention is grabbed by cartoon. And we also slightly understand watching through cartoons. Everyone concentrates on it, and they focus on cartoons because we have the habit of watching cartoons.] (..)
49.	R	[Okay, you said that cartoons grab entire attention, but don't you think that the video that comprises real people and their talk can grab entire attention too?] (2.0)
50.	K	[I didn't exactly mean to say that way. (..) We have the habit of seeing cartoon ever since our childhood. They are quite funny too.] (...)



In a query made during interview with regard to some classroom activities, one of the teachers states:

In turn 64 (Figure 7), the teacher, Mahesh clarifies how he involved his learners beginning from individual task to group work and finally to the gallery presentation. There seems to have been a good sequence of tasks built by teachers as post-machinima activities. Furthermore, the potential of connecting a video to the exercises given in the textbook is worth noticing, which implies that the supplementary material like machinima can be a big support to assist learning. Having said this, the effectiveness of such pre- and post-video activities cannot be attributed to machinima only. A lot depends upon the active role of the teachers.

Mahesh further adds that the learners were involved in speaking, listening, writing and reading during the post-video activities which is seen in the following excerpt below.

He mentions (Figure 8) that the learners practised their speaking skill in the form of presentation, listened to their friend's presentation, read their friends' work which was posted on the walls for gallery presentation and got involved in writing feedback based on their friends' work. Thus, it shows that in the follow-up machinima activities, the teachers could involve students to practise all four skills, which was also confirmed by the learners. Thus, machinima in this case became the catalyst for activities created to engage learners in practising all skills in an integrative way.

### Learners' Engagement

Tomlinson (2011) asserts that "what is being taught should be perceived by learners as relevant and useful" (p. 11). The linguistic input given through the materials should be considered useful for learners or else it will not be successful. He further mentions that the perception of relevance and utility of material can also be developed by relating teaching points to interesting and challenging follow-up tasks. During classroom observation, it was found that before showing the machinima to the learners, teachers could set the background and relate what they were going to do. Moreover, teachers could design post-machinima activities such as writing about the solar system in the first lesson, predicting what might happen with learners' friends when the learners would invite them for sports such as cricket or football, and making persuasive expressions about the places they know based on the expressions used in machinima. Because the teachers could relate the materials to interesting and yet challenging tasks, they found the materials useful and interesting. One of the learners in a reflective note mentions:

In this excerpt (Figure 9), she asserts that the machinima were based on their interest as they helped her to understand the lesson. She found the sense of relevance and utility of these materials

Figure 7. Interview excerpt from teacher

64.	M	Okay, after (...), let's say, after watching the video, we asked the students, individual- first individually, we asked them to point out the main points from the videos that they have learnt. Later on, we asked- we relate the video with the assignment, I mean the exercises of the book and complete the exercise in group. And most importantly we asked our students to (...) umm, let's say relate the videos with their course contents, exercises and complete the assignment that the teacher assigns, and the students were engaged in the gallery presentation.
65.	R	Wow!

Figure 8. Interview excerpt from teacher

66.	M	It was wonderful enough for the students to speak, practice their speaking skill, and of course and they listen their friends' presentation and they, the most important was the comment regarding feedback. There was a cheat for the students who used to paste on the friend's presentation, then finally, the feedbacks were collected and they have to choose the best comment and they need to answer it why their group liked their comments as the best one. It was good. It was interesting for the students too. All the students were engaged in the speaking, I mean some students were shy but they had to present.
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Figure 9. Excerpt from learner's reflective note

"Yes, those videos helpful to understand the lessons. Yes, they were interesting [Sic] enough. I like everything in those videos. Just like Basanta, I learnt about solar system. I learnt about prediction to put may and might [Sic]".

here which led her to have a strong opinion. The sense of relevance is significantly increased and this is also because of the activities built on the machinima by the teachers and their instructional scaffolding. So machinima alone may not be the sole factor to engage learners but they serve as an important starting point.

