Самореализация студентов в гибридной образовательной среде
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Аннотация. Целью исследования является оценка самореализации студентов в условиях гибридной образовательной среды. Для оценки самореализации студентов в гибридной образовательной среде авторами был организован опрос, в котором с помощью шкалы Лайкerta респонденты оценивали уровень своей самооценки, уверенности в себе, реализацию как своих достижений, так и чувства уважения и признания. При этом было подчеркнуто, что оценивание различных видов самореализации различается в зависимости от деятельности и задач, выполняемых обучающимися. Научная новизна определяется поиском новых форм обучения в условиях пандемии и изучением психологического состояния студентов в изменившихся условиях с целью создания новой, более эффективной обучающей среды. Полученные данные показывают, что, несмотря на все изменения, студенты положительно относятся к новой образовательной среде и считают, что новая форма обучения не может плохо сказаться на их самооценке. В то же время исследование показало, что в гибридной среде обучающиеся респонденты отдают предпочтение онлайн-обучению и групповой работе, хотя утверждают, что в этом случае уровень их самореализации ниже, чем при очном обучении и при выполнении индивидуальных заданий. В заключение авторы анализируют оценивание обучающимися различных видов самореализации в зависимости от формы гибридного обучения.

Students' Self-Realisation in the Hybrid Teaching Environment
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Abstract. The paper aims to assess the self-realisation of students in a hybrid teaching environment. In order to assess the students’ self-realisation in a hybrid learning environment, the authors organised a questionnaire where by means of the Likert scale the respondents were to evaluate the realisation level of their self-esteem, confidence, achievement, and respect. Moreover, it was highlighted that the evaluation of various types of self-realisation differs depending on the activities and tasks completed by the students. Scientific novelty is determined by the search for new forms of teaching during the pandemic and the study of students’ psychologic status to make a new educational environment more effective. The findings identify that despite all the changes, the students have a positive attitude towards the new educational environment and believe that such reorganisation cannot have a bad influence on their self-esteem. At the same time, the research showed that in the hybrid learning environment, the interviewees give their preferences to online study and group work, though they claim that in that case, the level of their self-realisation is lower than during offline study and individual tasks completion. In conclusion, the authors analyse the students’ evaluation of various types of self-realisation depending on the form of hybrid studying.

Introduction

It is impossible to imagine the current educational process without the integration of Information and Communications Technologies (ICT), which can be regarded as a set of methods and means of receiving, storing, transferring, distributing, and transforming information with the help of different electronic devices. ICT are widely used in educational institutions, as they allow academic staff to implement a student-centred approach to learning, to differentiate the learning process, taking into account students’ inclinations, their abilities, and also make it possible to combine online and offline studying.

Nowadays, in the context of the current pandemic and closed borders, the participants of the educational process are facing new difficulties and challenges, to be exact: managing students face-to-face (in the classroom) and online at the same time in the same class. The reasons for such challenges are the following:
- to open the “educational borders” and organise the effect of presence for each student in a class even in the period of the pandemic;
to avoid splitting the educational process into two parts (online and offline like in the blended approach), which may lead to a decrease in efficiency and loss of motivation, especially in the new reality;
- to personalise learning, to help students manage their own, self-directed, flexible style of studying, but at the same time, not to lose the teacher-student interconnection and class-student interaction.

“Blended” approaches to teaching and learning, which combine in-class discussion and activities with a substantial proportion of online course delivery, do not seem to be consistent to implement all the goals and objectives that academic staff and students face. A new approach is necessary to create the effect of presence and ensure effectiveness of the lesson for both online and offline students. Therefore, the relevance of the study can be explained by the new reality that the universities have to work in, when a teacher is to create equal educational environment for all students that would contribute to the high level of their self-realisation.

The main findings of this research can be applied by the academic staff during the classes, when they wish to raise the effectiveness of a lesson and the psychological comfort of each student.

Literature review. Until now, there are no clear solutions and unambiguous methods of how to conduct classes in the hybrid educational environment, as well as there is no unambiguous name for it. To cope with the current challenge different scientists and educators offer various teaching modes to deal with a “concurrent” (Barnwell, 2021; Tucker, 2021) or “hybrid” educational environment (Beatty, 2019; Case, 2020; Wu, Zheng, Zhai, 2021).

Paul Barnwell (2021) and Catlin Tucker (2021) call “blended model of instruction”, where some students attend class in-person, while others attend virtually, the “concurrent” teaching. The educators note that this is the most challenging scenario because a teacher in a concurrent classroom attempts to meet the needs of the students in class and online simultaneously (Tucker, 2021).

