TESL-EJ Teaching English as a Second or Foreign Language
The Electronic Journal for English as a Second Language

Using Minecraft for Learning English

*** * * On the Internet * * ***

August 2014–Volume 18, Number 2

Marijana Smolčec
Gimnazija Bernardina Frankopana, Ogulin, Croatia
msmolcec@gmail.com

Filip Smolčec
5th Grade Primary School Student

with an introduction by Vance Stevens
Higher Colleges of Technology / CERT / KBZAC, Al Ain, United Arab Emirates
vancestev@gmail.com

Introduction to Minecraft

One fine morning in August, 2014 as I was preparing to work on this article, I did as writers do all over the world as they seek to prolong procrastination, I checked Facebook. Right at the top of my posts, I discovered this:

Figure 1. Conversation with Lina
(Used here with permission from Rehab Rejab and from Lina's parents)

As Rehab and Lina can both tell you, Minecraft is a game known since its inception in 2009 to have occupied both children and adults in hours of enjoyable play with creative thinking. It has grabbed inordinate attention from educators in a plethora of blog posts, YouTube

videos and podcasts too numerous to mention (just Google Minecraft and whatever subject or aspect of education you are interested in). It's a game that is unique in that it's not player vs. world or player vs. others but "player vs. creativity," according to Australian educator Dean Groom (2011), who goes on to say that Minecraft's refreshing lack of agenda allows him to set the game up for his classes in ways that he feels will support his curriculum. As guest on another podcast show (Allison, 2011) he says that the curriculum is addressed not so much in the game but what goes on around the game, in discussion and follow up outside the game. He says what he likes about Minecraft is that it can be whatever a learner wants it to be. He can set the game in the way he needs to in order to direct learners toward goals to be accomplished, unlike with other games that are not so flexible. This point is not lost on homeschoolers, some of whom are blogging about how they find that when they let their children play Minecraft the student learners develop both academic and life skills through pursuing their curiosity in enjoyable discovery learning more persistently than they would if faced with prescriptive worksheets (Conaway, 2012; Coyle, 2012).

Joel Levin, a.k.a. Minecraft Teacher (http://minecraftteacher.tumblr.com/) mirrors Groom's approach to using Minecraft in his own classes. He says that Minecraft works so well because unlike with most games, where you craft a lesson to match the game, with Minecraft, he decides what he wants to teach, and shapes the game around that. In fact, in Minecraft, since players can set their own goals, Levin has to 'limit' the game by restricting resources, setting puzzles, and making it necessary for his students to collaborate. One of his videos (Levin, 2011) shows how he sets up such environments for kids, in this case tasking them to explore a desert to look for pyramids and expose archaeological treasures he's concealed within.

Minecraft is not only a darling child of the educational blogosphere; it has also achieved mainstream attention; for example, *The New Yorker*'s article on Markus Persson, the game's inventor, better known as "Notch" (Parkin, 2013), and Naughton (2014) who, writing for *theguardian*, nails "the secret of *Minecraft*'s attraction: it's *open-ended*. Players' possibilities are bounded only by the limits of their imaginations – or by the limits of their knowledge" (italics are the author's).

Naughton notes in his brief article that the Minecraft Redstone and Essential handbooks are at positions 16 and 17 on the Nielsen list of bestselling books January to July in the USA this year, just ahead of two books popular with young readers on stories based on the popular movie *Frozen* (Swanson, 2014). It's just short of startling that computer manuals would appear among the top 20 best-sellers in the USA, in competition from popular books deriving from Disney films, but hear what David Dodgson (2014) has to say in a talk at a recent RSCON conference about how these manuals impacted his teaching English in Turkey. Many of Dodgson's Turkish students enjoyed Minecraft and were in possession of the Turkish version of the basic handbook. When Dodgson's 8-year old son asked his dad if he could have a copy, he found one in English at a bookshop locally and also picked up the Redstone manual there in English while he was at it. Dodgson's son took the books to school, some of the son's classmates had older siblings in Dodgson's classes, and that day he was asked repeatedly where he had got the Redstone book. He told them, adding that it was only available in English. Nevertheless many of his students got copies and started pouring over them. Dodgson notes that his students often accessed the communities, forums, YouTube videos, and other websites associated with Minecraft and since "Most of these resources are in English … it's a great way for … students to interact with the language." However when he

found them pouring over the English version of Redstone, he was surprised because his students were rarely interested in even short stories in English, yet "their love for this game really motivated them to engage with a book that was actually written for native speakers."