Next, in the fourth sentence in the above excerpt, she interestingly sees herself in the character of the machinima as she points out that like Basanta, she was able to learn about solar system. In the machinima about the solar system, a character, Basanta, was learning about the solar system from an alien, Nini. In the above excerpt, it is also seen that the respondent imagined herself in Basanta's place and started learning, probably because she found the story was presented in an intriguing way. The CAMELOT Report (2015) states that machinima can be used to gain fluency of language by enabling the visualization and contextualization of narratives. In this study, it is found that the learners could learn through the unique visuals and contextualized material such as the material related to the solar system which is reflected in the above excerpt. Alongside learning the language, the learners said that they got some additional information through machinima, such as the concept of skating, which they felt was interesting.

## Critical Concerns

Despite having mostly positive responses to using machinima as teaching material, there are some issues, which need to be considered. These issues can be inferred from a few responses made by teachers and students. They typically made remarks in relation to the short videos, 'Making Predictions 1 and 2'. They said that those videos were difficult to understand. It is seen in the following interview excerpt by the teacher:

The male teacher, Mahesh talks about learners' engagement at first and says that more than 90 percent were engaged in the machinima related to the solar system and writing persuasive expressions, whereas it was not the case with second machinima, that is, making predictions 1 and 2. He explicitly points out the length of machinima as the factor to influence their level of engagement. Both machinima

Figure 10. Interview excerpt from teacher

16.	M	The First video and the last video, more than 90 percent let me say. There might be 10 percent. Approximately almost all of these students were engaged in the first and last video. Second video was quite short, one minute and something second was only there and they (..) when they started listening about that and it used to be finished.
17.	R	Ah. Okay.
18.	M	Yeah, students were quite distracted on that. At first their curiosity was so high but later on when the video used to finish within no time. Like one minute and something second. It was a bit short from my side.

were less than 1 minute and 30 seconds. In this case, tentatively 1 minute and 30 seconds videos did not help the learners get the content. As a result, as per his remarks, they got distracted. It was also seen during the observation of their activities. The learners bluntly said that they did not understand the short videos after watching them for the first time. They only understood the message after the second screening. When Mahesh was asked further using some probes about the reasons of distraction besides length, he mentions the issues as follows,

He further acknowledges that the learners of diverse language background, who were hardly exposed to English, had difficulty in getting the concept presented in the video. At the same time, he also implicitly indicates that it was the pace of the video, which caused a problem for learners to gain the message in the content. So, the pace has a co-relation with their diverse language background as the learners having limited exposure to English could not cope with the pace of the machinima. The teacher points out that by the time they started to adapt and comprehend the language and content used in the video, the video would be over. So, length and speed have to be considered while creating machinima. As regards language level, it should be noted that since the first author examined the language level of the learners by interacting with them before creating machinima, they found that the language used in machinima was appropriate. Otherwise, it may be one of the key concerns while creating and using machinima.

Compared to the second short videos, both the other videos were longer than five minutes. Rainbow and Schneider (2014) argue that machinima which are more than three and a half minutes make it difficult for the learners to concentrate. Contrary to their claim, it was found that the longer machinima which last for 5 to 7 minutes were equally if not more engaging. It was found that the short video clip which is less than 1 and half minute was not helpful. The male teacher also mentions that at times, learners faced difficulties getting the meaning while there were dark scenes, the scenes captured with a black background. The teacher's remark was related to some scenes of the machinima about the solar system. Likewise, the female teacher makes a suggestion that one of the reasons regarding the difficulty in understanding also can be due to some unfamiliar content such as a conversation related to an art gallery in 'Making Predictions 1' and skating in 'Making Predictions 2'. Thus, the content also needs to be taken into account. It is also interesting to note that the correct language level does not help the learners if the video is too fast and short, giving little time for processing information.

