

Self-Efficacy of Biology Students in an RQANI Classroom During The Covid-19 Pandemic

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Self-Efficacy of Biology Students in an RQANI Classroom During The Covid-19 Pandemic

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Abstract. The Covid-19 pandemic has altered learning processes and other facets of classroom instruction. The development of students' self-efficacy during the learning process is critical to describe in order to attain future learning goals and achievement. Self-efficacy measures the extent to which pupils can execute and complete specific tasks. This study was conducted on students from *Tadris* Biology Department at IAIN Ternate in North Maluku, Indonesia. The research sample consisted of 40 students, 25 of whom were female and 15 of whom were male. Prior to their usage, the instrument employed in the investigation had been declared valid and reliable by experts and practitioners. A self-efficacy questionnaire was used to collect data. The results indicated that on average, Biology students in the RQANI classroom had a self-efficacy score of 81.00 (quite confident). Female students scored higher on various facets of self-efficacy, including tenacity, the ability to adapt to difficult tasks, the ability to avoid situations and behaviors that are beyond their skills, as well as cognitive and affective abilities. Several components of self-efficacy, however, must be cultivated in students. The findings of this study are expected to provide insights to secondary and tertiary level teachers on the importance of improving students' competence, abilities, and confidence, particularly amid this COVID-19 pandemic.

INTRODUCTION

During the COVID-19 epidemic, online teaching and learning processes have become a requirement for education worldwide [1], [2]. Changes that have been brought to the classroom have altered learning patterns and facets of classroom instruction. These significant changes require students to adjust quickly. Therefore, students need to instill self-confidence and self-efficacy to accomplish this.

It is important to describe how students increase their self-efficacy during the learning process because it helps students attain success in the future [3], [4]. Students with a high level of self-efficacy appear to be more confident and enthusiastic about learning [5]. Self-efficacy has a significant role in explaining the degree to which students are challenged during the learning process in terms of problem-solving, task completion, and essential learning behaviors [6], [7]. When students with high self-efficacy are confronted with a tough task, they will attempt to tackle the problem in a variety of ways [8], [9]. According to Pajares, self-efficacy influences a variety of stressors and individual experiences, as well as anxiety, such as when individuals are engaged in an activity ([10]).

Students who have a high sense of self-confidence view challenging activities as obstacles they can conquer. They will choose difficult projects, swiftly regain their self-efficacy, and persevere in the face of several challenges [11]. Self-efficacy also adds to students' increased independence and achievement in the classroom [12]. Self-efficacy is regarded as critical for successful classroom learning [13]. Self-efficacy evolves into a tool for assessing an individual's capacity to perform a task, accomplish a goal, and produce something [14].

Self-efficacy is important for individuals to be able to make their own judgments about the amount of effort required to accomplish goals [15]. Self-efficacy has three dimensions: level, strength, and generality. *Level* denotes the degree of self-efficacy that varies according to the complexity of the assignment. *Strength* relates to individual

beliefs or expectations of their abilities. The term "generality" refers to a broad range of activities that indicate individuals' confidence in their ability [16]. The level of self-efficacy indicates the degree to which pupils can execute and finish specific activities. It can be associated with the critical role of student achievement in fostering academic success [17]. Students with a high level of self-efficacy demonstrate a high level of academic performance [18]. According to Myres, those who trust in their own competence and efficacy and who maintain a healthy internal control center will be able to manage and achieve higher academic achievement than those who do not [19]. Individual success in resolving a life issue might foster positive feelings [20]. Self-efficacy is a strong predictor of increased motivation and academic accomplishment, according to research [21].

Students develop self-efficacy from four primary sources of information: self-mastery experiences, observations of others, social persuasion received from others, and emotional and psychological states [22]. Active learning perception is the appraisal, comprehension, and emotion of students toward the notion of learning, as evidenced by the condition of students who consistently have a meaningful learning experience [23], [24].

One of the factors contributing to student low self-efficacy is a lack of variation in the types of learning models used to foster students' self-confidence in the classroom [5]. An authentic learning environment enables students to take greater ownership of their learning, hence enhancing their self-efficacy [25], [26]. To improve self-efficacy, learners should be supplied with an appropriate learning environment [27]. Students' involvement is not only physical, but also intellectual and emotional, during learning activities, and students experience changes consciously or unconsciously as a result of the learning process [28].

