

Digital Games in Schools: A Qualitative Study on Teacher's Beliefs

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Abstract: Games are omnipresent for children and young people. In primary and secondary schools in Switzerland, however, games still eke out a niche existence. Topics such as Game Design, Serious Games, or the Game Culture in general offer enormous potential for teaching, and there are many ways for pupils to experience the world of games together. However, specific training programs for teachers are necessary. For many teachers, these topics are less tangible than they are for children. To develop a new curriculum for in-service teachers, this paper addresses the prerequisites for a transversal games-curriculum for primary and secondary schools in Switzerland. In this endeavour, first, links between games and the Swiss Curriculum 21 are presented. Second, recent literature on games in the school context is reviewed, and finally, interviews with teachers on their beliefs and ideas about digital games are analysed. The results show that although teachers often have a limited idea of games in the classroom, they consider the topic relevant and sometimes already use game-based approaches.

Keywords: digital games, teacher beliefs, curriculum development, game-based learning

1. Introduction

With the introduction of the new "Curriculum 21" in German-speaking Switzerland, digital media and informatics have become increasingly important. Additionally, the ZHAW James Study from 2020 (Süss et al., n.d.) states that 34% of young people in Switzerland play video games several times a week. Considering this, there is a reason to use digital games as an anchor in school. The question arises, however, whether digital games have found their way into Swiss classrooms and how teachers assess their use. This topic has hardly been researched in Switzerland, which is why a first approach to the topic via the teachers' beliefs seems appropriate to narrow down this research gap. Therefore, interviews were conducted with five teachers from primary to secondary education about their beliefs on the topic of "digital games." In addition, four concepts were selected in this paper and discussed in the interview to which references can also be made to the Swiss Curriculum 21: Serious Games, Game Design, Gamification and Game Culture.

2. Literature Review

2.1 Digital Game Concepts

2.1.1 Gamification & Serious Games

The concept of Gamification is described by Marczewski (2013). In the term's beginning, it was used in business administration and marketing, thus having no inherent connection to schools. In this context, the author provides the example of loyalty points, which can be earned when shopping in a supermarket. Werbach and Hunter (2012, p. 26) define Gamification as follows: "*the use of game elements and game-design techniques in non-game contexts*".

Although Gamification and Serious Games are related, they differ significantly in content. While Gamification puts elements from games into a different context, Serious Games are entire games. However, these games aim not only to entertain but to get the player excited about a particular learning topic (Stieglitz 2015). Serious Games are more about simulation and learning specific subject matter, while Gamification gamifies elements of a process to increase user motivation (Stieglitz 2015, 2-4).

2.1.2 Game Design

Game Design is often used as a term to describe the process of game production. While professional game development is about creating an optimised, holistic product on a large scale (Wiemker, 2021), the requirements for creating digital games in primary and secondary school can and must be scaled down. In his book "The Art of

Game Design," Jesse Schnell (2020) reasons that small games consist of 4 basic elements: Mechanics, Story, Aesthetics, and Technology. Schreiber and Braithwaite (2008) further narrow down the development of a game to two competencies: The development of *rules of a game* and the *content of a game*. Game Design can encompass various disciplines, such as developing the game idea and story, programming the game, creating visuals and sounds, and setting the rules that define a game.

With an increasing number of freely accessible learning platforms designed for use in schools, youths can develop and publish complex games themselves. It is hard to deny that game development in a school context is motivating and skill-building. This conclusion was reached by Quian and Clark (2016), who examined 137 articles on the use of digital games in the classroom in a meta-study. The best result was achieved by the game Design approach, with 13 results having a high impact on the promotion of "21st Century Skills."

2.1.3 Game Culture

Game Culture is a broad term that encompasses everything in the field of games beyond playing and developing games. For instance, the media-psychological effects of games on young people, trends, and new developments that influence us as a society play an important role.

Media-psychological effects have been discussed within school contexts for some time. For example, the meaning and effect of violence in games. Likewise, the excessive consumption and addictive behaviour of young people. The effect of advertising in computer games can also have a negative influence on young people (Fileccia et al., 2010). In addition to these often-mentioned dangers, games also provide a basis for discussion and research that can be taken up in class. For example, game preferences, genres, and the economic and socio-cultural significance of popular games. Efforts to systematically bring these topics into schools can be found, for example, in the project "Game Culture in Schools" by Buser (n.d.). Here, various phenomena are dealt with in the elective subject "Game Zone" - from the history of games to "Let's Plays", to localised game production in one's country.

