

GETL Conference

Proceedings of 2021

Global Education, Teaching & Learning Conference



Editors:
Zoran Krupka, PhD
Goran Vlašić, PhD

Sep 22nd – 25th, 2021
Zagreb, Croatia



**GLOBAL EDUCATION, TEACHING & LEARNING CONFERENCE
Zagreb (Croatia), September 22nd - 25th, 2021**

Editors:

Zoran Krupka, PhD
Goran Vlašić, PhD

Program Committee:

Goran Vlašić, PhD (University of Zagreb, Croatia), Program committee chair
Ismael Abu-Saad, PhD (Ben-Gurion University of the Negev, Israel)
Adéla Antlová, PhD (Palacký University Olomouc, Czech Republic)
Joe Hair, Ph. (University of South Alabama, USA)
Zoran Krupka, PhD (University of Zagreb, Croatia)
Josef Langer, PhD (University of Klagenfurt, Austria)
Daniela Martinez Laureiro, PhD (ETH Zurich, Switzerland)
Jurica Pavičić, PhD (University of Zagreb, Croatia)
Patricia Schütte-Bestek, PhD (Bergische Universität Wuppertal, Germany)
Gabriele Troilo, PhD (Bocconi, Italy)

Organizing Committee:

Filip Vrhovnik, Organizing Committee chair
Ante Gugić
Krešimir Kežman
Fran Živković

Publisher:



Innovation Institute
Zagrebačka cesta 192, Zagreb

For Publisher:

Lidija Majer

All contributions were subjected to double blind review process by two expert reviewers.

Copyright © 2021 by Innovation Institute. All rights reserved including the right of reproduction in whole or in part in any form.

ORGANIZER



Institut za inovacije
Innovation Institute

GENERAL PARTNER



školska knjiga

Content

Psychological Well-Being Among High School Students During COVID-19 and Distance Learning: Risk Behaviors and Academic Performance as an Expression of Distress <i>Michal Alon-Tirosh, Dorit Hadar-Shoval, Orna Tzischinsky</i>	5
The Experience of the Arab Students Who Are Graduates of Bilingual Education in Israel <i>Nehaya Awida</i>	6
Attitudes of Homeschooling Parents Towards the Education System and Their Connection to the Perception of Homeschooled Children <i>Oz Guterman</i>	16
The Educational Reality of the Beginning Teacher of Upper Secondary Education in the Period of COVID-19 Pandemic <i>Lýdia Pilátová, Jiří Suchánek</i>	17
From Crisis to a New Normal? Empirical-Based Reflections on What Could Be Kept and What Should Be Adapted in Higher Education Teaching <i>Patricia M. Schütte, Gert Van der Sypt, Saskia Kretschmer, Alexander Gabriel</i>	27
Current State of Implementing Formative Assessment and its Obstacles in Primary and Lower-Secondary Schools in the Czech Republic <i>Jiří Suchánek, Jitka Nábělková</i>	38

Psychological Well-Being Among High School Students During COVID-19 and Distance Learning: Risk Behaviors and Academic Performance as an Expression of Distress

Michal Alon-Tirosh

The Max Stern Yezreel Valley College
Israel
e-mail: michalt@yvc.ac.il

Dorit Hadar-Shoval

The Max Stern Yezreel Valley College
Israel
e-mail: dorith@yvc.ac.il

Orna Tzischinsky

The Max Stern Yezreel Valley College
Israel
e-mail: orna@yvc.ac.il

Abstract

COVID-19 posed many challenges to education systems worldwide. In Israel as in other countries, all schools were closed and distance learning was implemented. During this period, major emphasis was placed on maintaining academic continuity, and hundreds of thousands of students used digital content on various platforms. Nevertheless, aside from its academic role, the education system has additional functions related to students' psychological well-being. Schools, for example, serve as a source of psychological well-being and also enable educators to identify distress and provide assistance. School closures and the shift to distant learning may make it difficult to identify students' distress and provide assistance, and may itself facilitate distress. In order to provide adolescents with psychological well-being, educators must identify this distress during distance learning. The literature shows that adolescents' distress can have behavioral manifestations, such as adoption of risky behaviors or impairment of academic performance. Therefore, we propose to examine the associations between various behavioral aspects and adolescents' distress levels. Our hypothesis is that an association will be found between distress and adolescents' academic performance and that this association will be mediated by risky behaviors. On the theoretical level, finding such an association can help expand knowledge regarding psychological distress among students during the COVID-19 pandemic. In addition, these findings may be of practical importance as they can help identify distress in adolescents during distance learning.

Keywords

COVID-19 pandemic, online learning, education system roles, students' distress

The Experience of the Arab Students Who Are Graduates of Bilingual Education in Israel

Nehaya Awida

The Open University

Israel

e-mail: nehaya.haj.awida@gmail.com

Abstract

This research focuses on the experience of the Arab students who are graduates of bilingual education in Israel. This study attempts to examine the satisfaction of the Arab graduates with the degree of the formation of the Arab student in various aspects such as personality formation, national-cultural and pedagogical identity, and their satisfaction in these aspects. The research method is qualitative, and the research instrument is a semi-structured interview. The research population consists of ten Arab students, some who studied in the elementary school in the bilingual school and some who studied both in the elementary school and in the high school in the bilingual school, from the bilingual schools in Jerusalem, Kfar Kara, and Misgav. The main research finding is that most of the students exhibited a positive attitude in all the researched aspects.

Keywords

Satisfaction, Arab students, Israeli education system, bilingual

1. Schools in Israel: A Snapshot

In the education system in Israel, different types of schools operate in parallel, when these schools are different from one another in their identity, legal status, degree of State supervision over them, and the laws that apply to them (Harel Ben Shachar, 2012). A report submitted to the *Knesset* (Weissblay, 2013) presents the complexity of society in Israel and the diverse human fabric reflected in the education system in the State. The heterogeneity of the education system is expressed in different dimensions in the structure of the system and its budgets and in the existence of many types of educational institutions suited to the needs of the different sectors. The structure of the Israeli education system can be presented according to the student's age (primary school, elementary school, secondary school, with various internal divisions); the legal status of the educational institution and type of supervision by the State, and the type of sector (Arab/Jewish) (Weissblay, 2013). Danieli (2012) notes different types of alternative schools in Israel, such as the anthroposophical school, the democratic school, and the bilingual school.

2. The Arab Education System

The Arab education system, which had existed before the establishment of Israel as a separate system for the majority of the Palestinian Arabs, became subordinate after the establishment of the State to the Ministry of Education and in essence became an inseparable part of state education in the country (Jabareen & Agbaria, 2014). Therefore, in Israel there is a division into a Jewish education system and an Arab education system (Al-Haj, 1995; Mari, 1978). The State Education Law emphasizes the cultivation of the Jewish identity and values but does not determine any parallel objectives in Arab education in Israel, although there were attempts in the 1970s-1980s to do so in committees headed by Jewish educators (Al-Haj, 1995).

Arab education is a victim of Israeli pluralism in that it is managed by the Jewish majority and the authorities determine the curricula, without the involvement of many Arabs, if any. Arab involvement does not go beyond the limits of the writing or translation of books and study materials according to painstakingly defined guidelines and does not extend further than the actualization of the policy of the majority (Mari, 1978). The authorities of Arab local governments and school principals are purely technical, while essential decisions are made in the Ministry of Education (Golan-Agnon, 2004).

In other words, instead of the core program reflecting the social willingness to recognize different cultural groups, preserve their identity, and create a common denominator between them, it constitutes an instrument through which attempts are made to replicate the existing status quo and ensure the privileged status of the hegemonic groups in Israeli society. The Ministry of Education does not adopt a liberal approach or a multicultural approach in its relation to the narratives of different groups in the country. According to the liberal approach, the state needs to be neutral and not to promote or cultivate one culture at the expense of another (Agbaria & Mohand, 2013).

3. Bilingual Education

Recently it is possible to see the phenomenon of the opening of private schools. Private schools in Israel serve as an alternative to the state education system, and their estimated number exceeds two hundred, despite the objection of the Ministry of Education. The development of private schools in Israel derives from the erosion of the public education system, the decline in the students' achievements, and the decline in the percentage of eligibility for the high school matriculation certificate. The tuition in private educational institutions may range from 5,000 shekels annually to 80,000 shekels and more, and nevertheless this does not deter parents who are forced to deal with painstaking screening process, difficult acceptance tests, and long waiting lists. The private educational institutions are privately owned by associations, local governments, parents, and other private owners.