RQANI is a new educational approach that was developed in response to students' requirements for merging science principles and Islamic values. The RQANI learning model is thought to have the ability to boost students' self-efficacy. The phases of RQANI learning contribute to increased self-efficacy by emphasizing critical reading and practicing asking and answering questions correctly. The empowerment component of this model entails student participation to build confidence in their ability to participate in classroom learning activities. Students can have a more nuanced understanding of the subjects studied since RQANI pushes students to combine the concepts learned with Islamic values found in the Qur'an and Hadith. This study aimed to ascertain biology students' self-efficacy during the COVID-19 pandemic.

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RESEARCH METHODS

This study was designed with a pre-experimental design. A one-shot case study was undertaken in this situation. The experimental class was taught using the RQANI learning model. The participants consisted of 40 students from Biology Department at IAIN Ternate, North Maluku, Indonesia. The class contained 25 women and 15 men. Data collection was done through the distribution of self-efficacy questionnaire.

There were three measurement dimensions in the self-efficacy questionnaire, which were (1) magnitude or level, which is related to the level of student confidence in determining the level of difficulty faced; 2) strength, which is related to the level of student confidence in their ability to solve problems; and (3) generality, which is related to the level of student confidence in generalizing tasks and previous experiences. This self-efficacy questionnaire consists of 30 statement items with alternative answers scoring from 0-49 (not confident), 50-89 (quite confident), and 90-100 (very confident). Before it was put into use, the questionnaire went through a process of expert validation followed by an empirical validation. Tadris Biology students were asked to participate in an empirical validation study, which was conducted on 30 students. The reliability of the questionnaire was determined using data analysis using Cronbach's Alpha. The validity and reliability of the self-efficacy questionnaire have been established, allowing it to be utilized in the collection of research data. Analyses of the data were carried out utilizing quantitative descriptive techniques.

RESULTS AND DISCUSSION

Table 1 contains data on the distribution of self-efficacy scores among biology students, classified by gender, in an RQANI classroom.

TABLE 1. Analysis of Biology Students' Self-Efficacy in an RQANI Classroom

| No | Dimension | Indicator/Aspect | Female | Male | Total Mean Score |
|------------------|---|--|-----------------|-----------------|------------------|
| 1 | <i>Magnitudo/Level</i> (task difficulty) | 1. Students' confidence in their ability to succeed | 84.00 | 86.67 | 85.33 |
| | | 2. Students' capacity for adapting to challenging tasks | 76.00 | 66.67 | 71.33 |
| | | 3. Students' capacity to avoid situations and activities that surpass their capabilities | 88.00 | 73.33 | 80.67 |
| 2 | <i>Strength</i> (confidence and expectation) | 4. Ability to defend self | 80.00 | 86.67 | 83.33 |
| | | 5. Tenacity | 92.00 | 60.00 | 76.00 |
| 3 | <i>Generality</i> (diversity and breadth of behavioral fields) | 6. Cognitive ability | 84.00 | 73.33 | 78.67 |
| | | 7. Affective ability | 84.00 | 80.00 | 82.00 |
| | | 8. Psychomotor abilities | 88.00 | 93.33 | 90.67 |
| Total Mean Score | | | 84.50 | 77.50 | 81.00 |
| Category | | | Quite confident | Quite confident | Quite confident |

According to the statistics in Table 1, biology students who learned using RQANI achieved an average self-efficacy score of 81.00 (quite confident). Male students, on the other hand, exhibited a higher level of optimism about achievement than female students, based on the statistics presented. Male pupils also demonstrated a greater capacity for self-defense and psychomotor abilities than female students. This is consistent with research undertaken by [29] which found that male students show a greater confidence in finishing tasks than female students. Increased self-confidence is regarded to be capable of bolstering optimism for academic performance. Male pupils can work more diligently than female students [30].

Additionally, previous research indicates that female students achieve high mean scores in various facets of self-efficacy, including the ability to adapt to challenging tasks, avoid situations and behaviors that surpass their capacities, tenacity, and cognitive and affective abilities. Figure 1 depicts the distribution of self-efficacy scores obtained by biology students on each self-efficacy indicator.

