

Selecting Virtual Learning Environment

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Education 360°



Virtual learning environment

What is it?



Virtual learning environment



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What is it?

- Online (accessible via Internet) learning platform for:
 - Delivering or sharing learning materials (embedded resources or links)
 - Organizing individual or group activities and their assessment
 - With tools for student tracking, communication, collaboration
- May be integrated with other institutional systems
- Provides possibilities for user administration



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Synonyms

- Virtual Learning Environment (VLE)
- Learning platform (LP)
- Learning management system (LMS)
- Content/course management system (CMS)
- Learning content management system (LCMS)



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Virtual learning environments (VLE) – what are the most popular?

- Moodle (open source, run since 2002, Australia)
- Canvas (created in 2008, as LMS started in 2010 in Utah, went international in 2014, #1 in North America, commercial, free trial)
- Blackboard (commercial, WebCT in 1995, later Blackboard Vista, now Blackboard Learn)





Popular virtual learning platforms in 2020 - 2021 (commercial=C; free= F)



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Other LMS/platforms:

- Google Workspace for Education Fundamentals (F/C, former G Suite for Education; includes Google Classroom (new in 2016) as Classroom management tool and assignments, constant updates),
- Edmodo (F for ind./C for schools, communication & collaboration (social) platform with LMS capabilities for schools)
- Office 365/MsTeams (separate tools popular long ago; recent (2017-2021) integration and constant updates)



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Virtual learning environments (commercial=C; free= F)



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Other LMS/ platforms :

- Sakai (free, open source, pop. in 2016)
- Desire2learn (D2L, C/F),
- Curatr (social platform for gamified courses, C/F)
- Schoology (C, LMS & soc. network, pop. 2014-18)
- Mahara (F, open source, e-portfolio system, dwnl., pop. 2011-2019)
- PebblePad (C, learning journey platform, pop. 2017-19, PPL & EDU, VLE & portfolio)
- Sloodle (Moodle + Second life; not working any more)



Alves, Miranda, & Morais (2017)

VLE potential in education



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- “The features and potentialities of VLEs turn them into spaces which allow the testing, promotion and support of new highly planned and directed teaching and learning strategies.”
- From a pedagogical perspective,
 - VLE boost advance and originate innovative experiences,
 - but are mainly directed towards the production and distribution of contents.



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What's VLE impact on learning?



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- Student withdrawals from higher education prior to degree completion remain at about 30% in OECD countries (Mah, 2016).
- Tracing and analysing LMS data during courses
 - allow the detection of students at-risk at an early stage (Papamitsiou, & Economides, 2014)
 - helps instructors predict final course achievement and provides proactive feedback and adequate interventions to students (You, 2016)

Here from Alves, Miranda, & Morais (2017)



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What's VLE impact on learning?



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Alves, Miranda, & Morais (2017) research results:

- The higher the number of accesses to the VLE is, the higher the number of course units students passed is;
- The number of accesses to the VLE did not influence the mean of the marks of the course units which students passed.

Rosero-Zambrano, Avila, Osorio, & Aguirre (2018) findings:

- students who did the activities in the VLE showed an increase in performance scores in comparison with students who did not do them;
- course supported by ICT activities in VLE fostered autonomy in students.



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Categories of features of open online learning environment

- easy accessible
- stimulating learning,
- creating a community for communication and collaboration,
- pedagogically well organized

(based on theoretical approaches analysed: Newman & Scurry (2001), Mentor (2007), Grant (2007), Wu, Yu, & Wang (2018), Andone, Dron, Pemberton, & Boyne (2007), Lubin & Ge (2012), Milligan & Littlejohn (2014), etc.)

Results from the Research project “Open and Online Learning for Digitalised and Networked Society” (No. 09.3.3-LMT-K-712-01-0189); funded by the European Social Fund according to Measure No. 09.3.3-LMT-K-712



What are the criteria for VLE selection?



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- Who is making the decision?
- Server - installed or cloud version? Who's hosting? Free or commercial
- Is institutional support necessary? Will you have it?
 - Who will provide support for learners?
 - Design issues
 - Administration issues
- What functions are necessary and what does platform provide?
 - User friendliness, variety of tools for content creation, interactivity, assessment and feedback



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