

MoodleMoot Finland

Accepted abstracts

17th May 2024

Moodle product vision: Empowering creativity, collaboration and outcomes for life

Author(s): Achour M (Moodle HQ)

Join us for an insightful presentation on the Moodle Product Vision, the compass that will guide the development and evolution of Moodle for the years to come. With a steadfast commitment to Harnessing Creativity, Facilitating Collaboration, and Optimising Outcomes, this vision paves the way for an exciting and transformative future for our platform. We will delve into the Moodle Product Roadmap and unveil how, with our community of Moodle supporters, we will continue to merge the power of technology and education to reshape the learning experience. Don't miss this opportunity to be inspired and discover the possibilities that lie ahead.

Keywords: Keynote

Panel discussion: Leveraging open education to maximize learner potential

Author(s): Achour M, Hunt T, Juuti K & Rytönen A (Moodle HQ, The Open university, University of Helsinki, Aalto University)

Educational institutions and organizations that have integrated Moodle, alongside other open educational resources, are paving the way towards a more accessible learning environment. This panel aims to delve into the unrealized possibilities of open educational tools, seeking strategies for educators and administrators to fully harness their power. The discussion will confront various aspects, including:- The underutilized opportunities that Moodle presents through the lens of student engagement and learning experiences. – Actionable steps that educators and organizations can take to amplify the learning benefits afforded by Moodle. – Effective learner re-engagement tactics, with a focus on their implementation within an open educational framework.

Join the discussion on how to unlock the full potential of open education for the advancement

of learner outcomes.

Keywords: Keynote

Virtual University of Occupational Health (VUOH) at DigiCampus – Boundless learning in a nationwide curriculum

Author(s): Antila A, Karjalainen P, Koivisto-Rautio H & Selänne L (University of Helsinki, University of Eastern Finland, Tampere University, University of Oulu)

Specialist physician training in Occupational Health is coordinated by five universities providing medical education in Finland. The universities are responsible for the national curriculum of almost 900 trainees. Essentials of six-year training are learned at work, supported with supervision, on-site training and theoretical studies. VUOH is a unique collaborative network for the universities. It has a shared learning environment at DigiCampus, a Moodle-based learning platform for Finnish higher education institutions. With 70 versatile annual courses, VUOH offers blended and distance learning, integrating theoretical studies and trainer training. It caters to local and nationwide needs, combining in-person and online elements, delivered through guided and self-paced courses. Collaboration follows a socio-constructivist approach emphasizing learners' active roles in knowledge construction. Ensuring quality involves shared educational planning, standards and feedback. We present two exemplary courses: Orientation for a new trainer and Orientation for a new trainee and personal study plan. Within the latter, the connection between two different courses is established with Subcourse plugin. A trainee needs to complete another course before they can proceed within the main course. When all assignments are approved, trainees obtain a certificate for the course. Effective collaboration requires shared goals, planning and open mindset, added with psychologically safe environment.

Keywords: Case study: course, Case study: institution, Course design, Curriculum development, Cross-institutional collaboration

Running Moodle on AWS: Architectures, scaling, and security

Author(s): Asuja A (AWS)

On AWS, there are several ways to run a Moodle installation. In this talk, we'll explore various architectures and their respective pros and cons. Additionally, we'll delve into the scaling and security features that aid in running Moodle on AWS efficiently and securely.

During the session, you can expect to:

- Understand the different architectural approaches for deploying Moodle on AWS
- Evaluate the advantages and disadvantages of each approach

- Learn about the scaling capabilities offered by AWS to handle increasing Moodle workloads
- Explore the security measures and best practices for securing your Moodle installation on AWS
- Demo of one architecture

Whether you're considering migrating your existing Moodle setup to AWS or planning to deploy a new instance, this talk will provide valuable insights and recommendations to ensure a smooth and efficient experience.

Keywords: Case study: institution

Organisation training process digitalization – How to do it right?

Author(s): Benaitytė F (Vextur)

Vextur, Premium Moodle partner in Baltics will talk about challenges and best practices, how to manage and ensure, that digitalization journey of learning and trainings process in different type of organisations will be well managed and all parties (clients, end users, vendor) achieves a success project and long partnership establishment. All practices are from Vextur implemented projects and many successful and some unsuccessful :) cases.

Keywords: Curriculum development

Learning in humans and machines

Author(s): Cowley B (University of Helsinki)

Cowley presents an overview of the research on digital learning and AI in education, and discusses empirical/design work from his research group.

Keywords: Keynote

Maintaining Moodle systems at scale

Author(s): Dethmers M (Catalyst IT Europe)

With the design of an AWS cloud infrastructure, Catalyst IT Europe equip organisations with the scalability and flexibility needed to support expanding user bases, meaning that during critical exam periods a seamless learning experience is had by all.

Keywords: Assessment, Proctoring

Involving everyone – Learning experience 360°

Author(s): Dudoravičė A & Marcišauskas P (Vextur)

E-learning system Moodle is a global platform that is used not only by educators, but also by the public and private sectors. The variety of tools, functionalities and extensions is wide, but a problem that is increasingly being noticed by users is the lack of comprehensiveness, feedback, or in other words, 360° assessment and learning.

Many would agree that a successful learning process is not only ensured by high quality content, but also by targeted collaboration and feedback between lecturers and learners. In order to create a fully successful and high quality learning process, we have taken the initiative and developed a number of solutions to ensure a successful, smooth and engaging process for learners and lecturers.