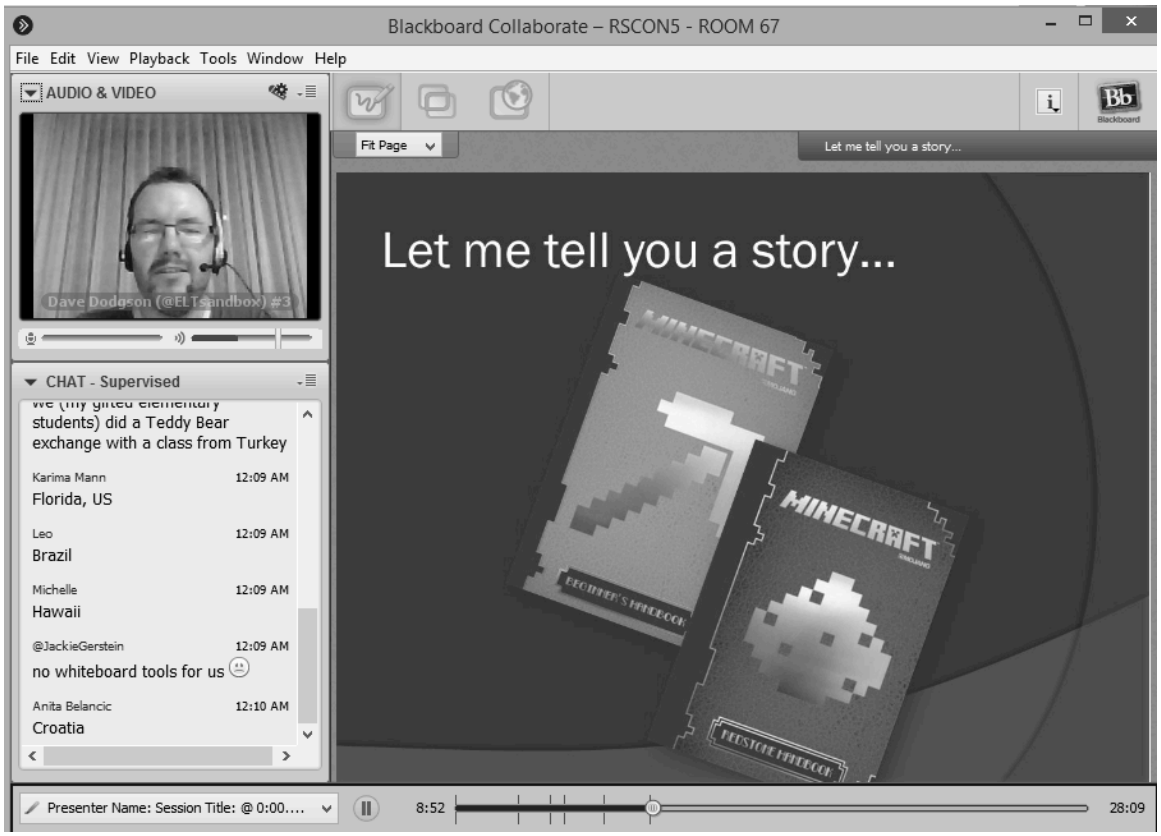


Figure 2. RSCON5 Minecraft Presentation

In a talk he gave at a recent TESOL/CALL-IS & IATEFL joint conference, subtitled "The World is not Enough" (meant to suggest that the real world should thus be augmented with gaming) Jeff Kuhn (2014) explained how his second-language writing class uses Minecraft to leverage game pacing, possibility space, and intentional design to create a situated learning context conducive to teaching academic writing to ESOL students. Tracing his arguments here, first in defining games as "well defined constraints with ill defined solutions" and "a voluntary attempt to overcome unnecessary obstacles" he gets at what compels people to play games (i.e., their curiosity to find elusive solutions within those design constraints). This is where the three key design elements come in.

