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UDC 378.147**MS FORMS APPLICATION DURING INTERSESSION TESTING OF PART-TIME STUDENTS**M.A. Pachkiv¹, L.Ya. Shpilchak²*Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine:*¹*Department of Medical Informatics, Medical and Biological Physics,
ORCID ID: 0000-0002-4040-3934, e-mail: shyfnarovych@gmail.com*²*Department of Linguistics,
ORCID ID: 0000-0002-6144-2430, e-mail: l.shpilchak@ukr.net*

Abstract. Introduction. According to the organization of the educational process for part-time students of the Faculty of Pharmacy at IFNMU, the academic year can be divided into the session and intersession periods. While studying at the university, the student acquires knowledge either under the guidance of a teacher or independently. Part-time studying at the Pharmacy Faculty involves allocating a significant part of the student's time to self-done training, especially in the intersession period. The student learns the theoretical material from the discipline, which will be discussed in the upcoming period of the session independently and must present the result of the study before the beginning of the session. The form of control of the student's self preparation during the intersession period is the testing of the covered theoretical material of each discipline. Taking into account the need to ensure a certain set of conditions in which the student and the supervising teacher are during this intersession period, there is a need to choose a reliable tool for the implementation of this kind of testing.

The results. The current state of development of information technologies in education allows automatic control measures of the educational process at a fairly good level. The involvement of highly professional tools in conducting student testing requires significant time investment and specialized knowledge of the appropriate software, both for the teacher who develops such testing, and for the student himself as a user. If to focus on ensuring certain conditions such as online testing; performing automatic assessment and the possibility of checking the mistakes made by the student; identify the student by personal account and manage access to testing; adhere to clear testing intervals; to fill test questions with mathematical formulas, it is worth noting the functions of MS Forms from the Office 365 cloud environment toolset.

It is known that MS Forms from the suite of tools of the Office 365 cloud environment is mainly used for surveys or collecting the necessary information, but it can also be adapted for testing. However, the functionality of MS Forms is not limited to this only. In this case, the question arises that the form can not only receive answers, but also compare them with the correct ones and make their automatic evaluation.

Important criteria for choosing a testing environment that is convenient for the student are the ability to take the test for free, without additional software and online. Since IFNMU uses the Office 365 cloud environment in the organization of the educational process under the terms of subscription, it is worth considering the MS Forms tool in this aspect. It will allow every part-time student to take the test in the intersession period remotely.

However, there are a few disadvantages in the use of MS Forms when testing students in the intersession period.

Conclusions. The use of tools of the Office 365 environment, namely MS Forms, during the testing of part-time students of the Faculty of Pharmacy allows you to automate the process of conducting control measures of self-studied theoretical material in the intersession period. Despite certain disadvantages, it is still possible to adapt MS Forms to the organization of student testing, taking into account the possibility of coping with current conditions.

Keywords: Office 365, MS Forms, intersession period testing.

Introduction. According to the organization of the educational process for part-time students of the Faculty of Pharmacy at IFNMU [1], the academic year can be divided into the session and intersession periods. A session for part-time students involves the implementation of all forms of the educational process provided by the working curriculum: lectures, practical classes, seminars and individual work, assessment measures both under the guidance of a teacher and a student himself. In the intersession period, part-time students learn most of the educational material independently and to a lesser extent under the guidance of a teacher in the form of consultations in accordance with the department schedule. It is the student's independent work in the intersession period that is one of the important elements of the educational process. The student firstly studies part of the theoretical material by himself

and later presents the result of his work. The form of control of the student's self preparation in the intersession period is the testing of the covered theoretical material of the subject. Each discipline test and its rework is clearly regulated and has a defined time limits for each stream of students. The fulfillment of the testing requirements in the intersession period is monitored by the teachers of the department and the dean's office in accordance with the previously provided schedule.

Research results and their discussion. In order to meet the requirements for testing part-time students of Pharmacy Faculty in the intersession period, it is necessary to choose a reliable tool for its implementation, considering the following conditions:

- students have distance learning in the intersession period, (due to lockdown and martial law in the country);

- the student must be automatically evaluated at the end of the test, and have the opportunity to review the mistakes made during the test;
- each student must be identified by his personal account;
- testing for students must take place in a clearly defined time frame;
- testing in Physics and Mathematics disciplines involves the creation of test questions and options for their answers, which will contain mathematical formulas;
- a teacher should be able to make tests with several variants quickly and easily.