Figure 11. Interview excerpt from teacher

19.	R	Okay. So, what do you think are the reasons for making them feel distracted? Is it because the videos were only short enough or do you think it's because students take some time to adapt to the conversation or adapt to the language that is being spoken?
20.	M	Yeah, yeah. Oh yeah. Definitely. Yes, this is (xxx to say). You took my words. Actually, the students from Nepali language background and some of them are from Madheshi, I mean and let's say, Awadhi language background and they need to understand English. In the second time, I mean first, they listened it and later on they think in their mind, and oh yeah, this is this but the video was too short that at the time they used be thinking, the video used to be finished.
21.	R	Okay.

## DISCUSSION

Overall machinima were found to have potential for use as teaching material in EFL classrooms. Two machinima entitled 'The Solar System' and 'Writing Persuasive Expressions' were highly effective whereas the second short machinima entitled 'Making Predictions 1 and 2' had some issues as most of the learners and both teachers considered them too fast which ultimately caused difficulty in understanding.

It was found that machinima enable the creation of contextualized or culturally appropriate materials based on learner needs, local values and interests. McGrath (2002) highlights context relevance as one of the criteria for evaluating materials and states further that there has to be "reasonably good fit between the material, the learners (age, level, cultural background-including sophistication) and the constraints under which teaching takes place (length of course, course aims, official syllabus, public examinations)" (p. 35). Teachers, in this study mentioned that machinima were contextualized material because they could fit to the learners' needs, cultural background, and helped them to set the context to make learners situate themselves within the desired content. Considering the local culture used in machinima, the learners liked the Nepali names given to the characters and places, and the Nepali movie trailer embedded in one of the videos. It helped them to move from known to unknown or a new zone. Howard and Major (2004) claim that "materials should link explicitly to what the learners already know, to their first languages and cultures" (p. 104). Thus, on the basis of the familiar information, they could practise language, for instance, they could talk a lot about the Nepali movie Kabaddi using persuasive expressions, which was seen during classroom observation. When the query was made to the teachers regarding using other possible videos instead of using machinima, they said that they would struggle to find videos which address most (if not all) of their learners' needs and are appropriate in their contexts. If they found some which were relatively connected, they would still need to exert a lot of effort to make them appropriate for their lesson(s). Thus, it shows that one of the greatest potential of machinima is that it can be contextualized based on learners' needs.

It is possible to show unusual things through machinima which are not possible to see in real-life, and present the content interestingly. Any person can be anything, for instance, one of the actors in the machinima entitled ‘The solar system’ was an alien, and the alien took Basanta to space to see the planets. This cannot be done in real-life. Rainbow and Schneider (2014) maintain that people can completely change their identity, personality, gender, size or shape, and become non-human (i.e., a robot, a vehicle or an animal) in the virtual environment. This flexibility enables machinima to give a unique presentation, which further helps increase learners’ engagement in language learning. In the findings, learners maintained that they liked the fictional element, that is, an alien describing the planets in the first video.

Machinima also have potential to embed real-life video and create mashup forms. Participants pointed out during the interview and in their reflective notes that they appreciated this. It is possible to embed any kind of video to create a gripping effect. In the machinima entitled ‘Writing persuasive expressions’, a short movie trailer of 53 seconds was embedded which helped learners get motivated and get engaged in post-machinima activities, for example, making persuasive remarks related to the same movie.

Hancock and Ingram (2007) argue that because avatars are not human actors, it can create dullness. Contrary to their claim, it was found that the learners and teachers showed the close connection of machinima to the learners’ love for cartoons and this grabbed their attention. Intriguingly, learners acknowledged the fact that they are accustomed to watching cartoons ever since their childhood, and they love to watch similar videos. In this connection, bringing machinima in the language classrooms also helps teachers address the needs and interest of the learners.

