THE PROCESS OF DESIGNING THE FUNCTIONALITIES OF AN ONLINE LEARNING PLATFORM – A CASE STUDY

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Abstract

This study investigates the process of designing the functionalities of an online learning platform put forward by three types of its users: students, academics and admin staff. Moreover, the study intends to get an insight into the impact the attitudes of the participants of the instruction process have on the process of the platform construction. The case study design was used to see if users of an online learning platform could contribute to defining its functionalities in the areas of creating and sharing classes remotely, conducting tests, tests and exams and advanced reporting of student activity. Moreover, the author wished to learn if different platform users would put forward similar platform functionalities. It was discovered that the parties involved in the platform construction processes may, first of all, have a lot to offer in terms of the platform functionalities and should therefore be involved in the platform construction process. Second of all, although their contributions as far as the functionalities of the platform are concerned may have a lot in common, there are certain aspects of the platform which only people involved in seemingly narrow areas can come up with.

Keywords: online; platform; functionalities; technology-enhanced; teaching

1. Introduction

There are certain considerations to bear in mind to deliver e-ducation for all. These embrace human, organisational and technological challenges to respond to with the aim of ensuring management of schools, appropriate use of technology and enthused teachers and school administrators.

Firstly, the teacher who manages online schooling in the way their digital literacy and skills allow. Thus, there are novices to e-ducation who require time and training on the one hand and pundits who juggle teaching methods, online tools and apps according to the needs, expectations and, as it is now, emergency situations on the other.

Secondly, from the organisational perspective, teacher training programmes provide academic courses on designing or constructing online learning environments (OECD, 2009; Burns, 2011; Moore et al., 2014). However, they do not train on crisis management to cushion

the effect of a widespread disaster. Having no backup plans in place, educational systems around the world have had to adapt existing methods and substitute them with online learning; at primary, secondary and tertiary level – frequently by means of trial and error. Fortunately, as studies report, education has tackled the challenges of the online instruction and most importantly has come to grips with the implementation of online means and tools of teaching (Basilaia et al., 2020; Dhawan, 2020).

Finally, there is the technological challenge. The complaint we hear from teachers more and more often is not the lack of internet tools and apps to include in their classes but their profusion. They feel overwhelmed trying to choose among commercial and non-commercial computer apps or e-learning platforms and their functionalities. This paper aims to tackle the process of designing the functionalities of an online learning platform.

2. Literature review

The process of online knowledge construction is founded on the access to commercial, open-source or free platforms[1] which manage and distribute content as well as offer numerous functionalities. As the range of the existing literature is evolving, the transition to online teaching platforms and tools confirms their value and inevitability both in pandemic and postpandemic education. The research carried out in the area of online teaching and learning has revealed varied expectations and requirements, institutional determinants and strategies to deliver appropriate content (Szadziewska and Kujawski, 2017; Smyrnova-Trybulska, 2018; Kuzminska et al., 2019). The very online platforms are required to meet a number of requirements put forward by its users which, as discussed by Abdulazeez and Zeebaree (2018:253), can be divided into *functional requirements, non-functional requirements* and *software and hardware requirements*. The construction of an online platform proves to be an integrative effort of students, teachers and admin staff as they all possess previous knowledge of working with online platforms or demonstrate specific needs concerning their functionalities. Moreover, they may simply want to be involved in designing an environment they will be using shortly. According to the research carried out by Habib and al. (2020: 1), the process (…) "provides an integrated and digital platform to key stakeholders particularly to the teachers for sharing course outlines, lesson plan, assignment generation and submission, announcements and generating assessment reports". Adopting one-model-fits-all approach

[1] The available platforms include MS Office 365, Google G Suite, Moodle, Blackboard, EduPortal, Coursairs, Edupage to name only the most popular ones.

may lead to purchasing an expensive and complex platform whose all functionalities will be implemented only to minimum extent in practice.

