Swedish Teachers’ and Student Teachers’ Opinions About the Use of Videogames in Teaching

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About the study

Purpose

The purpose of this pilot study is to investigate if teachers and student teachers see any value in and have any experience of using videogames in teaching. The aim is to learn what pedagogical benefits, pedagogical challenges and technical challenges the respondents could identify if they would use videogames in their teaching. We also want to learn about how they believe videogames can affect youth health and social context as we believe this may be an issue under consideration when school teachers or teachers consider bringing in videogames in school.

Method

The study is based on two similar online surveys. The teacher survey was directed to teachers working in Umeå school and advertised through a common learning environment. The student survey was directed to student teachers at the local University and advertised through a learning environment. In total, 24 teachers and 95 student teachers responded to the surveys.

Results

Teacher and student teacher background

In both groups 2/3 are female and 6/7 of all respondents own a videogame console. 4/5 of all groups are respondents below 30 years of age, with exception of preschool (0-6 years) teachers, all school levels are represented. A majority of the respondents teach or plan to teach ages between 16-18. Regarding game habits, 5/6 of both teachers and student teachers play games 1-3 times per week and a majority of the groups spend a maximum of three hours gaming per week. A noticeable difference is that no teachers are represented amongst the highest frequency players (more than 12 hours/week). It also appears as if both groups are familiar with various gaming contexts.

Opinions on games in teaching

The study shows that a significant part of both teachers and student teachers have no experience of videogames in school. One of the pedagogical challenges for teachers and school leadership is to gain knowledge about how videogames can support and improve learning activities. A few of the respondents express concerns whether colleagues or school leaders would be willing to welcome and accept videogames as a natural part of the work in school.

When asked about what kind of characteristics a game should have in order to be of value in their teaching, curriculum relevant game content, challenging tasks and educational designs were listed as important. A group before entertaining game play is an important characteristic for school use.

Arguments listed as reasons for not using games in teaching are schools’ lack of equipment and that it is difficult and time consuming to prepare games for the subject. Additional factors mentioned by the student teachers are the lack of personal experience and competence regarding teaching with games and that some cannot see the purpose of using games in their subjects.

One of the arguments for using games in teaching is the increased possibility to alter the teaching methods and by this perhaps improve the individual learning situation. This is believed to make the learning more motivating and inspiring. Many respondents find it appealing to include pupils’ personal interests in their teaching and since pupils enjoy playing games some believe that games in schools are here to stay.

Opinions on health and social context

More than 1/3 of the respondents in each group believe videogames have negative effects on physical and mental health. When asked about how videogames affect youth’s social skills the respondents express some concerns, but 1/4 of each group believes that youth social contact or skills can be developed by playing videogames. 1/3 of the respondents are neutral or unable to decide whether the effects are positive or not.

Videogames are believed to help develop communicative competence, expand social networks and strengthen group identity. Lack of physical exercise and time spent outdoors are addressed as the main negative effects, but also the possible negative impact from non-age appropriate and violent games are mentioned.

Conclusion

A majority of the surveyed respondents have no personal experience of and limited knowledge about game-based learning, student teachers being the less experienced group. This indicates that there may be no apparent change in teacher experience regarding game-based learning when today’s student teachers begin their careers. Add the schools limited technical resources and a strained financial situation, using videogames in teaching suddenly becomes a rather large leap to bridge for the common teacher. Doubts regarding using games in school could also come from teachers personal beliefs regarding how videogames affect health.

When surveyed about preferred games, most respondents mention pedagogical games and only a few have knowledge about how commercial games can be used in teaching.

Opinions on health and social context

Positive effects

- Successful problem solving leads to improved self-esteem
- Fostering an interest in science
- Games strengthen group identity
- Games that require physical activity help improve health

Negative effects

- Risk of becoming isolated when playing single-player games, not developing social skills
- Video games have neither positive nor negative effect on health

Opinions on games in teaching

Personal experience

- Yes
- No
- Unsure

Will you use games?

- Yes
- No
- Unsure

Desired characteristics

- Curriculum connection
- Challenging
- Discover or develop
- Educational
- Extracurricular
- Other

Technical challenges

- Access to adequate hardware
- Keeping systems running
- Stop ignoring needs with development
- Finance hardware/software

Pedagogical challenges

- Predistributing games is an easy way to improve pedagogue mental games
- Evaluation of learning outcomes
- Knowing how and when to use games
- Get children to understand purpose of playing
- Focus on learning & contact with children
- Find support in curriculum
- Convince colleagues/leadership
- Keep concentration on the task at hand
- Games don’t add any value in school

Opinions on health and social context

Physical & mental health

- Strongly positive
- Positive
- Neutral
- Negative
- Strongly negative

Social context

- Strongly positive
- Positive
- Neutral
- Negative
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