Naturally, the geopolitical environment in which the school operates dictates the constant engagement in questions of identity, nationality, and citizenship (Bekerman & Shhadi, 2003; Mor-Sommerfeld, Azaiza & Hertz-Lazarowitz, 2007). This engagement influences the parents whose children learn in the shared educational frameworks (Adiv, Mor, Azaiza & Hertz-Lazarowitz, 2013). Bilingual education and cooperation help eliminate relations of power that exist between the different sides, when this activity enables us to aspire to eliminate the separate existence of the two groups who are partners in the process and sets the school as an alternative model, both in the educational dimension and in the political dimension (Adiv et al., 2013).

The models of bilingual schools are different in their goals, student characteristics, continuity and amount of teaching in the different languages, methodological approaches, and amount and support of the decision makers and the community (Baker, 1993). Bilingual education is influenced by the philosophy and politics of the country or society to which this education belongs. Bilingual education not only reflects the decisions related to the curriculum but also is linked directly to the perceptions on the languages of minorities, their cultures, immigrants, the issue of equality in the state, the rights of the individual and the group, assimilation and integration, separation and discrimination, pluralism, and multiculturalism. The framework of bilingual education is different in definition and nature from that of one-time meetings held from time to time under the title of "coexistence meetings". The shared educational framework is held on a daily basis and sets the idea of unity, which goes beyond the 'binational' division understood in the meetings of the first type (Adiv et al., 2013).

Bilingual pedagogy in the school seeks to promote the two languages and the history and culture of the two partner populations (Mor-Sommerfeld, Azaiza & Hertz-Lazarowitz, 2007). Different researchers have shown that bilingual education succeeds in the implementation of its goals, on the high level of bilingualism, equal opportunity for academic achievements, and strong and positive multicultural identity that includes positive attitudes towards the other person (Crawford, 1997). However, bilingual education through immersion, which came from Canada, is most successful, and its objectives were speaking, reading, and writing in both learned languages, to teach and to evaluate the customs and culture of both partner nations (Amara, 2005).

4. Research Methodology

The research method is qualitative, and the research instrument is a semi-structured interview. The research population consists of ten Arab students, some who studied in the elementary school in the bilingual school and some who studied both in the elementary school and in the high school in the bilingual school, from the bilingual schools in Jerusalem, Kfar Kara, and Misgav.

5. Findings: Satisfaction of Arab Graduates of the Bilingual Schools

The interviewees, Arab graduates of bilingual schools, were asked the following question: What is your attitude towards the bilingual school and what is your sense of satisfaction with it?

This section presents the satisfaction of the graduates of three bilingual schools with the formation and empowerment of the student's personality, the formation of the national, cultural, and religious identity, education and enrichment for education for humanistic values, and in terms of pedagogy and achievement and the mastery of the Hebrew language as a native language.

Satisfaction with the Formation of the Student's Personality

One interviewee shifted from the regular school to the bilingual school in the fifth grade and studied there until the eleventh grade. He maintained he remembers himself in his childhood as "weak" and having poor self-confidence, and today he has the ability to express himself and self-confidence only because of his learning in the bilingual school. "First, my entire personality was, and I will say honestly ... I had a weak personality ... I was afraid to speak ... or to express my opinion ... in the previous school it was very rigid and there was great 'stifling' of the students ... if I were to say my opinion there, it would be received with indifference ... since the principle there is 'you come to the school to listen and to learn ... and you do not need to speak.' However, in the bilingual school, even in the middle of the lesson, the lesson is stopped if there is a student who wants to say something. The student is given a 'place' to talk, not only the teacher ... the student is allowed to express himself now ... this thing has importance since the student must have a strong personality, needs it ... and needs to be taught how to speak ... it is not important how, in speech or in writing or in drawing ... their method in the bilingual school, they accept each person how he is and care about his personality ... I myself experienced a total change, from how I was to how I became ... I became a completely different personality ... I speak and express my opinion freely and confidently ... in the bilingual school they form and strengthen the student's personality ... very greatly ... they build a person already from a young age and teach us how to cope in certain situations and how to address others..."

Another graduate expressed satisfaction with the bilingual school, especially following a conversation that lasted the year in actuality. This developed his personality and thinking at an early age, and only now he realized this, that the conversation and discussions that

occurred in the classroom about the national days and about the current events, such as the War in Gaza, caused experience and the development of a personality and the understanding that not everyone has the same opinion. “For instance, the Gaza war ... we were in school in class ... and the conversation on the Katyusha rockets and the children of Gaza ... now when I go back in my thoughts and look ... this is truly an unusual experience for a student in sixth grade ... but it is good in this matter or these things that the student begins to understand and know ... and I always say that the person will not know himself, if he does not meet the other person ... know yourself and your identity more when you are in friction ... in other words, if I were to learn in a school only with Arabs I would not have formed the personal identity...”

Another graduate continued that he felt the differences in personality between him and the regular Arab students, in his transition to the regular school, where it was felt that graduates of the bilingual school are more impressive as graduates and understand more in all that relates to social and political life. “In the bilingual school the personality and personal opinion formed in all the areas ... how did I know this, since when I would say my opinion in any field ... especially in the seventh and ninth grades and my peers in the class would tell me ‘you are more mature than your age’ ... in the bilingual school, true, I formed my personality and I learned much that helped me ... and also what is nice in the bilingual school is that they have ‘freedom of choice’ ... since in the bilingual school I came out aware of my personal identity, I became possessed of a strong personality ... I came out of the bilingual school clever and with considerable awareness about what happens in the country from a political perspective and more ... something that does not exist in the Arab schools ... and thus I began to express my opinion in different issues and thus I had self-confidence to speak and to express my opinion, without fear or concern ... and all this from the bilingual school, in the bilingual school they begin life in the right way...”

Most graduates maintained that the secret to the formation and reinforcement of their personality is a positive system of relationships, equal and respecting, between teacher and student. The teachers in the bilingual school take the student into consideration, support his personality, encourage his self-expression, and this reinforces the student’s self-confidence. “What is nice in the bilingual school is that all my experiences in it were happy and good ... I do not remember one single negative experience ... since you have the teachers who come to love you, to give you self-confidence ... to form your personality ... and not like in the regular school, to suppress you ... or to traumatize you, as I already was in the first grade...”

To conclude, most Arab graduates of the bilingual school expressed their satisfaction with the formation of their personality. The school developed in them self-confidence to express their opinion and to express themselves freely.

Satisfaction with Informal Education in National, Cultural, and Religious Aspects

The Arab graduates expressed complete satisfaction in terms of informal education in the bilingual school in the national, cultural, and religious fields, to differentiate from the regular Arab schools that do not engage in the topic at all or in the private Arab schools. All the Arab graduates who went to learn in the public Arab schools expressed great disappointment with the public school, as opposed to high satisfaction with national, religious, and cultural perspectives in the bilingual school. One interviewee who studied in the elementary school in

the bilingual school and then for secondary school shifted to the regular school in the village expressed satisfaction with the informal education in the bilingual school and the education for national identity, in comparison to the public Arab school, which does not address at all the topic of the national identity or has no informal activity for national days. "Now I will start from this point, you are given much information ... for instance, in the regular school I do not remember that they ever spoke with us or did activities on the national days ... for instance, on the Nakba that is from the days that must in every Arab school be mentioned and an orderly and organized ceremony must be held. No, they are afraid ... perhaps not afraid, they are not even interested ... what this principal is interested in is only grades ... this is like a factory for achievements."

The significant difference between the bilingual school and the public Arabic schools, according to most Arab graduates who moved from the elementary school in the bilingual school to the public Arab secondary school, is the establishment and organization of the ceremonies for the national days. On the basis of this move and this traumatic experience of all the Arab graduates who moved to the regular/public school, they expressed total satisfaction with the national days in the bilingual school and strong disappointment with the Arab schools for the total ignoring of these national days. "For instance, in the bilingual school there was ... in every year we would hold a ceremony for the Nakba ... we had the right every year to remember the Nakba, as something with a right, organized, arranged every year ... this is not found in my village school or in any other school ... certainly, it is not possible that the Arab schools will hold this ceremony."

Graduates mentioned satisfaction with the preparation and organization for the national days organized in the bilingual school for both peoples, to the same extent, with the same right, with the same respect. "We, I remember ... every year ... there was never a year ... that there was no discourse and discussion about the day – the national event ... there was always a conversation ... we would discuss in all that is related to the Arabs and Jews ... every society, every people ... this was always ... in every year we did trips to the villages that were conquered in the year 1948 or 1967 ... the 'abandoned' ones ... nothing was missing in this subject ... everything was revealed ... the entire narrative." "When we would talk about political issues ... we would know that the other side has another opinion ... you will learn over time ... to refine the conversation, to refine/lower the tones ... you will learn how to talk ... you will understand that there is another side ... you will understand that not everything is 'white' ... you can say all that comes to you ... but the question is how you will say this ... you know ... practically ... this was not so very good and nice ... when speaking about the Gaza war or ... the events of the year 2010."