The term “hybrid teaching” is used by Maohua Sun (2020) and Brian Beatty (2019), when they speak about the “online and offline today’s traditional classroom”. “Hybrid teaching model”, “hybrid teaching” is also used by Guifeng Wu, Jie Zheng, and Juan Zhai (2021), when they state that “hybrid teaching model which combines traditional classroom with online learning emerges as the times require. Hybrid teaching uses information technology to reorganise the various elements of teaching so that traditional teaching and new technology application can complement each other, and gradually get the attention of teachers and students” (p. 1).

Besides, the term “hybrid” is used by the manufacturers of the equipment for the hybrid teaching environment. For example, Aaron Case (2020) from the Company “Aver” says that “after the craziness of 2020, teachers and students might be wondering if they’ll ever get to leave the house for school again. But there’s no need to worry because the nearest future doesn’t seem to be going fully remote just yet; rather, a blended version of physical and distance learning in a hybrid classroom (also known as a hyflex classroom) is set to dominate the way we teach and learn”. Hybrid products are offered by such companies as Huawei (https://e.huawei.com/cz/solutions/industries/education/hybrid-learning), Logitech (https://www.logitech.com/en-us/education/hybrid-learning-solutions.html), ViewSonic (https://www.viewsonic.com/library/education/hybrid-learning-a-complete-list-of-essential-resources) and others. Thus, synonymous terms are denoting one phenomenon, that is why we think it is important to investigate the trends in the usage of terms with the help of a Google service (https://trends.google.com). The data on the comparative frequency usage of terms “hybrid teaching” and “concurrent teaching” around the world over the past 12 months are presented in Figure 1.

Figure 1. Comparative frequency usage of terms “hybrid teaching” and “concurrent teaching”
The study of the frequency usage shows a significant prevalence of the term “hybrid teaching” (blue) over “concurrent teaching” (red). Moreover, the term is actively adapted in the language and takes part in forming other terms (hybrid learning, hybrid education, hybrid teacher, etc). So, the term “hybrid teaching” will be used in the research.

We agree with Zuo Yi (2020) that “hybrid teaching is a learning method that combines face-to-face learning and online learning in a traditional classroom to realise the complementary advantages” (p. 154). Hybrid teaching can be defined as the educational process integrating traditional classroom teaching/learning and online teaching/learning at the same time at the same place simultaneously with the help of electronic devices, where online students and face-to-face students have equal opportunities and can manage the individual style and pace of studying.

Hybrid teaching has become the integration of all the advantages of online teaching and learning such as students’ learning autonomy, creativity and initiative, and at the same time, it possesses the advantages of traditional teaching, such as teachers’ guidance, inspiration, and monitoring role (You, 2021). Hybrid teaching relies on technology in the educational environment. With the help of Internet services and cloud technologies, students can search, transfer and process educational information, as well as communicate with other students and consult teachers being in class or online.

With this new form of work, students’ attitude towards themselves and their achievement in studying changes. Therefore, the authors set the aim to reveal the self-realisation of students in a new educational environment.

The term “self-realisation” was introduced into the educational discourse from psychology. Self-realisation is defined as the “fulfillment by oneself of the possibilities of one’s character or personality” (Marriam-Webster Dictionary, 2022). The idea of self-realisation was developed by the American psychologist A. Maslow (1945), who offered the hierarchy of needs. According to his ideas, as basic needs are satisfied, a person moves towards the realisation of the needs of a higher level. When the psychological safety and belonging needs are gratified, the time for “esteem needs” comes. He thought that to be happy, painters realise themselves in painting, musicians realise themselves in music, and we can add that students can realise themselves in successful studying.

Self-realisation in the learning process corresponds to the fourth level of Maslow’s hierarchy. At this level, students want to have good esteem through recognition, perfect achievements, confidence, respect of others, and the need to be respected by others (Maslow, 1945). To implement all these points, students need a comfortable educational environment. The attention of the educators to the problem of self-realisation is increasing and this can be explained by the understanding of its defining role in the development of the personality, which allows the students to fulfil their inner potential and get better results in the future.

Methodology. To achieve the aim of the study, we are going to complete the following tasks:
- to study hybrid teaching features;
- to define hybrid teaching;
- to assess the self-realisation of students studying in the hybrid educational environment.

The following tasks can be solved using mixed research methods. This methodology requires a purposeful mixing of methods in data collection, data analysis, and interpretation (Shorten, Smith, 2017).

A survey was held in autumn 2021 among three groups of students, in which due to the conditions of the pandemic, some participants attended classes in person and some attended classes online. Thirty first-year and second-year undergraduate students of South Ural State University took part in the experiment. The data were collected by providing students with a link to the questionnaire “The Investigation of Students’ Self-Realisation in the Hybrid Teaching Mode”.