Furthermore, the reflection of the young people's actions and the interaction of children with games play an important role. Here, studies such as the JAMES study of 2020 (Süss et al.) repeatedly show that video games play an important role in the everyday lives of young people. Around three-quarters of young people in Switzerland who play games spend an average of one hour on weekdays and two hours at weekends playing video games. It should be noted that game use decreases with age (from 85% among 12-year-olds to 58% among 19-year-olds), and gender plays an important role (56% of girls and 93% of boys play), while other factors such as socioeconomic status, origin, and type of school have little influence.

2.2 The Swiss "Curriculum 21"

The analysis of the Swiss "Curriculum 21" (<https://v-fe.lehrplan.ch/>) for primary and lower secondary education shows that numerous competencies of the curriculum can be linked to game concepts. For the paper, only competency levels in the "Media and Informatics (MI)" domain were considered. Teacher training for these competencies has only existed since 2017, and the content specification is not yet complete. Therefore, games can play an important role in topics related to MI rather than to all disciplines of STEM (Science Technology, Engineering, and Mathematics). Furthermore, MI topics are implemented differently in the Swiss cantons, either as a separate subject or integrated into other subjects. In the following we provide cross-references to the different game concepts from the previous section and the main competences from the Curriculum 21.

Important examples of a reference to "serious games / gamification" in the curriculum are the following (translated into English by the authors of the paper):

Pupils...

- ...can learn and obtain information on a specific topic using given media (e.g., book, magazine, educational game, game story, website). (MI.1.2c)
- ... can use media selectively for cooperative learning. (MI.1.4d)

The entire competency area 2 "Algorithms" is suitable for embedding "Game Design" topics, since various programming concepts are described. These include sequences, loops, conditional statements, variables, and subroutines. Furthermore, the following competency levels are especially emphasised:

Pupils...

- ... can use media to create and present their work (e.g., class newspaper, class blog, radio play, video clip). (MI.1.3c)
- ... can produce media contributions with their own and other people's content, taking into account the legal framework, safety, and behavioural rules. (MI.1.3g)

A remarkable number of competency levels belong to the area of "Game Culture." Two of these are:

Pupils...

- ... can name advantages and disadvantages of direct experiences, experiences conveyed through media or virtually, and justify personal media use. (MI.1.1b)
- ... can distinguish rules and value systems of different lifeworlds, reflect on them and act accordingly (e.g., netiquette, values in virtual worlds).

2.3 Teacher Beliefs

Kirchner (2016) defines teacher beliefs as subjective, relatively stable, although experience-based changeable, partly unconscious, context-dependent cognitions of teachers. Pajares (1992, p. 324) argues that teacher conceptions are not formed during the first or second phase of teacher education; they are already formed during one's own school years, sometimes even before, and are undergoing constant change. This «apprenticeship of observation» was already described by Lortie 1975, p. 65. Pupils thus develop ideas about teaching/learning processes, subjects, etc. by observing teachers. If these students later decide to become teachers, their perceptions of teachers will also be shaped by teachers. Studies point to a direct empirical correlation between the selected advanced courses during school and the later choice of studies or profession (Kleinn et al. 2013). This also applies to future teachers. Their choice of subject often depends on their favorite subject. Computer science is not or cannot always be chosen here due to the lack of opportunities at schools. In addition, computer science is generally afflicted by many prejudices (Spieler et al. 2020). Interests, motives, and convictions play a major role in this decision.

Furthermore, various research studies have assessed teacher beliefs in relation to games (see: Allsop, Yildirim, Screpanti, 2013; Hsu et al., 2017; Cabellos, Sanchez, Pozo, 2021; Alberola-Mulet, Iglesias-Martínez, LozanoCabezas, 2021, Belda-Medina and Calvo-Ferrer, 2022). It is evident from these contributions that teachers are open to the use of games in school or find them useful. However, lack of training opportunities (Allsop, Yildirim, Screpanti, 2013), lack of resources (Cabellos, Sanchez, Pozo, 2021), or inflexible curriculum hinder the implementation of gaming practices in schools (Alberola-Mulet, Iglesias-Martínez, Lozano-Cabezas, 2021). In the discussion, similarities with these studies will be provided and complement with new insights from our work.