Online learning platforms are not a new phenomenon and therefore the research which corresponds to their construction, application and assessment is considerable (Passey and Higgins, 2011; Moreno et al., 2017; Hodge, 2020; Di Pietro et al., 2020; Rabiman et al., 2020). Broadly speaking, the subject literature defines an online platform as an environment where learning takes place mediated by the available technology. As regards the theories on which learning platforms are founded, the most applicable may be the Technology Acceptance Model (Davis, 1986) because it postulates that the application of an information system is conditioned by the platform's usefulness and ease of use. Therefore, if platform users are affectively involved in the construction process, which requires behavioural intention to use computer-based instruction, it may determine the eventual successful or ineffective use of a platform. Platform users may not welcome the very system; however, there is a possibility that they will find it valuable if they recognise that the system will enhance their performance in action (Dillon and Morris, 1996). Consequently, learning platforms have had a substantial bearing on the direction of contemporary education. Their main function to date has been augmenting traditional instruction with digital content and, as different studies indicate, the outcomes are varied and include the ones where its impact is either positive or negative and those where further research is required for appropriate evaluation (Survey of Schools: ICT in Education, 2013, 2019; Study Report: Virtual Learning Platforms in Europe, 2010; NEPC Report, 2013; Cole et al., 2014; Selwyn, 2016; Cacheiro-Gonzalez et al., 2018; Oliwa, 2020).

Nonetheless, since the occurrence of the pandemic, the main function of online platforms has been to enable teachers to substitute traditional instruction or to hybridise it. Overall, platform users agree that they facilitate autonomous learning, enable content distribution and support interaction among users (Reinders and Darasawang, 2011; Muhammad, 2020). On top of this, platforms manage and distribute course content and offer repositories of materials, support assessment and feedback as well as support communication among users (Dahlstrom, 2014; Kurucay and Inan, 2017; Garcia-Aretio, 2017; Bartolomé et al., 2018).

The scarce research on the customisation of learning platforms does not undisputedly support the view that integrating different parties in the process of platform construction can ensure the success of the platform. Moreover, "technology does not in itself bring about successful learning" (JISC, 2009: 17) and the app generation may rely on teachers to guide

their effective strategies for using technology in learning. As indicated by Nat et al. (2011), there are no apparent differences between the results achieved by students who use platforms tailored to their requirements or those who access the ones constructed with an average user in mind.

3. The study

3.1. Aims and research questions

The study attempts to examine the process of designing the functionalities of an online learning platform put forward by three types of its users: students, academics and admin staff decisions concerning the choice of functionalities of an online learning platform at the East European State Higher College in Przemyśl (hereinafter referred to as 'the college'). The available research may indicate that the area of online learning, with its impact and quality as well as the customisation of online environments, largely owning to the unexpectedness of current circumstances and the lack of such studies, has become the centre of attention. Therefore, the present study also aims to draw attention to the importance of the platform construction process. The study aims to determine the following research issues:

1. To what extent may users of online learning platforms help to define their functionalities?
2. Will different users put forward similar platform functionalities?

The data was gathered with the intention of addressing the two research questions as well as choosing or designing an online learning platform equipped with the required functionalities. The construction of the platform was meant to be outsourced and purchased through bidding procedures and implemented in an academic environment. Similarly, an examination and assessment of the very process and its follow-up was intended to be undertaken in view of the anticipated results, future recommendation and modifications to respond to new educational requirements and expectations in the pandemic times.

3.2. Design and procedure

The case study design was applied with the aim of finding the scope of the required online platform functionalities. Moreover, it intended to get an insight into the impact the attitude of the participants of the instruction has on the process of the platform construction. The case study design included such tools as document analysis, interviews and an online survey.

The analysis was based on the requirements issued by the Polish Minister of Science

and Higher Education and the Rector of the College prior to the coronavirus pandemic - March 2020 and those released afterwards. The official parties involved in the legal process included the Council of Ministers, the Minister of Science and Higher Education, the Minister of Health and the Rector of the East European State Higher College in Przemyśl. They all issued the regulations concerning the organisation of studies with the use of distance learning methods and technologies as well as the tasks and functions of organizational units supporting their implementation at the college.

The interviews used in the case study were conducted individually with randomly chosen five representatives of each group of participants, namely students, teachers and administrative staff. The admin staff were questioned at prearranged times on the same day in face-to-face interviews conducted one after another. The interviews with the students and teachers were also arranged one after another on MS Teams in a dedicated team. The reasons for conducting individual or online interviews was a response to the recommendations by the Ministry of Health to limit the spread of the COVID-19 virus, assemblies and events and the shutdown of all educational process on all levels of studies. either face-to-face or online. All the participants were requested to provide their recommendations in three areas; namely, the platform's administration and management, instructional environment and reporting. Their responses were recorded in the written form for further processing.

