(matn, elektron jadval, taqdimotlar) va so‘rovnomalar yaratish. Google Classroom veb-xizmatidan foydalanib masofaviy o‘quv kursini yaratish. Elektron doskalar uchun interfaol taqdimotlar tayyorlash. https://classroomscreen.com/ - da onlayn elektron doska bilan ishlash” mavzusi misolida qarab chiqish mumkin. Bunda to‘ldirilgan reallikning markerlarini o‘zgarishi bilan talabalar turli xil Google ilovalarga o‘tib, u yerda berilgan topshiriqni bajarishligi mumkin bo‘ladi.

“Filologiya va tillarni o‘qitish” ta’lim yo‘nalishi talabalarni raqamli texnologiyalardan foydalanish ko‘nikmalarini rivojlantirish orqali ta’lim sifat va samaradorligini oshirish, jumladan o‘qitishda to‘ldirilgan reallik texnologiyalaridan foydalanish bo‘lajak mutaxassisdan yangicha yondashuvni talab etadi.

FOYDALANILGAN ADABIYOTLAR RO‘YXATI

1. Zakirova F. M., Muhammadiyev F. G. (2023). Training future english teachers in the context of using digital technologies. SPAST Abstracts, 2(02).

2. Muxammadiyev F.G. Ta’limda axborot texnologiyalari. O‘quv qo‘llanma. – T.: “Ma’rifat”, 2023. – 314 b.

3. Muxammadiyev F.G. The need to improve the digital skills of future english teachers in uzbekistan. // European Journal of Research and Reflection in Educational Sciences, Great Britain. ISSN 2056-5852. Vol. 11 No. 2. 2023. P. 1-5.

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POSITIVE MOTIVATION MIGHT BE EXPECTED TO RESULT IN INCREASED ACHIEVEMENT

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Abstract: *This article includes some methods and techniques of teaching mathematics, which will further help in teaching.*
Key words: *Integration, the continuity, innovation activity, modernization of education.*
Аннотация. *Ушбу мақолада талабаларга математика фанини ўқитишда кенг қўлланиладиган баъзи янги методик усуллардан фойдаланиш етарлича ёритилган.*
Калит сўзлар*: Интеграциялашув, ўзаро боғлиқлик, инновацион фаолият, таълимни модернизация қилиш.*
Аннотация. *В статье рассматривается новые методические средства обучения математике, широко используемые в обучении студентов.*
Ключевые слова*: Интеграция, преемственность, инновационная деятельность, модернизация образования.*

"Appreciate science, strive for science. Do not waste even a second of your time.
Youth is the most invaluable period of life.
Science and knowledge - fireproof, non-submersible, never forget that it is a fortune that no one can take away from you!"

Sh. Mirziyoev

Emphasizing that no country can develop without scientific achievements and innovations in this area, the President said: "Strategies and mechanisms of innovative development of the country are closely linked, first of all, with the effective use of intellectual and scientific-technical potential created in this country. Deepening the integration of science and industry, including science and education, will play an important role in fulfilling this task" [1].

Teaching and learning strategies are broad concepts. Teaching strategies refer to a wide range of processes, from the way in which classrooms are organized and resources used to the daily activities engaged in by teachers and students to facilitate

learning. Student learning strategies refer to cognitive and meta-cognitive processes employed by students as they attempt to learn something new.

The literature on students' motivation to learn often makes a distinction between intrinsic and extrinsic motivation, commonly holding that intrinsic motivators are more effective than extrinsic ones in engendering engagement and performance. The report uses the index variable interest in and enjoyment of mathematics to represent this construct. This variable derives from a series of questionnaire items on how much students enjoy and look forward to doing mathematics. The report considers subject-matter interest to be an aspect of student learning strategies, especially if interest in the subject flows in some way out of or from the teaching. This type of positive motivation might be expected to result in increased achievement. In contrast to the intrinsic nature of interest and enjoyment, students may be motivated to study mathematics by its perceived importance to future education or to careers. To analyze this possibility, index of instrumental motivation in mathematics, measured by a series of questionnaire items on the perceived value of studying mathematics for these external reasons [2].

Together, on average, the two measures of motivation to learn mathematics account for an additional 5% of performance variation among students but no additional performance variation among schools. Students' motivation accounts for 11% of the variation in student performance in Norway, 9% in Denmark and Finland and 8% in Korea. Students' reported levels of interest in and enjoyment of mathematics show relatively strong positive association with mathematics performance. However, this changes mainly to moderate Mathematics Teaching and Learning Strategies. Are Students' Perceptions of their Mathematics Teaching and Learning Related to Mathematics Performance? In contrast, students' instrumental motivation to learn mathematics, which also has a strong positive observed association with performance, continues to show significant positive effects. It is interesting to note that in Poland, the United States, Canada and the Russian Federation, the effect of students' interest in and enjoyment of mathematics is

negative while the effect of students' instrumental motivation to learn mathematics is positive.