Using certain tools to create highly reliable student testing environments (for example, the Edx platform) requires a significant investment of time to create an entire course in a discipline and test its material, as well as some specialized knowledge to work with the software at the level of professional use. If we focus on ensuring the fulfillment of only the conditions listed above, we should note the functions of such a tool as MS Forms, which is available for every student studying at IFNMU.

It is known that MS Forms from the suite of tools of the Office 365 cloud environment is mainly used for surveys or collecting the necessary information [2], but it can also be adapted for testing [3, 4]. However, the functionality of MS Forms is not limited to this only [5]. In this

case, the question arises that the form can not only receive answers, but also compare them with the correct ones and make their automatic evaluation. Therefore, the question of adapting the functions of MS Forms to the existing testing conditions arose.

Important criteria for choosing a testing environment that is convenient for the student are the ability to take the test for free, without additional software and online. Since IFNMU uses the Office 365 cloud environment in the organization of the educational process under the terms of subscription, it is worth considering the MS Forms tool in this aspect. It will allow every part-time student to take the test in the intersession period remotely.

When creating a test variant for a student with a certain set of questions in MS Forms, the teacher can choose the type of question (with one or more correct answers, entering your answer in the form of text or an attached file) (Fig. 1). However, one should remember that text, file or multiple choice question types will not be automatically scored in MS Forms. These types of questions will require validation and grading directly by the instructor, which will take some additional time and resources. Therefore, if there is a question of receiving a grade for the test automatically after its completion with highlighting of the mistakes made, which is of interest to most students, it is worth choosing the multiple choice tests [3].

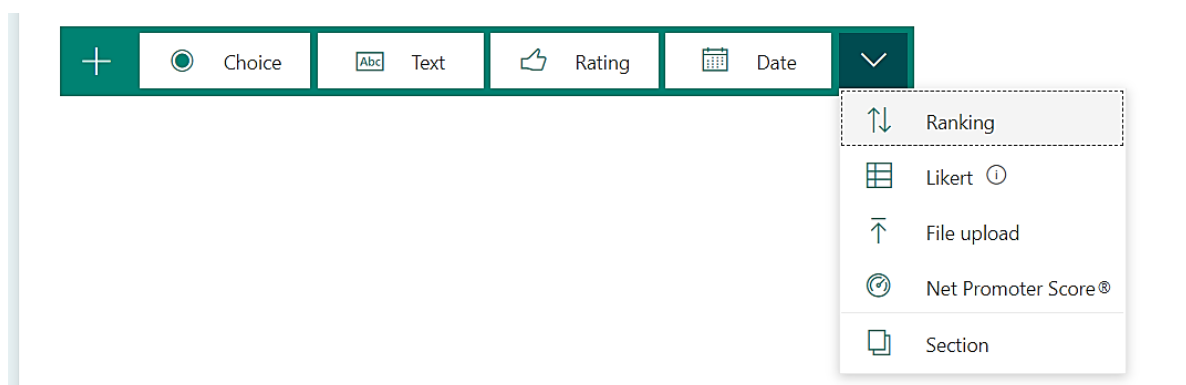


Fig. 1. MS Forms question type options.

An important stage in the creation of forms for testing is not only their context, but also setting the parameters (Fig. 2). The first parameter allows you to enable the automatic display of the result, i.e. the student will be able to compare his answers with the correct ones and analyze his mistakes after sending the results to the teacher. The second option controls the access permissions to take the test specifically from your personal account provided by the university as access to the Office 365 environment. This limits the taking of the test by other users, and also allows you to identify students by account names and limit the number of test attempts per student. The third option

allows you to accept students' answers, as well as set a clear time limits for testing, after which it will be impossible to send results automatically.

In this parameter block, you can set the random order of the questions in the variant and set the "thank you" message.

Another specific feature of MS Forms is that you can insert mathematical formulas into the multiple choice tasks as well as into the answers themselves. This is the function of MS Forms that provides the possibility of making questions for testing students in physical and mathematical disciplines (Fig. 3).