The online survey tool used was researchonline.pl, a Web-based advanced online research tool which allows creating professional surveys and conducting complex research from any computer with an Internet connection and a full-featured Web browser. The language of the survey, similarly to the interviews, was Polish as not all the study participants' command of English allowed for undisturbed understanding of the survey questions.

The survey comprised three sections. Sections one and two aimed at getting the participants to ease themselves into the survey and they concerned the participants' general opinions and experience of distance learning whereas part two dealt with organisational and legal issues of the distance education introduced in the pandemic. Finally, section three of the survey was composed of five parts. Part A inquired about the functionalities which would allow teachers to organize and store course content. Part B dealt with posting tests, exams and assignments. Part C enquired about reporting students' grades and activity. Part D encouraged the participants to enumerate any other platform functionalities they considered indispensable. In the last part of the survey the participants could voice any other comments and recommendations about new online platform under construction.

All sections of the survey comprised open-ended questions so as to encourage authenticity and empower participants, as well as examine their expectations about the features of the platform in the areas of creating and sharing classes remotely, conducting tests, tests and exams, and advanced reporting of student activity. The data collected allowed the researcher to obtain information about the most important characteristics of a platform and the frequency of responses.

3.3. Research participants

The participants who took part in the study consisted of two groups. The first group comprised the students who were listed in the student database. This included undergraduate and postgraduate degree students of all available degree courses. The number of the students who responded to the survey was 30% of their total number. The other research group encompassed teachers and admin staff. The number of the teachers who responded to the survey was 21% of their total number. Additionally there were five members of the admin staff, the same who had already participated in the interviews. The survey link was distributed to all teachers and students whose email addresses were available in the database. The email address had been obtained previously during the interviews. Both the teacher and student groups had had some introductory online platform experience as the studies programme allowed, without stipulating which one, the use of an online platform and some courses had already included the online Moodle component. It constitutes a web-based learning management system which allowed course content distribution, collecting and grading assignments, hosting online discussions and sharing resources.

3.4. Results and findings

3.4.1. Document analysis

The analysis of the documents issued prior to the outbreak of coronavirus as well as those issued in response to the coronavirus pandemic indicates a different approach taken by the lawmakers concerning the management of classes with the use of distance learning methods and technologies.

Naturally, the requirements and recommendations issued by the Minister of Science and Higher Education in the years prior to the platform construction process correspond to the general issues concerning the organisation of distance learning. The regulations issued by the Rector relate to local circumstances and conditioning. However, no requirements are offered regarding the specifics of the online platform including its components, features or functionalities, except for the general mention of Moodle. In 2020 the Ministry gave no recommendations as to the features, functionalities, tools or cost of online learning platforms. The right to choose a platform, specify its subsystems and functions as well define the organization of remote studies is one of the autonomous powers of universities. Technical issues related to the verification of learning outcomes, as well as the methods of ensuring ongoing control of its course, are determined by the university at the organizational level, taking into account its infrastructure. The available recommendations concern distance learning tools and platforms submitted to the Ministry of Science and Higher Education by service providers. Universities which need substantive, organizational or financial support, are requested to contact the Ministry. The Rector complies with the general recommendations of the Ministry and implements corresponding regulations.

3.4.2. Interviews

The detailed examination of the interview results which shows the distribution of similarities and differences between the answers provided by the parties depending on the interviewee group and platform functions is presented in Table 1 below.

As regards the platform administration all groups advocated the division of the platform into modules (e.g. announcements, assignments, settings etc.), which can be switched on and off by a course teacher and admin staff. The platform should support different media formats and enable external linking to third party resources. Moreover, external applications should be integrated and supported by the platform. Another requirement put forward by the teachers and students is free access to the platform. The admin staff mentioned the features which are vital from the perspective of the technical personnel. These included assigning course roles, security features or setting passwords. The array of the platform functionalities provided by the admin staff was the broadest one which may be due to the fact that their managerial and administrative competence was extensive and based on hands-on experience.

In terms of the instructional environment, the teachers' group may be perceived as the most resourceful one because they enumerated the most wide-ranging list of functionalities.

However, the areas of similarity among the three groups include different media format support (also mentioned in the first criterion), automatic and customisable feedback system, repository of resources and task completion record. Further to the above, the teachers included those functionalities which may streamline their work: different file support, different means of content presentation, customisable surveys and co-teaching option. Additionally, the admin staff suggested the notification of new content option.