Monitoring your team's and personal progress, setting goals and achieving them consistently through regular communication with teachers and feedback is the basis for successful learning, which allows you to collaborate, to create and to learn with the involvement of everyone participating in the process, experiencing 360 learning.

Keywords: Assessment, Course design

Tearing down the accessibility barriers in online education

Author(s): Henrick G & Holland K (Brickfield)

Join the discussion on how to unlock the full potential of open education for the advancement of learner outcomes.

Keywords: Accessibility

Using the Moodle Accessibility Toolkit to fix your content

Author(s): Henrick G & Holland K (Brickfield)

Brickfield provides an integrated platform for your Moodle LMS to enable a more accessible and inclusive learning delivery by helping institutions manage content accessibility and usability of their course materials. The Accessibility Toolkit automates the analysis of course content inside Moodle against a set of accessibility tests and provides reports and wizards to help users fix the common content issues. In this session you will learn how to audit your course content and find accessibility issues and how to use wizards to bulk remediate content in Moodle and have access to a test course to use the platform.

Keywords: Accessibility

Embracing accessibility: Building awareness in your institution

Author(s): Henrick G & Holland K (Brickfield)

This session proposal, titled “Embracing Accessibility: Building Awareness in your Institution.” aims to educate university staff on the importance of accessibility in higher education. The workshop will include insights on inclusive teaching practices, for face to face and asynchronous learning. The session will also highlight case studies from institutions that have successfully implemented accessibility initiatives. Participants will leave with some practical strategies to help build awareness among staff.

Keywords: Accessibility

How do computer-marked quizzes best help students learn? How does Moodle help you make the best quizzes?

Author(s): Hunt T (The Open university)

This talk will be in two sections, a theoretical part, and a practical part.

I will start by talking about what is most important in our use of Moodle: teaching and learning. Considering what is known about how education works, when can computer-marked question be a good thing to include in your course, and which ways of using them are likely to be most effective?

After establishing how quizzes can contribute to good course design in general, I will then talk about some of the features of the Moodle quiz and question bank which let you realise those ideas in practice. However, when implementing technology in schools and universities, it must work for the people involved, in the time they have available, and the institution must be able to administer that use at large scale. Therefore, to be effective, software like Moodle must balance the educational needs with other requirements.

Keywords: Assessment, Course design, Keynote

Simplifying assessment: streamlining grading schemes for clarity and technical ease

Author(s): Hölttä M, Kamula A & Lindholm S (University of Helsinki)

Designing clear and concise assessment schemes guide students towards understanding what is expected from them. Furthermore, transparency increases the objectivity and fairness of assessment. Ensuring the assessment scheme can be technically executed with ease will also reduce teachers’ workload and stress. It is important to design the assessment scheme in

a way that is not only pedagogically sound but also easily implemented using the various assessment tools in Moodle. In this presentation, we hope to give ideas for developing clear and transparent grading schemes that follow the principles of constructive alignment in pedagogical practices and are easily implemented in Moodle. In addition, we want to provide guidance on what teachers should consider in course assessment planning, specifically regarding assessment in Moodle. Using concrete examples, we will demonstrate how to avoid some common pitfalls in the technical implementation of various grading approaches, such as assessing individual assignments using numerical grading scales instead of points. When the assessment scheme and its technical implementation is planned ahead of time, the assessment process becomes more transparent. By planning ahead, you can make Moodle work for you instead of having to find a suitable workaround to cram your assessment scheme into Moodle.

Keywords: Assessment, Course design

Case study: Conducting user testing provides insights into the design of online courses related to energy transition

Author(s): Iskala E & Aejmelaeus M (Metropolia University of Applied Sciences)

Based on the feedback from user testing and results from prior research we developed the “Energy Transition Today” online course. In this presentation, we discuss the processes of course development and user testing. The aim of the course is not only to increase knowledge of energy transition but also to bring new expertise to the energy, real estate, and construction sectors. The course is aimed at those interested in the topics and does not require prior knowledge of the field. Learning materials were designed to be user-friendly, flexible, and lightweight, allowing learners to enhance their skills at their own pace, regardless of time or location. We took accessibility and different learning styles into account in the design of tasks and materials. Tasks were designed to be automatically assessed, so that the course doesn’t require a teacher. We recruited eight students from energy studies to test our “Energy Transition Today” course. The testing was conducted in three parts, with different feedback forms created for each part. Based on the feedback received, we further developed the course. As a result we achieved a well-trying course template that will continue to be utilized in course design. The template is easily customizable based on new user feedback. In the course template we created, learning materials are accessible and user-friendly. Alongside course development, a sufficient testing process was established, which can be easily replicated as needed.

Keywords: Accessibility, Assessment, Case study: course, Course design

Harnessing GenAI for enhancing Moodle's assessment capabilities: A collaborative workshop

Author(s): Järvinen J-P & Wilenius H (University of Helsinki)

This workshop invites Moodle developers and educators to explore the potential of Generative Artificial Intelligence (GenAI) in improving the LMS's capabilities. Participants will engage in brainstorming sessions to discuss and propose enhancements to prompting strategies and to identify novel ways in which GenAI can augment Moodle's Quiz and Question bank features. The session aims to foster a collaborative environment where ideas for future development are not only shared but also critically evaluated for practical implementation within Moodle's plugin framework. Whether you are a seasoned Moodle developer or simply keen on shaping the future of educational tools, you are welcome to contribute to the workshop.