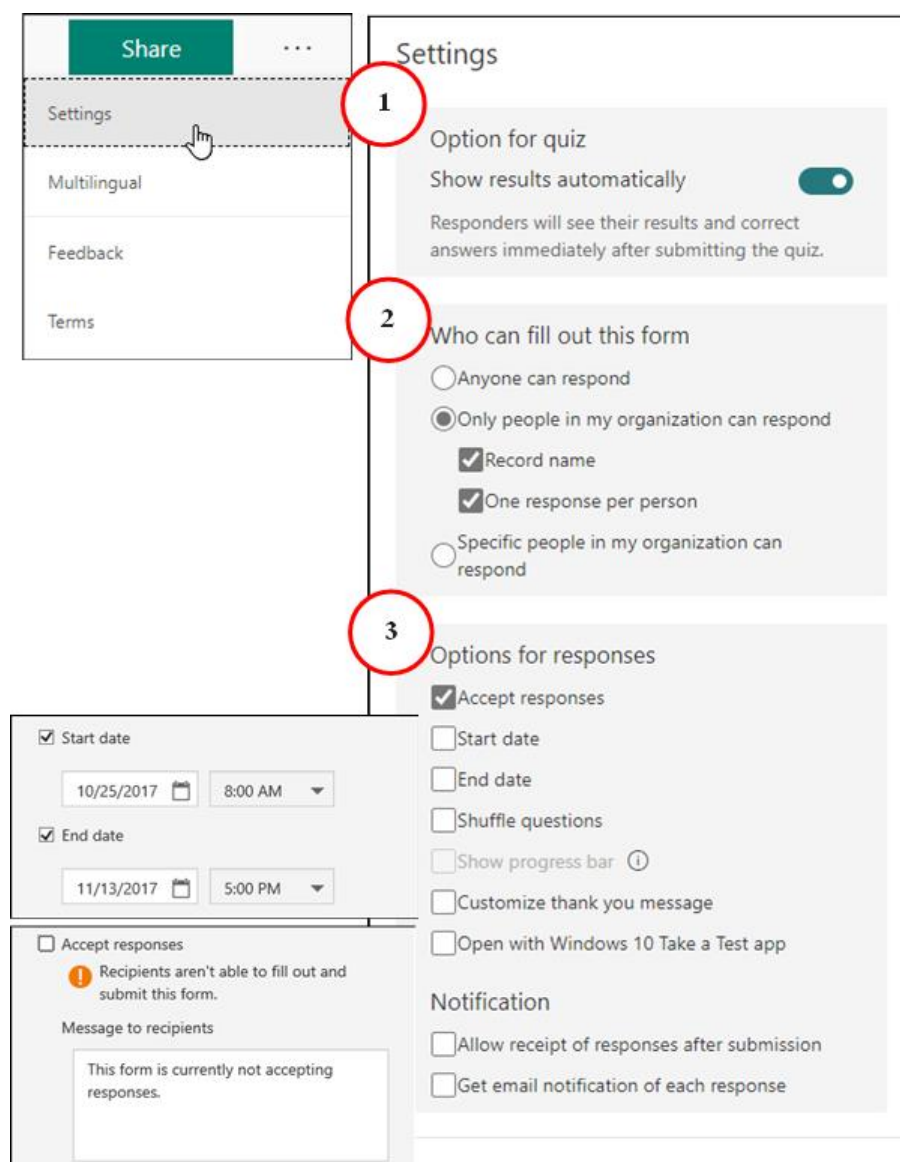


Fig. 2. Setting the parameters of the MS Forms.

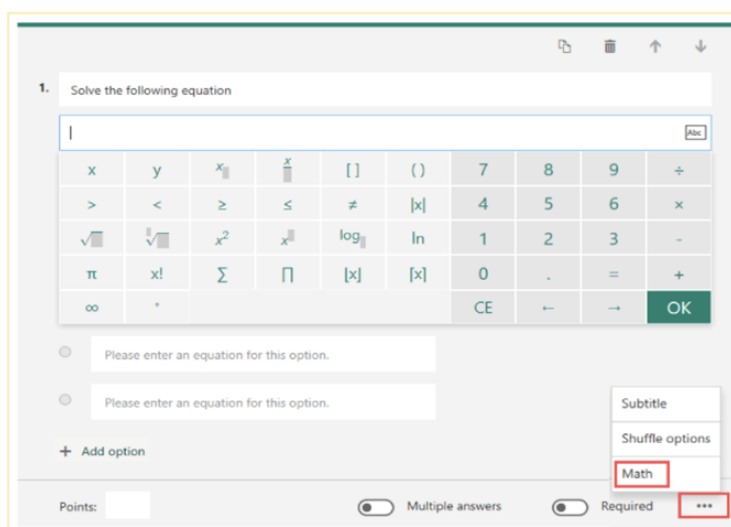


Fig. 3. Creation of mathematical expressions in MS Forms questions.

When creating different variants for testing students, MS Forms is quite simple and quick to understand. There are tools for copying both the questions and the answer options, the possibility of deleting them and changing the order of follow-up. It is also quite convenient that the form saves the settings of the previous question, which can be changed if necessary. In the form, it is possible to indicate the correct answer option and evaluate it with the specified number of points. It is convenient to mark all questions in the form as obligatory, this will allow the form to show the student which questions he missed and return to them. If the teacher mistakenly did not mark the correct answer in the question, then the grade for it is automatically added after the correction of this problem (Fig. 4).