The students were offered the link to fill in an anonymous form, and 30 answers from volunteer respondents who had the experience of studying in a hybrid educational environment were obtained. This reveals the attitude of the learners to individual study, work in pairs, group work, and it also defines the ability of students to self-realise in such an educational environment. The Likert-type survey included several questions where the participants were to evaluate their self-realisation in the hybrid educational environment.

The questionnaire was compiled based on the points of the fourth level of Maslow’s hierarchy that corresponds to the self-realisation in education. The Likert scale has the advantage that lets the participants not just to give simple yes/no answers but allows them to grade their opinion on self-esteem, confidence, achievement, respect of others, and respect by others. The students can express the importance of the points with the help of quality descriptive words: ‘very important’, ‘important’, ‘fair’, ‘unimportant’, ‘unwanted’. The data help the authors to assess the degree of students’ self-realisation in the new educational environment. To specify the results, the participants were asked some additional questions concerning their general opinion on the hybrid educational mode. The answers allow the authors not only to interpret the received data and explain the nature of the students’ reaction towards self-realisation in the educational process but also reveal their evaluation of a new learning reality.

Results and Discussion

The assessment of students’ self-realisation study in the hybrid educational environment was held through the survey. The organised experiment made it possible to obtain data that can be effectively used to estimate the level of students’ self-realisation in the hybrid educational environment.

Individual work allows a student to concentrate attention on his/her ideas and projects. Table 1 demonstrates the evaluation of the students’ self-realisation during the individual work-study and the level of its importance.

The data show that most of the students considered self-esteem, confidence, and achievement to be vital issues during individual tasks, as they allowed them to demonstrate skills and knowledge that they had obtained during the educational process. However, nearly 30% of the respondents evaluated their importance as ‘fair’, because they
described these aspects as something general on which one should not concentrate particular attention. For the fewer number of students, these points were ‘unimportant’ and even ‘unwanted’, as they did not care too much for the results that they could achieve in the individual work. While dealing with personal tasks, most of the students (60%) agreed that respect of others and respect by others were ‘very important’ and ‘important’, as they helped them to stabilise their leading positions within the group. Approximately 25% of the respondents clarified their attitude as something in-between, as they did not consider respect as a crucial point in completing personal tasks. For the smaller number of students, these two issues were ‘unimportant’ and ‘unwanted’, as, on the one hand, they dealt with the project on the level that suited them, and, on the other hand, they did not take into consideration people’s feelings.

Table 1. Evaluation of the students’ self-realisation in the individual work during the hybrid educational process

| Type of self-realisation | Very important | Important | Fair | Unimportant | Unwanted |
|--------------------------|----------------|-----------|------|-------------|----------|
| Self-esteem              | 25.3%          | 43.3%     | 30%  | 5.4%        | 0%       |
| Confidence               | 13.5%          | 50%       | 50%  | 6.7%        | 0%       |
| Achievement              | 20%            | 46.7%     | 30%  | 3.5%        | 0%       |
| Respect of others        | 33.3%          | 26.7%     | 23.3%| 13.5%       | 3.4%     |
| Respect by others        | 23.3%          | 36.7%     | 26.6%| 6.7%        | 6.7%     |

The pair work demands knowledge, creativity and good communicative skills, as this type of activity is considered to be a two-way process. As a result, the level of the students’ self-realisation could be quite different from the one that the respondents experience while completing individual tasks (see Table 2). For example, self-esteem was evaluated by the students mostly as ‘fair’ because they considered pair work to be the matter of not an individual rating but of collaboration, where personal ‘I’ is substituted by ‘we’. The same opinion was expressed by 16.7% of the students who considered self-esteem to be ‘unimportant’. This group of students also underlined that a subjective sense of personal value cannot be influenced by the educational process. At the same time, one third of the interviewees stated that this type of self-realisation was ‘very important’ and ‘important’, as they highlighted that evaluation of their worthiness during the collaborative work could greatly impact their status within the society.

Confidence was mostly characterised as ‘very important’ and ‘important’ criterion in the process of self-realisation. Students explained that it was vital for them to be assured, positive and determined while working in pairs, as such feelings helped them to find better solutions and cope with the tasks easier. On the other hand, 23.3% of the students estimated confidence as ‘fair’. They explained that confidence did not play a leading role in the pair work, as, for example, creativity, problem-solving and communicative skills were more crucial. At the same time, 6.7% of the respondents who answered ‘unimportant’ stated that in the pair work they could always rely on a partner. Therefore, even if they did not know something it could not affect the work.