As for the reporting functions of the platform, the discrepancies among the groups are visible; however, the teachers provided the most qualitative functionalities of the platform. They included task display format, task retake option, qualitative and quantitative progress evaluation as well as different feedback format.

Finally, as regards other comments expressed in the interview, they concerned social media integration, mobile phone application, accessibility functions and regular platform support and update.

3.4.3. Survey

The detailed analysis of the online survey reveals a comprehensive picture of the preferences for platform functionalities. Moreover, it is collated with the results of the interviews to seek any similarities.

When analysing the first section of the online survey (Part A), which asked to provide the platform functionalities in the area of creating and sharing classes remotely, both students and teachers highlighted the importance of video conferencing, screen sharing and screen recording. Other functionalities included a customisable archive of materials, notifications of new feeds and upcoming events as well as sharing the sound only. The following section (Part B) revealed that both groups thought that random question/test generators and customisable access time would be convenient functionalities. Moreover, students' participation in content construction, reliable hardware and virtual presence of a lecturer during assignments were mentioned in the responses.

Part C of the questionnaire enquired about reporting students' grades and activity. It revealed that the most desired option is the electronic academic transcript as well as the attendance and grade record. Furthermore, the students expected the platform to include such functionalities as exam notification, grading report available for a nominated student, immediate feedback on a grade or exam results, variety of assessment types and finally tracking the progress of students in achieving the learning objectives. In Part D the students and teachers alike wanted the online learning platform to be available on mobile phones.

Other interesting functionalities mentioned by the students encompassed customisable user profile, social media integration, contact with the secretary or rector's office and cloud storage space.

The last part of the survey asked the participants for their comments and recommendations concerning the new college teaching platform under construction. It can be discerned that the answers focused on very down-to-earth choices whose aim is mainly to streamline functioning of the platform, improve the quality of instruction and assessment provided and ensure a user- and environment-friendly platform. It was discovered that the parties involved in the decision making process may have, first of all, a lot to offer in terms of the platform's functionalities and therefore should be involved in the construction process. Although their contribution as far as the functionalities of the platform are concerned had a lot in common, there may be certain aspects of the environment which only people involved in very expert areas can come up with.

3.4.4. Postulated functionalities

Table 1 below shows the functionalities of the platform as postulated by its future users. The most imperative findings as far as the management of the platform are concerned refer to resemblance of the platform to the available social networking sites and their functionalities. This also refers to a mobile application of the platform to run on any mobile device such as a phone, tablet or smartwatch from any location. Furthermore, the platform is required to integrate the most popular social networking sites in its interface. However, the question that arises at this point is whether or not an online learning platform is required to resemble social networking sites and to what extent since it has a didactic aim rather than a social function. All parties stress that the user interface must be constructed in such a way so as to make it intuitive and customisable. All file formats and media types should be supported. The platform must ensure the protection of all content, personal data in particular.

From the instructional standpoint, also emphasised in the section dealing with platform management, content should be available from any device and any location (anytime / anywhere learning) so students can complete tasks autonomously outside school which provides an augmentation of a traditional form of learning. The application generation, well-accustomed to different media types and formats, requires the platform to offer multisensory output. This may not necessarily denote students only as increasingly more and more teachers flexibly apply new technologies. Both teachers and students stress that all the content accessible in a repository should be customisable and reusable depending on the authorisation

type. As highlighted in previous studies (Plastina 2015), it may encourage a personalised learning path according to each student's strengths, needs and temperaments, while enabling them to work collaboratively in an online social context which follows the assumptions of social constructivism. It claims that human advancement hinges on social interaction and knowledge is acquired, constructed and applied through teamwork. The platform should support such teamwork and cooperation because students and teachers progress in social networking. This also supports the idea of connectedness as it offers real-life contexts in which students discover instructional content in the time and place of their choice. Moreover, it is mandatory that the construction of the platform supports the inductive approach to teaching based on discovery and placing the learner in the centre of the instruction process. This, in return, may lead to better student interaction and involvement, improve higher order learning skills and foster their critical thinking. Consequently, students may gain deeper understanding of the studied content. The immediate feedback which students receive on their performance has an impact on their motivation and sense of achievement.