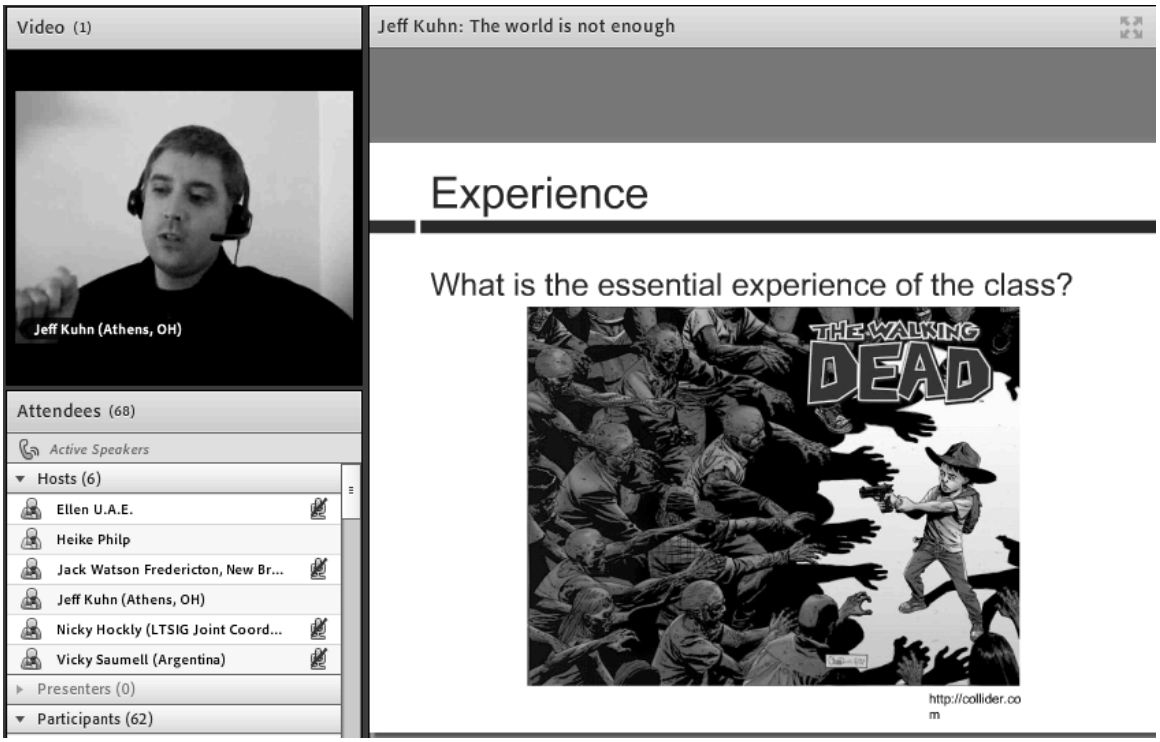
Kuhn illustrates the concept of possibility space by explaining why we lose interest in Tic Tac Toe (too limited a possibility space – games become boring once possibility spaces are exhausted). The second design element addressed is game pacing, which boils down to how much time players want to spend on a game. Here Kuhn draws on Ito et al.'s (2010) construct of briefly hanging out in a game, messing around (taking the time needed to gain

agency, what some still perceive as goofing off), and geeking out on the game (achieving flow, after spending around 40 hours with it). Clearly, a game that can engage its players enough to achieve agency and then want to continue developing their expertise will be a boon for students in any field, let alone language learning.

Enter the third design element, intentional design. Minecraft has in common with Second Life that both incorporate features that reward "players" with the perception of increasing agency for spending the time to become better at the "game" and both present obstacles that players must overcome to achieve their goals by learning how to master and manipulate the objects in the virtual space, thus expanding the horizons of the possibility spaces. But Second Life ceases to be considered by its users to be a "game" when they use it as community space where people meet and collaborate toward achieving real life goals rather than pursuing the fantasies of an intentional designer. Minecraft is intentionally designed to spawn creatures that can create unnecessary obstacles, so it's indeed a game, though players can choose whether to deal with these obstacles or not.

This range of choice is what makes Minecraft so amenable to learning. The game is a sandbox that can generate infinite possibility space that allows all levels of expertise to enjoy hanging out and messing around, often leading to geeking out. Geeks ranging in age and maturity from pre-literate 4-year olds to adult teachers all over the world are discovering that they can design their own outcomes by controlling their level and intensity of play and in the case of teachers, guiding learners in this space to achieve a range of objectives connected to desired learning goals.

Kuhn's academic writing classes look at how disasters occur and are managed, and the student players apply what they learn to hypothetical scenarios locally. He uses Minecraft to help his students "learn, feel and do"; that is, to experience disaster caused by zombie attack and apply what they learn about the stress of dealing effectively with dynamic and unexpected developments to inform their writing about real disaster management.



Another example of using Minecraft in an EFL context shows how the game can transform classes where students were not responding to traditional treatments in the curriculum. A teacher at Applied Technology High School in UAE, writes "Grade 9 students at ATHS are reading Geoffrey Malone's *Crocodile River* as it is a part of their curriculum this year. Unfortunately, the traditional tasks associated with the reading such as drawing a story outline or writing a summary were not very engaging during Term 1. During the second term we (the teacher and the students) decided to use Minecraft instead of word processing or presentation … as a summary tool. Students started reading to understand the story and then they created a virtual setting and scenes based on the story … From what I've seen so far, gamification has had a great positive impact in my classroom" (Rajan, 2014).

