Avatar − an innovative teaching method?

A cooperative project between Mercy College and the Teacher University College of Lower Austria

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Abstract

This article describes a collaborative partnership between Mercy College (US) and the Teacher University College of Lower Austria (Pädagogische Hochschule NÖ) which was conducted during the academic year of 2014/15. The theoretical background for using innovative and cooperative teaching methods is discussed and compared to our approach of using "avatars." The project, upon completion, was evaluated by course instructors at both colleges, and some initial results will be presented. It became evident that implementing this new method is challenging, but that the approach in general can be successful in supporting students' perspective changes.

Avatar – eine innovative Lehrmethode?

Ein Kooperationsprojekt zwischen Studierenden des Mercy College und der Pädagogischen Hochschule Niederösterreich

In dem vorliegenden Artikel wird ein Kooperationsprojekt beschrieben, das im Studienjahr 2014/15 mit Studierenden aus New York (USA) und aus Niederösterreich (Österreich) durchgeführt wurde. Es werden die theoretischen Hintergründe für die Verwendung von innovativen und kooperativen Lernformen präsentiert, die helfen können, das Theorie-Praxis-Problem zu lösen. Eine dieser Methoden bedient sich der Verwendung von Avataren, die näher beschrieben wird. Das erstmalig durchgeführte Projekt wurde am Ende von den Lehrenden beider Studierendengruppen evaluiert. Die Ergebnisse werden hier präsentiert. Es zeigt sich, dass einige Implementationsprobleme vorhanden waren, aber es insgesamt eine gute Methode ist, die hilft, einen Perspektivenwechsel zu schaffen.

Keywords:	Schlüsselwörter (German keywords, optional):
Avatar	Avatar
Innovative teacher methods	Innovative Lehrmethoden
Situated learning theory	Situiertes Lernen

1   Introduction

Teaching aspiring teachers to teach and what it means to be a teacher is a complex process. Thus, teacher education programs must strive to support their students in understanding and experiencing the complexities of being a teacher in order to prepare them for the realities of the classroom. While it is impossible to simulate all of these realities in the higher education classroom, teacher educators need at least to try by using innovative teaching methods. In the following we will describe an endeavor to overcome these obstacles. In the spring of 2015, we began a collaboration between the teacher education programs at the Pädagogische

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Hochschule NÖ and Mercy College in order to examine ways to make teacher education more realistic and lively. First, the approach of using avatars in teacher education will be discussed (1), followed by a description of the collaboration between Mercy College and the PH (2). Finally, students' feedback, challenges, and ideas for improvement will be discussed.

2 Using Avatars in Teacher Education

Teacher education programs must prepare future teachers for making the leap from theory into praxis (Darling-Hammond & Baratz-Snowden 2007; Wahl, 2006) and assist them in examining "their taken-for-granted-beliefs" (Feinman-Nenser & Norman, 2000, p. 737) about what it means to be a teacher. Unfortunately, teacher education programs are often failing in regards to this task (Darling-Hammond & Baratz-Snowden 2007; Leaman & Flanagan 2013). One way to overcome this problem is to use alternative teaching methods. The complexity of teaching cannot be learned through simple lectures or readings on this topic. Aspiring teachers need to experience what it means to be a teacher. Thus, teacher educators are faced with the challenge of creating a more authentically simulated classroom context (Leaman & Flanagan 2013).

While it is almost impossible to simulate the realities of a classroom, there are innovative teaching methods that can create a more realistic learning environment. One of these methods involves the use of "avatars", where students have to create unique characters in order to investigate and experience real world scenarios from different points of view. Such an approach has been used successfully in studying history (Sheffler, 2009; Volk, 2012, 2013), and recently in teacher education as well (Wasmuth, in press). The idea is that students create an avatar, a user's alter ego, and then think and act as their avatar. Thus, students are forced to present their ideas about educational scenarios from the perspective of their avatar – they put themselves in someone else's shoes.

Such an approach can be helpful in supporting students to understand the issues previously mentioned and seems to be a promising way to make learning more authentic. Our approach was loosely based on situated learning theory (Brown, Collins and Duguid, 1989), as well as theories regarding role-play and case-based learning. Research and case studies have shown that the situated learning approach can be used successfully as an instructional approach (Herrington & Oliver). Course content is presented through realistic and complex problems that allow students to learn to think and act like professionals in the field. Instead of presenting "packages" of information organized by instructors, learning should be context-related and an active and constructive process, and students should learn through activities that support problem solving (Gräsel, 1997; Kiel et al., 2011; Schnotz, 2006; Vincini 2003). Assignments and activities should not be unrelated to the kind of activities and thinking that teachers use in their everyday work and should support active engagement, discussion, and reflective thinking (Brown, Collins and Duguid, 1989; Herrington & Olive; Vincini 2003). By using the avatar approach, we wanted to provide such an authentic context with activities that reflect the ways teacher use knowledge in real-life.