Another finding is the potential to mount pre- and post-video activities to support the learners. Gawlik-Kobylińska (2015) asserts that machinima “can be used by instructors as a video material supported with multifarious exercises, or as a specific task assigned to the class” (p. 6853). It is found that teachers were able to set the scene with some prompts before the machinima was shown, and as post-machinima activities, they could further involve the learners in individual writing activity, group work, conversation modelling, and gallery presentation for learning English. They could engage learners to practice all four listening, reading, writing and speaking skills in an integrative way. The use of machinima in the classroom can help learners be engaged more in the lesson. However, the effectiveness of machinima also depends upon other influencing variables like time and effort spent on creation and the active role of teachers to relate machinima to different activities used for language teaching (the level of instructional scaffolding).

Besides having these potential benefits compared to other video-related teaching materials, it is also found that over-short machinima, for instance, shorter than 1 minute and 30 seconds, were not effective for language learning. It was found that because of being so short in length, the machinima was too fast and too hard to grasp. One of teachers also mentioned that introducing some new concepts in their local context such as skating and art gallery in short machinima might create some problems in understanding; however, contrary to her opinion, one of the students said that they were able to learn about these new concepts. That might have been possible since the learners were involved in post-activities immediately after the video, which played a significant role in affecting their perception. Another criticism was the dark scenes in one of the machinima. McGrath (2002) asserts that it is desirable that “we consider the likely appeal to learners of the materials (clarity of layout, visuals) and their content (choice of topics)” (p. 35). In line with McGrath, teachers expressed the concern related to the dark scenes, the choice of content and some unfamiliar content in machinima.

## CONCLUSION

Machinima are very novel teaching learning materials. They have great potential since it is found that they can be contextualized and address learners' needs, interest and values. Machinima can create a comfort zone for teachers while teaching and for learners during learning. Similarly, the different modes such as moving picture, sounds, gestures, and text help learners construct meaning. This is in line with the Cisco study (2008) which confirms that presenting information using multiple modes, primarily using visual mode, helps learners understand the information in a fuller and deeper way.

Rainbow and Schneider (2014) argue that there is a plethora of simulated environments in Second life, and machinima can capture them easily which is not possible to do in real life. Therefore, machinima can be an affordable means for teachers to help their learners learn through visuals which are hard to see in real-life. It is also possible to teach through real-life videos found on YouTube, however, it was found in this study that the content and information on YouTube videos do not necessarily match the lesson. McGrath (2002) says that if the material does not fit to the context, teachers need to cut out the inappropriate part, select what is not appropriate or adapt and supplement as necessary. As a result, teachers will need to exert more time and effort to clarify the context and content, adapting and supplementing.

Through machinima, any low resource classroom can add resources. In developing countries like Nepal, where only teachers have access to computers and Internet, teachers could create their own machinima with little learner training or use those created by some other contributors from an online repository. Teachers interested in machinima may work collaboratively with other teachers in creating a machinima resource bank. This, on one hand, would help teachers be more creative and get involved in the 'community of practice' (Lave & Wenger, 1991), and on the other hand, help students to be more engaged through the use of contextualized materials. There is also potential for students creating authentic materials through this network once they feel comfortable in machinima practice. Teachers could even request some machinima related to their content from a machinimator as many of them love to contribute and disseminate their work (based on our own experience). Use of machinima can thus make a significant change in teaching and learning thereby promoting learners' motivation as animated visuals can assist them to comprehend the content easily.

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## ENDNOTES

- <sup>1</sup> In the English Web 2013 (enTenTen13) corpus, both forms 'machinima' and 'machinimas' are found to have been used interchangeably to denote plural. It was found that there are 4,977 instances of 'machinima' (referring both to refer to singular and plural cases) out of 19,685,733,337 total words, but only 56 instances of the plural form, 'machinimas' so in this study it was decided to adopt what seems to be the majority consensus, that 'machinima' is used as both singular and plural.
- <sup>2</sup> 'Making and Using Machinima in the Language Classroom' by Rainbow and Schneider (2016) is a kindle edition, and all the direct quotes retrieved from the work of Rainbow & Schneider (2016) has been cited in-text as per the guidelines of APA 6<sup>th</sup> edition given for citing a kindle edition.

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