ციფრული შეფასების ხელსაწყოები
PLICKERS/SOCRATIVE/NEARPOD/SEESAW

დიანა ბომგვერაძე
სსიპ გენერალ გიორგი კვინიტაძის სახელობის კადეტთა
სამხედრო ლიცეუმში

თათია მარდალეიშვილი
სსიპ გენერალ გიორგი კვინიტაძის სახელობის კადეტთა
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აბსტრაქტი

მსოფლიო პანდემიამ კარდინალურად შეცვალა სწავლებისა და ინტერაქციის დამყარების გზები. ონლაინ სწავლების ფორმა გახდა ერთ-ერთი საკვანძო მეთოდი განათლების მიღებისა. მრავალი მიზეზი არსებობს იმისათვის, რომ პედაგოგებმა ონლაინ ტექნოლოგიები გამოიყენონ სწავლებისა და შეფასების დროს: დროის დაზოგვა, სწრაფი უკუკავშირის მიცემა, მრავალფეროვანი რესურსების გამოყენება, მოსწავლეებთან სწრაფი კონტაქტის დამყარება და სხვა.

ციფრული რესურსები მოსწავლეთა და მასწავლებელთა საქმიანობას უფრო მრავალფეროვანსა, პროდუქტიულსა და ხდის. პედაგოგისათვის იოლდება მოსწავლეთა მიღწევების დანახვა და შეფასება, რესურსების მრავალფეროვნება გაკვეთილს უფრო სახალისოსა და საინტერესოს ხდის და ასევე მარტივდება შეფასების მონიტორინგისა და უკუკავშირის დამყარების გზები.

შეფასების რგოლი ერთ-ერთი უმნიშვნელოვანესია სწავლა-სწავლების პროცესში. ვიცით რა, რომ შეფასება არსებობს განმასაზღვრელი და განმავითარებელი- ციფრული ინსტრუმენტების გამოყენებით შესაძლებელია პედაგოგმა შეფასების უკუკავშირი მოსწავლეს მცისიერად მიაწოდოს არა მხოლოდ გარკვეული სასწავლო თემის დასრულებისას, არამედ გაკვეთილის დასაწყისში, მიმდინარეობისას და მის ბოლოს.

შეფასების მრავალრიცხოვან ციფრულ ინსტრუმენტთაგან კვლევის პროცესში გამოირჩა შემდეგი მათგანი: Seesaw.com, Plickers.com, Socrative.com და Nearpod.com.

კვლევის ავტორები მოხარულნი ვიქნებით, თუ შეფასების ზემოხსენებულ ინსტრუმენტებს კოლეგა პროფესორ-მასწავლებლები გამოიყენებენ სწავლებისა და შეფასების დინამიურ პროცესში და დანერგავენ მათ საკუთარ პრაქტიკაში.

საკვანძო სიტყვები: ციფრული ინსტრუმენტები, განმასაზღვრელი შეფასება, განმავითარებელი შეფასება, ვებ 2.0 ინსტრუმენტები

Digital Assessment Tools
Plickers/ Socrative/ Nearpod/ Seesaw

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Abstract

Worldwide pandemic has completely changed the way we teach and interact with our students. Online educational technologies have gained speed. There are lots of reasons to use educational technologies for student assessments, such as saving time, making the learning process more comprehensive and friendly, offering fast feedback, etc.

Digital assessment tools ease the lives of both teachers and learners: due to modern technologies, students can get answers to their questions without needing to interrupt each other. All their activity can be tracked by a teacher on the spot. Finally, digital testing is fun for students, which creates a better learning environment: working with an interested audience makes teaching easier and more desirable for learners. The assessment does not just happen after an online course or module or unit. It can (and should) happen before the learning, during the learning, and after the learning. Assessment has a triple function—it is diagnostic, formative, and summative—that help us assess where students are before, during, and after the learning. Formative assessment refers to a wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course. Summative assessment is an evaluation of student learning at the end of an instructional unit by comparing it against some standard or benchmark. Assessments should really be about measuring learning outcomes. And learning outcomes should be about students demonstrating what they know, and more importantly, what they can do (their skills). Learning outcomes can be low-level (recalling information) or high-level (analyzing information). There are numerous tools of conducting digital assessment, but we are going to present just a few, namely: Seesaw.com, Plickers.com, Socrative.com, and Nearpod.com. Teachers will find them useful, as these tools will help them track their students' progress and provide them with more objective feedback and grades.