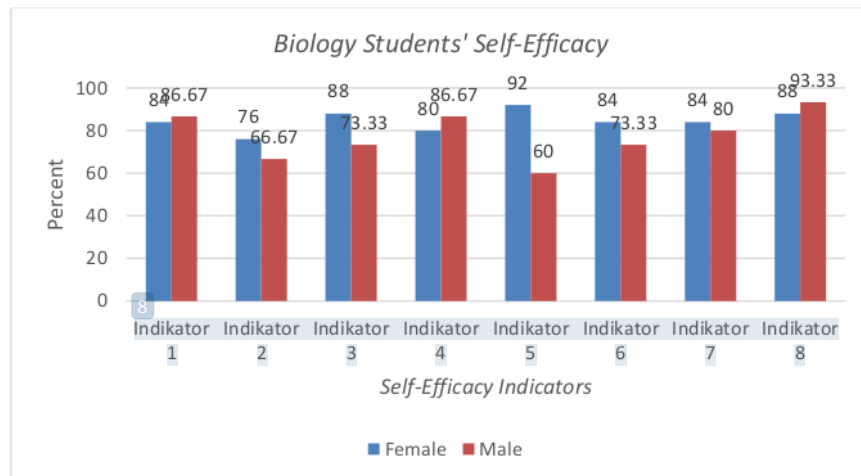


FIGURE 1. Biology Students' Self-Efficacy in an RQANI Classroom Based on Gender

Pedagogical techniques, gender division, gender composition, and group division in the classroom all have a role in establishing positive or negative attitudes, interests, self-confidence, and enthusiasm toward biology education [31]. The study's findings indicated that female students outperformed male students in terms of self-efficacy and academic achievement [32]. This is consistent with the findings Jamil & Sawari, which revealed that female students exhibited stronger self-efficacy than male students [33], [34].

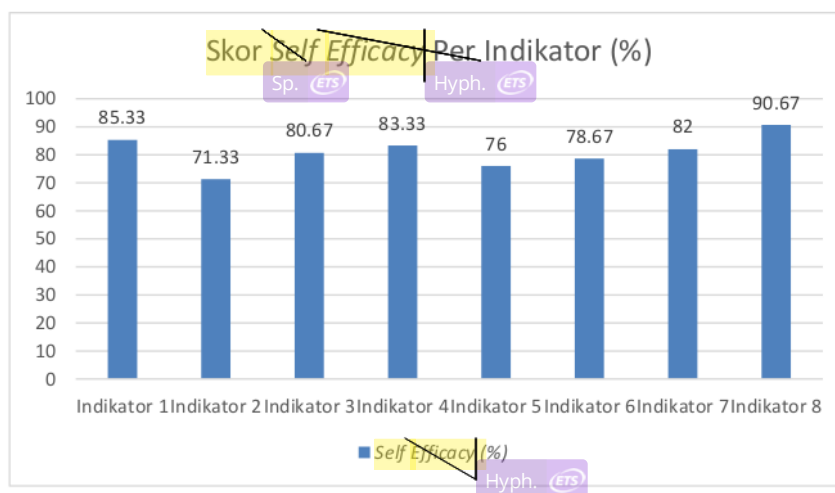


FIGURE 2. Biology Students' Score for Each Self-Efficacy Indicator in an RQANI Classroom

As illustrated in Figure 2, indicator 2 (students' ability to adapt to challenging tasks), indicator 5 (tenacity), and indicator 6 (cognitive ability) of biology students all require improvement. Low self-efficacy is not limited to students who lack ability and desire for studying; it may equally affect exceptional students who lack confidence in their abilities to complete tasks [35].

On each indicator, the study's participants demonstrated sufficient self-efficacy. This indicates that biology students who have been exposed to RQANI have a high level of confidence in their abilities to carry out their academic responsibilities as students, such as studying, completing assignments, and utilizing the learning environment. Self-efficacy is critical since it serves as a powerful paradigm for regulating one's drive to learn [36]. Self-efficacy reflects pupils' perceptions of their talents. If a person has a healthy self-esteem, he or she is more likely to be self-sufficient during the learning process. Students with a positive self-concept will be more motivated to pursue autonomous learning. This is because they have recognized and comprehended themselves to act appropriately in a variety of settings. A positive self-concept is frequently associated with self-acceptance. Students that have a positive self-concept can comprehend and accept a variety of self-related aspects.

RQANI learning was able to boost students' self-efficacy in biology since students were given the opportunity to study material linked to lectures during the learning process. The opportunity is intended to familiarize students with critical-reading patterns that can help them enhance their literacy and readiness to learn. Students in the RQANI class appeared more confident and engaged in discussion activities, expressing their opinions/arguments more actively. This conviction is formed because of students' solid conceptual foundations for knowledge construction and argumentation during class discussions. Additionally, students are given the ability to ask and answer questions throughout RQANI learning. The habit of asking and responding to these questions builds students' confidence in admitting when they do not comprehend a concept. Besides, RQANI involves students in discussion activities. The integration of Islamic values and science in an RQANI classroom enables students to connect the content being studied to everyday occurrences. The incorporation of Islamic values into learning enriches the learning process, which in turn increases students' self-efficacy.