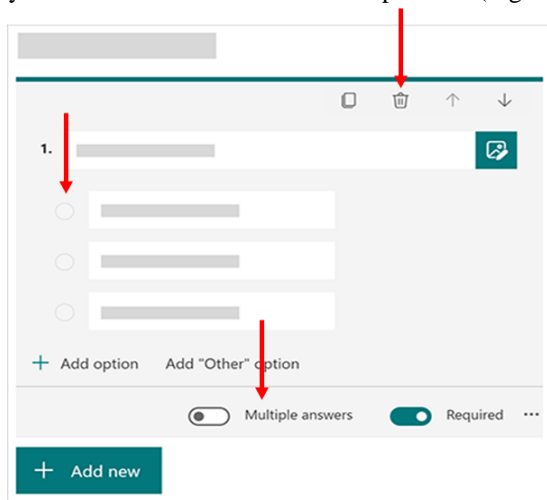


Fig. 4. Elements of work with MS Forms.

It can also be noted that if a group of teachers is working on the development of different variants for testing, all of them have access to MS Forms. This significantly saves the teacher's time in the process of creating forms for testing (Fig. 5).

The convenience of using MS Forms is also in the availability of a version for a mobile device not only a computer version.

MS Forms has convenient functions for sharing a link for testing: through the possibility of copying a link, creating a short version, sending messages personally or to a group of people through the synchronization of accounts in Outlook or MS Teams, creating a link in the form of a QR code (Fig. 6).

Share to collaborate

Specific people in my organisation can view and e... ▾

Enter a name, group, or email address

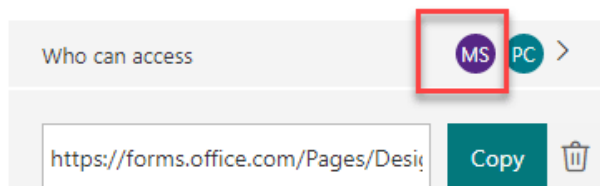


Fig. 5. Controlling access to making changes in MS Forms.

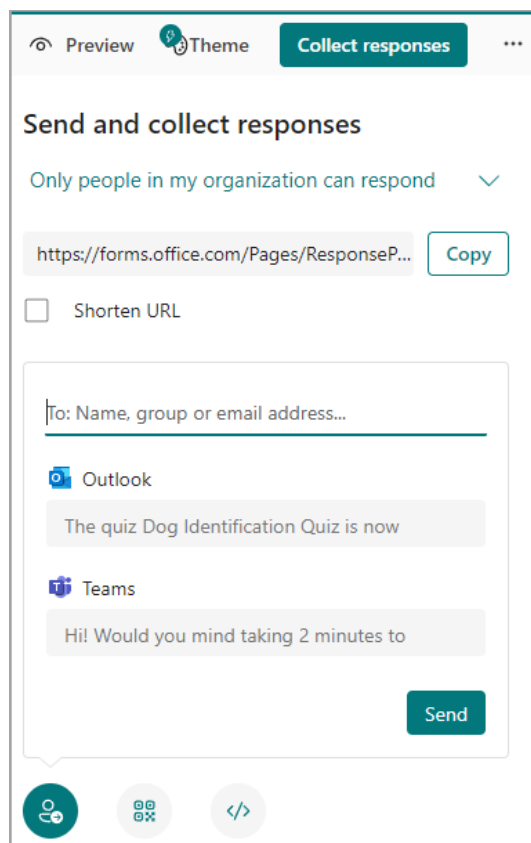


Fig. 6. Distribution of the link to the MS Forms.

For the teacher MS Forms provides quite helpful tools for analyzing the test results both in a group form and for an individual student. There is an opportunity to present test results in different ways. In addition, for a more detailed analysis of test results and defining the level of students' knowledge, the obtained test results can be exported to MS Excel (Fig. 7). However, there are a few disadvantages in the use of MS Forms when testing students in the intersession period.

Since the testing takes place online, it does not provide an opportunity to ensure equal testing conditions for students fully. Another drawback is the inability to choose questions randomly from the general question database and automatically generate a large number of variants for each student individually. And such a situation requires the creation of a large number of testing variants or their combinations. The tools for creating mathematical formulas are too simple and do not provide a wide range of possibilities for creating complex mathematical expressions.