Keywords: AI, Assessment

Moodle as an instant accessibility improvement

Author(s): Kivelä M (University of Helsinki)

This paper examines the user-perceived accessibility of a fully online course for Uni Helsinki undergraduates. The course has been running since August 2017, first on Confluence Wiki, then Teams and nowadays in Moodle. We focus on comparing delivering the same content on two different platforms in relation to problems reported by the participants. Our theoretical framework builds on the deleuzoguattarian concept of arrangement with some luhmannian influences. Thus we examine selecting and organising matters to primarily enable communication. **Data:** This paper is based on one-to-one mid-course discussions, mandatory onymous and optional anonymous written course feedback. At the time of writing, Moodle 51 students have completed the course in Moodle. Last academic year in Teams the number was 61. Some students had tried the course in Teams before completing it in Moodle and thus could compare both iterations. **Findings:** 1. The students' familiarity with and frequent use of Moodle instantly improved both technical and cognitive accessibility. 2. The basic UI layout feels clearer to many students in Moodle than in Teams when the course content is organised the same way. 3. Flexible course design both enables and hinders accessibility. **Discussion:** The data and findings tell mainly about the way a group of users encountered one course. Therefore we do not make any claims concerning the accessibility of a particular Moodle installation or Teams tenant.

Keywords: Accessibility, Course design, User experience, Cognitive load

Videotallenteiden luonti, säilytys ja jakelu helposti ja turvallisesti (Create, store and share video recordings easily and securely)

Author(s): Kolmakow A (Ilona IT)

Videotallenteiden merkitys opetuksessa on kasvanut ja tulee edelleen kasvamaan. Kuinka videoiden tekeminen tallennus opetuksesta voidaan automatisoida ja tallenne lopuksi julkaista helposti opiskelijoiden käyttöön? Esityksessä kerron esimerkein yleisesti Suomessa käytössä olevan videoneuvottelujärjestelmän, Zoomin ja sen tallenteiden automatisoinnista Panopto ympäristöön. Lopuksi tallenteet julkaistaan helposti opiskelijoiden käyttöön.

Keywords: Course design

Ilona IT: Kolme vinkkiä softahankintojen helpottamiseksi! (Ilona IT: Three tips to make your software purchases easier!)

Author(s): Korhonen R (Ilona IT)

“Ohjelmistojen ja pilvipalveluiden hankinta on aina hankala ja työläs prosessi, koska niihin liittyy lakisäätteiset sekä kilpailutukset että tietosuoja-asiat. Esityksessäni käyn läpi vinkkejä, joiden avulla hankintaprosessista tulee hallittu ja siten helpompi. • Ilonan palvelut oppilaitoksen avuksi: laaja tuotevalikoima, tiiviit valmistaja ja asiakassuhteet • GDPR-sovelluskirjasto auttamaan sekä GDPR-selvityksissä että DPIA-prosesseissa • Softatukku-toimintamallin edut

Ilona IT toimii lukuisten eri Moodle-yhteensopivien ohjelmistojen ja pilvipalveluiden jälleenmyyjänä valtakunnallisesti Suomessa. Luvassa on konkreettisia vinkkejä, asiakastarinoita ja vastauksia kysymyksiinne. Asiantuntijana Risto Korhonen, jolla on yli 30 vuoden kokemus IT-järjestelmien oppilaitosmyynnistä. <http://www.ilonait.fi/ohjelmistot> <http://www.sovelluskirjasto.fi> ”

#Moodle #IlonaIT #Pilvipalvelut #GDPR #DPIA

Keywords: Case study: institution

Practical use of AI in Moodle

Author(s): Korsgaard T (Moxis)

The rapid advancement of Artificial Intelligence (AI) technologies has opened new frontiers in educational methodologies. This presentation aims to explore the current state of AI within the Moodle ecosystem. Our discussion begins with an overview of the AI landscape in education, emphasizing recent developments and their implications for online learning

platforms. This sets the stage for introducing two innovative Moodle plugins developed by our company, Moxis, which exemplify the practical application of AI within the Moodle framework. The first plugin, SmartLink, is a new way of delivering dynamic content within Moodle courses. SmartLink allows educators to easily include live web pages in their course materials, using a predefined prompt to send content to a Large Language Model (LLM). We will show a concrete example of SmartLink, highlighting its features and simplicity. The second plugin, AI Writer, is designed to enhance students' writing skills through AI-driven prompts and feedback. As a Moodle submission plugin, AI Writer assists students in crafting well-structured and coherent texts. This tool leverages the power of AI to train students in writing effectively, catering to individual learning needs and fostering academic growth. Our presentation will include a live demonstration of AI Writer, illustrating its functionality and the benefits it brings to both students and educators.

Keywords: AI

eLearning in the Finnish Defence Forces

Author(s): Kostian V & Rouvinen M (Finnish Defence Forces)

Major Ville Kostian and Mr. Miika Rouvinen are working at the Finnish Defense Force's ADL Office. Major Kostian is the Head of the Unit and Mr. Rouvinen is the Head of Administration and Development of the FDF's eLearning Platform. The presentation tells about what the Finnish Defence Forces are as an educational organization, what our LMS is and how we use it for the training of professional soldiers, reservists and conscripts. In addition, we also briefly explain how we produce, distribute and maintain our eLearning materials.