There were two talks on Minecraft at the Future of Education, Reform Symposium RSCON 2014 online conference. One was the talk by Dodgson mentioned above and the other was a conversation with Filip Smolčec (2014), a 10 year-old Croatian student who is himself an example of how Minecraft can serve to facilitate acquisition of a wide range of academic and literacy skills, including achieving a great enough fluency in a foreign language to have the confidence to present at an online conference in that language. Filip's mother Marijana is a teacher in Croatia, and at a recent Learning2gether event, I had the opportunity to chat with her and her engaging young son (Stevens, 2014). To encapsulate our brief discussion, I learned how Filip had acquired a high level of English through watching YouTube videos, mainly ones about Minecraft, and interacting with players from other countries, often to exchange expertise on the game, but more recently in making his own videos of game play and tutorials to explain his techniques to others. Through this process he has become conversant in recording tools and setting up servers to enable multi-player modes, and has picked up a lot of vocabulary ahead of his mother (who gave as an example, 'pickaxes'). I was particularly impressed by Filip's saying that when he and his brother were children

they used to watch YouTube with no idea what people were saying, until the wall gradually dissolved as the language somehow became comprehensible.

There are obviously insights here on how kids acquire English through exposure to media and playing games like Minecraft. As Rehab found with Lina, conversations with youngsters may never again be the same, and the implications of this are already impacting the dynamic between teachers and their younger students in ways that we writers and readers of articles such as this are hoping to unpack and understand. Following my own curiosity with what we might learn about these processes, I asked Marijana Smolčec if she and Filip could write the article for this month's On the Internet column. They agreed, and what follows is mostly theirs.

Minecraft World

In order to start playing Minecraft, first you need to buy the game by visiting https://minecraft.net. After that you download it to your PC or MAC and install it. Now there are versions for xBox, smart phones, iPad and even Play Station editions. It is a game that has spread fast not just among kids, but also among adults. The game was created by the Swedish computer programmer Markus Persson, or as my son would refer to him as "The Notch". When I asked my son who Notch was, he told me, "He is a Minecraft God!" Referring to the developer as God or Creator obviously says a lot, because the Minecraft

World is a creative and exciting one for the players. According to Kinder (2013), Notch was an unknown computer programmer when he started to create this very powerful and famous Lego-block style adventure game. It would be difficult to say when exactly the game was officially launched, but the beta version as they refer to it on the official Minecraft website was released in December 2010 (https://minecraft.net/game). We can say the rest is history and all I hear about since my sons started playing Minecraft is the possibility of their attending MineCon http://minecon.mojang.com/ – MineCON2015 http://mineconiw.com/.

But here, we are more interested in how to start using this game, not just for fun but also as a teaching resource. Is it possible and where to start? We will try to address these questions.

What is the fastest way to learn about the game?

After you have installed the game on your PC or MAC, you can start in single player mode and create your own new world. There are three game modes in Minecraft: creative, survival and hardcore. My son recommends that all noobs start with creative mode. If you're new to Minecraft, then you are a noob.

Creative is a game mode with unlimited resources where you can build anything that you want without having to gather those resources. When you enter creative mode, you have to press E or I to open your inventory where you can find things such as: grass blocks, stone blocks, red stones, TNT, diamond pickaxes, diamond sword etc.

Survival on the other hand is a game mode with limited resources. In order to get those resources you have to craft them using resources around you to create other better items that will help you in your adventure. To craft something in Minecraft you need to move the required items from your inventory into the crafting grid and arrange them in the pattern representing the item you wish to create. The 2×2 crafting grid can be accessed from the inventory screen and you can see that a workbench contains a 3×3 grid when right clicked. This is to create certain items like tools (swords, fishing rod, shears, flint and steel), breweries for potions, and much more. Having basic items you collect from mining will help you make new ones. A beginner can access the information about basic crafting on http://www.minecraft-crafting.net/or from any number of tutorials on YouTube. Along with creating items, you need to kill mobs and monsters such as: zombies, skeletons, spiders, spider jockeys (skeletons who ride spiders) and creepers that attack you during the night.

In survival mode there is also a hunger meter, a bar that depletes quickly when you sprint and jump at the same time. So, if you want to fill your hunger bar you have to kill animals like; chickens, pigs, cows, and even zombies but when you eat zombie meat your hunger bar runs out more quickly.