Other important comments and recommendations expressed by the parties under examination include cloud storage which allows file maintenance, management and back-up over the internet rather than using local servers to store data which may turn out more costly, less secure and less reliable if in-house technicians are not at hand. Another recommendation referred to the cost of the online learning platform. Preferably, such a platform should be free of charge to use for both students and teachers which does not imply that the initial purchase cost does not exist. Conversely, any commercial software which is free to use for its users may be a considerable financial burden for an institution. Yet another comment dealt with the very decision to implement online learning and its outputs. If such a decision was taken then it should lead to the paperless education that has numerous advantages, some of which include preparing students for their future, improving organisational skills or boosting efficiency. The suggestion to link the content available on the platform with external resources might be an incentive to implement such learning initiatives as Massive Open Online Courses as well as other free courses into regular platform resources. They may augment the online learning environment with evergreen, interactive video lectures, exercises, or readings and offer assessment tools which only distance education can provide.

Table 1. Specifications and functionalities of the online platform

1.	**Creating and sharing classes remotely**
a.	anyplace/anytime access;
b.	customisable user interface;
c.	advanced set of tools for delivering and conducting classes (e.g. video conferencing, presentation; screen sharing; live streaming etc.);
d.	assigning user roles;
e.	attendance registration module integrated with the evaluation system,
f.	customisable course modules (e.g. switch on and off)
g.	customisable course content (e.g. chapters, unites, paths, plan content, co-edit content omit content, hide content, go to further content, block content, allow content etc.);
h.	file attachment;
i.	external links;
j.	assigning tasks on external resources;
k.	social media integration;
l.	social media functionalities;
m.	mobile applications;
n.	import courses or their elements,
o.	communication tools between participants,
p.	records of uploads and user logs and files;
q.	opinion polls;
r.	instructional training for users;
s.	helpdesk;
t.	changes introduced by the helpdesk within 24 hours,
u.	technical support by email / telephone;
v.	disability friendly interface;
w.	regular platform update.
2.	**Conducting tests and exams**
a.	various assessment tools (e.g. true/false, match, multiple choice, multiselect, complete text);
b.	registration module
c.	archive of text chat, video-conferencing, transferred files;
d.	test modules support various file formats;
e.	text or voice comments to the submitted work/tasks;
f.	predefined assessment scales;
g.	predefined weighting of grades;
h.	test result calculation and assessment tools;
i.	open-ended essay questions,
j.	peer evaluation;
k.	co-authoring;
l.	all tests / exams limited by a deadline or password;
m.	extended assessment information (e.g. various assessment elements of the same course);
n.	customisable test management (e.g. result formats, deadlines, upload delays and test access logs);
o.	oral written assessment combination;
p.	helpdesk;
q.	changes introduced by the helpdesk within 24 hours;
r.	assigning tasks on external resources (e.g. MOOC);
s.	technical support by email / telephone;
t.	disability friendly assessment settings.

3.	**Advanced reporting of student activity**
a.	reports of all activities in the course,
b.	user and group activity reports,
c.	individual student performance in the form of grades - any task; - for a given period / semester; - for a given type of task; - all tasks.
d.	individual student performance in the form of percentage - any task; - for a given period / semester; - for a given type of task; - all tasks.
e.	quantitative or qualitative feedback on the performance of the participant / group; - any task; - for a given period / semester; - for a given type of task; - all tasks.
f.	feedback on the student's grades with their weights,
g.	pre-defined automatic post-task comments,
h.	teacher's comments sent in a separate file in the form of a text or voice recording,
i.	comment limited to one student or all course participants.

4. Discussion

Table 2 below presents the postulated functionalities and features of a required online platform confronted with those which selected online learning platforms available on the market offer. The platforms brought together for comparison are Moodle, Canvas, Office 365, Google G Suite and EduPortal. The functionalities embrace creating and sharing classes remotely, conducting tests and exams and advanced reporting of student activity. Some major similarities and differences can be discerned between the users' expectations and what individual platforms can make available. Moodle, despite being a free tool, offers one of the largest arrays of functionalities. As an open-source solution, however, it relies on individual initiatives to implement, maintain and troubleshoot the platform which commercial solutions e.g. EduPortal guarantee and are accountable for. Other free platforms e.g. Office 365, Google G Suite, on the other hand, do not contain so many functionalities tailored to meet certain requirements as commercial products do, but nevertheless, we have seen and can predict their development and the addition of new applications as a response to both the continuing pandemic and feedback received from their users. Another application model can be used where one major online platform is extended and supplemented by external solutions for better functioning of the platform (EduPortal uses MS Teams for video conferencing).