Keywords: digital tools, formative assessment, summative assessment, web 2.0 tools

Introduction

Assessment is universally recognised as one of the most important – and powerful – elements of an educational experience. It is also seen as one of the hardest to reform. However, there is an increasingly demonstrated need for assessment reform, particularly, if it is to keep up with other theoretical, cultural and technological developments affecting teaching and learning. Current assessment methods, especially the heavy emphasis and priority afforded to high-stakes summative assessment, are often described as outdated, ineffective and at worst damaging. The idea that digital technologies can help transform education and specifically assessment is not a new one. New technologies and tools have long been seen to open up new possibilities due to their potentially beneficial characteristics or affordances, such as offering more personalised, instantaneous or engaging assessment experiences. In many cases this potential has been realised and demonstrated benefits. However, the literature suggests that the use of digital technologies has yet to be 'transformative' and is often used via traditional assessment methods or within pockets of innovation that are not widespread. Thus, there remains a need to better understand how technologies can support or spur educational changes and what affordances are most useful to support the outcomes educators envisage within the current educational context. This acknowledgement of the potential digital technologies offer should also not be naïve about the complexity of the task and the myriad of influences and factors affecting successful educational change. Nor should it shy away from the significant ethical questions raised by the use of digital technologies in assessment, such as the collection, use and protection of large personal data sets, as well as how use of these tools support or unsettle inequalities within education. Thus, the question becomes how to mobilize a new vision for assessment that includes the use and development of technology, reflects an understanding of effective feedback, offers considered and equitable assessment and supports the dispositions, knowledge and literacies that are necessary to help students flourish.

Digital assessment tools ease the lives of both teachers and learners: due to modern technologies students can get answers to their questions without the need to interrupt each other. All their activity can be tracked by the teacher on the spot. Finally, digital testing is fun for students, which creates a better learning environment: Working with an interested audience makes teaching easier and more desirable for learners.

The assessment doesn't just happen after an online module or unit. It can (and should) happen before the learning, during the learning, and after the learning. I like to say that assessment has a triple function-it is diagnostic, formative, and summative-that help us assess where students are before, during, and after the learning.

Formative Assessment: refers to a wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course.

Assessments should really be about measuring learning outcomes. And learning outcomes should be about students demonstrating what they know, and more importantly, what they can do (skills). Learning outcomes can be low-level (recalling information) or high-level (analyzing information).

There are numerous tools of conducting digital assessment, but we are going to present just a few, namely: Socrative, Plickers, Nearpod and Seesaw.

Using Digital Assessment has both advantages and disadvantages. Let's begin with advantages:
- Immediate return of test results.
- Immediate feedback.
- Students can complete their assessments anytime and anywhere.
- Increases students' engagement.
- Accommodates students with disabilities

On the other hand using digital assessment has some disadvantages too;
- If a system is not in place at school, it can cost to set up.
- A level of digital literacy is needed.
- It can be difficult to spot of students are not using extra help when doing a digital assessment.
- Internet access at home or at school can impede students from using digital assessment.

Despite these disadvantages, we use digital assessment at school for the following reasons: Digital assessment is the presentation of students' evidence and achievements through the use of information and communication technologies.

Literature review

Assessment sits at the heart of the learning process, as it provides observable evidence of learning, determines student progress and demonstrates understanding of the curriculum. More broadly, it could be said that an institution, culture, or society depicts its conceptualization of learning and ideal future citizens by how it creates and uses assessment. Recently, many scholars in the field have been warning that current assessment practices have forgotten their core purpose: to support learning. Rather, assessment is often seen to be preoccupied with qualifications and narrow achievements, and critiques of current assessment systems abound, from both scholars and dissatisfied students (Schwartz and Arena, 2009; Attwood and Radnofsky, 2007). These critiques have propelled an imperative for reform, which is backed by a growing understanding of what constitutes effective feedback and how to track and measure learning. A number of developments in learning sciences have contributed to a deeper understanding of the relationship between feedback processes and effective learning (Whitelock and Watt, 2008; JISC, 2010). Such developments have particularly acknowledged the importance of learner self-regulation and peer-assessment in deeper engagement and effective learning (Sadler, 2010). Another emphasis on developing and assessing characteristics and dispositions of learners that augment more traditional areas of the curriculum – often classed as '21st Century skills' – has also become a familiar mantra within the field. This focus acknowledges the digital and participatory worlds that children and young people increasingly need to negotiate (Jenkins et al, 2006). However, this view is often clouded by a naiveté about young people's natural competence and agency within these worlds, through notions like the much critiqued concept of the 'digital native' (Facer, 2012). Additionally, it is generally poorly understood how to translate these ideas into practice, and they often play out in the classroom through methods that replicate existing and traditional assessment practices rather than embracing or supporting new digital practices that give learners opportunities to flourish and have more say in their education (Claxton, 2007). These advances have been paralleled by a dramatic increase and interest in the use of digital technologies in society and for learning. As Pellegrino and Quellmalz (2010: 130) state, 'There is an interesting and powerful confluence among theory, research, technology, and practice, especially when it comes to the integration of curriculum, instruction, and assessment'. The increasing influence of digital worlds means that young people are seen to be taking on new participatory and collaborative roles in learning online and outside the classroom, and there is a growing interest in incorporating these roles and practices inside education. Combine this with an unswerving enthusiasm from many in politics and education about the transformative potential of 'e-learning' and it's unsurprising that the use of technology for purposes of assessment – commonly known as 'e-assessment' or more recently technology enhanced assessment (TEA) – is under pressure to help facilitate assessment reform.