For a small number of the Arab graduates, especially those who moved to a private Arab secondary school, their satisfaction with the formation of the national identity and the organization and planning of the Palestinian national days is greater in the private school than in the bilingual school. However, they still expressed satisfaction with the bilingual school, but they felt more satisfaction in the private Arab schools, both in the response on the national days and on the formation of a clear and not vague national identity, as in the bilingual school. The argument was that in the bilingual school they present you with all the information and expose you to two narratives, so that every student can choose his way and belief, so that the Arab graduates are forced to continue and clarify what is correct and not correct in terms of

the formation of the national identity at home. However, in the private schools they succeeded more in providing a response and an unequivocal answer that you are Palestinian and your people are Palestinian.

One graduate on the one hand expressed satisfaction with the bilingual school and the private school with a 'little' criticism of the private school because of their extreme position. "I feel that the private school too ... there is a little radicalization ... and thus ... since it makes it difficult for the students to fit into Israeli society ... in my opinion, the school is like a bubble, as there is in the bilingual school ... for instance, in my opinion the bilingual school is not realistic and when they compare it to Israeli reality that stop their ears from hearing about the Nakba but in the bilingual school they do listen and respect (and this is a contradiction) ... since according to law it is forbidden to say the word Nakba ... therefore in my opinion the change begins from above ... the bilingual school was the best choice as a private school since the number of students is low and this is the consideration that my parents took into account."

Satisfaction with Humanistic Education and the Enrichment of the Humanistic Values

The graduates expressed satisfaction with humanistic education, education for values, the principle of the student at the center, and the model of respectful mutual attention in all systems of relations in the school: teacher-student, student-student, and principal-student. One graduate expressed his satisfaction with the humanistic education of the bilingual school, when no other school or Arab school does this, and does not educate/raise the students this way, only the bilingual school, and this makes them unique, since the learning together and the contact with another, lets the graduates from both sides to undergo experiences. "From an early age they teach us how to love one another and not hate one another only because of what you see on the television. Not every Jew wants your land, and not every Arab is a terrorist! We learned how to address people as human beings and not to refer to religion, race, or sex."

Another graduate added that one of main values learned in the bilingual school, already from a young age, is education for multiculturalism, which includes reciprocal respect and acceptance of other people's opinions. "... and you learned to respect and to accept the other nation ... and you also received all that you need to learn from the school from a pedagogical perspective ... in other words, the reason you came to the school you received ... and nothing was missing ... moreover ... you also acquired other things ... you knew co-existence and the Hebrew language and ... even if you came to the school not to respect the other side ... and not to accept ... in the end the student acquired humanistic and humane values."

One of the main values transmitted in the bilingual school, with which the Arab graduates are satisfied, because of the Jewish-Arab / Israeli-Palestinian conflict, is the right of every nation to tell its narrative, without harm to the other, and also the chain of the idea of the necessity of a shared life and coexistence between the two peoples. One of the graduates maintained that, "On the Day of the Nakba, which is Independence Day, we would divide into Jews and Arabs and everybody would do what he wants without harming the other ... since we learned that it is possible to live together without hurting and fighting. It is just land and everybody can do and believe what he wants and to do what he wants without fighting."

Satisfaction with the Conditions of the Bilingual School, the Teaching Methods, and the Acquisition of the Hebrew Language

A graduate who learned in the elementary school only in the bilingual school and in the secondary school shifted to the regular school in the village expressed satisfaction with the bilingual school in terms of the conditions of the school and the class. The graduate maintained that in the bilingual school there is a small group with two teachers, and this enables every student to express himself and to participate in the lesson, to differentiate from the regular school where there is a large group that does not allow every student in the lesson to share his opinion. Moreover, most teachers in Arab schools are rigid and traditional, placing the teacher at the center of the learning process. To differentiate, the bilingual school places the student at the center. "In the regular school ... I was at first in shock, since there are forty students in the classroom ... in the bilingual school we were a small group and one or two teachers ... in the regular school the student is not allowed to speak ... and even if you asked for permission to speak, the chances are that you will not be allowed to speak ... there is no self-expression or expression of opinions of the student ... the student is not listened to ... and it is exaggerated and completely opposite to the bilingual school ... in which the student is in the center, and the student is always allowed to express himself and to say his opinion ... the student's personality is always a topic of concern, as is the reinforcement of his personality ... there is no such thing that the student wants to say something and will be received with indifference ... in the regular school the student does not have value ..." Another graduate was satisfied with comfortable class conditions. "There were half Arabs and half Jews ... the class was not large ... in the class there were 30 students, 15 Arabs and 15 Jews ... even the structure of the school was different, two teachers, an Arab and a Jew ... it was very surprising but as a first experience I was very impressed by where I am found."

The graduates mentioned their satisfaction with the different and unique teaching methods of the bilingual school, in comparison to those of the regular Arab school, which is rigid and coercive in teaching, unlike the bilingual school, where education is meaningful and the student is at the center. "I began from the second grade ... I was the first year in my village (first grade) ... the level of the school was different ... even the teaching methods of the bilingual school were different ... this is a school that is of less quality ... since the Arab schools are more serious and rigid, forcing things on the student ... this causes alienation and the students flee from the school ... and this is truly what I felt at the time of the shift ... I felt this really when I moved ... you go to the bilingual school from desire and not from compulsion."

One graduate added that in the bilingual school, unlike the regular schools, there is not only the transfer of information and knowledge but also the student's understanding and internalization of the learning materials. In the bilingual school they attempt to teach with contemporary teaching methods and not the traditional method. "It is clear that in the regular schools no importance is ascribed to activities and to informal education ... there the main thing is primarily the student's achievements ... but in the bilingual school the methods of teaching and learning reflect the concern how to convey the knowledge to the students and to ascertain that the students understood the material ... and were willing to repeat the material another time if it is necessary to the understanding of the lesson ... and even would use the homeroom teacher to help explain ... for instance, when I began to study here, in the class ... I had no idea in the Hebrew language, and I remember that they assigned to me a

teacher to be with me and to work intensively with me on the Hebrew language, so that I could advance along with the rest of the class ... therefore, I do not have bad memories of the bilingual school, the reverse is true, everything is positive and enjoyable ... and there are also many challenging subjects of study, such as on the Nakba Day and Land Day ... where they prepare materials and activities ... not like in the Arab schools that ignore these days totally ... since it is forbidden.”

In addition, most of the graduates expressed satisfaction with the school curricula of the bilingual school, when these unique educational programs not only enriched them in knowledge and pedagogy but also extended horizons and awareness in life. “We had, for example, a unique lesson in the bilingual school, which was titled ‘The Cables of Thought’ ... it is a lesson of thinking games alone ... this is something not found for the Arab students in the Arab school ... we also learned, like, Yoga ... I for instance studied Yoga in the bilingual school ... they give you certain things/tools considered simple perhaps in your eyes ... but for us, as students, this was more and this had greater importance.” “When I went to look at the bilingual school when I was in the first grade, it was clearly felt that the atmosphere was different and unique in the bilingual school ... and I said these are students who live (they have fun) since they are also learning but are learning nicer things ... my intention by nicer things is that they do many activities ... they learn new things and not only learn from books ... and not only according to the format of the Ministry of Education ... in other words, they do not only learn knowledge and do a test of the knowledge and that is all.”

In addition, the Arab graduates expressed satisfaction with their level of mastery of the Hebrew language, which greatly helped them adjust and succeed in higher education, which requires a high level of the Hebrew language, when most Arab students do not have this advantage of this mastery of the Hebrew language. “They would be enthusiastic over the simple things, like, for example, how I know to speak Hebrew ... they would look at me like I am ‘strange’ ... until today even when I am in the university ... the language, as a language I know it far better than students who are in year four or year five of the university ... and they still look at me with a glance, ‘strange how you speak Hebrew’ ... (as a first year I speak Hebrew better than the senior students), at my accent ... and primarily things ... I never felt that they look at me like a ‘Jew’ ... perhaps because I forced them ... in other words, the person is the one to direct the type of reference to him.” “It was clear that my mastery of the Hebrew language and my accent that is totally Israeli ... caused many times for the Arab students with me in the class to ask me whether I am Arab. Since it was strange for them how I speak with the lecturers and argue with the Jews sometimes ... it was prominent that I have a high level of mastery of the Hebrew language relative to them...”