Role play and case-based learning have also been proven to be effective in higher education (Kiel et al., 2011; Leaman & Flanagan, 2013; Mogra, 2012) and many of their advantages are valid for the avatar project as well. First, by creating hypothetical educational situations, students are forced to reflect on their educational beliefs. Because they do not think and act as themselves, but as their avatars, students must use the perspectives of others to clarify and expand their own thinking. This creates a learning situation that allows students to "think outside of the box" of their own experiences and to develop new and creative ways of examining their values and assumptions. Thus, such a project supports their personal and professional development. Second, it helps students realize that educational situations can be ambiguous and that the role of the stakeholder, be it a teacher, principal, or parent, matters and is essential to the decisions that are being made. For us, this is an important idea that future teachers need to understand. Students are often struggling to make decisions when the context of a situation is unknown to them. They do not know how to solve problems "correctly" and fear showing their own "incompetence". However, in real life they are facing such situations constantly. Students need to realize that there is not always a clear answer to questions, and that teachers make "mistakes" too, simply because there is not only one "right" decision. To support the development of such a disposition in their students, teacher educators can demonstrate that they also make mistakes (Gerteis, 2009) and help their students to understand that various stakeholders feel, think, and act differently, and that all opinions need to be considered in a school context. Creating a scenario such as the avatar project, where these different perspectives play out their interests and set their own agenda, helps students to understand this issue. Finally, such a project goes beyond the abstract exploration of content

usually found in higher education. As discussed earlier, being a teacher cannot be learned through lectures and readings only. Educational issues should not only be examined and analyzed as abstract concepts, but as a personal and emotional encounter. Typically in higher education the emphasis is on being rationale, focusing on knowledge and understanding problems, but not on emotions (Noddings, 1996). Emotions and feelings are not valued; rather they are neglected and seen as almost damaging. This perspective limits the learning experience - as it reduces their engagement. Emotional responses are an important part of the overall learning process and should be valued (Noddings, 1996; Volk, 2012). Through role play, students can act out emotions and try and practice new behavior, especially in the context of situations that cannot be practiced otherwise. For example, we cannot practice teacher-parent conversations, situations that are very often challenging for teachers in their career entry phases. But students should somehow experience the emotions that are related to such situations. By using avatars, we can support students' understanding of the fact that teachers, principals, and parents are human beings with feelings, and that these emotions have an impact on the decisions we make. It is an attempt to make teaching, education and learning more real to our students and help them to understand and feel the ways in which our daily decisions as teachers impact real people.

Overall, our belief is that being involved in an innovative approach such as our avatar project enables our students to prepare well for classrooms by exposing them to unfamiliar concerns and issues, and sensitizing them to some of the complex, often controversial aspects of their future roles as teachers.

3 The collaboration between Mercy College and the Pädagogische Hochschule NÖ

In order to further our exploration of this teaching method, we thought that an international collaboration would be promising. The discussions with colleagues from an unfamiliar educational system would make it easier to understand that people with a different background think differently about educational issues, and that our own cultural and educational background influences our thinking and decision making. It would be, so we hoped, an interesting experience to see the ways in which educational issues were assessed in different contexts.

The collaboration took place between the two education programs at the Teacher University College of Lower Austria and Mercy College. The American students were enrolled in the Master's degree program in "Early Childhood Education" and participants of the fully online course "Introduction to Early Childhood Education". For them, the avatar project was an ongoing course assignment during the spring semester 2015. At the beginning of the semester, the students received detailed information about the avatar idea (Wasmuth 2015, in press). Students were then provided with the basic facts about their avatars: the age, gender, occupation (assistant teacher, teacher, head teacher, or principal), and the number and ages of their children (if they were parents). In the next step, the students had to "give birth" to their avatars and create personalities they could relate to: a character they liked or detested. Every second week, they received a new topic and had to discuss this topic as their avatar. Examples of such topics were *Tragedy at Local School*, *New Tests for Early Childhood Education*, *Governor Signs Bill Allowing Armed Teachers in the Classroom*, *New Reward System*, or *Spanking*.