Self-efficacy is associated with feelings and attitudes, including self-confidence and complete trust in someone's ability to do something correctly to succeed. It is also determined by the environment's physical, social, and carrying capacities [37]. Students that have a high sense of self-efficacy will typically find it easier to complete the given assignments. Students who lack self-efficacy shun tough assignments and have reservations about their abilities to

2 solve complex challenges. Self-efficacy can also be influenced by an individual's psychological circumstances and emotional state. Positive emotional states have been shown to promote self-efficacy, and negative emotions have been shown to diminish self-efficacy.

Self-efficacy is not an inherent or permanent characteristic of an individual, but rather the consequence of a cognitive process [38]. Self-efficacy is a motivational construct that is founded on an individual's self-perception of competence and ability [39]. Self-efficacy is critical when acting or making a decision to accomplish a goal [30]. Self-efficacy influences an individual's behavior, effort, tenacity, adaptability to change, and achievement of goals [40]. Self-efficacy enables pupils to cognitively create knowledge in the form of basic thought structures in problem-solving.

15 Teacher self-efficacy has a beneficial effect on the attainment of active learning goals and the learning environment of students [41], [42]. When teacher self-efficacy diminishes, students are more likely to encounter scenarios such as (1) being less engaging and productive in the classroom; (2) encountering issues with unpredictable teacher behavior; and (3) being unable to accomplish learning activities efficiently [43], [44]. Self-efficacy has been shown to improve motivation [45] and ability to succeed [46]. Teacher self-efficacy and perceptions are almost certainly critical components of daily science teaching practice [47]. When students are confronted with real-world challenges, they believe that scientific classes become more interesting and enjoyable [26].

CONCLUSION

3 The findings of this study reveal that the self-efficacy of biology students enrolled in an RQANI class is classified into the "quite confident" category with an average score of 81.00. Female students scored higher on various measures of self-efficacy, including the ability to adapt to challenging tasks, the ability to avoid situations and behaviors that are beyond their skills, tenacity, cognitive and affective abilities. Male students, on the other hand, exhibited a higher level of optimism for success than female students. Similarly, male students scored higher than female pupils in terms of self-defense ability and psychomotor ability.

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REFERENCES

- [1] Khaferi B and Khaferi G, 2020 Online Learning Benefits and Challenges During the COVID 19-Pandemic-Students' Perspective from SEEU *SEEU Rev.* **15**, 1 p. 86–103.
- [2] Nambiar D, 2020 The Impact of Online Learning during Covid-19 Pandemic: Students Perspective *Int. J. Res. Appl. Sci. Eng. Technol.* **8**, 11 p. 686–690.
- [3] Calpo V B, 2020 Correlates of Science Education and Self-Efficacy Towards Fisheries Technology as Basis for Online Learning Policy *J. Crit. Rev.* **7**, 13 p. 212–218.
- [4] Yılmaz D and Turan H, 2020 Self-Efficacy Beliefs of Pre-Service Teachers in Teaching First Reading and Writing and Mathematics *Particip. Educ. Res.* **7**, 1 p. 257–270.
- [5] Mambwe R Chishimba C P and Manchishi P C, 2019 Student Teacher Preparation and Self-Efficacy Beliefs about Inductive Teaching Learning Methods in Primary Colleges of Education , Zambia. *Int. J. Educ. Res.* **7**, 2 p. 179–196.
- [6] Surahman and Adhim M F, 2021 The Relationship between Positive Emotion, Self- Efficacy, and Student Engagement during the Covid-19 Pandemic *Int. J. Res. Innov. Soc. Sci.* **5**, 1 p. 231–235.
- [7] Ayllon S Alsina A and Colomer J, 2019 Teachers' Involvement and Students' Self-Efficacy: Keys to Achievement in Higher Education *PLoS One* **14**, 5 p. e0216865.
- [8] Çeliker H D, 2001 Problem-based Scenario Method with Experiments: Determining the Prospective Science Teachers' Biology Self-Efficacy and Critical Thinking Tendency *Sci. Educ. Int.* **32**, 1 p. 23–33.
- [9] Askar P and Umay A, 2001 Computer Self-Efficacy Perception of Elementary Mathematics Teaching Students. *Hacettepe Univ. J. Educ. Fac.* **33**, 21 p. 1–8.
- [10] Pajares F, 2018 Self-Efficacy Beliefs in Academic Settings Author *Rev. Educ. Res.* **66**, 4 p. 543–578.