6. Conclusion

Most of the Arab students who studied in the bilingual school expressed for the most part great satisfaction with the learning and education in the bilingual school, both in the formation of the personal identity and national identity and in terms of the learning. Satisfaction derives primarily from personal experience and from their transition to Arab public education, during which they compared and saw themselves the difference between bilingual education and Arab public education in all fields, mentioned above. Students who learned in the elementary

and high school schools in the bilingual school displayed satisfaction in their contact with relatives and in the studies in the university, when they saw “significant” differences between them and Arab students who studied in the Arab public education. The conclusion of the research is to recommend to the Arab public schools to change their school “vision”, according to the needs of the students of the young generation, to have more humanistic education, to have development and formation of the personality of the Arab student, both personal and national, and to make certain to change the teaching methods so that the student will be at the center.

References

1. Adiv, U., Mor, O., Azaiza, F., & Hertz-Lazarovitz, R. (2013). National Perception, Shared Activity, and Bilingual Education: The Case of the Galil School. *Discovery: Multidisciplinary Journal for Education, Society, and Culture*, 3(1).
2. Agbaria, A. K., & Jabareen, Y. (2013). Buried Reports: Implications of the Politics of Contempt on Arab Education in Israel. *Civic Education in Israel*, 106-146.
3. Al-Haj, M. (1995). *Education, Empowerment, and Control: The Case of the Arabs in Israel*. Albany, NY: State University of New York Press.
4. Al-Haj, M. (1995). Kinship and Modernization in Developing Societies: The Emergence of Instrumentalized Kinships. *Journal of Comparative Family Studies*, 26(3), 311-328.
5. Amara, M. (2005). The Core as a Focus of Statehood, In: H. Gur Ziv (ed.) *Militarism in Education*. Tel Aviv: Babli.
6. Baker, C. (1993). *European Models of Bilingual Education*.
7. Bekerman, Z., & Shhadi, N. (2003). Palestinian Jewish Bilingual Education in Israel: Its Influence on School Students. *Journal of Multilingual and Multicultural Development*, 24(6), 473-484.
8. Crawford, J. (1997). *Best Evidence: Research Foundations of the Bilingual Education Act*. Washington DC: National Clearinghouse for Bilingual Education.
9. Danieli, M. (2012). Not Only Arithmetic and Language: 6 Alternative Schools, in *Mako*, August 21, Retrieved from: <http://www.mako.co.il/home-family-kids/education/Article-0c4ca654aa84931006.htm>
10. Golan-Agnon, D. (2004). Why Are the Arab Students in Israel Discriminated Against? In: D. Golan-Agnon (Ed.). *Inequality in Education*. Tel Aviv: Babel.
11. Harel Ben Shachar, T. (2012). *Series of Selective Private Schools: The Havruta School as a Test Case*. The Jacob Hazan Center for Social Justice and Democracy, Jerusalem, The Van Lear Institute.
12. Jabareen, Y., & Agbaria, A. K. (2014). Autonomy for Arab Education in Israel. Rights and Possibilities. *Knowledge Discovery*, 5.
13. Mari, S. (1978). *Arab Education in Israel*. Syracuse, N: Syracuse University Press.
14. Mor-Sommerfeld, A., Azaiza, F., & Hertz-Lazarowitz, R. (2007). Into the Future: Towards Bilingual Education in Israel. *Education, Citizenship, and Social Justice*, 2(1), 5-22.
15. Weissblay, E. (2013) *The Education system in Israel – Main Issues Discussed in the Committee of Education, Culture, and Sport*. Retrieved from <http://www.knesset.gov.il/mmm/data/pdf/m03160.pdf>

Attitudes of Homeschooling Parents Towards the Education System and Their Connection to the Perception of Homeschooled Children

Oz Guterman

Western Galilee College

Akko, Israel

e-mail: ozgute13@gmail.com

Abstract

Home education is an expanding phenomenon in many countries. In most cases, the choice of homeschooling is connected to parental attitudes. Previous studies show that parents have a variety of reasons for choosing to homeschool. The present study examined the attitudes of children and parents among a group of families educating from home. The findings indicate a number of connections between the attitudes of children and parents. The study presents these attitudes and explains their significance for key questions in the field of homeschooling research.

Keywords

Homeschooling, parents, attitudes between children and parents

The Educational Reality of the Beginning Teacher of Upper Secondary Education in the Period of COVID-19 Pandemic

Lýdia Pilátová

Palacký University Olomouc
Olomouc, Czech Republic
e-mail: lydia.pilatova01@upol.cz

Jiří Suchánek

Palacký University Olomouc
Olomouc, Czech Republic
e-mail: jiri.suchanek01@upol.cz

Abstract

For more than a year, educational system has been struggling with the transition from the classic contact form of teaching to the contactless form of teaching. The pandemic situation of the COVID-19 infection required a contactless form of teaching also in the Czech Republic, which we consider in the study. In this paper, we focus on a narrow group of upper secondary education teachers who started their professional practice just during the transition from the contact form of teaching to its contactless form.

The paper explores the progress of the situation in the distance learning during COVID-19 pandemic in the Czech Republic. We present and analyze research into the reality of teaching of beginning teachers of upper secondary education, during the pandemic situation of COVID-19. Based on the content analysis of a qualitative questionnaire, we provide the insight into the issue of distance form of education of beginning teachers in the Czech Republic.

The aim of the work is to analyze and find out the opinions of beginning teachers of upper secondary education, in the educational process, in the period of the pandemic situation in the Czech Republic. The research is based on interviews with beginning teachers and monitors the issue of teaching during the pandemic situation. This study points to the benefits and drawbacks of contactless teaching. Its results can serve to improve online teaching and make it easier for beginning teachers to prepare for online teaching during a pandemic.

Keywords

Beginning teacher, distance education, COVID-19, upper secondary education, the Czech Republic

1. Introduction

Education has undergone a continual, gradual change in the past. However, the recent past has brought about a radical change. The pandemic situation of COVID-19 has shaken the whole world last year. For more than a year, education has been struggling with the transition from the classic contact form of teaching to the contactless form of teaching. In this paper, we focus on a narrow group of upper secondary education teachers who started their professional practice just during the transition from the contact form of teaching to its contactless form. They had to react quickly to the necessary changes and often deviate from the standards to which they would naturally be exposed to at school. The change has triggered the need for the introduction of different teaching methods and styles for passing on the knowledge. Contactless teaching can be associated, for example, with technical shortcomings, lack of training and unpreparedness of the teacher for a contactless form, which they have never encountered before. Another issue is the degree of sustainability and quality of education and training in contactless form. The positive effects of the distance form of education can support the educational process, even when returning to the full-time form. The basic premise is to increase the digitization of the Czech educational environment. In case of a forced transition to distance learning, with worsening of the pandemic situation, better preparedness of teachers, pupils and their families is expected, based on the previous experience of the past year. The need to learn from mistakes is a prerequisite for streamlining the educational process in any form of teaching.

2. Distance Education during the Pandemic Situation of COVID-19 in the Czech Republic

Distance education is distance learning which takes place through correspondence, telecommunication media and other means, in which there is usually no direct contact between the pedagogical staff and the self-study student. Distance form of education is based on self-study, performed largely or entirely through information technologies. It might be associated with individual consultations. Implementation of distance education in the Czech schools led to updating the education law (Act no. 561/2004 Coll., On pre-school, basic, secondary, higher professional and other education), amendment no. 349/2020 Coll. came in the effect on 25. 8. 2020. The amendment in the Articles stated the rules of distance form of education in the exceptional situation of closing school, or prohibition of the presence of pupils and students in schools (MŠMT [Ministry of Education, Youth and Sport], 2020).

The law provides:

- a) the obligation of the school in defined extraordinary situations to provide education in a distance manner for children for whom pre-school education is compulsory, pupils and students
- b) the obligation of children, pupils and students to be educated in this way (with the exception of pupils in primary art schools and language schools with the right to a state language examination).

To support the schools of the Czech Republic during distance education, the Ministry of Education, Youth and Sports (MŠMT) issued a supporting methodological document (MŠMT, 2020). It includes legal, organizational and pedagogical elements, suitable during distance

learning. The manual should help schools to set the rules of distance learning by which places emphasis on the development of key competencies, digital literacy, development of innovative methods and strengthening the role of formative feedback in the learning process. MŠMT recommends that schools use elements of distance education with the support of digital competencies also during the full-time form of education. The independent inspection operations of the Czech School Inspectorate (ČŠI) as administrative office of the Czech Republic with national scope in the education sector, confirmed considerable flexibility of schools and teachers, to new situation in the distance learning (ČŠI, 2020). However, it revealed less suitable procedures that hinder the more successful implementation of distance education. Organization is a paramount step towards the effectiveness of distance education. This was the case, with the immediate transition to the distance form of education, and it was insufficient. There is no wonder, since for so rapid intervention in education, because of pandemic COVID-19, no one has been prepared. In order for distance learning to be effective and sustainable, it needs to take a different form than in full-time form. The negative impact is the focus on explaining and going through the new schoolwork, in order not to be delayed in the teaching schedule. This places a massive burden on teachers, students and their families.