3. Method

3.1 Qualitative guided interviews

The interviews are structured with the help of a guideline (Helfferich 2011, S. 180) focused on four areas: 1) associations to "digital games" and personal attitudes, 2) experiences using Games in class, 3) children's use of games, and 4) technical terms. The following lead and control questions were subsequently defined, see Table 1.

The assumptions about teacher beliefs (see Section 2.4) helped to shape the first lead question that related to their own experiences with games in general (in school, childhood, their attitudes towards games). The second question was intended to establish the school connection to digital games, while the idea of the third and fourth questions was to open a broader picture of digital games in schools and to point out potentials or even necessities to consider games in class. Furthermore, the questions were designed so that the term "digital game" remained open initially, then further specified. This allowed respondents to come up with surprising answers (Helfferich 2011, p. 182). The terminology around games could also be concretised during the interview, leading to a broader definition, and thus increasingly specific concepts were mentioned associated with games in a broader sense.

Table 1: The lead and control questions.

	Lead Questions	Control Questions
1.	What do you associate with digital games?	1. Do you remember the first time you interacted with digital games? 2. What is your personal attitude towards games? 3. Reason for this attitude?"
2.	What opportunities/benefits do you see for the use of games in the classroom?	1. Can you imagine using digital games in the classroom? <ul style="list-style-type: none"> • What games could these be? Why these games? • What are the characteristics of a game that can be used successfully in the classroom? • What social forms do you associate with games in the classroom? 2. How do you see the use of digital games in other subjects (others than MI)? 3. Can you think of any risks in using games in the classroom? Or disadvantages?
3.	Where do games occur in the daily lives of school children?	1. Can you name a concrete example? 2. Do games occur in the lives of all children at all? Is there a difference between boys and girls? 3. Are issues around games addressed properly in school?
4.	A slide was shown with the concepts described in 2.1.	1. What contents do you associate with these terms? 2. Are these concepts significant for the school? 3. Are there any important concepts missing?

3.2 Participants

Teachers were contacted directly by email and asked if they could participate in a short interview. Attention was paid to ensure to include teachers from different school levels, ages as well as female and male teachers to get a broad view. Knowledge regarding games in the classroom or certain expertise was not a prerequisite.

The interviews were conducted online with five teachers, see Table 2.

Table 2: Details of the teachers interviewed.

No.	Gender	Age	School type
1	female	46	Primary middle and lower school (Grade 3-6)
2	male	26	Primary middle school (Grade 5 to 6)
3	male	43	Secondary school (Grade 7-9)
4	female	57	Primary lower School (Grade 1 to 3)
5	male	32	Primary middle school (Grade 5 to 6)

3.3 Data Analysis

All online interviews were transcribed. Following Kuckartz (2018), we started the process of data analysis by applying "initial coding." This step highlighted important text passages in the transcript. Next, we used the technique of "focused coding" to identify the basis of these main categories, the subcategories. We then repeated these steps for each question.

4. Findings

4.1 Question 1: Associations to digital games & personal attitudes

The analysis showed that teachers associate positive and negative aspects with games (the main categories in bold). The **positive aspects** can be divided into three sub-categories (in italic): *Usefulness of games in class*: Classroom experiences were an important association with games. In this context, teachers mentioned the possibility of practicing learning content, individualisation of lessons, adding a fun learning element, and innovation as something new for the children to do collaboratively. *Specific game elements*: Teacher 2 introduced the concept of "Gamification" or the link to some sort of Learning Management System (LMS) where

"students have to get started, take on a role, i.e., a character and have to complete a learning path or reach the next level and that motivates them a bit intrinsically." The competitive aspect was also mentioned because of the possibility of measuring oneself against other classmates, e.g., in levels or collecting gadgets. Teacher 5 uses the expression "reward system." For example, when someone finishes an exercise in class, they play a game on their tablet. This type of reward was also mentioned by another teacher, i.e., playing as a reward for something achieved or to keep busy at the semester's end (Teacher 4). The third category includes *games as leisure time* in association with fun and entertainment (Teacher 3, 5).

Negative mentions were also related to *games in school* associated with effort because the children need equipment and knowledge about the platform (Teacher 4). She mentioned at the beginning of the interview that she does not find games appropriate in class at all. *Games & Leisure time*: In leisure time, games are portrayed as "time wasters" and as an escape from reality (Teacher 5).