Keywords: Case study: institution, Curriculum development

H5P tools demonstration area to help and support teachers

Author(s): Kuitunen S, Hörkkö P & Suokari E (University of Turku)

The H5P toolkit is a popular and versatile family of tools in Moodle that allow you to diversify a Moodle course area. They are well suited for small quizzes and self-reflection, for example. H5P tools add variety and visualization to the course. However, teachers may find the sheer number of tools challenging. Few teachers have time to learn the whole toolkit, and the long list of H5P tools that opens up in Moodle can be daunting. Thus, H5P tools may have been selected at random for a course (based on, for example, a colleague's recommendation) and some useful tool may be ignored because they are not known. It can be difficult for support staff to recommend particular H5P tools, so as part of Digitalization Programme Implementation (DOT) of the University of Turku, we decided to build a demonstration area open to everyone, where the entire available H5P toolkit is presented. The tools were divided into 11 categories according to their intended use. Each tool has an example made

by the staff or found online, along with short instructions. The examples are very simple, not university-level tasks, to focus teachers' attention on the tool itself rather than the contents of the task. The feedback we have received suggests that the demonstration area has helped teachers to explore the potential of the tools and to consider how they can be applied in their own teaching.

Keywords: Course design

In the Mood(le) for visual learning: The art of engaging students

Author(s): Kujala S (University of Helsinki)

Visuals are not just embellishments; they can be bridges between ideas and student understanding. This presentation will cover simple, yet effective, ways to visualize content. With the help of Bootstrap's components, you can create intuitive and engaging interfaces. The Bootstrap examples will include the use of cards, accordions, and buttons. You will gain insights into creating visually engaging learning materials, that not only captivate students, but also facilitate deeper understanding and retention of information. The aim is to equip educators with the knowledge and tools to harness the power of visual learning and Bootstrap within Moodle. Recognizing that time is a precious commodity in the educational sphere, the aim is to provide flexible solutions. From quick and straightforward methods, that can be implemented in a matter of minutes, to more intermediate visualizations requiring a few hours for a deeper level of customization, and finally, to advanced techniques for those who can dedicate a more substantial portion of their time to crafting highly sophisticated visual learning materials. By leveraging tools like Bootstrap within Moodle, you can create responsive, engaging, and visually rich learning environments with ease.

Keywords: Course design, User experience, Cognitive load

eOppiva Moodle: Experiences and future directions

Author(s): Kurkipää T (HAUS Finnish Institute of Public Management)

eOppiva serves as a vital learning hub for the Finnish civil service and beyond. Originating from a modest experiment, it has evolved into a comprehensive ecosystem offering open learning materials for all and a robust Moodle platform to 170 central government organizations. We appreciate Moodle's reliability, flexibility in access, and possibilities for integrations. Our learner-driven design process is key to eOppiva's success. We collaborate with experts in various fields to produce courses, while agencies also create content tailored to their specific needs. Our approach is rooted in co-creation, service design, and continuous improvement, aiming to make learning in Moodle easy, accessible, rewarding, and enjoyable, while also leveraging data to serve learners and their organizations effectively. We focus on integrating open learning materials seamlessly into Moodle while ensuring accessibility for all learners.

In our presentation, we'll delve into eOppiva's future scenarios and development ideas, including: - Designing personalized learning paths using open learning content, data, and AI. - Utilizing learning data for competency development and other needs. - Creating engaging multimedia content. - Exploring generative AI for an enhanced learning experience. - Showcasing successful administration, training, and development practices within Moodle. Join us to explore these topics and foster continuous improvement and innovation in eOppiva's learning ecosystem.

Keywords: AI, Accessibility, Case study: institution

Digitaalisen koulutuksen käsikirjoittaminen (Scripting courses: crafting effective workshops and scripts)

Author(s): Kurkipää T, Salovuori A, Kosola H & Kalinainen T (HAUS Finnish Institute of Public Management)

Työpajassa esittelemme lyhyesti eOppivan yhteiskehittämiseen perustuvan digikoulutusten tuotantoprosessin ja teemme ryhmässä harjoituksen oppimissisältötyöpajasta ja käsikirjoitustyöpajasta: - oppimistavoitteiden kiteyttäminen - oppijaymmärryksen hankkiminen - sisällön rajaaminen - koulutuksen rakenteen ja esitystapojen suunnittelu - käsikirjoittaminen 3–30–300 mallin mukaan - käsikirjoituksen työstäminen yhdessä. Työpaja sopii erityisesti niille, jotka auttavat eri alojen asiantuntijoita verkkokoulutusten suunnittelussa ja toteutuksessa, mutta myös kaikille, jotka laativat itse digikoulutuksia. Prosessia voi soveltaa erilaisiin toteutuksiin webinaareista ja muista itseopiskeleltavista sisällöistä ohjattuun koulutukseen. Osallistujat saavat käyttöönsä palvelumuotoiluun perustuvia työpohjia työpajojen toteuttamiseksi. Voit tutustua etukäteen eOppivan kaikille avoimiin koulutuksiin ja (<https://www.eoppiva.fi/tyyppi/kaikille-avoin/>) ja eOppivan pelikirjaan (<https://www.eoppiva.fi/pelikirja/>)

Keywords: Course design

Level up! – A useful tool for online courses?

Author(s): Kärppä L (University of Helsinki)

Gamification of learning has increased its popularity as a teaching strategy, increasing student motivation, especially in self-directed online courses. There are different approaches to gamification of learning, for example gathering experience points and progressing from one level to another based on a learner's activity on online course platforms. Early in 2024 the Level up! plugin for Moodle was introduced at the University of Helsinki, to enable the use of a motivational tool in online learning. Our team introduced the tool in an 8-week, 5 ECTS, Moodle-only, masters level course on self-management in order to test its effect on individual learning in a fully online course. The tool has also been introduced in a 2-year, 20 ECTS, self-paced postgraduate module on advanced medical leadership. Our team will present initial findings from using the Level up! Tool including student and teacher experiences and

reflections.