As distance learning takes place in a virtual space, it brings new forms of ways of education. It is an online and offline form, which is adapted to the individual conditions of the teacher, student and technical equipment of the school. In the case of online teaching a synchronous form may occur (teacher is coupled with pupils at the same time via one virtual space), or an asynchronous form (pupils work in their own pace in their desired time, in the virtual space). Off-line education takes place outside the virtual space (self-study, elaboration of practical tasks). The most effective distance education presupposes a combination of the above-mentioned forms (MŠMT, 2020). From the research conducted by the Czech Secondary School Union (ČSU) it is clear that online teaching at secondary schools took place from 97.1%. The remaining 2.9 % means the absence of the internet access and the total absence of online hours. Frontal teaching was combined with interaction with pupils. Up to 80% of students positively evaluate sufficient space for their questions. High school (Gymnasium / Grammar school) students have the highest representation. Almost half of the students (46.8 %) are satisfied with online teaching. A large proportion of students, up to 28.8%, are not satisfied with teaching online. High representation of dissatisfaction is represented by students of the ending years (ČSU, 2021).

Distance education of secondary school pupils is possible to organize more easily, as in the situation in basic education. A prerequisite is the high degree of autonomy and development of competence in given age category of pupils. MŠMT (2020) recommends that secondary schools teach as much as possible online. Educational forms and methods should be chosen accordingly to the digital skills of a particular group. Utilize online channels to transfer and organization of lectures and discussions. Include a variety of digital tools and online resources for individual as well as group student work. Although the level of ability to maintain the attention and activity of students for a long time is higher, it is not recommended to implement teaching according to the standard schedule. It is preferred to combine the planned curriculum into thematic units and dedicate to it a longer continuous period of time. This method of organization makes efficient use of time and dampens lengthy organizational and technical breaks when changing subjects and teachers. It enables students to work

intensively and concentrate on a comprehensive topic. From the side of the teacher, it is important to be able to be available to pupils for personal and group consultations. Ensure the quality of formative feedback provided to all individuals, which develops students' potential and study autonomy.

During distance learning it is desirable to provide quality feedback which supports motivation and expose the path to achieve progress. Formative assessment has a significant effect on efficiency and achievement of the expected results. Distance education can demotivate the student, so the role of the teacher is to continuously monitor the involvement and activity of all participants, to support and motivate them. In the case where the pupil does not engage, or engages in insufficient manner, it is not appropriate to use evaluation (reduced classification level), as a form of pressure and punishment. It is preferred to detect the reasons and find the ways to support the child in higher engagement. Consult the school management with more serious cases and problems and choose a coordinated approach to solving the problem. Compared to traditional summative assessment, it is more effective in distance learning to use more frequently formative assessment (MŠMT, 2020). Assessment becomes formative when it is individually shown to the pupil where they are on an imaginary path towards a goal, and particularly how they should proceed further to fulfil it (Kalhous & Obst, 2009). The purpose of formative assessment is to identify the educational needs of students, based on which we adapt teaching so that it is possible to achieve maximum development within the specific capabilities of the individual (MŠMT, 2020).

In distance education, the school follows the relevant Framework Educational Program (RVP) and the School Educational Program (ŠVP), as appropriate. Experience in education at the beginning of the pandemic situation shown that during the distance learning it is not possible even is not recommended to educate entirely in accordance with ŠVP, planned for a full-time form. The primary focus is on the application of knowledge and skills, in solving various situations. At secondary schools, these are crucial subjects related to the graduate profile and subjects of the common part of the Maturity examination. In educational process directly develop competence to teach, for the pupils' ability to educate themselves and self-study. For a long-term ban of personal presence in schools (more than 2 weeks), it is necessary to prioritize educational areas in the ŠVP. Focus on the expected outcomes according to the RVP, with emphasis on general profile subjects and professional subjects for the graduate profile (MŠMT, 2020). In the thematic report of the ČŠI (2020), it is confirmed that the majority of secondary schools provided distance education using digital technologies with a combination of online teaching, enriched with other educational activities in the offline mode. For the implementation of online teaching the teachers utilized by large school digital technology and equipment. Their use has led to a significant improvement in teachers' digital competences and is incomparable with its previous level. Of fundamental importance was the quantity and quality of digital equipment, but also support that was provided for teachers by administrators, ICT methodology specialists and from workshops on distance form of education. In the distance education, educational information systems as well as management systems for teaching are dominantly used: Microsoft Teams, Skype, Google Class room, Moodle, Edupage, Bachelors and School OnLine (ČŠI, 2021). During online lessons, students did not have to have their cameras and microphones turned on, due to a poor internet connection. The voluntary nature of the cameras is in place, also in the question of interfering with the personal integrity of the student. According to a ČSU research (2020), up to 73.2% of

students do not like having the camera switched on during online lessons. Teachers have cameras and microphones on at all times during online lessons. This also suits the students, it increases their concentration and they feel in contact with the teacher, thus increasing the quality of learning. In order to realize a higher quality and easier way of distance teaching there is a need for teachers having quality technical equipment themselves and support their training in the use of this technique. On the other hand, it is necessary to provide technical equipment and the internet connection for the students themselves, with the support of education from parents (EDUin, 2020).

3. Methodology

The research into the reality of the beginning teacher teaching in higher secondary education during pandemics COVID-19 we developed based on the methods by J. HENDL (2005), a qualitative questionnaire with open questions. The method can be used to clarify interpretations obtained by observation. We conducted the research on beginning teachers of higher secondary education who began their professional career in the years 2018 – 2021. Teaching qualifications of the teachers involved in the research are as follows: Geography, French language, Biology. Mathematics, Statistics, ICT, Physical education and English language. Six respondents participated in the research. In a depth questionnaire we monitor the issues in transition from a contact to contactless form of teaching. In it, we observe changes in the preparation of a beginning teacher for teaching in the distance form, the teacher's training in the distance form of education, the use of teaching methods and the methods of evaluation in this form. We are looking for the benefits and drawbacks of the distance form, and the comparability of quality between contact and contactless forms of education in secondary schools and grammar schools (high schools / gymnasiums). The beginning teachers' replies are processed by content analysis. Miovský (2006, p. 238) defines content analysis as: *"a wide range of sub-methods and procedures used to analyze any text of a document in order to clarify its meaning, identify its stylistic and syntactic peculiarities, or determine its structure."*

4. Research Results

The transition from the full-time form of teaching to the distance form is perceived by beginning teachers of upper secondary education as very chaotic. Constantly changing information and regulations due to the pandemic situation brought about the confusion in the educational process. Within a few weeks, however, teachers were able to adapt to the requirements of the distance form of education and stabilized its form. However, disunity still persisted in distance education. Each teacher chose the virtual teaching space that suited them best. This fact had a negative impact on students who had to struggle with different teaching platforms in each subject. The schools only reworked themselves towards a unified teaching platform over time. During the unification, schools tested different platforms, looking for the most efficient and most suitable for their requirements. During this time, they worked through School Online, Moodle, EduPage, or Skype. During the teaching via the School Online, there was a lack of storage space within a few days and it was not possible to send teaching materials on the servers. The introduction of a unified teaching platform unified the

whole process and thus simplified the work of teachers as well as students. After the unification of schools, they operated through the MS Teams and Google Classroom platforms. From the perspective of lessons themselves, beginning teachers were able to react promptly and adapt teaching to the virtual space. They describe their transition to distance learning as easier, compared to older colleagues who are not that used to working with technology. Beginning teachers also perceive, that the distance education is predominantly about a teacher's approach, their tolerance, humanity and willingness to cooperate and adapt to circumstances. However, not only a unified platform is enough for quality distance education, but also engaging and motivating teaching that would not tie the student to the computer screen for whole days.