This interesting comment by Respondent 5 regarding stigmatisation and old-fashioned stereotypes in relation to games can be seen as **neutral**: *"For a long time, games had a negative connotation in the media because of school shootings and their connections to shooter games. Today it's different. It's no longer just the stereotype of the boring fat guy in his mid or early 30s sitting at home playing these games. Today it ranges from young to old, man and woman."*

The control questions asked about their **own attitudes towards games** and where or when they had first **contact with games**. The youngest respondent, Teacher 2, mentioned that games were a topic in his own school days. However, the non-cooperative nature of this experience was highlighted in this context. Two of the respondents (Teachers 2, 3) mentioned they were exposed to certain tools such as "Kahoot" or "Quizlet Life" during their teacher education. *Gaming attitude*: Teachers 2 and 5 expressed a positive attitude, while others expressed themselves very negatively towards games. Teacher 2 played a lot as a teenager and even compares games to a "form of art," although he rarely plays games today. Teacher 5 tried different consoles in his childhood (e.g., Game Boy, PlayStation) but describes the games children play today as "trash," although he understands student fascination with them. Teacher 1 says she is not a "game freak" and only plays games to relax. Teacher 3 also says that he does not play digital games. Moreover, he describes games as a waste of time. He understands the purpose of learning games but argues they lack importance. In addition, Teachers 3 and 4 mentioned their experiences with their own children. Negative experiences were reported by Teacher 4 (e.g., games have taken up too much of my children's time, a lot of time is spent indoors, lack of social contact) as well as positive ones by Teacher 3: *"I can rediscover this world of games through my son."*

4.2 Question 2: Experiences in using Games in Class

The second leading question started with **possibilities, even advantages, of games** in class. Answers can be divided into four subcategories: *to increase motivation*: Here, Teacher 2 mentioned that games motivate children, having them engage with something they otherwise would not bother with. The children are allowed to bring something of their private lives to school. Teacher 3 notices that there are more and more children playing games, and teachers can take advantage of that. *To enhance the learning effect*: Here, possibilities of self-directed or individualised learning were mentioned; that it also trains digital application skills, and that children who play are generally more competent with computers (Teacher 2) or that topics can be repeated in a playful way (Teacher 4). *New possibilities through games*: Games could have a balancing factor and create a common basis (Teacher 2). Games appeal to children on a different level (e.g., visually), and sometimes, children who are otherwise reserved can pass on their knowledge of games (Teacher 3). Teacher 1 refers to the fact that children also get immediate feedback on their learning. *Promoting social competencies*: Here, a social component was generally emphasised (Teacher 5), and when students play against each other, they also learn how to deal with frustration (Teacher 1).

At this point, Teacher 3, who was initially very negative about digital games, describes the enormous potential of games in general in the classroom: *"In my opinion, playing is a very natural human characteristic. As a child, we started playing, and then at some point, we were told we can't play anymore, we must learn now [...]. There is a lot of creativity in it. All games where you can create something, where you can build and design something, have a huge potential. Not in the sense that you passively do something, but that you drive the action or design the action yourself and then, of course, also must live with the consequences. And that has a very big learning effect."*

Regarding games or playful applications teachers already **used in the classroom**, some specific tools could be gathered: quiz apps like *Kahoot!* (kahoot.it) and *Quizlet* (quizlet.com) by Teachers 2, 3, 5; *Anton* (anton.app) with playful elements by Teachers 1, 3, 4, and *learning apps* (learningapps.org) by Teacher 5. Teacher 1 mentions the game *Conni* (conni.de/apps), which is very much geared towards girls. Teacher 3 mentions two *simulation games*: *PostFinance* and *PearUp*, to build your own start-up. Teacher 5 mentions the use of the *Unreal Engine* (unrealengine.com) for the purpose of Game Design and that his students are engaged by designing own characters and worlds.

For the question of what **requirements, a game** needs to be used in the classroom, the following subcategories could be identified: *Recommendation/certification from authority*: According to Teacher 2, there should be recommendations for appropriate, usable games. Currently, according to Teacher 1, one must try out whether a game fits or not, which can be time-consuming. *Thematic fit*: Teacher 3 said that the game must be thematically suited to the current subject matter and should also train transversal competencies. It must relate to the students' lives or the topic they are working on. Furthermore, it must be mature and add value to the lesson. Teacher 1 continues that there are learning programmes already installed on the school's iPads, but many are without educational purpose. *Simple/self-explanatory*: Teachers 4 and 5 urge that games must be simple and self-explanatory. It needs to be accessible for children to start quickly. Accompanying resources were additionally mentioned by Teacher 2. The game must not require too much time, money, and hardware/tools to be usable (Teacher 5). *Appealing design*: According to Teacher 3, the game must be sustainable, appealing, and not have any bugs.