With the potential to increase personalisation, self-regulation and peer involvement in learning, as well as offering the chance to elicit and evaluate complex skills and practices, digital tools may well provide a useful catalyst for a re-assessment of the assessment system itself.

3. Methodology

3.1. Methods

3.2. We have collected and used many tools for formative assessment over the years but in this document we would like to present our most favourites: Nearpod, Seesaw, Plickers and Socrative, that we have been using for a while now and have been observing the ease of use, positive user experience and real value over gimmicky tools that are created to make everything more difficult.

Immediate feedback is a vital part of the learning process. Socrative gives you just that for the classroom or office – an efficient way to monitor and evaluate learning that saves time for educators while delivering fun and engaging interactions for learners.

Quickly assess student understanding with prepared activities or on-the-fly questions, then adjust your teaching based on the results. From quizzes to polls, create whatever type of activity suits your needs. Shuffle questions, run your activity anonymously, provide instant feedback…it's up to you!

Socrative quizzes are easy to create and download. Create your own and use them as many times as you need. Since they are graded automatically in real time, you'll spend less time grading assignments and more time catering to the needs of your group.

Socrative apps are available for download on all major digital devices and platforms. You can use Socrative on smartphones, tablets, laptops, and computers.

Great lessons begin and proceed with well-thought-out questions, and Plickers can help teachers revamp warm-ups, quick checks, and exit tickets while collecting valuable data to help them monitor student progress. Start or end class in a meaningful, engaging manner by asking insightful, thoughtful questions, or challenge students to create questions to be used for quick reviews of information or texts. Begin a unit with a pretest of sorts, gaining valuable information on how to meet students where they are, and determine from the start who may require additional challenges or support. Promote metacognition by asking students procedural or reflective questions. Test-drive quiz and exam questions beforehand, providing time to self-reflect on your instruction before giving students a summative assessment. Need a little pick-me-up in class discussion or behavior? Create big-picture questions to jump-start class discussions and engage students, and break up multiple-choice monotony by letting kids debate the answers or stand up as they respond. Any way you use it, students are sure to prefer the interactive answer cards to paper-and-pencil assessments.

Seesaw - What is seesaw? Seesaw is the best classroom platform for meaningful students' engagement. It is the greatest way to engage your students. It gives immediate feedback of how the students are doing. Furthermore, it allows to get to know our students on a deeper level. Seesaw creates a powerful learning loop between students, teachers and families. Students use built in multimodal tools to capture what they know in Seesaw's digital portfolio.

While using Seesaw teachers see all stages of students' thinking and progress enabling them teach better. Moreover, families gain a window into their student's learning and engage in home-to-school connections.

 Seesaw is a simple way for teachers and students to record and share what's happening in the classroom. Seesaw gives students a place to document their learning, be creative and learn how to use technology. Each student gets their own journal and they can add things to it, like photos, videos, drawings or notes. When we had online classes, we used this tool during our lessons. For each group we had the class journals, the students had their activities and progress bars, it was really simple to use as the students used just codes for joining the class. With the help of this tool we understood strengths and areas for growth in real time. With the help of Seesaw's multimodal tools it was easy to differentiate instruction and meet the needs of all our students. Here you can choose from thousands of engaging activities, you can also search by grade level, subject and keywords to find activities made by educators like us.

Nearpod - What is Nearpod? Nearpod helps educators to make any lesson interactive whether in the classroom or virtual. The concept is Simple - A teacher can create interactive presentations that can contain quizzes polls, videos, collaborate boards and more. Nearpod's formative assessments create a safe environment for students to learn and share. You can create and import your own Google Slides, Power point PDF lessons in minutes and add interactive activities such as;

• Quizzes - They assess students' understanding through multiple choice questions and receive instant feedback.

• Polls - They highlight students' opinions, check for understanding or provoke discussion.

• Collaborate Board- creates collaborative learning opportunities where students can share ideas in real time.

• Draw it – Helps students to draw, highlight, type and add pictures on an interactive white board.