The preparation of beginning teachers for distance learning has not fundamentally changed, compared to the full-time form. The biggest change was not the technical complexity, but the demand on time, which there was not enough. Many materials used in physical form had to be transformed into virtual form. However, the need to print teaching materials disappeared. These were available online. The prepared materials were favorably used by the teachers as a substitute for lesson records for students, which rapidly shortened the time for creating notes and the time gained was used for other activities. Because of the split in teaching on-line and off - line, teachers prepared two kinds of lessons. They also prepared lessons for different groups of pupils, to best suit the individuality of a given group. In the lessons, they negatively evaluate communication with students, which is extremely lengthy, especially due to technical difficulties. In the distance form of education, teachers used textbooks to a greater extent to work with students than in the full-time form. On the other hand, group activities that are more demanding to organize in virtual space have receded or completely disappeared. Discussions in smaller groups or pairs were not possible in foreign language teaching in a common virtual classroom. In MS Teams, this problem could be solved by creating smaller subgroups, which made group work available. Some teachers replaced group activities with new applications that will enliven lessons. The difficulty of using applications has been shown in their very search for to be effective, to learn to work with them and to create lessons in them (e.g. Gather Town). To the on-line form feedback was also transferred and keeping the report of knowledge and capabilities of the pupils was made more difficult. Corrections of students' work take more time for beginning teachers in the distance form than in the full-time form. Home assignments are based on work sheets and photo-tasks, work with articles, videos and educational portals.

When choosing teaching methods, the beginning teachers consider their usability in virtual space. In large they share computer screens with students, where they present interesting websites and resources. In full-time form, they often cannot afford to work with the Internet resources, due to insufficient conditions for projection. Increasing the use of textbooks in distance education, according to teachers, supports the student's independence. As well as the students' independent preparation of news, creation of comics and presentations. In Mathematics, the method of problem interpretation to the heuristic method prevailed similarly to the full-time form. Geography was dominated by an explanation, enriched with guiding questions, work with a map or diagrams. In the graduation years discussion and conversation prevailed to a large extent. In foreign languages interpretation has been reduced to a minimum and replaced by conversation and work with audio-visual materials. Teachers enriched the lessons with interactive applications and work with them.

The greatest change, in comparison to the full-time form teaching, was brought about by distance way of student assessment method. According to beginning teachers, assessment during the distance form is much more tolerant and benevolent. In reality it happened that students got better marks despite the fact that they received less knowledge and capabilities. Initially, in some schools numerical classification was replaced by the evaluation "pass / fail". The level of student knowledge did not really get the required assessment, as the evaluation "pass" included excellent results, but also average ones. In their opinions, the motivation of students to try more gradually disappeared. Later, it was switched to evaluation using the numerical scale 1 - 3 (excellent - good) and worse results, or not met, were rated as "failed". Pupils then had room for correction, with the teacher's awareness that they would include the previous result in the overall evaluation. With the possibility of correction unused, the rating was changed to number 5 (insufficient). The essence of this method of evaluation was the motivation that even the retrospective output makes sense. In other schools, the 5 - point scale of classification was not abandoned even in the distance form. In addition to tests, which were used to examine the knowledge, once a month a preparation for complex analyses of a specific topic was added, linked to the thematic plan. This work included except summative assessment also verbal assessment. Despite the fact that teachers did not use verbal assessment in full-time teaching, they now tend to continue using it in full-time form. A third option of assessments that beginning teachers started to use in the distance form of teaching is verbal assessment supplemented by evaluation in percentage. The final grade will be taken from the obtained percentages at the end of the school year. If there was a tie final grade, the teachers considered the student's performance during distance learning. In schools, knowledge was tested in online testing, with one possible correct answer, within the time limit for completion. Open questions and creative thinking have been abandoned, in contrast to the full-time form of education. Tests in educational platforms were more complex, which has yielded greater margin point range and divided pupils more effectively according to their performance. A negative and persistent phenomenon was the non-deduction of student copying / cheating, which reduces the resulting objectivity.

The transition to the distance form of education brought with it the question of whether teachers are ready for the distance education at all and, if they feel a deficit of readiness, whether it is realistic for them to overcome it more easily through training. The research shows that beginning teachers of secondary higher education, at the beginning of the distance education, did not feel deficit in readiness. They evaluate their readiness positively due to their younger age, the use of digital technologies both in the full-time form of education and in personal life. They do not feel preparedness from their previous university education as essential. Beginning teachers largely had to create their own way of conducting lessons to suit them and their students. Inspiration they searched among teaching groups, they shared their ideas with colleagues, or participated in volunteer webinars. They were provided with support by the school management in the form of training and regular meetings. Only in one case did the beginning teacher not meet with the interest and support of the employer, who focused only on the results and outcomes of education.

Beginning teachers feel several benefits that distance learning has brought. In the first instance it is the more massive independence of pupils, to which they are during distance learning led. The ability to schedule one's own time and work is developed, and responsibility

for oneself and one's actions is strengthened. By acquiring knowledge and skills for the use of information technology, students improve their computer literacy. Many obsolete processes (records, documentation, homework) are simplified in the distance form and converted into an online form. A big positive is the unified school platform, which unites classes and teachers not only in terms of information. Teachers are motivated to engage new technologies to the lessons, use of new applications and web sites even after the return to the full-time form. From the students' point of view, distance learning has led to the realization that full-time learning is important and they feel the need to return to physical school as soon as possible. The distance form suits a smaller part of students more and is more important for them. Despite the loss of social contacts with surroundings.

From the point of view of beginning teachers, the distance form of education also brought with it a number of drawbacks and pitfalls. As the teachers did not have direct contact with the students, they could not correctly estimate whether the teaching was successful and the students understood the explained schoolwork. It is difficult to make sure that students pay attention, cooperate and take notes. Many students could not actively participate in lessons for a long time, due to insufficient technical equipment of the household and poor Internet connection. Problems with technology, the Internet outages, problems with cameras and microphones, spontaneous computer restarts and other problems disrupted the flow of teaching. Teachers describe teaching as very demotivating due to teaching of largely "black screen" having no idea whether there is someone actually behind it. Communication with the students was very slow and during the lessons the achieved goals were not achieved. Pupils struggled with health problems, whether physical or mental. A major negative of the distance form is difficult verification of the level of quality of students' results, easier possibility when cheating and not fulfilling the tasks and tests, as well as less personal feedback. The passivity of students in subjects in which they are not interested is noticeable. Differences in the resulting knowledge are deepening, especially in the ending years, when starting further education. The difficulties of inconsistent solution of school issues are manifested by emerging conflicts and contradictions, and a disinformation bubble is being built for the public, which thwarts any effort for more effective distance education. Teachers are challenged and there is visible increased sensitivity of parents to their children, who have enormous power in home - schooling. The distance education is associated with continuous work with a computer and therefore associated lack of natural physical activity of the pupils, loss of contact with classmates, buddies and authorities, and the loss of control and self-control and high rate of procrastination. Disrespect and the loss or limitation of decency and decent disembarking has increased, also the loss of interest and hope. Older students feel a high responsibility for younger siblings and a deepening of domestic problems, which contribute to the psychological difficulties of students.

The comparability of the quality of distance and full-time education of upper secondary education is questionable. Despite the fact that distance learning has many advantages, beginning teachers are largely inclined to the full-time form. The society is in a modern information and technological age, but it is still not sufficiently prepared for a permanent transition to the distance form. The independence of upper secondary students is more in favor of this form than in the case of primary and lower secondary schools. If we are looking at the amount of taught curriculum, explained schoolwork and acquired knowledge the distant form is comparable to full-time form. However, from a "human" point of view of virtual

teaching, the quality cannot be compared. With hundreds of students, the teacher is not able to recognize them, assign faces to names, and work on a more favourable classroom climate.

5. Conclusion

Opinions of beginning teachers suggest that the distance education is, assuming the existence of support measures, feasible and effective. The shift that has taken place since the beginning of the pandemic situation indicates that the education system is able to gradually build a level of education similar to the full-time form. However, persistent inappropriate approaches can reduce its effectiveness. Therefore, it is necessary to address the weaknesses, re-evaluate them and introduce more appropriate methods into the educational process. Support measures of the MŠMT and ČŠI research confirm that, provided appropriate procedures, distance learning is effectively feasible. As in the previous study conducted by the same authors who were concerned with reality of a beginning teacher teaching at lower secondary schools in the period of COVID-19, we have come to similar conclusions. A positive finding is that most teachers and students have improved and developed their digital skills over the course of distance learning which are undoubtedly necessary for the effectiveness of the distance form. Additional research still points to continuing problems in the effectiveness of teaching online. A prerequisite for an effective distance form of teaching and the satisfaction of the educators is the organization, active participation of pupils, and quality feedback. An appropriate approach is to choose a fixed organization of the schedule, consultation lessons, clarity of information, an effective and unified communication platform, and updating the latest information on possible changes in lessons. Emphasis is recommended to put on targeted psychological hygiene of teachers and students, with the involvement of the school counselling centres. Gain feedback from teachers, students and parents and evaluate it regularly. In the teaching process of distance learning, as well as in the contact form, it is recommended to focus on the development of key competencies. Enrich online teaching with cooperative activities, which makes it possible to achieve the development of social competencies. Use inter-subject links to create tasks suitable for students' home environment or the stay in nature. Lead students to the ability to organize their responsibilities and their learning, to develop their ability to self-assess and maintain social contacts. Encourage a classroom teacher to communicate with students, especially if they are unable to attend online classes on a regular basis, thus strengthen their relationships. In lessons, adapt the pace and content of education to the conditions of individuals. Identify priority knowledge and skills to be achieved. A key aspect is quality feedback, based on formative assessment, motivation to move forward revealing barriers to achieve the goal. Educational system cannot afford to reduce the effectiveness of the distance form. The future situation in the development of the pandemic situation of COVID-19 and teaching during it is unclear and that is precisely why it is necessary to ensure the level of the distance form so that it is as similar as possible to the contact form of education.