Positive attitudes towards school and motivation to learn may be, independently of their impact on achievement, important outcomes in their own right. The four measures of students' perceptions of school in general and their motivation to learn mathematics show positive correlations among themselves. This lack of independence among these measures no doubt accounts for the change in patterns of relationship when all of the measures enter into the same analytical model [3].

Like socio-economic status, students' self-confidence and motivation as learners show consistent correlations with achievement. These factors could also be related to teaching and learning strategies, and therefore they are included as control variables in the models. Nevertheless, unlike socio-economic background, the direction of causation is not at all clear for these variables. That is, it is possible that attitudes can be influenced by teaching strategies that attitudes influence learning strategies or that attitudes are affected by achievement. For example, the question remains unresolved of whether a high level of perceived competence in mathematics precedes or follows a high level of achievement, or whether low achievement engenders high mathematics anxiety or vice versa. As noted earlier, cultural differences are likely to affect students' interpretation of self-confidence and motivation questions. Results in these areas should be interpreted with country differences in their mean index values in mind. Readers familiar with particular countries or cultures are better placed than the authors to make judgments about such differences. These variables show some unexpected patterns when taken in the context of other factors in the full model and hence warrant further discussion.

Self-efficacy is often seen as a major determinant of behavior. However, there is some debate as to whether self-efficacy is best thought of as a generic or a subject-specific trait. The extent of its correlation with achievement seems to depend on the type of self-efficacy measure used. In countries where students have least confidence in their own efficacy, this variable also makes least difference to their predicted

achievement; it is most closely correlated in some countries that have about average self-efficacy overall [3, 4].

The question arises of whether there would be any benefit in attempting to enhance self-efficacy in mathematics as a means of improving achievement. Students in Japan and Korea have among the lowest average sense of self-efficacy in mathematics, though both countries have among the highest average achievement levels. This finding raises the further question of whether the culture or the school systems of these countries are in some way engendering more negative student opinions of their mathematics competence than the reality of their achievement warrants.

Some indication to teachers that students' motivation is an important aspect of their learning. When asked about their motivation to learn mathematics – out of interest or for more instrumental reasons – students once again responded differently across countries. Although cultural differences may influence the way students respond to this question across countries, within countries those with the highest motivation perform best on average (there is a moderate correlation between motivation and performance). Much of the research on efficacy, attitudes and motivation hinges on the working hypothesis that high values of such variables are associated with high achievement. However, some sources suggest that the relationship between these factors and achievement is subtler and more indirect than the simple hypothesis would indicate. This study strongly reinforces that view. While most of the bivariate relationships operate in the predicted direction when examined within countries, there is an obvious country-specific component in the patterns. For example, students in several high-achieving countries, particularly Asian ones, show a generally negative sense of self-efficacy and have relatively negative attitudes and motivations.

The existence of negative between-country effects suggests that country-specific features strongly influence the measurement of these factors. Even within countries, however, positive associations between certain attitudes and performance sometimes become negative when adjusting for other factors [4].

Conclusion

These factors influence achievement, it might be desirable to direct teaching strategies towards improving attitudes and motivations in the hope that this would have indirect positive effects on achievement. While there is no way of measuring the extent to which teachers deliberately aim to improve attitudes in order to improve achievement, in practice there is a consistent bivariate association between good student attitudes and the adoption of helpful teaching strategies, for example by creating a positive classroom climate. Nevertheless, it seems that there is little to be lost in having teachers act in ways that help reduce mathematics anxiety and increase students' sense of self-efficacy in mathematics and their self-concept. However, teachers should also note that students who enjoy mathematics or feel a sense of belonging at school actually tend to perform worse in mathematics when adjusting for all other factors. This evidence does not mean that enjoying mathematics causes students to perform worse, but that a student who enjoys mathematics more than another will not necessarily perform better if she does not also have other characteristics that tend to go with enjoyment, such as greater confidence in her mathematics ability.

References

1. Shavkat Mirziyoev. We will resolutely continue our path of national development and take it to a new level. Volume 1, T., "Uzbekistan", 2017.

2. Francisco, J. M. & Maher, C. A., Conditions for promoting reasoning in problem solving: Insights from a longitudinal study. Journal of Mathematical Behavior. 2005.

3. Urdan, T., & Turner, J.C., Competence motivation in the classroom. New York, NY: Guilford. 2005.

4. Brophy, J. Toward a model of the value aspects of motivation in education: Developing appreciation for particular learning domains and activities. Educational Psychologist. 1999.