Players can choose their own level of difficulty:

- Peaceful, where there are no mobs or monsters and your hunger bar doesn't run out;
- Easy, where there are mobs and monsters but they don't attack as they usually would do, and your hunger bar runs out slowly;
- Normal, in which the monsters attack every time they spawn, but if the player is hidden, mobs cannot see him and they will not attack, whereas your hunger bar runs out two times faster than in the easy level of difficulty;

- Hard, which is too demanding for noob players, as zombies spawn more often and they do twice as much damage as in the normal mode of difficulty. You will starve and die faster;
- Hardcore is a survival mode but if you die, your world is deleted and you have to start all over again. You can play this game mode in both singleplayer and multiplayer. In a multiplayer server if you die you will get banned from the server where you were playing, but there are many other servers that you can later choose to play in.

Minecraft characters

The main Minecraft character is called "Steve". When you start playing Minecraft in the beginning you have a Steve skin, which is actually him dressed in a light blue T-shirt and blue trousers. You can be more creative than that and change the skin at http://minecraft.net. However, before you go there you have to visit http://www.minecraftskins.com/ and choose the skin you like and directly upload it to your Minecraft account or even download it to your computer. Besides choosing among many fantastic and creatively made skins, you can try and make your own if you wish.

Other characters are mainly monsters (e.g., creepers, skeletons, zombies, Endermen) that appear in Survival mode and have different attacking skills depending on the difficulty level you play. An Enderman for example is a character that has the ability to teleport and can steal your blocks if you look at him in a certain way, so if you encounter him in the game, you need to know how to look at him or otherwise he will get angry. As with almost every aspect of Minecraft, it is easy to find information on Endermen; for example, search YouTube videos or consult http://minecraft.wikia.com/wiki/Enderman.

What are the pros and cons of playing Minecraft?

As teachers, educators or even theorists we can agree that every new teaching method has its pros and cons and we should approach it as such. In my opinion, the best way is to try to combine various methods into our own teaching and learning environment and experiment as much as we can. In this section we will look as some of the benefits Minecraft offers students and consider whether there are any pitfalls.

What children and students learn from playing Minecraft

Michelle Conway is homeschooling her kids. She has largely abandoned workbooks and worksheets and lets her kids choose how they want to learn. They have chosen Minecraft, and Conway (2012) addresses some of the skills she thinks the game develops; that is, problem solving, research, communication, typing, spelling, vocabulary, science, creativity, math and spatial reasoning.

To augment this list, we have made our own independent list of life-skills that Minecraft helps facilitate:

1. Collaboration – building friendships and PLNs, learning how to work in a group, exchanging ideas, having fun
2. Creativity – making imaginative and real life buildings, such as Eiffel Tower, Colosseum, etc.
3. Developing better computer skills such as "keyboarding" (practice fast typing, easily locating special keyboard characters, typing codes and IP addresses)

4. Peer tutoring – helping each other to solve difficult problems, like how to make certain items, or spelling, giving codes
5. Time zones – learning about different time zones especially if playing with somebody from another part of the world.
6. Geography – fostering interest in locations and developing map skills
7. Science – learning vocabulary about geology, mineralogy, different types of stones, plants, animals, learning about habitats, volcanoes and lava
8. Math – geometric principles, counting, calculating, and tracking of items you need to build a certain construction
9. Cultural differences – holidays, food, celebrations
10. Language learning, more about this in the next section

We could continue adding more advantages like intrapersonal skills, socialization, art, engineering and others enumerated by Coyle (2012), who, like Conway, is homeschooling her children using Minecraft and finding the game to be a great asset for developing children's thirst for knowledge. I can corroborate their stories as I myself am amazed by the things our sons have learned. If they come across something that intrigues them while playing the game, they ask their parents about it or they google historic facts and even watch interesting videos on YouTube to get more information to fill their knowledge gaps. If they were forced to learn these things through a syllabus at school, I am sure it would be a nuisance for them, but when it comes from Minecraft or YouTube their interest in knowing more is its own stimulus, and they explore in their own way.

Three pitfalls

The first pitfall I have noticed is what Coyle refers to as "foul language." What our kids learn first whether they are native or non-native English speakers is to swear. This is something that bothers me a lot. I think kids are not even aware of it, because as my sons would say "that's normal in the gaming world." Well it isn't normal in mum's world! Coyle explains that we don't need to be bothered with it too much, on the contrary we should use Minecraft to teach our kids about proper behaviour. What Coyle does for her own daughters in their mutual Minecraft server is to post ridiculous signs to call their attention to inappropriate language (in their private sandbox) and let them discover and experiment with the language. Maybe this idea of sign posting can be used in teaching as well. Definitely, it's something to think about, the possibility of teaching our students netiquette, online safety and even not to swear in public or not to swear at all, through constructive play.