References

1. ČŠI (2020). [*Tematická zpráva, Zkušenosti žáků a učitelů základních škol s distanční výukou ve 2. pololetí školního roku 2019/2020.*](#) Retrieved from:

2. <https://www.csicr.cz/cz/Aktuality/Tematicka-zprava-Zkusenosti-zaku-a-ucitelu-ZS-s-di>
ČŠI (2021). *Tematická zpráva, Distanční vzdělávání v základních a středních školách*. Retrieved from: <https://www.csicr.cz/cz/Aktuality/Tematicka-zprava-Distančni-vzdelavani-v-zakladnich>
3. ČSU (2021). *Zpráva z průzkumu kvality distanční výuky na středních školách*. Retrieved from: <https://stredoskolskaunie.cz/wp-content/uploads/2021/01/Zprava-z-pruzkumu-distančni-vyuka-na-SS.pdf>
4. EDUin (2020). *Tematická zpráva - Vzdělávání na dálku v ZŠ a SŠ*. Retrieved from: https://www.eduin.cz/wp-content/uploads/2020/06/EDUin_Sekund%C3%A1rn%C3%AD-pohled-na-vybran%C3%A1-data-ze-%C5%A1et%C5%99en%C3%AD-%C4%8C%C5%A0I.pdf
5. Hendl, J. (2005). *Kvalitativní výzkum: základní metody a aplikace*. Praha: Portál.
6. Kalhous, Z., & Obst, H. (2009). *Školní didaktika*. 2nd ed. Praha: Portál.
7. Miovský, M. (2006). *Kvalitativní přístup a metody v psychologickém výzkumu*. Praha: Grada Publishing.
8. MŠMT ČR. (2020). *Metodické doporučení pro vzdělávání distančním způsobem*. Retrieved from: <https://www.msmt.cz/file/53906/>

From Crisis to a New Normal? Empirical-Based Reflections on What Could Be Kept and What Should Be Adapted in Higher Education Teaching

Patricia M. Schütte

Bergische Universität Wuppertal (University of Wuppertal)
Wuppertal, Germany
e-mail: schuette@uni-wuppertal.de

Gert Van der Sypt

Artesis Plantijn University of Applied Sciences Antwerp
Antwerp, Belgium
e-mail: gert.vandersypt@ap.be

Saskia Kretschmer

Bergische Universität Wuppertal (University of Wuppertal)
Wuppertal, Germany
e-mail: kretschmer@uni-wuppertal.de

Alexander Gabriel

Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center)
Bremerhaven, Germany
e-mail: Alexander.Gabriel@dlr.de

Abstract

This paper examines the questions of how students perceived higher education teaching in the wake of COVID-19 crisis and what lessons can be learned for shaping a new (post-pandemic) normality at higher education institutions. For this purpose, a survey was conducted among students of the CONRIS network. This survey was enriched with the results of a previous survey among faculty and teaching staff at higher education institutions (also members of the CONRIS network). The explorative survey among the students mainly focused on the areas of communication between the university and its teachers to the students and on teaching at the university under the conditions of Corona. The main goal of this paper is to provide some empirical based guidance on the extent to which the crisis-like development and the accompanying upheavals in teaching could become a new standard in a future system of higher education teaching. The focus is on which elements of the ad-hoc transformation seem worth preserving from the students' point of view and where there is a need for adaptation on the way to a new "normal" teaching at higher education institutions.

Keywords

COVID-19 pandemic, digitization, higher education, online-survey, Cooperation Network for Risk, Safety & Security Studies (CONRIS)

1. Introduction / Background

Since early 2020, the whole world has experienced the COVID-19 pandemic and its effects. This crisis brought huge challenges to all societal subsystems and organizations. Also, higher education institutions (HEIs) had to adapt and implement quickly new types of working and teaching (Bozkurt & Sharma, 2020; Daniel, 2020; Mohammed, Khidhir, Nazeer & Vijayan, 2020; Pascault, Jütte, La Noto Diega & Priora, 2020; Schütte, Gabriel & Lotter, 2020; Schütte, Van der Sypt, Gabriel & Kretschmer, 2021). Although digitization was not completely new, a conversion from presence-based to online learning and teaching did not always seem to come easily and put the digitization of HEIs to the test. Shifting the systems into distance teaching and learning e.g. in terms of online teaching, emergency remote teaching (ERT), blended-learning had to be taken quickly (almost overnight) by HEIs (Daniel, 2020; Hodges, Moore, Lockee, Trust & Bond, 2020; Milman, 2020; Mohammed et al., 2020; Pascault et al., 2020; Schütte et al., 2020). As quickly as the decisions were made, they also had to be communicated to the students in connection with the announcement of appropriate and practicable solutions for an (almost) undisturbed continuation of their studies. Similar to other eruptive crises, crisis communication and crisis management gained an increased importance alongside new teaching and learning approaches to reach those affected. Sense and purpose of the communication and crisis management probably had in most cases as a main goal to communicate effectively to the correct receiver in a proper message right on time.

The teaching staff faces multiple challenges. Firstly, as a connector and mediator between the HEIs and the students, the teaching staff appears to be the centre of the communication with the students. They have to act as crisis managers who communicate adequately with affected students. Secondly, the teaching staff has to handle some new management aspects regarding the shift to online teaching. In other words, they have to adapt to the situation professionally, methodically and didactically. Thirdly, the teachers were also affected themselves and first had to learn how to deal with the situation (in private and professional life). At the same time, they, and the students also faced a challenging situation: waiting for information and solutions, later on (almost) no real-life teaching, not being able to discuss in a group of students, not being able to ask questions immediately after class (one to one to the teacher), missing social and campus life. Nevertheless, online teaching showed some (new) advantages, like lessons being streamed and captured which made it possible for students to look at it when it was most suitable for them, they also could turn back to what was not understood at once (Schütte et al., 2020).

This has been happening at many universities and universities of applied sciences in Europe since March 2020 (c.f. Boer, 2021; Schütte et al., 2021). Although the typical chaos phase in the crisis has been overcome for a while now, the pandemic continues. It is now clear that the shift to digital teaching and learning was more than just a short-term break. Rather, it is becoming apparent that digital teaching and learning opportunities will continue to be needed in the future. They seem to be a crucial cornerstone of a new post-crisis normality in context of HEIs. Perhaps there are not only positive aspects and advantages of the past digital semesters that should be preserved for the future, but also things that should be avoided in the future. Therefore, the following article addresses the question:

What could be kept from the crisis phase and what should be adapted for a new normal in higher education teaching?

In order to answer this question, this article draws on an online survey among students of Risk, Safety and Security courses from universities and universities of applied sciences participating in the Cooperation Network for Risk, Safety & Security Studies (CONRIS)¹. After some explanations regarding technical and content-related aspects of the survey (section 2), selected empirical results are presented which include insights into the areas of communication and teaching (section 3). In the end a few theses and conclusions are formulated (section 4).

2. Online-Survey in the European network CONRIS²

2.1. Online-survey-method – Technical and content-related aspects

The primary data basis is a survey of students (marked in the following with S). This is preceded by the survey of teaching staff (marked in the following with T) in 2020 (Schütte et al., 2021). Both surveys were developed in close cooperation between the Artesis Plantijn University of Applied Sciences and Arts in Antwerp, Belgium, and the Department of Public Safety and Emergency Management at the University of Wuppertal, Germany. To delineate, it should be noted that the target group of the first survey mainly comprised lecturers and academic or teaching staff in the institutions organised in CONRIS (Schütte et al., 2021). The target group of the second follow-up survey, on the other hand, were students in the same network. The results of this article therefore focus on the second survey, using the results of the first survey for contextualisation.

The survey was conducted through a redirect by the CONRIS network partners. For this purpose, the survey was transferred into a digital survey tool and made available to the contacted participants for a period of six weeks for answering. The period of the second survey was thus limited from mid-April to the end of May 2021. Considering the challenges from the first survey, the second survey was optimised and then shortened. The shortened student survey included questions on general data, perceived crisis communication and teaching during the COVID-19 pandemic, and requirements for the post-pandemic restart. In terms of content, the questions mainly covered the perception and evaluation of the type of teaching and communication, possible deficits in equipment and the evaluation of the teaching methods used, as well as questions on the desired use of teaching methods in the future.