Conclusions. The use of tools of the Office 365 environment, namely MS Forms, during the testing of part-time students of the Faculty of Pharmacy allows you to automate the process of conducting control measures of self-studied theoretical material in the intersession period. Despite certain disadvantages, it is still possible to adapt MS Forms to the organization of student testing, taking into account the possibility of coping with current conditions.

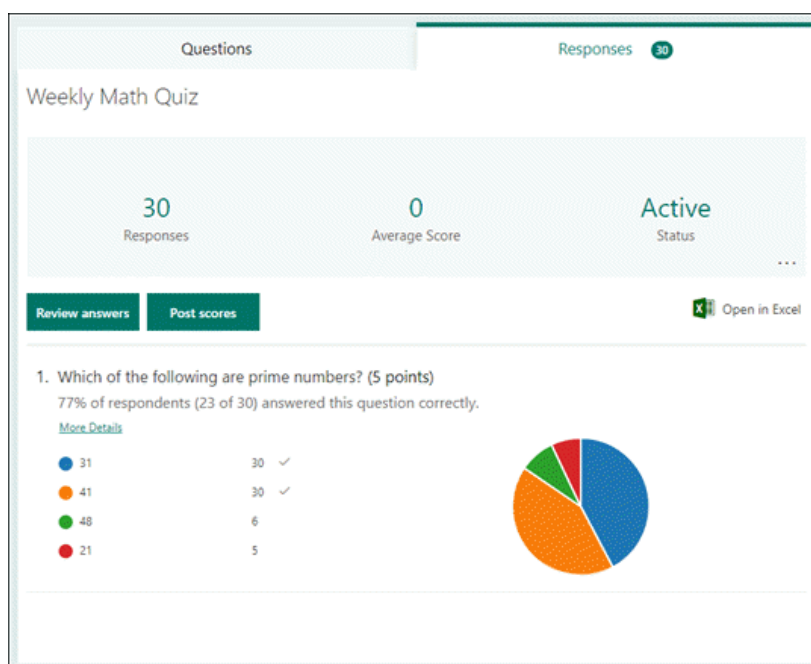


Fig. 7. Analysis of the received test results in MS Forms.

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ЗАСТОСУВАННЯ MS FORMS ПРИ ПРОВЕДЕННІ МІЖСЕСІЙНОГО ТЕСТУВАННЯ СТУДЕНТІВ ЗАОЧНОЇ ФОРМИ НАВЧАННЯ

М.А. Пачків¹, Л.Я. Шпільчак²

Івано-Франківський національний медичний університет, м. Івано-Франківськ, Україна:
¹кафедра медичної інформатики, медичної і біологічної фізики,
ORCID ID: 0000-0002-4040-3934,
e-mail: shyfnarovych@gmail.com
²кафедра мовознавства,
ORCID ID: 0000-0002-6144-2430,
e-mail: l.shpilchak@ukr.net

Резюме. Під час навчання в університеті студент здобуває знання або під керівництвом викладача або ж самостійно. Навчання на заочній формі передбачає виділення значної частини часу студентом на самостійну підготовку, особливо у міжсесійний період. Формою контролю самостійної підготовки студента у міжсесійний період є тестування теоретичного матеріалу з дисципліни, яка виноситься на період сесії. Для забезпечення певного набору умов, у яких перебуває студент та викладач у міжсесійний період, виникає потреба у виборі надійного інструменту для реалізації такого тестування.

Результати. Сучасний стан розвитку інформаційних технологій в освіті дозволяє здійснити автоматизацію контролюючих заходів освітнього процесу на досить хорошому рівні. Залучення високопрофесійних інструментів до проведення тестування студентів потребує значних часових затрат та спеціалізованих знань відповідного програмного забезпечення як самого викладача, що розробляє таке тестування, так і студента як користувача. Якщо сконцентрувати увагу

на забезпеченні виконання певного набору умов тестування у міжсесійний період: проведення тестування в режимі online; виконання автоматичного оцінювання та можливості перегляду допущених помилок студентом; ідентифікація студента за особистим обліковим записом та керування доступом до тестування; дотримання чітких часових проміжків тестування; наповнення питань тестування математичними формулами – то варто відзначити функції такого інструменту як MS Forms з пакету інструментів хмарного середовища Office 365.

Висновки. MS Forms, як інструмент хмарного середовища Office 365, можливо адаптувати до проведення тестування студентів заочної форми навчання, а також в основному забезпечити дотримання вимог тестування в міжсесійний період, які передбачаються організацією освітнього процесу.

Ключові слова: Office 365, MS Forms, тестування у міжсесійний період.

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