The second pitfall is spending too much time online while you can be doing other things like reading, sports etc. Minecraft could be time consuming for a teacher, but especially so for a student who needs to study other subjects; whereas students mainly enjoy playing games. So, in conclusion; take your time and explore it in your own way, but try not to get addicted, which brings me to the third disadvantage.

Addiction could be a big problem, but in our case, being addicted to Minecraft actually can be a positive thing (as in 'geeking out'). If you know how to use Minecraft properly with your students to enhance their creativity as I have witnessed it online, then crafting and survival modes are not a waste of time.

In my experience, there are always negative sides that can easily discourage you, but don't let them do so because there are always more advantages that can easily overcome the disadvantages.

Learning English with Minecraft

We are already familiar with gamification and game-based learning as a way of getting our students motivated to easily learn another language, in this case English. Of course, I am not the only one who has noticed that in the past few years our students are developing vocabulary they can only have learned by playing computer games. This became evident when my own sons started to play online games. It is not only in playing the games, making your way from one level to another, and familiarizing yourself with the vocabulary of certain items you need to find in games, but it is also about collaboration with other players that most games have these days. I would call it a "multiplayer effect", a need to communicate with a player from a different country who might not speak your mother tongue, but because you depend on each other you try to communicate in English in order to succeed in your efforts.

Why does Minecraft have such a big influence on children and their ways of learning English? In my observation, YouTube has had a huge role in making this game so popular. It is not only the place where kids find out about a certain game, a place where they come to check tutorials, but also a place to have fun by watching various videos. I personally don't know how much fun there is in watching such videos but they certainly have a great effect on children.

Actually, watching videos made by native or non-native English speakers is one of our children's first exposures to a foreign language. Foreign language teachers have long been searching for ways to make the learning experience they provide more like those that occur in real life; for example, Secules, Herron, and Tomasello (1992). Numerous curriculum reforms are aimed at authentic learning materials, stressing the importance of listening comprehension, and practising drilling that are increasingly contextually appropriate, which makes a classroom activity more meaningful. Nowadays, we can hardly avoid using videos in class, some teachers more, some less, but with the proliferation of excellent free web 2.0 tools and creatively invented video games the approach to the effective teaching of a foreign language through video is definitely changing.

As an EFL teacher and also a mother of two boys whose mother tongue is Croatian, I often asked myself this question: Am I supposed to teach my sons English at an early stage of life? In Croatia, children start learning English from the 1st grade, at the age of 6 or 7, two times a week. By the time they reach high school it can be three or even four times a week until their graduation, and I know many of my secondary students speak English at upper intermediate level without any problems, but to be so fluent in a language you need to be exposed to it in more than just the classroom. If we don't get the chance to practice it in the real world, which would mean moving to an English speaking country, then how can we bring that real world to our students and our children? For me, the answer was on TV, uncaptioned Disney cartoons, and as our kids were growing up it was the Internet, video games and YouTube.

Neither my husband nor I are English native speakers, which means our sons don't live in a bilingual family, but many have made the wrong assumption that our boys are native speakers mainly because of their American accents. On the other hand, as an EFL teacher I have tried so hard to gain a native accent for years, while for our sons that was a piece of

cake. Why? The answer is simple, the exposure at a young age to input similar to that in the "real world". So, how do they learn English in this way and how can we use their example in our classrooms?

The answer is related to the question of the optimal age for a child to start learning a foreign language. According to Shoebottom (n.d.), young learners are much better at acquiring native-like pronunciation in the foreign language than older people. Some time ago I watched a documentary about how our brain works, and in one of the episodes scientists tried to explain why kids learn the language quickly. Their explanation was that they absorb a language with both sides of the brain until the age of 6 or 7, and after that, only the left side is responsible for language learning. Well, I am no expert here and in reading some blogs and articles about cognitive learning, we can all agree that kids learn language easily.

Regarding Minecraft and English learning

Is it possible to learn English by playing Minecraft and simultaneously developing all four linguistics skills: listening, speaking, reading and writing?