Keywords: Case study: course, Course design, User experience

How to develop Moodle in a user-centred way without losing focus

Author(s): Laatikainen J (University of the Arts Helsinki)

The development of Moodle at the University of the Arts is defined directly from the teaching. Unlike the delivery of a finished product, Moodle was introduced as a technical platform, with an emphasis on collaborative development with teaching professionals. Behind this is Moodle Support Service - a Trojan Horse that helps teachers and academic staff in designing and implementing digitally supported learning and providing the bottom-up feeds for the development of Moodle. This development has been guided by the specific nature of arts pedagogy, where artistic process and medium (instrument, visual arts technique or dance, for example) must be taken into account in all instructional design. One cannot expect Moodle to provide generic tools for this kind of teaching. Moodle support has worked to identify and, where necessary, develop workflows that can be used to meet very specific needs in arts education. In the development of Moodle, it has been important to find those specific needs generic enough to be brought step by step into the whole Moodle environment. Transferring workflow from an individual teacher to a department is often useful, but from a department to the entire university Moodle is rarely justified. As we try to create practices for development, I find myself frequently thinking about the scalability and adaptability of a single solution without it becoming a tool to do many things barely. In development maintaining focus requires the right grain size.

Keywords: Case study: institution

Revolutionize education with generative AI on AWS

Author(s): Lavanko H (AWS)

Generative AI is revolutionizing the educational landscape, and AWS provides a powerful platform to harness its potential. In this talk, we'll explore how you can leverage AWS services to integrate Generative AI into your educational workflows, enhancing learning experiences and driving innovation. During the session, you can expect to: - Understand the fundamentals of Generative AI and its applications in education - Discover AWS services and tools tailored for Generative AI workloads - Learn best practices for building and deploying Generative AI models on AWS - Explore real-world use cases and success stories from educational institutions - Live demo showcasing the use of Generative AI and traditional AI/ML services for educational use

Whether you're an educator, administrator, or educational technology professional, this session will equip you with the knowledge and strategies to leverage the power of Generative

AI on AWS, empowering you to create innovative and immersive learning experiences for students, researchers, educators and administrative staff.

Keywords: AI

DigiCampus - A collaborative endeavor of twelve Finnish universities

Author(s): Lehto T (Tampere University of Applied Sciences)

The Finnish DigiCampus, hosted at digicampus.fi, represents a collaborative endeavor among twelve Finnish universities and universities of applied sciences. This presentation illuminates the features and some of the pedagogical principles embedded within the DigiCampus Moodle environment, jointly developed among the participating institutions. In this presentation we will discuss our experiences of applying the platform's four different login options using an international cross-institutional study module as an example of flexible international collaboration on the DigiCampus learning platform. We also discuss a case of an Erasmus project, and how the cross-institutional courses in that particular project were implemented at Digicampus, and how the studies were integrated into the degree programs of four different universities in Finland, Germany and the Czech Republic and UK.

Keywords: Cross-institutional collaboration

Easy livin' in Moodle – Student and teacher perspectives on cognitive load

Author(s): Lindholm S & Miettinen I (University of Helsinki)

A typical university student is often juggling several different courses on the Moodle platform. Meanwhile, a teacher may manage and teach multiple courses with varying levels of Moodle involvement. Given the amount of time and energy spent on Moodle, the intricacies of course design are far from trivial. Cognitive load, referring to the information held in working memory, is an integral aspect of learning and teaching processes. Ideally, such load should arise from relevant learning tasks and teaching activities, rather than the mechanics of manoeuvring through a course platform – whether from the perspective of a student or the course manager. In this presentation, we will showcase different ways to mitigate this type of unnecessary burden through the efficient and purposeful utilisation of Moodle. Regardless of the volume of content within a course, users should effortlessly locate specific information and activities as needed, while maintaining a clear overview of the entire course. This can be achieved by visual cues, clear and accessible navigation structures, situation- or role-specific elements, and other user-centric design principles. After this presentation, you will be aware of factors contributing to cognitive load and equipped with ideas for managing them in the design of Moodle courses.

Keywords: Accessibility, Course design, User experience, Cognitive load

Proctoring vs the AI revolution

Author(s): Lundqvist J (Smowltech)

In this presentation, we discuss the current challenges posed by artificial intelligence in education. We will talk about how SMOWL and digital proctoring provide an effective solution against text generation software like ChatGPT and our commitment to ensuring accessible and quality education.

Keywords: AI, Assessment, Proctoring

Security and trust in the digital era: Proctoring and data protection with SMOWL

Author(s): Lundqvist J (Smowltech)

In today's educational and professional landscape, the integrity and security of assessment processes have never been more critical. In this talk, we will explore how our proctoring solution, SMOWL, is redefining the standards of digital learning, accreditation, and GDPR compliance, ensuring a secure and trustworthy environment for institutions and users alike.

Keywords: Assessment

Case study: Uniarts Helsinki's Rosetta's stone for Moodle service development

Author(s): Malinen M (University of the Arts Helsinki)

In 2021 University of the Arts Helsinki started a strategic development project to create a new digital learning environment and a service around it. We had the rare opportunity to create a new education technology service from scratch and rethink the way Uniarts Helsinki had traditionally developed systems and services. In this case study we'll show how Uniarts Helsinki blends keywords like Moodle, digital pedagogy, SaaS, agile, business technology standard, customer-centric thinking, service management and university's administration model together to provide a service that functions as a Rosetta's stone between end users, service providers and university's administration. Our goal is to help teaching, administration and technology filled boats to navigate through murky treacherous waters. It's been quite a journey, but shoreline with sunshine and clear waters is already visible through the binoculars!