The Austrian group consisted of students of a bachelor´s degree program who were in their sixth and last semester and were studying to become English-teachers for new secondary schools (middle-schools). The seminar was called "Studien zur Schulentwicklung" (studies for the development of schools). Thus, it was not difficult to do the project in English. Their avatar project started in February 2015. It was part of the students' workload to receive grades for the seminar. In the first session, students received information about the project and were told to create an anonymous e-mail account. Unlike the US students, they were not given any information about their avatars because they were expected to slip into different roles with every "case": principals, parents, pupils, or school facility managers. The seminar consisted of five parts and the students were asked to work on three different cases. The first case discussed development of teaching and gave the students the chance to slip into a role and to get to know the other participants. The other two cases were done in cooperation and will be described in detail later on in this text.

The US-Austria collaboration consisted of two cases. For the case discussions, we created two blogs, one for the American and one for the Austrian group; both blogs were used for the whole project. On both blogs, the students could only participate by using their avatar name, therefore the anonymity of the avatars was

guaranteed and only the instructors were aware of the real identity of the avatars. At the start of the collaboration, the students were asked to introduce themselves as their avatars and briefly describe their role. We requested that each student reply to the posts of at least two avatars from the other country and that these replies should be used as the beginning of a deeper conversation.

The American case presented a controversial issue that is currently being debated in the US, but probably unfamiliar to the Austrian students. We thought it would be interesting to see if students think differently about it based on their background and experience. For this reason, the students had to discuss a new teacher evaluation system that was loosely based on the reality in New York State. The students received the following information:

> *This week, the New York State Education Department (NYSED) announced that it will modify the Teacher Annual Professional Performance Review (APPR). The new APPR will enter in to force beginning the school year of 2015/2016. The modifications will affect the teacher evaluation itself, as well as the principals' power and will serve as a new means to hold teachers accountable.*
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> *The new APPR will consist of two parts: The teacher evaluation and the students' test scores. Every teacher will be observed and evaluated by the principal three times a year. The instrument for the teacher evaluation will be Danielson's Framework for Teaching, a well-established teacher evaluation instrument. In addition, the students' test scores will have an impact on the result of the APPR. The teachers need to demonstrate their ability to add value, meaning that the current test scores of their students will be compared to the scores of the same students in previous years, as well as to the scores of other students in the same grade. It is still undecided, how teacher evaluation and student test scores will be weighted, but the NYSED announced that student test scores will count at least 60%.*
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> *Furthermore, the principals will obtain new power. Principals will be allowed to release teachers who are rated as "ineffective" two years in a row, regardless of their existing contract. Additionally, principals will have the option to offer an incentive by distributing merit pay to teachers who will be rated as "excellent".*
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> *The NYSED also announced that it is planning to revise the Principal APPR for 2016/2017 using the same evaluation measurements.*

The Austrian case dealt with a student whose homework had disappeared and who now accuses his peers of stealing his work. Again, we were interested in seeing if American and Austrian students would solve this everyday problem differently. Typically, it is difficult for novice teachers to see problems from a parent's perspective, so the following case was designed to give them the opportunity to experience the role of parents.

> *Jonas is a very overprotected boy. He is always told to work well and to be attentive. His parents help him with the homework. Often he voluntarily does additional tasks. The teachers are very pleased about his diligence and praise him a lot. His classmates don´t like him very much, because he is presented as ideal.*
>
> *In the breaks Jonas is often alone or he speaks with a teacher.*
>
> *One day at the beginning of a lesson, the teacher asks for the homework, but Jonas can´t find his. He assures, that he has done the homework, but the homework-book has disappeared. Jonas is very sure, that he has brought it to school. So he accuses his classmates: "You have stolen my book, give it back to me!" – But the classmates don´t know anything, they are silent and laugh gleefully. (Schwenk, J & Schwenk E., 2009.)*
>
> *Think of the following questions:*
> 1. *Describe the situation out of the perspective of a teacher/Jonas/a classmate/Mother of Jonas/Father of Jonas/Mother of a classmate/Father of a classmate*
> 2. *What is the main question of the problem?*
> 3. *What kind of solution do you have for the problem?*
> 4. *Discuss two other proposals for solution from a member of the other country!*
> 5. *Tell at first, whether you are form Austria or America and then explain what kind position you have!*

Both groups received the information and access to the blog thread at the same time. We provided a time frame and encouraged our students to participate as soon as possible, as well as to start a real conversation. Afterwards, we did not participate in the discussions and let the conversations develop freely. This was

somewhat new for the American students because earlier in the course, the instructor had commented on their responses in order to start a discussion, or provided a new perspective on the case. We did not provide further guidance because we wanted to see how the discussion developed without the instructors being involved or leading the discussion.