As achievement in the students’ minds was connected with a mark, half of the interviewees took seriously this aspect of self-realisation, since they saw a mark to be the reflection of their success that influenced further motivation. However, another half of the students treated educational achievement either as something neutral (30%) or something that they did not care for (20%). They stressed that their self-attitude, self-assessment of the whole process of the pair work was more important than the level of their self-realisation.

Respect of others and respect by others received a lot of scores because the students estimated these aspects as the ones that were essential while working with a peer. They supposed that without mutual respect from both sides, the pair work could not be completed and thus their self-realisation would fail. Moreover, they replied that respect allowed them to feel their importance, effectiveness, and satisfaction from work. Nearly 20% of the interviewees estimated this type of self-realisation as ‘fair’. They believed that respect did not play a considerable role in the educational environment, as people’s attitude cannot affect their inside world and their feeling of self-respect. Moreover, there were even students who thought that respect was ‘unimportant’ for them due to their closeness and self-concentration.

Table 2. Evaluation of the students’ self-realisation in the pair work during the hybrid educational process

| Type of self-realisation | Very important | Important | Fair | Unimportant | Unwanted |
|--------------------------|----------------|-----------|------|-------------|----------|
| Self-esteem              | 6.7%           | 26.6%     | 30%  | 16.7%       | 0%       |
| Confidence               | 20%            | 50%       | 23.3%| 6.7%        | 0%       |
| Achievement              | 10%            | 40%       | 20%  | 16.7%       | 3.3%     |
| Respect of others        | 33.3%          | 26.7%     | 20%  | 16.7%       | 3.3%     |
| Respect by others        | 26.7%          | 40%       | 20%  | 10%         | 3.3%     |

Group work presupposed the involvement of several students, this type of activity was characterised by common goals, dynamism, a high degree of interaction, and, what was more important, by self-determination within the group. So, it can be concluded that recognition by others as a member of the team and the feeling of belonging could greatly influence the level of self-realisation. According to the data presented in Table 3, 56.7% of the respondents evaluated self-esteem realisation as ‘fair’ while dealing with collaborative tasks. They pointed out that working with others enabled them to concentrate more on common goals, critical thinking, and decision-making; therefore, self-assessment became less vital in comparison with the feeling of connectedness. Apart from this, 20% of the learners considered this type of self-realisation as ‘unimportant’ and 10% as ‘unwanted’, because they supposed that a person should not think too much about his/her priorities but give way to the team realisation preferences. Nevertheless, self-esteem was fundamental for one third of the interviewees who gave such answers as ‘very important’ and ‘important’, because they considered group work as a field of strengthening their leading positions within the team.
Confidence is always treated as an integral aspect of personal recognition. Moreover, understanding one’s assurance in group work also constitutes a crucial element of self-realisation within the society. This idea could be proved by the percentage of the students who supposed it to be ‘very important’ (16.7%) and ‘important’ (33.3%). These respondents underlined that without confidence it would be impossible to evaluate themselves as a member of an educational group working on a common task or project. The fewer number of the interviewees, 6.7%, on the contrary, replied that the level of confidence might be lower during the team activity, as they could always rely on the group-mates. The same opinion had those who estimated this type of self-realisation as ‘fair’. Moreover, they stressed that during the group work self-comfort became even more important than confidence.

Concerning achievement, half of the students evaluated this type of self-realisation as a vital issue, because they took seriously the matter of assessment and self-assessment. They highlighted that it was crucial to get high results and feel the importance of their role in completing tasks. At the same time, 15.3% of the interviewees did not care for the outcomes that they got from the team activities, mostly because they did not consider group work as an instrument that could measure their success. 36.7% of the respondents evaluated its importance as ‘fair’, first of all, due to the lack of self-responsibility and, second, due to the fact that the failure in teamwork was not the evaluation of personal realisation.

Collaborative activities are difficult to organise without respect between team members; therefore, respect of others and respect by others got their highest scores as ‘very important’ and ‘important’. However, for 23.3% of the respondents, this type of self-realisation is neutral because they suppose self-approval to be more vital than the approval of the society. Also, several interviewees estimated respect as ‘unimportant’ and ‘unwanted’, since they considered themselves to be self-oriented people who did not care about the feelings of others, as well as they did not pay attention to how they dealt with the team.