The input in listening and in our case watching YouTube video tutorials for playing the game has had the largest influence on my two sons. They used to watch many videos about games made by English native speakers, mainly Americans, and even though they didn't understand much at first, they were attracted to the images and sneak peeks on how to make their own world in Minecraft, or create a server, or just check how to pass a certain level when they got stuck in playing Minecraft or other video games.

Even before he discovered Minecraft, Filip was interested in playing Lara Croft – Tomb Raider, at the age of 5. We allowed it because that was the time when he was obsessed with Indiana Jones adventures. Whenever he got stuck on a certain level he would check for YouTube tutorials to get a sneak-peek and see how it is done. So, he would rush to my laptop, research the certain level, watch it carefully and then run back to his room. The remarkable thing is that he didn't know how to read or write at that time; for him, letters where just incoherent symbols. I remember my husband telling me that he would never think of doing that himself and how our son's behaviour shows his resourcefulness for his age.

Regarding writing, when children play multiplayer mode in Minecraft they usually communicate by chatting and posting short messages directly in the game. This is the most common way for them to discuss and share things. The other part where writing skills are useful is when players leave special signposts in the game or in the mutual server. In this way they practice the micro linguistics skills as well, like spelling and grammar. If Minecraft is used in language learning or in school, English teachers could give their students different tasks to show their use of present simple, idioms, comparison of adjectives etc.

However, when writing is too distracting and kids like to exchange things faster and do it in a more fun way, they tend to connect via Skype or maybe some other VOIP web tool. Here is where it is all about speaking. Before my elder son was comfortable enough to communicate in English he used to play Minecraft with only his Croatian friends. They would start a Skype group call and together explore the world of Minecraft. Although our son had enjoyed playing Minecraft with his Croatian peers, it still wasn't enough for him, so he continued to watch more YouTube videos, listen and imitate the native speakers and also practice his English with me or his younger brother. As was mentioned at the beginning of this article, the learning of English language became more important than the learning of mother

tongue, and what I witnessed was the language shifting that is still in process. The dilemma of teaching my sons English or not was resolved by letting them speak the language with me whenever they wanted. If they speak English with me I respond in English, if they communicate with me in Croatian I do the same. At first, we could only discuss games, zombies, cartoons etc. but soon their vocabulary increased and now we can discuss anything except maybe politics. Sometimes my husband and I catch them playing in English, discussing, chatting and having fun. It would seem more normal for them to do so in Croatian, but they like to use English because they love to practice. It seems to me that speaking English makes them more "cool". What worries me now is that I need to help them improve their Croatian!

The speaking practice actually hasn't stopped here, but developed in a way I couldn't have imagined. The older son decided after watching so many Minecraft videos and creating his own amazing Minecraft worlds that he could also record video tutorials about the game and publicly display his Minecraft expertise so he insisted on setting up his own YouTube channel, http://www.youtube.com/user/SnakeGaming12. That was more than a year ago. Now, he is rather famous and has more than 200 subscribers and followers. In order to make videos he read a lot and did his research on possible recording tools. At first he used Camtasia to record (http://www.techsmith.com/camtasia.html) and he really enjoyed it, but as it is free for only one month he can no longer use it, so he records using Fraps (http://fraps.com/) and edits in Microsoft Movie Maker (http://windows.microsoft.com/en-us/windows-live/movie-maker). When I show his work to my high school students they cannot believe that a 10 year old can be so skillfully creative and speak English with an American accent. I think I have come to the point when my ICT skills are nothing to the magnificent and rather cunning works of my son.

So, we see that all the linguistics skills of listening, speaking and even writing (writing letters as if they were mere symbols) were developed in our sons before they learned how to read in Croatian or knew the alphabet. Their extensive English vocabulary built during the years and combined with the acquired skills of simple reading prepared them for reading English words and sentences. In Croatian language every letter represents a sound you need to pronounce. In English this is not the case, but somehow they didn't find that as a problem; it is unbelievable how easily they pronounce the words even if the word isn't familiar to them.

In conclusion: Extrapolation to teaching practice

Observing our sons, monitoring their work online, and helping them from the beginning has encouraged me to become a better language teacher. The skills my sons have taught me I try to bestow on my students. I have realized that listening helps you with reading, speaking, writing and vice versa. Also, the more you read and obtain a certain amount of vocabulary the more it helps you be more confident as a speaker and eventually as a writer. So, it is a constant circle and I have found myself in the middle of it.

Sometimes we are just bystanders, but I am more than confident enough to quote Sir Ken Robinson (2006) "creativity now is as important in education as literacy, and we should treat it with the same status." Students can definitely be creative while learning a foreign language; we just need to show them the way. In the end, allowing my sons and my students to be creative gives me the privilege of becoming a student as well, a student constantly re-learning how to teach.