• Time to climb; Assesses students' understanding with a game based activity.

Teachers can use Nearpod to support students' learning in a variety of ways. They can give students opportunities for interaction and immediate feedback by having them draw on a map or a diagram, respond to a poll question, post a note or an image to a Collaboration board, or take a multiple choice quiz. Furthermore, the teachers can bring the world to their classrooms by taking the students a virtual field trip to national park or a different country. With the help of this tool the teachers can help their students to preview learning concepts by watching videos to review key learning concepts by watching videos, reviewing notes or taking their own notes. Moreover, the teachers can incorporate students' social and emotional learning and digital citizenship skills with pre-created lessons on cyber bullying, empathy or internet safety.

Nearpod works with what you are already using -tools like - Microsoft teams, Google classroom, canvas, Schoology, Google, clever, Classlink, etc. Nearpod is an award-winning Instructional software that engages students with interactive learning experiences, with Nearpod students have the ability to participate in lessons that contain virtual reality, 3D objects, Simulations and much more interactive software features empower

student's voice through activities like open ended questions, polls, quizzes, collaborative boards. Students will learn while having fun.

3.3. Procedure

The idea that digital technologies can help transform education and specifically assessment is not a new one. New technologies and tools have long been seen to open up new possibilities due to their potentially beneficial characteristics or affordances, such as offering more personalised, instantaneous or engaging assessment experiences. In many cases this potential has been realised and demonstrated benefits. However, the literature suggests that the use of digital technologies has yet to be 'transformative' and is often used via traditional assessment methods or within pockets of innovation that are not widespread.

3.4. Results and analysis

Teachers can boost students' participation with collaborative activities and formative assessments like virtual Reality, Polls, Collaborate boards and game-based quizzes. The teachers always know where their students are in their learning.

With the help of this digital assessment tool you can provide space for voice, choice and ownership. Portfolios empowered self-reflection on learning over time and engaged students something they were proud to share with others. The teachers can discover thousands of teacher-tested activities to inspire and engage their students.

Whatever learning looks like this year, feel confident that your lessons will work in any environment with the help of these digital assessment tools mentioned above- regardless of device type or availability, the same lesson can shift with your plans.

Discussion

Thus, the review identifies what digital technologies can offer assessment, focusing on cases where they have been used in innovative or 'cutting-edge' ways that support new processes and practices. In particular, it focuses on the following three questions: 1. What do digital technologies offer for educational assessment? 2. How might assessment be different when knowledge and performance can be represented digitally? 3. Where is the 'cutting edge' in such developments at present? This review will consider e-assessment in educational contexts at primary, secondary, further education (FE) and higher education (HE) levels. This broad scope offers a wide overview of the innovations and various practices found in TEA, as well as hopefully providing inspiration and insight across different educational levels that may not have been previously connected. Thus, this review focuses on breadth of coverage rather than investigating areas in great depth. Mainly addressing 'formal' educational activities, the paper may draw inspirational examples from informal practices. Additionally, it identifies 'innovative' or 'cutting edge' practices as those which provide new insight or practices to the field of TEA, particularly via the opportunities they provide for transforming outdated methods. While understanding that the complex, contextual nature of innovation in education is relevant to this discussion, it is not feasible to fully explore this issue here. While not solely focusing on technology enhanced assessment tools or computer-assisted assessment, this paper instead examines the range of potential offered by digital technologies for various assessment purposes, be they assessment for learning (formative), of learning (summative) or both. While it may refer to technology enhanced assessment tools, pilots or developments, this is for illustrative purposes only and will not offer a list of available products or make judgments related to benefits of specific tools.

Despite these disadvantages, we use digital assessment at school for the following reasons: Digital assessment is the presentation of students' evidence and achievements through the use of information and communication technologies.

Conclusion and Recommendations

With the help of this digital assessment tool you can provide space for voice, choice and ownership. Portfolios empowered self-reflection on learning over time and engaged students something they were proud to share with others. The teachers can discover thousands of teacher-tested activities to inspire and engage their students.

- Cultivate new assessment practices based on principles and theories of learning
- Develop new assessment tools that reflect pedagogical principles
- Construct new responses to the current emphasis on high-stakes summative assessment

- Respond to ethical challenges presented by the use of digital technologies in assessment
- Consider new contexts relevant to assessment using digital technologies, including learners' lives and social, cultural, educational and technical backgrounds

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Internet resources

13 Ways to Use Socrative as a Formative Assessment (thelandscapeoflearning.com)

Plickers | Online Tools for Teaching & Learning (umass.edu)

The Beginner's Guide to Nearpod - Nearpod Blog

Teachers' Essential Guide to Seesaw | Common Sense Education