- [11] Agamber S T Achor E E and Ajayi V O, 2019 Enhancing Students' Motivation and Self-Efficacy Belief in Solving Biology Related Problems using Frequent Practical Work *Icsher J.* **4**, 2 p. 20–30.
- [12] Kılıçoğlu G, 2018 Study on the Relationship between Social Studies Course Self-Efficacy and Motivation Levels of Secondary School Students *Univers. J. Educ. Res.* **6**, 8 p. 1743–1748.
- [13] Krause M Pietzner V Dori Y J and Eilks I, 2017 Differences and Developments in Attitudes and Self-Efficacy of Prospective Chemistry Teachers Concerning the Use of ICT in Education *Eurasia J. Math. Sci. Technol. Educ.* **13**, 8 p. 4405–4417.
- [14] Ormord J E, 2008 *Human Learning (5th ed.)*. Upper Saddle River NJ: Pearson Merrill Prentice Hall.
- [15] Bilgin I Karakuyu Y and Ay Y, 2015 The Effects of Project Based Learning on Undergraduate Students' Achievement and Self-Efficacy Beliefs towards Science Teaching *Eurasia J. Math. Sci. Technol. Educ.* **11**, 3 p. 469–477.
- [16] Bandura A, 1998 *Self-Efficacy. Encyclopedia of Human Behavior* .
- [17] Adiyah M Mutangana D and Ameyaw Y, 2020 Concept Mapping Impact on Self-Efficacy for Enhancing Students' Motivation and Performance in Biology *African J. Educ. Stud. Math. Sci.* **16**, 1 p. 73–82.
- [18] Ugwuanyi C S Okeke C I O and Ageda T A, 2020 Motivation and Self-efficacy as Predictors of Learners' Academic Achievement *J. Sociol. Soc. Anthropol.* **11**, 3–4 p. 215–222.
- [19] Nurwendah W and Suyanto S, 2019 Relationship among Self-Motivation, Self-Efficacy and Achievement of High School Student in Biology *J. Phys. Conf. Ser.* **1233**, 012009.
- [20] Flores I M, 2015 Developing Preservice Teachers' Self-Efficacy through Field-Based Science Teaching Practice with Elementary Students *Res. High. Educ. J.* **27** p. 1–19.
- [21] Richardson M Abraham C and Bond R, 2012 Psychological Correlates of University Students' Academic Performance: A Systematic Review and Meta-analysis *Psychol. Bull.* **138**, 2 p. 353–387.
- [22] Doménech-Betoret F Abellán-Roselló L and Gómez-Artiga A, 2017 Self-efficacy, Satisfaction, and Academic Achievement: The Mediator Role of Students' Expectancy-Value Beliefs *Front. Psychol.* **8**, JUL p. 1–12.
- [23] Freeman S *et al.*, 2014 Active Learning Increases Student Performance in Science, Engineering, and Mathematics *Proc. Natl. Acad. Sci. U. S. A.* **111**, 23 p. 8410–8415.
- [24] Silberman M L, 1996, Active learning: 101 strategies to teach any subject. p. 189.
- [25] Mataka L M and Kowalske M G, 2015 The Influence of PBL on Students' Self-Efficacy Beliefs in Chemistry *Chem. Educ. Res. Pract.* **16**, 4 p. 929–938.
- [26] Saputro A D Atun S Wilujeng I Ariyanto A and Arifin S, 2020 Enhancing Pre-Service Elementary Teachers' Self-Efficacy and Critical Thinking using Problem-Based Learning *Eur. J. Educ. Res.* **9**, 2 p. 765–773.
- [27] Jayaprakash R K and Nath S S, 2019 Self-Efficacy and Achievement Motivation of Students At Secondary Level *Int. J. Curr. Res.* **11**, 8 p. 6629–6631.
- [28] Kustyarini K, 2020 Self Efficacy and Emotional Quotient in Mediating Active Learning Effect on Students' Learning Outcome *Int. J. Instr.* **13**, 2 p. 663–676.
- [29] Wicaksono A P and Urumsah D, 2018 Analisis Gender Dalam Pembajakan Produk Digital *J. Ris. Akunt. Mercu Buana* **4**, 2 p. 85.
- [30] Rizki M Suryawati E Zulfarina Z and Rahmi F O, 2021 Analisis Self Efficacy Sebagai Dasar Pengembangan Sumber Belajar Mandiri untuk Praktikum Jarak Jauh Di LPTK *J. Pendidik. Biol.* **12**, 2 p. 71–80.
- [31] Almasri F Hewapathirana G I Ghaddar F Lee N and Ibrahim B, 2021 *Measuring Attitudes towards Biology Major and Non-major: Effect of Students' Gender, Group Composition, and Learning Environment* **16**, 5 .
- [32] Catherine A, 2017 Investigating the Relationship between Science Self-Efficacy Beliefs , Gender , and Academic Achievement , among High School Students in Kenya *J. Educ. Pract.* **8**, 8 p. 146–153.
- [33] Sawari S S M Ghazali M A and Mansor N, 2015 A Study of Learning Efficacy Among Rural Area Students in Ledang Johor *Sains Humanika* **5**, 3 p. 1–8.
- [34] Jamil N L and Mahmud S N D, 2019 Self-Efficacy Relationship on Science Achievement amongst National Secondary School Students *Creat. Educ.* **10** p. 2509–2527.
- [35] Sagita D D Daharnis and Syahniar, 2017 Hubungan Self efficacy, Motivasi Berprestasi, Prokrastinasi Akademik Dan Stres Akademik Mahasiswa. *J. Bikotetik* **1**, 2 p. 43–52.
- [36] Smolleck L A and Mongan A M, 2011 Changes in Preservice Teachers' Self-Efficacy: From Science Methods to Student Teaching *J. Educ. Dev. Psychol.* **1**, 1 p. 133–145.
- [37] Cocca M and Cocca A, 2021 Testing a Four-Factor Model for the Teachers' Sense of Efficacy Scale: An updated Perspective on Teachers' Perceived Classroom Efficacy *Psicol. Educ.* p. Ahead of print.