Keywords: Case study: institution, User experience

Unite! European university network with Moodle and LTI

Author(s): Martikainen J (Aalto University)

Unite! is the European university alliance of innovation, technology, and engineering, with nine universities connecting entrepreneurial, innovative European regions. Aalto University is the Finnish Unite! member. Eight of the nine member universities, including Aalto, use Moodle as their learning management system. The ninth uses Canvas. Unite! is committed to long-term collaboration and progressive integration, and in order to turn this vision into reality, the objectives for 2030 focus on building effective cooperation, a strong community, innovative educational offerings and a transnational campus. The Unite Community Requirement analysis concluded the need for aligning IT infrastructures for digital learning amongst the European university alliance, with the Unite! digital campus framework and requirements. A working group for integrating IT-Solutions has given suggestions about integrating services and platforms with each other and with the collaborative LMS, called Metacampus. The idea is to create an European Moodle ecosystem with the help of LTI connections in such a way that each member Moodle installations can act as LTI platform and tool, and the Canvas partner can provide their contents via acting as an LTI tool. All member universities' students find all available shared courses via the Metacampus hub. The presentation shares information on the technical implementation with test experiences and takes a look forward to the alliance future plans and schedule.

Keywords: Case study: institution, Curriculum development, Cross-institutional collaboration

Kuinka saada kaikki irti Tietokanta-aktiviteetista (Database activity: How to get the most out of it)

Author(s): Matveinen K & Kivinen B (University of Helsinki)

Työpajassa pääsee ymmärtämään Tietokanta-aktiviteetin toimintaa. Tässä työpajassa pureudumme Tietokanta-aktiviteetin toimintaan, opimme tunnistamaan ja korjaamaan mahdollisia ongelmia sekä rakentamaan toimivan Tietokanta-aktiviteetin alusta alkaen. Työpaja on suunniteltu sopivaksi niin aloittelijoille kuin edistyneemmillekin käyttäjille. Tarjoamme konferenssitunnusten avulla osallistujille mahdollisuuden tutustua ja harjoitella tietokannoissa tyypillisesti esiintyvien ongelmien ratkomista ja Tietokanta-aktiviteetin hyvää käyttöä tarjoten esimerkkejä yhteisestä tietokannan rakentamisesta ja tietokannan hyödyntämisestä myös yksittäisten opiskelijoiden suoritusten seurannassa ja keräyksessä.

Keywords: Course design

Case: Jamk student Moodle orientation

Author(s): Minkkinen S & Kivioja T (Jamk University of Applied Sciences)

At the beginning of each semester, we acquaint our new students with a range of digital systems essential for their academic journey. Knowing the basics of a learning management system (LMS) allows students to focus on learning on the content courses in our degree programs. During the transition to Moodle LMS, we wanted to enhance this student orientation process. This led to the creation of an independent online course Student Moodle Orientation. Student Moodle Orientation is designed to provide equal opportunities for all students to grasp the basics of Moodle. We provide concise instructions and practical and concrete assignments both in Finnish and in English. The course development process has emphasized a student-centered approach, fostering independence, and prioritizing accessibility. Featuring user-friendly navigation, and consistent course sections, we aim to provide our students with a secure foundation in our LMS. Every angle of the course is based on student feedback. The course is a valuable resource for our students as they learn to use Moodle effectively and thus their learning experience becomes more seamless. The course has also equipped us with tools to facilitate consistency on our content courses in general and our teachers' ongoing professional development as Moodle users. In our presentation, we introduce the core choices of the orientation course, and the effects the course has had on our Moodle course creation and teacher skill-development.

Keywords: Accessibility, Case study: course, Case study: institution, Course design, User experience

Step inside the assessment: A student's journey & building powerful exams

Author(s): Neves S & Martin S (Inspira)

We'll unveil Inspira's assessment ecosystem through a student demo, then empower you to create assessments (from simple to complex) as the instructor, and finally dive into the backend to show you how it all works with Moodle.

Keywords: Assessment

From delivery to results: Streamlining assessments with Inspira

Author(s): Neves S & Martin S (Inspira)

We'll showcase the backend with live demos of the Planner, Monitor, and Grader roles. See how to seamlessly deliver assessments, monitor exam progress, and collaborate with colleagues on grading and marking - all within Inspira.

Keywords: Assessment

Using a table as the course navigation and calendar

Author(s): Niinisalo R (University of Jyväskylä)

In the Centre for Multilingual Academic Communication at the University of Jyväskylä, we have developed a table-based Moodle structure for blended learning courses. This one table works both as a course calendar and as navigation to all the course information, materials, and tasks. This Moodle structure allows the student to easily access all the course content. The course feedback has proven this Moodle structure to be user friendly for both the students and the teachers. In this presentation, I will discuss the design and how these Moodle solutions work in practice.