Often the considerations about the types of online learning platforms hinge, to a large extent, on the cost and here the distinction is into the commercial products and free / open source alternatives. Open-source solutions are free of charge, their source code can be modified or extended to satisfy individual requirements but do not provide human technical support or troubleshooting services and they are available only by online forums or guide sections. Commercial tools, in contrast, offer after-sales assistance and their implementation is supervised by technicians. Finally, the decision with regard to on-line learning platform can be subject to reviews, rating, training and integrity with the existing solutions or pedagogical assumptions.

Table 2. Presentation of the postulated platform functionalities confronted with the market offer

Platform / Functionalities	MOODLE[2] release 3.10	CANVAS[3] free learning platform	OFFICE 365 / GOOGLE G SUITE[4]	EDUPORTAL[5]
Creating and sharing classes remotely	- anyplace/anytime access; - customisable user interface; - advanced set of tools for delivering and conducting classes; - assigning user roles; - customisable course modules; - customisable course content; - file attachment; - external links; - social media integration; - mobile applications; - import courses or their elements; - communication tools between participants; - records of uploads and user logs and files;	- anyplace/anytime access; - assigning user roles; - attendance registration module - file attachment; - external links; - mobile applications; - import courses or their elements; - communication tools between participants; - records of uploads and user logs and files; - guides for users; - guide forum.	- anyplace/anytime access; - customisable user interface; - advanced set of tools for delivering and conducting classes; - assigning user roles; - attendance registration; - customisable course modules; - customisable course content; - file attachment; - external links; - assigning tasks on external resources; - mobile applications; - communication tools between participants; - records of uploads and user logs and files; - opinion polls;	- anyplace/anytime access; - advanced set of tools for delivering and conducting classes; - attendance registration module integrated with the evaluation system, - customisable course modules; - customisable course content ;; - file attachment; - external links; - import courses or their elements; - communication tools between participants; - records of uploads and user logs and files; - opinion polls; - instructional training for

[2] Examples of MOODLE extensions include SmartKlass™, Dialogue and Attendance.
[3] Presently, CANVAS is available in three different versions; i.e.: www.canvaslms.com – paid learning platform builder, www.canvas.instructure.com – free learning platform builder and www.canvas.net – online learning provider.
[4] Both of these platforms are free for education and offer similar collaboration, usability, tools and extensions.
[5] EduPortal is a commercial platform supporting the work of universities. It enables a comprehensive management of students, faculties and broadly understood didactics.

	- opinion polls; - instructional training for users.		- external instructional training for users; - technical support by email / telephone; - limited disability friendly setting; - regular platform update.	users; - helpdesk; - changes introduced by the helpdesk within 24 hours, - technical support by email / telephone; - disability friendly interface; - regular platform update.
Conducting tests and exams	- various assessment tools; - registration module; - archives; - test modules support various file formats; - predefined assessment scales; - predefined weighting of grades; - test result calculation and assessment tools; - open-ended essay questions, - co-authoring; - all tests / exams limited by a deadline or password; - customisable test management;	- registration option; - archive of files; - test modules support various file formats; - test result calculation and assessment tools; - open-ended essay questions, - peer evaluation; - co-authoring; - customisable test management.	- various assessment tools; - registration module; - archives; - test modules support various file formats; - text comments to the submitted work/tasks; - predefined assessment scales; - test result calculation and assessment tools; - open-ended essay questions, - co-authoring; - all tests / exams limited by a deadline; - extended assessment information (e.g. various assessment elements of the same course); - customisable test management; - technical support by email / telephone.	- various assessment; - extended registration module; - archive of text chat, video-conferencing, transferred files; - test modules support various file formats; - text or voice comments to the submitted work/tasks; - predefined assessment scales; - predefined weighting of grades; - test result calculation and assessment tools; - open-ended essay questions, - peer evaluation; - co-authoring; - all tests / exams limited by a deadline or password; - extended assessment information; - customisable test management; - oral written assessment combination;