Regarding the **social form of games**, the teachers agreed that this should mostly be done collaboratively at school but could be accomplished individually. Also, competitive games are allowed.

Regarding the **risks or disadvantages of games in the classroom**, the following subcategories can be defined: *Purpose*: Teacher 2 describes that many learning games require a certain amount of prior knowledge to be successful. Consequently, if children are bad at a subject, Gamification elements will not help them or can even be demotivating. Teacher 5 notes that it is often difficult to see the learning outcome and that games can be manipulated by children. Teacher 1 argues similarly ("too confusing") and that there are too many ineffective games. *Addiction/isolation* (also related to parental acceptance): Teacher 2 sees addiction as an important topic but associates this more with media in general. Teacher 3 points to the high addiction potential of children who usually do not play games at home. Teachers 3 and 5 have already been confronted by concerned parents in this context. Teacher 1 describes that she often perceives isolation through games. The children talk less to each other and interact less (games in a form of a "silencer"). *Effort*: In addition to resources, time, and costs (Teachers 2, 4, 5), a certain amount of control was also mentioned so that children do not lose themselves in games (Teacher 1). *Data protection*: Teacher 2 sees the risk of children's personal data being used, especially when the programs originate from non-governmental organisations.

4.3 Question 3: Games as part of the children's everyday life

Teachers 1, 2, 3, and 5 agree that **games play an important role for children**. The subcategory identifies where games are a topic: *At home*: Teacher 1 reports that children play many games, but she knows little about how their parents regulate this. With others, she feels that playing is not an issue at all. Teacher 4 describes those children in lower grades play less (most of them do not have their own mobile phones yet). Teachers 2 and 5 report that they notice children schedule to play together at home. *School breaks*: According to Teacher 1, many children have trouble detaching themselves from the iPad when switching between that and analog exercises. Between breaks or when changing lessons, many children start playing on the iPad. Teacher 3 reports a similar situation "Every 5-minute break is used for surfing or playing games online. In some classes, this is very characteristic. When I ask everyone to stop playing at the beginning of the lesson, they get very frustrated, and the lesson starts negatively". Teacher 5 reports that he often must interrupt conversations about games post-break. This happens mainly in the morning when they have played together the day before or in the afternoon when they plan to play together again. Teacher 2 also reports he heard the following statements: "Yesterday you stayed online late," "You play a lot" (both with positive and negative connotations), but also "You are addicted" (as an accusation).

One specific question regarded the **difference between girls and boys** in playing games. Teacher 2 mentions that, in his opinion, more girls play games on tablets or mobile phones. Teacher 3 raises that for girls, it is more about social media apps like *TikTok* or *Instagram*. Teacher 4 states that although girls talk less about games at

school, they play equally at home. This is also mentioned by Teacher 5, who adds that many girls also have their own game consoles at home.

With our future goal being the development of a new games' curriculum, it was particularly interesting to find out whether teachers think **games should be a topic in school**. Teachers were divided in opinion here. Teacher 1 reports a social worker at their school who discusses the topic already with the children. Teachers 2, 3, and 4 believed the school should treat the topic of "games" more effectively. According to Teacher 2, the topic of "addiction" is addressed too quickly (e.g., by the school's remedial teacher) and not differentiated enough. He himself tries to address games in school and wants pupils to ask him about games. Teacher 3 thinks it is often attributed to the children, assuming they know about smartphones and games. However, in his opinion, they know little about the dangers (e.g., hidden agendas of the game industry, advertising issues). Teacher 4 thinks that the topic also belongs in school, but it is mainly the parents who should educate the children about games. Teacher 5 also sees both the school and the parents as responsible.

4.4 Question 4: Knowledge of game concepts

In general, most of the terms shown were unknown to the teachers. Concerning **Game Culture**, Teachers 2 and 3 picked up on issues from the previous discussion points, such as games as part of identity, anonymity in games, and addressing stereotypical beliefs.