References

Allison, P. (2011). Exploring Minecraft w/ Jo Kay, Dean Groom, Bronwyn Stuckey, Joel Levin, and Chad Sansing. *Teachers Teaching Teachers #255*.
Available http://edtechtalk.com/node/5001.

Conaway, M. (2012). What my kids are learning while playing Minecraft. *Taking the road less traveled*. Availablehttp://www.michelleconaway.net/2012/07/what-my-kids-are-learning-while-playing-minecraft/.

Coyle, C. (2012). Learning from Minecraft. *Sandra Dodd*.
Available http://sandradodd.com/videogames/minecraftlearning.

Dodgson, D. (2014). Breaking the learning blocks – Minecraft and language learning. The Future of Education, Reform Symposium RSCON 2014.
Available http://www.futureofeducation.com/forum/topics/breaking-the-learning-blocks-minecraft-and-language-learning.
Recordinghttps://sas.elluminate.com/site/external/recording/playback/link/table/dropin?sid=2008350&suid=D.1C3B72F27A5E4558F86D6DB9DFB263.

Groom, D. (2011). Exploring Minecraft and crafting discoveries with Joel Levin (Minecraft Teacher) & Dean Groom. *Ed Tech Crew* podcast 164.
Available http://www.edtechcrew.net/podcast/ed-tech-crew-164-exploring-minecraft-and-crafting-discoveries-joel-levin-minecraft-teacher.

Ito, M., Baumer, S., Bittanti, M., boyd, d., Cody, R., Herr-Stephenson,B., … & Tripp, L. (2010). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. Cambridge, MA and London UK: MIT Press. Available http://mitpress.mit.edu/sites/default/files/titles/free_download/9780262013369%20_Hanging_Out.pdf.

Kinder, L. (2013). What is Minecraft? *The Telegraph*.
Available http://www.telegraph.co.uk/technology/video-games/10330606/What-is-Minecraft.html.

Kuhn, J. (2014). The world is not enough: The need for game design. IATEFL LT SIG & TESOL CALL-IS Web Conference on Gaming and Gamification – a Win-Win for Language Learning.
Availablehttps://docs.google.com/document/d/1PNFQ9skXJPIqU4wAoRy0joEt0nm8CUkLHvwr17OlHj4/mobilebasic?pli=1. Recordinghttp://iatefl.adobeconnect.com/p4zf1evoz43/.

Levin, J. (2011). Teaching Minecraft – Episode 7: Houses and Pyramids. *MinecraftTeachr YouTube Channel*. Availablehttp://youtu.be/sl9FPWNnVBQ.

Naughton, J. (2014). How Minecraft has bewitched 40 million of us: The worldwide domination of Markus Persson's building-blocks game is a triumph for the power of human imagination. *theguardian*.
Available http://www.theguardian.com/technology/2014/aug/03/how-minecraft-bewitched-40million-users-john-naughton.

Parkin, S. (2013). The creator. *The New Yorker*.
Available http://www.newyorker.com/tech/elements/the-creator.

Robinson, K. (2006). Sir Ken Robinson on TEDTalks. *TED Blog*.
Available http://blog.ted.com/2006/06/27/sir_ken_robinso/.

Secules, T., Herron, C., & Tomasello, M. (1992). The effect of video context on foreign language learning. *The Modern Language Journal 76*, 4, 480–490.

Shoebottom, P. (n.d.). What is the best age to start a second language? *A guide to learning English*. Available http://esl.fis.edu/parents/advice/myth2.htm.

Smolčec, F. (2014). Minecraft for Edu: Filip Smolčec's (11 yr-old Youtuber) Insight. Future of Education, Reform Symposium RSCON 2014. Recording available https://sas.elluminate.com/site/external/recording/playback/link/table/dropin?sid=2008350&suid=D.3F83255C4DDFF6BD54C70F58111C4E.

Stevens, V. (2014). Hangout with Filip and Marijana Smolčec on the EU LLP Comenius project and learning through Minecraft.*Learning2gether*. Available http://learning2gether.net/2014/06/29/hangout-with-filip-and-marijana-smolcec-on-the-eu-llp-comenius-project-and-learning-through-minecraft/.

Swanson, C. (2014). The bestselling books of 2014 (So Far). *Publishers Weekly*. Available http://www.publishersweekly.com/pw/by-topic/industry-news/bookselling/article/63195-ya-tops-nielsen-and-kindle-lists-for-2014-so-far.html