- [38] Rahayu F, 2019 Efektifitas Self efficacy dalam Mengoptimalkan Kecerdasan dan Prestasi Belajar Peserta Didik. *J. Ilm. Bimbingan. dan Konseling* **2**, 2 p. 119–129.
- [39] Tschannen-Moran M and Hoy A W, 2007 The differential antecedents of self-efficacy beliefs of novice and experienced teachers *Teach. Teach. Educ.* **23**, 6 p. 944–956.
- [40] Bandura A, 1997 Self-Efficacy: Toward a Unifying Theory of Behavioral Change. *Psychol. Rev.* 1977 **84**, 2 p. 191–215.
- [41] Bay D N, 2020 Investigation of the Relationship Between Self-Efficacy Belief and Classroom Management Skills of Preschool Teachers with Other Variables *Int. Electron. J. Elem. Educ.* **12**, 4 p. 335–348.
- [42] Ghaffar S Hamid S and Thomas M, 2019 The Impact of Teacher's Self-Efficacy on Student's Motivation towards Science Learning *Rev. Econ. Dev. Stud.* **5**, 2 p. 225–234.
- [43] Zee M and Koomen H M Y, 2016 Teacher Self-Efficacy and Its Effects on Classroom Processes, Student Academic Adjustment, and Teacher Well-Being: A Synthesis of 40 Years of Research *Rev. Educ. Res.* **86**, 4 p. 981–1015.
- [44] Shum A Lau P and Fryer L, 2018 Strengthening Self-efficacy In Teaching For Non-teachers Through Training Student-Focused Teaching in *Paper presented at the 16th International Conference on Motivation, 2018 (Earli SIG 8, Motivation and Emotion)*.
- [45] Schunk D H, 1991 Self Efficacy and Academic Motivation *Educ. Psychol.* **26**, 34 p. 207–231.
- [46] Yılmaz Tomris G and Kurt A A, 2016 Pre-school Teachers' Self-efficacy Beliefs and Their Attitudes towards the Use of Technological Tools: Balıkesir Province Sample *Anadolu J. Educ. Sci. Int.* **6**, 1 p. 1–26.
- [47] Haatainen O Turkka J and Aksela M, 2021 Science Teachers' Perceptions and Self-Efficacy Beliefs Related to Integrated Science Education *Educ. Sci.* **11** p. 272.

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