Keywords: Case study: institution, User experience

From learning to teaching: The continuum of using Moodle in teacher training and vocational education

Author(s): Palkinen V & Saarinen R (Tampere University of Applied Sciences, Tampere Vocational College Tredu)

Moodle is actively used at Tampere University of Applied Sciences and in its Professional Teacher Education program, where teacher students become acquainted with Moodle from the student's perspective. In the optional course "Teachers' Basic Digital Competencies", students get to practice using Moodle from a teacher's perspective, which has received positive feedback especially from those who have no prior experience in teaching roles or with Moodle. Tampere Vocational College Tredu offers training and tips for both new and experienced teachers on how to utilize Moodle in teaching, allowing for the deepening of knowledge and skills acquired in professional teacher education in practical teaching tasks. In this seminar presentation, we will share our experiences and the best tips for training aimed at teachers starting with Moodle. Our seminar will be interactive, including audience participation segments such as question and answer sessions, and possibly live demonstrations of Moodle usage. Our goal is to spark discussion and share best practices.

Keywords: Case study: course, Course design

Quiz with Safe Exam Browser (SEB) in on-site exams

Author(s): Rajaniemi L & Lindqvist K (University of Helsinki)

In the last four years, the University of Helsinki (UH) has moved towards digital exams. One of our approaches has been to implement digital exams as Bring Your Own Device (BYOD) on-site exams using the Moodle Quiz activity where access to other resources is fully or partially blocked by the Safe Exam Browser (SEB) software. Becoming more and more dependent on the Moodle + SEB -combination for the digital exams is not without potential pitfalls: supporting the exams is resource intensive and requires the co-operation of many parties for it to work smoothly. Students and teachers require assistance, Moodle

and SEB may feature version changes that can affect exams, the Wi-Fi networks need to be well managed and so on. UH has strong expertise in the use of SEB for on-site exams and we want to share our experiences with you. We will tell you about our practical arrangements, the most common challenges and solutions we have faced. We would also like to hear about your experiences of the SEB quizzes and your perspectives for the future. Let's share our SEB expertise together!

Keywords: Assessment

Our Moodle Journey at TU Wien: 18 years of successes, lessons and the road ahead

Author(s): Rakoczi G (TU Wien)

TU Wien, Austria's largest technical and scientific research and education institution, has been using Moodle continuously for almost two decades. In this presentation, we will describe how Moodle has grown to become the central learning platform for the entire university, acting as a central hub for digital teaching and learning. We will highlight the custom development that has been required and also discuss the impact of the Corona pandemic. We will give insights into what plugins we have integrated over the years and also report on successes such as user growth and acceptance etc. We will cover lessons learned from topics such as GDPR, IT security, accessibility, policies, etc. We will also highlight how important the Moodle community and open-source have been during these two decades, giving an overview of our commitments to the Moodle community, cooperations (local, national and international) and working with our power users as drivers for practical use cases. We will also focus on what is not working well in Moodle and possible future improvements across a range of issues such as usability, competencies etc. During our journey, supporting teachers and students has been key, so our presentation will also cover our support processes and strategies, documentation approaches, as well as our solutions for promoting networking, training etc. Finally, we will also give insights into statistics as well as key issues for the future such as AI, e-assessment, EU alliances etc.

Keywords: AI, Accessibility, Assessment, Case study: institution

Katsaus taaksepäin: 20 vuotta Moodlea Suomessa - miten olemme onnistuneet? (Looking back at 20 years of Moodle in Finland - How have we succeeded?)

Author(s): Rytönen A (Aalto university)

First Moodle installations in Finnish Higher Education were set up in about 2004. Until then, at least BSCW and WebCT/Blackboard were used, with some additional in-house tools. The variety of tools was wide and heterogeneous. At CS departments, in-house tools focused on a specific pedagogical process were developed for teaching-related research and after the

research period, the tools were actively run down with short generations. Among the first Moodle installations were department pilots more than university-wide services. The use of Moodle increased actively, and already in 2007 the national IT peda network implemented a survey on universities' long-term plans for learning platforms. It turned out that open-source solutions – specifically, Moodle – were preferred over commercial products, and instead of a nationwide service, universities wanted to host their own installations. Open-source was emphasized among other perspectives also for the opportunity to create own add-ins. Who remembers the steps along the way, and what have they been? Who were the first teachers using Moodle in Finland? What was it used for? This workshop given in Finnish invites Finnish Moodle teachers, maintainers, support and leadership to combine their memories to a national Moodle logbook with milestones, processes and collaboration which have made Moodle the innovation diffused and adopted in Finnish HE wider than in other countries.

Keywords: Case study: institution, Cross-institutional collaboration

Curriculum knowledge and AI as a critical friend: Teachers' challenges and opportunities using Moodle LMS

Author(s): Sandström N, Nevgi A & Rekola M (University of Helsinki)

University teachers design courses sometimes with little knowledge of the curriculum and of their students' prior knowledge of the course topics. Nuanced understanding of students' prior knowledge is pivotal for curriculum development and personalised instruction, serving as a cornerstone in the pursuit of educational excellence. This workshop proposal outlines an approach focusing on the integration of Artificial Intelligence (AI) as a Critical Friend for teachers, using existing Learning Management Systems (LMS) data in order to create new solutions to enhance insights into students' learning backgrounds. We discuss the capacity of AI algorithms in supporting teachers with designing course content, assignments and grading and analysing various components of LMS data, such as student performance, participation, and assignment submissions, mapping out individual learning trajectories. Anchored in constructivist learning theories and the concept of adaptive learning, this workshop seeks to support teachers in focusing on individual learner needs by uncovering patterns, strengths, weaknesses, and gaps in understanding, supporting curriculum planning and instructional strategies. We highlight AI's potential to revolutionize educational settings by providing teachers with a deeper comprehension of students' prior learning, thereby facilitating the design of more relevant, timely lessons, bridging learning gaps, and enhancing content delivery, leading to improved learning outcomes.