4 Analysis of the Students' Feedback

At the end of the semester, both groups were asked, for feedback about the collaboration. In the following, we will highlight and analyze some of their responses, and discuss ideas for improvement. While such a short project as ours is of course not representative and cannot be used to gather valid results, we believe that their answers are helpful in understanding how such projects can improve teacher education. Since the Austrian students gave the feedback in German, their responses were translated. To analyze their responses, the open coding method of the Grounded Theory was used (Strauss & Corbin, 1996). First, passages focusing on the collaboration were underlined and initial labels (open codes or in vivo codes) attached. In the next step, larger codes named positive reports, negative reports and reports for improvement were created. To identify the Austrian students, each student was given a number and the students' replies were entered into a chart. For the American students, their avatar names were used, thus, all the names in the following analysis are not the original students' names, but their avatars' names.

4.1 Students' Feedback

For the American group the collaboration feedback was part of a broader feedback regarding the entire avatar project. The students were asked the following questions: "Did the collaboration with the Austrian colleagues enrich the project? In your opinion, did they think differently about the topics and did it help to broaden your understanding of educational issues?" Overall, they appreciated the collaboration as a meaningful and enriching learning experience. Of the 18 responses, 13 were positive while 5 did not address the collaboration at all. Two students thought that the collaboration was the best part of the whole avatar project: "My favorite part was the collaboration with the Australians [sic]. This was my favorite part because I found it very interesting to see their point of view of the issues in their schools. I wish my other classes would do a project similar to this as it was helpful as a future teacher" (Ellie Moise, assistant teacher). Another student mentioned: "One of the best parts of this project was being able to participate in the Austrian blog and see their perspectives on the issues presented" (Andrew Neal, parent).

The Austrian students also had to reflect on the project (only 25 of 32 replies were used for the analysis as seven students reported too late). Compared to the American students, the Austrian students were more critical about the collaboration, and there were as many positive as negative responses, as well as some suggestions for improvement. A reason for this difference could be the fact that the collaboration was part of a bigger avatar project for the Americans. They had more time to become familiar with the idea and their avatars. It also needs to be considered that the Austrian students were in their last semester and that they may not have been very motivated to invest a lot of time in this collaboration. At this point, most students are looking forward to the end of the study and starting a new job: "Generally it was very nice. … Many students, like me, did not take the task very seriously" (12).

The following table summarizes the Austrian students' feedback (as the responses of the American students were not so diverse, we refrained from creating a similar table):

Positive reports	Negative reports
Helpful in order to get to know different opinions and approaches to solving problems (7x)	Technical problems (10x)
	Laboured (8x)
	A lot of expenditure of time (4x)
Slipping into another role (6x)	American Students were kindergarten teachers (4x)
Good idea (5x)	
Interesting cases (5x)	American students blogged late – not much interaction (4x)
Interesting opinions of American students (4x)	
	Not all students took it seriously (3x)
New experience (3x)	I could not take a lot with me (2x)
Very interesting, funny and enlightening to think outside the box (3x)	Tasks were hard to do
	I could not cotton up with it
Anonymity (2x)	Confusing to slip into another role
Project could also be done with pupils	Better cases
It helped to get more empathy	Unclear aims
Could learn a lot about teaching	Not very successful
Clear assignments	Experience was senseless
Successful change	Could not understand the meaning

Figure 1: Reports from Austrian students

One of the main reasons for creating the project was that we wanted to reinforce in our students the understanding that people think differently about educational issues and that their perspectives are shaped by their backgrounds. Looking at the students' responses, we believe that the project supported the students in understanding this issue. For both the Austrian and American participants, it was interesting to see what their counterparts thought about education and how they deal with such issues in their schools. As one American participant wrote: "I like the fact that we got to participate in the Austrian blog and see their perspective. I think it is very helpful for future teachers because we get to see how others entering the teaching profession think" (Ava, teacher). Eight other American students wrote similar responses. The Austrian students also appreciated hearing from their colleagues abroad. As one student (19) said: "Reading the other students blogs was so interesting, because they were so diverse. ... It gave the students the opportunity to think outside the box." And another student replied: "The project was a new experience and I found it exciting doing it with students from New York. … In a way the project was helpful for my career entry, because there will be a lot of colleagues, who have different opinions …" (24). Both sides clearly valued having the opportunity to learn form each other and see what their international colleagues think about various educational issues.