Game Design was explained by Teachers 1, 4, and 5 from the perspective of game development companies (and their hidden agendas). Teacher 2 mentioned the development environment *Scratch* and considerations about game ideas to find out how games are designed. Teacher 3 reported successfully prototyping his app development course.

Game-based Learning has been interpreted by Teacher 2 and 5 as a universal concept.

Gamification is noted as something digital by Teachers 4 and 5. Teacher 3 describes it as the motivation that keeps students online, like embellishing their avatar when they have done certain things. Teacher 2 describes Gamification as making a game out of something that is not a game initially.

For **Serious Games**, Teacher 2 gives the example of simulation games. Teacher 5 says that it is a kind of "organic label" for games.

5. Discussion

The constructive nature of the questions (see Section 3.1) led to the result that teachers initially had a limited idea of digital games and may not even see them in the context of school (e.g., Teacher 3, 5). However, they recognise the importance of games in children's lives and thus the role of school in addressing these issues. Very often it was mentioned in this context that the game must serve a purpose for the school, and at the same time, the effort for introducing the game in class should be kept very low. These technical and pedagogical efforts were also reported in the findings of Belda-Medina and Calvo-Ferrer (2022).

Moreover, some of the presented findings can also be replicated in other studies: For example, the evaluation shows that teachers who played digital games in their childhood also have a more positive attitude towards games today and greater knowledge in the field. This was also reported by Cabbellos, Sanchez, and Pozo (2021). Knowledge about games can lead to a better evaluation of potential learning aspects that are not recognised by teachers who use fewer games. The more teachers play games, the more positive their assessments are. This is also shown in the studies by Sánchez-Mena et al. (2017, 2019). Similar studies showed the same trend for the intention to use (Bourgonjon et al., 2013; de Grove et al., 2012). This could be partially adapted for our study. Belda-Medina and Calvo-Ferrer (2022) were also able to show that a huge number of games are generally used by teachers regardless of aptitude. According to the teachers, the low effort and thematic components are particularly important for using games in the classroom. A new implication of this study is the influence of one's own children: Teacher 4 was, in her opinion, strongly negatively influenced by her children who play a lot, while teacher 3 sees the possibility of games being viewed more positively by his son. Furthermore, we see teachers' observations of how children talk about games at break time, how they engage in play or how much games should be a topic at school are also new insights. Even when specific subjects or teachers in schools are designated for the topic of media, teachers often report feeling that the topic is not sufficiently addressed.

At the same time, some new aspects were raised in our interviews that have not been reported before. For example, teachers are aware that games are not only played by a certain group of people (see stereotypes) but are everywhere, and even if they do not see games as beneficial for their teaching, they are an omnipresent topic anyway, for example during breaks or in pupils' leisure time. As an additional comment, Teacher 2 noted that girls should be introduced to games more and games should become normal. Interestingly, all teachers reported that girls and boys spent the same time playing games, but girls did not talk about games as much at school. This is consistent with previous studies by the author where girls did not see themselves as "gamers" (Spieler et al., 2020). Further research is needed to explore the pre-existing construct of games and how they might act as an encouraging factor or a barrier when the teacher mentions a "learning game". Another conclusion from this study is the influence of one's own children, which could also have an impact on teacher beliefs: Teacher 4 was, in her opinion, strongly negatively influenced by her children who play a lot, while Teacher 3 sees the possibility of games being viewed more positively by his son. Furthermore, teachers' observations of how children talk about games at break time and insights on if at all games should be a topic at school are new insights. Even if specific units or teachers are designated to MI, teachers report that the topic is certainly not sufficiently covered now, indicating the potential for future training.

6. Conclusion & Outlook

In this study, the beliefs of five teachers regarding digital games were analysed and compared with existing studies. From the interviews, it emerges that teachers need to be addressed on different levels. On the one hand, prejudices must be reduced in advance (e.g., with the involvement of parents, definitions of concepts, and general benefits), best practice examples and use cases must be highlighted (when do games make sense at all), and games must be perceived as a very comprehensive topic and as an opportunity to be used for all teachers. If questions of data protection, usefulness, and possibilities, or even necessities are clarified in advance, it can become an exciting teacher training for all teachers and not only for those who have already had positive experiences with games.

Based on these initial results, we will investigate the current appearance of games in teacher education at Swiss universities. Based on these surveys and further evaluations, a new curriculum for digital games in teacher education will be developed to be used in MI or interdisciplinary.

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