Keywords: AI, Assessment, Curriculum development

From repository to ILE: Improving user experience in Moodle with H5P

Author(s): Swanepoel C (Tampere University)

From the first LMS in the early nineties (Pressey’s “Teaching Machine”), the use of these systems in Higher Education continues to advance alongside rapidly changing technology. Initially, course pages at universities only provided a space where students submitted assignments and downloaded teaching resources as files. Over time, more interactive tools like “Forum” became popular across LMSs and now activities like “Board” and “Glossary” are becoming essential parts of the learning process. Educational technologies developed to the extent that course pages no longer have to function mainly as repositories for resources but have the potential to be interactive environments that support learning in both online and in-person courses. Educators can create user-friendly and interactive learning environments that are in-line with contemporary online experiences by: 1) Designing and presenting course resources not as downloadable lists of documents, but as activating content (combining standard Moodle activities like Chat, Choice, Database, etc. with H5P content) and 2) Organizing administrative materials in the same consistent course design. In this presentation, I illustrate these two principles by way of an exemplar Moodle course that is designed in Moodle’s OneTopic format and that presents content primarily in H5P’s “Interactive Book” content type. The Moodle course will show the potential of H5P tools to eliminate course clutter and a clunky out-of-date user experience.

Keywords: Course design

Efficiency in Moodle quiz processes through Lean development

Author(s): Tikkala A & Kivinen B (University of Helsinki)

In recent years, the University of Helsinki has developed digital exams. The aim is to replace paper-based exams with digital exams if and when this supports student learning, but at the same time formative assessment through midterms and tests has also been developed. In particular, digital exams are implemented at UH using Moodle’s quiz activity. They are carried out in collaboration with teachers and campuses’ examination services. From Moodle, it is also possible to export grades directly to the UH’s study register. This involves administrative work and development needs. Over the last five years, the university has also developed Lean thinking in higher education, with the aim and principle of improving efficiency and effectiveness of operations and quality of work. The Lean aim is to organize and encourage employees’ activities in such a way that they produce more benefits for all while reducing wastage. How do digital exams and Lean development fit together? How have the processes included in digital exams benefited from Lean development? What still needs to be developed? We will share our experiences and tell you about our plans for the future.

Keywords: Assessment

Database activity in the creation of collective course work: Mixed pedagogical experiences, promising prospects

Author(s): Wahlström M (University of Helsinki)

The paper presents a pedagogical experiment that made use of the Moodle Database activity module in creating collective course work. The students were working on a newspaper archive and tasked to each make short resumes of articles about the Russo-Turkish war of 1877-1878 for a certain time period. Then the students submitted their texts through the Moodle database interface. The resulting database was then converted into a timeline of the summarized articles as a PDF file, representing the entire duration of the war. Pedagogically the task was successful: It introduced the students to working with an online archive, and resulted in a nicely typeset collective coursework. However several students with limited computer skills found working with the database activity difficult, resulting in problems that had to be sorted out manually. From a teacher's perspective the preparatory work was somewhat time consuming, but, in theory, this would have been compensated by less work with the finalized database. However, I was unprepared for the kinds of problems almost 10 percent of the students had. Based on later experience with having students submitting exercises in the .GIFT format, I argue that the problems could have possibly been overcome with better instructions. Moreover, for me personally, better coding skills would have saved me time as a teacher in creating the final file.

Keywords: Assessment, Case study: course, Course design

Language models and assessment in Moodle

Author(s): Wilenius H (University of Helsinki)

In this presentation, I will share practical experiences and outcomes from implementing GenAI techniques in the creation and manipulation of single-best answer (SBA) multiple choice questions within a teaching module that took place in Spring 2024. The session will focus on elucidating the methods used to integrate GenAI into question development, highlighting the efficiency brought about by this technology. Practical performance of GenAI-based questions is discussed, as evidenced by statistical data of GenAI-crafted SBA questions in Moodle, providing a glimpse of current capabilities and impacts of AI on student assessment. Furthermore, I will delve into the potential future applications of GenAI in Moodle assessments. The discussion will extend to how this technology can continue to evolve and support educators in creating more sophisticated and adaptive assessment tools.

Keywords: AI, Assessment

Development of Moodle course templates for the University of Oulu and Oamk – Quality for Moodle courses with course templates made with AI

Author(s): Ylitalo A, Kononen J & Mattila A-L (University of Oulu)

In spring 2023, the steering group for the Moodle learning environment of the University of Oulu and Oamk decided that there is a need to create course templates which would guide teachers to build Moodle courses. By using course templates, the aim is to make the Moodle courses of these higher education institutions as uniform and pedagogical as possible. An aim also was that certain things would be located in the same places in the Moodle courses. Thus, the Moodle courses would have as little unnecessary cognitive load as possible for students to find the things they need for studying and make accessible Moodle courses. In other words, course templates would promote the work of teachers and students in Moodle. The first course templates were introduced in November 2023, named after Moodle course formats. Course templates in English are: 1. Course template Topics format; 2. Course template Tabs format; 3. Course template - empty. After introducing these templates there soon became a need to develop a template for a completely online course that students could complete independently. This course template was created using artificial intelligence. In the future, there will also be a need for course templates based on different pedagogical working methods. These course templates will be created using artificial intelligence.

Keywords: AI, Accessibility, Case study: institution, Course design, Cognitive load, Cross-institutional collaboration