As mentioned before, students often ask their instructors for recipes or "right" answers of how to respond in certain situations. With the avatar project our goal was to help them to understand that such easy answers cannot always be found. The exchanges between participants helped them to understand that there are different ways of solving problems and that each way can be successful. "It was exciting to read various solutions for different kinds of problems" (20). The majority of the American students thought that the Austrians are thinking differently about educational issues: "Some things that may happen in American schools may be opposite of what may happen in Australian (sic!) schools so it was interesting reading their views on topics" (Richard Webber, principal). However, not all agreed on this assessment. Two students actually thought that the thinking was very similar. "It was really good to have that kind of collaboration. It was good to know that all teachers regardless of what country you live in do think the same" (Carlos, assistant teacher). Even if the opinions differ, it seems that this project helped students understand that educational issues are context-related.

4.2   Ideas for Improvement

Both the American and especially the Austrian students mentioned possible areas of improvement. One student wished for deeper and more meaningful discussions: "I wish we could interact more with our Austrian counterparts and each other. The dialogue seemed to cease once you posted a reply" (Sanaa, parent). This is a common problem of online discussions and online learning in general. While some students are interested in a real discussion, others only participate as required. Thus, after writing their initial post and the two required replies, they stop participating in the discussion. We also felt that this was a problem in our collaboration. While we reminded our students after the first case of the importance of a real and meaningful conversation, some of the contributions continued to be lacking in depth.

Another student mentioned that it would be better to have only one joint blog. During the project, we felt that technical problems were a huge challenge for many of the students and that navigating on both blogs was difficult and led to confusion. At the Teacher University College, students have to deal with many different kinds of internet platforms and it is very time consuming for them to look at all the platforms in order to be up to date. As one student said: "Maybe the task would have become funny, but the required electronic investment was in no relation" (15). It was not very motivating for them to create an additional anonymous e-mail account and to use another platform, which caused a lot of technical problems: "It was very laborious to create an anonymous account and sometimes the access was denied" (12). It was also challenging that some settings in the Austrian blog appeared in German, making it more difficult for the American students to navigate and participate. We both felt that the technological difficulties are an aspect that needs to be considered carefully in a future collaboration. Different options could be offered, such as allowing students to either create anonymous e-mail accounts, or use existing ones.

Nine Austrian students felt that the cases should be discussed in the seminar and two recommended that results of these discussions should be reported to the American students and vice versa. Further, two students thought that different cases would be more meaningful and that it would be helpful to divide the roles in the seminar and discuss them there. One student explained that she would have liked the lecturer to evaluate each case in order to tell how many of the students had good suggestions for solving the problems and how many only said something in order to get good marks. A way to solve this problem would be more instructor involvement, as done in the other American cases.

In addition, the Austrian students saw it as problematic that the American students were educated to become early childhood teachers. "The fact, that the American colleagues came from the pedagogy of kindergarten teachers made the communication more difficult and senseless" (11). They did not see the advantage of having a discussion with teachers from a different educational field and that such perspectives could enrich their own thinking. For this reason they were asking for "better" cases. It will be of importance to exchange more information about the background of the students and the educational systems of both countries before the project starts next time to avoid obstacles and students' resistance.

Another challenge was that the Austrian and American students worked on a different time schedule. Most Austrian students wrote their entries during the week, but many American students waited until the end of the week and published their posts on the weekend. This was probably due to the fact that the American course was an online course and that most of the participants are working fulltime during the week. However, it impacted the flow of the discussion. As one student said: "I found it a pity, that our American Blogger posted their inputs very late" (6).

Altogether, we felt that the collaboration was sometimes overwhelming for the students. It was indeed very confusing to read 32 comments from Austria and 18 from America. "I did not take the time to read many comments of other students" (11), one student replied honestly. An alternative would be to create smaller groups, so that it can be possible to get into deeper discussions with each other. For example three students from each country could build a group and discuss the case. Then each group reports the results to the whole group and so another discussion can get started.

5   Conclusion

Teacher education programs need to help their students to understand the complexity of teaching and being a teacher. To do so, instructors need to go beyond traditional higher education teaching methods and implement innovative teaching methods that engage students in meaningful ways. We believe that the avatar project and our international collaboration is a promising approach in achieving this goal. For us as well as our students, it was a very interesting project that helped better prepare our students for their future role as teachers. The majority of our students not only enjoyed the project – something that cannot be said about all assignments – but could also see the importance of an international exchange and learning to think about educational issues from the perspectives of others. Students felt that their participation in the project helped prepare them for the reality of the classroom. The avatar seems to be a promising way of creating a more realistic and meaningful context that allows students to experience what it means to be a teacher. It helps students to understand that educational situations can be ambiguous, that the role matters and that easy solutions and answers often do not exist.

We feel certain that such approaches and projects can be important parts of teacher education. While further development is necessary, innovative teaching methods such as our avatar project can help to prepare future teachers in more realistic and comprehensive ways.

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