Table 5. Evaluation of the students’ self-realisation in the group work during the hybrid educational process

| Type of self-realisation | Very important | Important | Fair | Unimportant | Unwanted |
|--------------------------|----------------|-----------|------|-------------|----------|
| Self-esteem              | 15.3%          | 20%       | 36.7%| 20%         | 10%      |
| Confidence               | 16.7%          | 55.3%     | 25.3%| 6.7%        | 0%       |
| Achievement              | 16.7%          | 33.3%     | 36.7%| 15.3%       | 0%       |
| Respect of others        | 35.3%          | 26.7%     | 25.3%| 15.3%       | 5.3%     |
| Respect by others        | 35.3%          | 50%       | 25.3%| 10%         | 3.3%     |

While comparing the level of self-realisation during the hybrid educational process, it can be concluded that self-esteem had the highest position in individual work and the lowest position in the group activities. Such distribution was explained by the degree of self-involvement, self-responsibility, and self-assessment that the students experienced while dealing with different educational tasks. The higher this degree was, the higher the level of the students’ self-esteem realisation was.

As for confidence, its importance was steadily evaluated by the respondents, who emphasised that this feeling helped them to overcome difficulties during the entire educational process and raise their self-appraisal not only during the completion of a personal task but also during the pair and group work.

Achievement realisation was also of great importance, however, comparing the data one can notice that individual activities, as well as pair work, provoked the deeper understanding of self-responsibility that strengthened the desire to get a higher degree of achievement level. At the same time, the teamwork where the tasks were distributed between several members lead to the decline of students’ personal success and neutralisation of self-realisation.

The attitude to respect mostly depends on the person’s inner world and his/her realisation as a part of society. In general, ‘respect of others’ and ‘respect by others’ did not vary according to the educational process. The percentage showed that there was a slight difference in their variation; therefore, we could conclude that the level of respect did not receive a great influence from the type of educational activities that students completed.

If we compare the whole evaluation data in the hybrid educational process, we can summarise that in group work, the level of different types of students’ self-realisation was more evenly distributed than in individual and pair work, where self-realisation became more important. It could be mainly explained by the nature of team activities that presupposed the group realisation and the feeling of commonness.

However, it is interesting to point out that it was the group work that the respondents pointed to as the most preferable type of activity in the hybrid educational process. Figure 2 shows that a significant number of students (60%) preferred a group type of work, as it gave the feeling of belonging and involvement into the shared process, provided them with the shared sense of purpose, as well as lowed the level of their self-responsibility and stress that they experienced. 26.7% of the interviewees selected individual work as the most comfortable way of studying, as they saw it as the vital chance for self-realisation in the educational environment. The fewer number of students (13.5%) chose the pair work because they supposed that their input was more noticeable in pair activity, but the level of responsibility was lower. Therefore, we stated that though self-realisation played an integral role in the educational process, most of the students preferred to work in teams and reduce the level of their self-appraisal since its recognition demanded a lot of efforts and determination from them.

Moreover, while speaking about the type of educational process organisation (see Figure 3), more than half of the respondents (56.7%) inclined towards being online, while 43.5% of the students selected being offline. This choice was explained not only by the overall situation connected with the pandemic and an increase in sickness level but also by the feelings of self-realisation that students experienced while dealing with the tasks either online or offline. The respondents who gave preference to online study stressed that this type of educational process allowed them to be more comfortable, less stressed, confident and, therefore, raise their level of esteem. The students
who chose offline education argued that only face-to-face communication in class could help them reinforce their self-approval, self-reliance, and self-realisation.

Despite all changes that happened in the sphere of education due to the integration of new information and communication technologies, students did not have a negative attitude to such innovations (see Figure 4). On the contrary, a significant proportion of the students (63.3%) had a positive view of technological changes that were introduced by the teachers, and a little bit more than a third of the participants (36.7%) had a neutral attitude towards the implementation of the hybrid educational environment.

So, the hybrid teaching process can be turned into an effective educational environment that contributes to the development of students’ self-realisation and positive attitude towards a new learning reality. A hybrid educational environment erases the pandemic barriers, creates the instrument that helps students and teachers to make the educational process continuous, full and uninterrupted using new technologies and teaching methods. Moreover, it keeps the contact between teachers and learners, provides interaction between online and offline students, increases their achievement drive, respect, and feeling of togetherness and, therefore, has a significant effect on the level of confidence and self-esteem.

**Conclusion**

Hybrid teaching represents a new reality that different universities face due to the current pandemic situation. Integration of traditional face-to-face learning and the online teaching process presupposes the usage of various services that help us to overcome educational borders and eliminate the split between offline and online students. Studying in a hybrid educational environment, students face new challenges, and they need to learn how to interact with other students and how to self-realise in the new educational environment.

Self-realisation constitutes an important role in the learning process, as it helps a person to fulfil his/her intentions and wishes connected with educational goals. The research showed that the assessment of various types of self-realisation can vary depending on the activities and tasks completed by the students. The highest degree of self-esteem
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