				- helpdesk; - changes introduced by the helpdesk within 24 hours; - assigning tasks on external resources; - technical support by email / telephone; - disability friendly setting.
Advanced reporting of student activity	- reports of all activities in the course; - user and group activity reports; - individual student performance in the form of grades; - individual student performance in the form of percentage; - feedback on the student's grades with their weights; - pre-defined automatic post-task comments; - teacher's comments sent in a separate file in the form of a text or voice recording; - comments limited to one student or all course participants.	- reports of all activities in the course; - user and group activity reports; - individual student performance in the form of percentage; - pre-defined automatic post-task comments; - teacher's comments sent in a separate file in the form of a text or voice recording; - comment limited to one student or all course participants.	- reports of all activities in the course; - user and group activity reports; - individual student performance in the form of percentage; - quantitative or qualitative feedback on the performance of the participant / group; - pre-defined automatic post-task comments; - teacher's comments sent in a separate file in the form of a text; - comment limited to one student or all course participants.	- reports of all activities in the course; - user and group activity reports; - individual student performance in the form of predefined grades; - individual student performance in the form of percentage; - quantitative or qualitative feedback on the performance of the participant / group; - feedback on the student's grades with their weights; - pre-defined automatic post-task comments, - teacher's comments sent in a separate file in the form of a text or voice recording, - comment limited to one student or all course participants.

5. Conclusions and recommendations

As the available subject literature reveals and the present study confirmed, the more integrative the process of an online platform construction is, the more comprehensible a platform may be accomplished. In other words, a more diverse group of users involved in choosing the required platform functionalities may ensure a better online environment. Moreover, all the groups engaged in the construction process may provide both similar ideas to choose the core functionalities of a platform as well as different ideas which may satisfy local requirements of each party (Habib and al., 2020). Consequently, this may contribute to creating a platform based on strong triangulated foundations supported by legal requirements for such platforms. It may be a sensible solution, if financial resources to purchase one complex online platform are scarce, to collect appropriate free or open source applications and tools separately and combine them into an integrated online learning platform. The process is often possible as different tools are built to integrate and provide a user-friendly, intuitive environment.

The competences and skills acquired by the different groups of users in platform construction process may be valuable in the years to come as education will function in a new, hybrid normal, which is also confirmed by the available research (Basilaia and Kvavadze, 2020). Taking into consideration the contribution made by all the participants of the study, the students who provided the largest number of answers were the most keen to share their ideas concerning the online learning platform and its functionalities which could stem from the fact that they feel more at ease with the online environment and its features. Moreover, as the research indicates, the reason for the preparedness to use online tools may stem from the student personality type, individual preferences or preference poles (Bolliger and Erichsen, 2013) as well as from the fact that they enjoy combining the traditional with the new, the classroom-based with the online (Keskin and Yurdugül, 2019). The introduction of the platform is conditional on the appearance of new generations who obtain and process knowledge differently as compared to previous generations. Because social distancing and self-isolation influenced various aspects of education and have changed the way it is run, proper data collection, its analysis and execution becomes a must, bearing in mind the fact that coronavirus and its aftermath will be felt for many years to come.

The conclusions drawn from the study correspond to different subjects of the platform construction process and the contribution they may offer. Firstly, their involvement gives them agency on the one hand and makes them liable on the other. Different platform users, becoming involved in the construction process, may contribute to a better selection of the

required functionalities. They may also discover their own and their peers' needs and potentials as previously indicated by Szadziewska and Kujawski (2017), Smyrnova-Trybulska (2018), and Kuzminska et al. (2019). Conversely, one limitation of the platform construction is the fact that its users are not involved in the content design and creation which they later on access. It is the author's belief that the data collection stage requires an appropriate length of time to be a reliable source of information for the platform's construction. Moreover, the platform should be flexible and allow further modifications and augmentation of the functionalities depending on the changing circumstances and new resources being made available continuously.

The far reaching implications include the extension of the programme of studies with digital tools and content so as to provide a hybrid model of education in the postpandemic years as in the author's opinion this may become the new normal. Hopefully, the study will help other teachers and decision makers to examine and choose the platform tailored to their requirements.

The study confirms other authors' findings in the field of online platforms (Passey and Higgins, 2011; Moreno et al., 2017; Hodge, 2020; Di Pietro et al., 2020, Rabiman et al., 2020) and necessitates further examination as regards the construction, functionalities and most importantly the impact of online platforms on learning. Further research is required not only to provide guidance for all the above mentioned factors, but most importantly to answer the questions of maintaining the quality of education as the next school year is likely to be completely different from the norm. Besides, in a long term perspective, queries concerning the leadership in education, teachers' competences, management model or investments will have to be dealt with. Students require clear messaging from their college about the upcoming academic year. While it is difficult to predict exactly where we will go, it is important universities are as clear as possible in their efforts to provide the best online study conditions possible.

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