After the survey was completed, results were transferred from the online tool into SPSS, where they were subjected to a quantitative evaluation after cleaning the raw data, which was supplemented by a manual qualitative evaluation. The results presented in the following sections are from the student survey.

¹ CONRIS started its network activities in 2007 in higher education, meaning universities and universities of applied sciences. The goal is to share knowledge across Europe concerning risk, safety and security study fields. Members of CONRIS meet regularly (twice a year) and organize summer schools every year. 18 partner universities and universities of applied sciences (from North to South and from Eastern to Western Europe) participate in the network (more info on www.conris.eu).

² Partial results of the present work were published in advance in the following essays, as the conditions overlap in both surveys (cf. Schütte et al., 2021).

2.2. Sample and analysis method

The final sample includes 90 cases in the teacher-sample and 249 cases in the student-sample after choosing only those providing enough information for the analysis. The loss in the second survey was lower based on the assumption that the survey was shorter and clearer to understand. A majority of the teaching respondents work at a German HEIs (T: 39%) and the majority of the asked students study in the Netherlands (S: 48%). Overall the two samples cover eleven different countries in the CONRIS network (see **Error! Reference source not found.**). Both samples include both uni and uas in a ratio of 1:2 (S: 65% and T: 67% uas).

Figure 1: map of Europe - participated countries



Note: dark = just students, middle = both, light = just teachers)

Source: Authors

The evaluation of the data is done by a descriptive presentation. For this purpose, the answers were summed up and presented in their frequency. All cases were examined for evaluation. By visualizing the response behavior, noticeable differences could then be examined in more detail. In individual cases, a comparison was made between the different types of higher education institutions or between students who started their studies during COVID-19 pandemic and students who started before, in order to identify possible differences in the way this crisis was handled. Subsequently, the content of the open questions was examined and then collectively grouped into categories in order to identify similarities in the students' perceptions. In the following, certain statements are presented as example of individual categories. These statements were marked as quotations and used to (qualitatively) substantiate the results of the survey. In the comparison of the two samples, similarities and differences in perception from the different perspectives were then observed.

The presented results should be treated with caution due to the small sample size and the fact that the subjects of the two surveys do not necessarily attend the same university or even come from the same country. As the group size was below 30 cases (for example for the

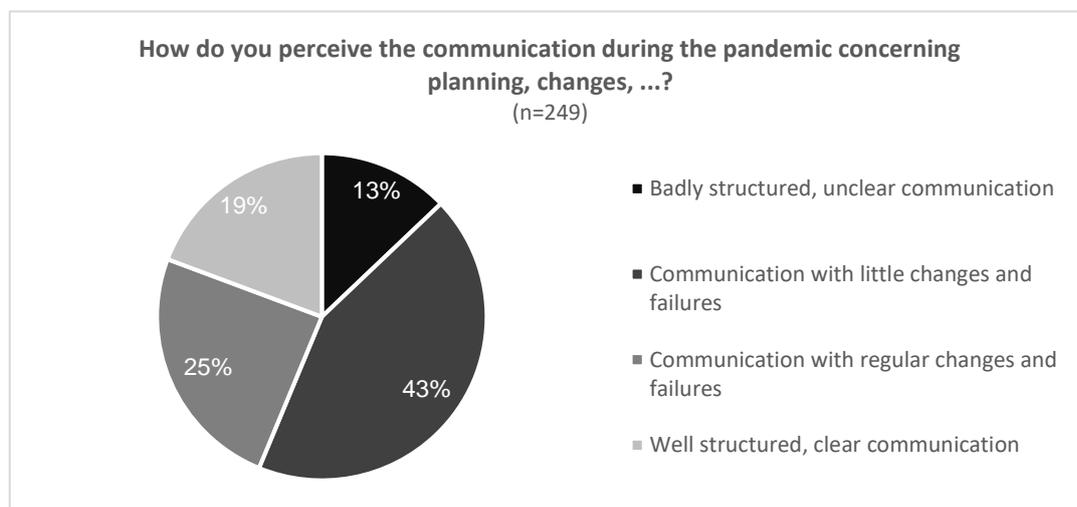
different countries), small-scale group comparisons could not be performed. Therefore, the focus is on the aggregated statement of all surveyed students. However, this has no influence on the significance of the data. Due to the non-representative composition of the sample, the results can only be transferred to the entire field to a limited extent. Nevertheless, the results show first insights into teaching and learning during the pandemic.

3. Communication and Teaching During COVID-19 Pandemic – Central Findings from the CONRIS Student Survey and Suggestions

3.1. Communication

The first part of the survey asked questions about communication at the beginning and during the COVID-19 pandemic. The majority of respondents said they had been informed about COVID-19 by their HEIs between mid-January and early April. This probably depends on the different countries and the political decisions taken there regarding complete or partial lockdowns, which were not all taken at the same time. In addition, it probably takes some time to adequately transfer from the political level to the HEI decision-making level. When asked how students perceived communication of their HEI regarding planning, changes, etc. during the pandemic, the picture is mixed. Only 19% of respondents had the impression that communication was well structured and clear. 67% perceived small to regular changes and failures in communication, while 13% of respondents perceived communication as badly structured and unclear (**Error! Reference source not found.**).

Figure 2: Perceived communication



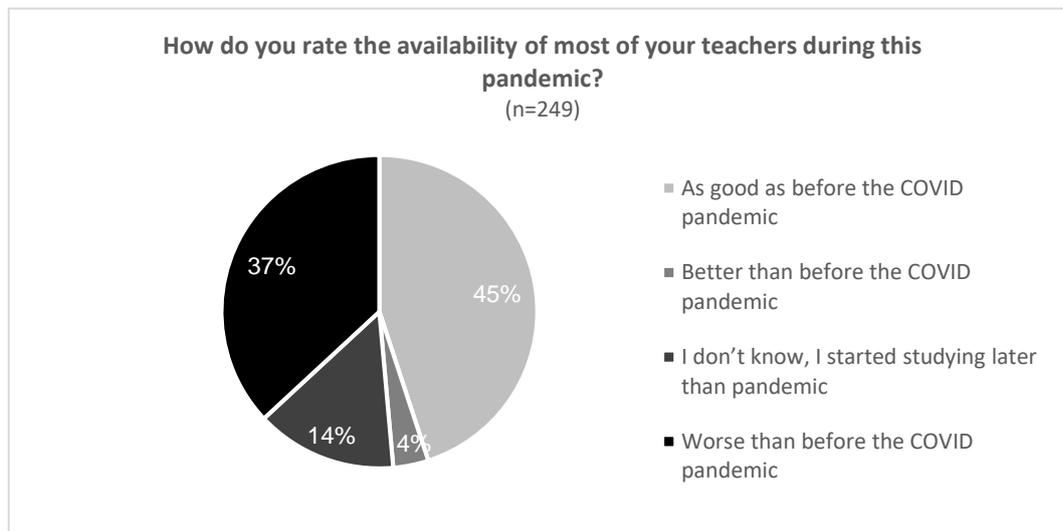
Source: Authors

In an open category to this question, the students could describe the communication with keywords: "chaotic", "chaos", "horrible", "confusing", "vague" [quotes from the open category] stand here next to words like "good", "enough", "adequate" and "fine" [quotes from the open category]. This underlines the impression that communication was perceived as relatively mixed by the respondents. This may indicate weaknesses in communication or perhaps even a lack of plans at some HEIs. These results fit with the results of the first survey, in which some of the responding teachers were either not aware of any plans or did not even

know if there were any at their HEIs. Others pointed “to inconsistent communication and planning on the side of the HEIs” (Schütte et al., 2021).

Another important aspect, which was already questioned in the first survey, related to the availability of the teachers, as they are the main contact persons for the students – this is presumably even more so in times of crisis. Availability is thus an indicator of whether a solid basis for communication exists at all during the COVID-19 pandemic and purely or largely digitally designed semesters. Results of the first survey indicated that the majority of teachers considered themselves available to their students. Only a small proportion of respondents felt that they were less accessible than before the pandemic (Schütte et al. 2021). The majority of the responding students in the second survey confirmed the self-assessment of the teachers: 45% rate accessibility as good as before the COVID-19 pandemic, 4% even better than before. On the other hand, however, there is a not insignificant 37% of respondents who perceive availability as worse than before (**Error! Reference source not found.**).

Figure 3: Availability



Source: Authors

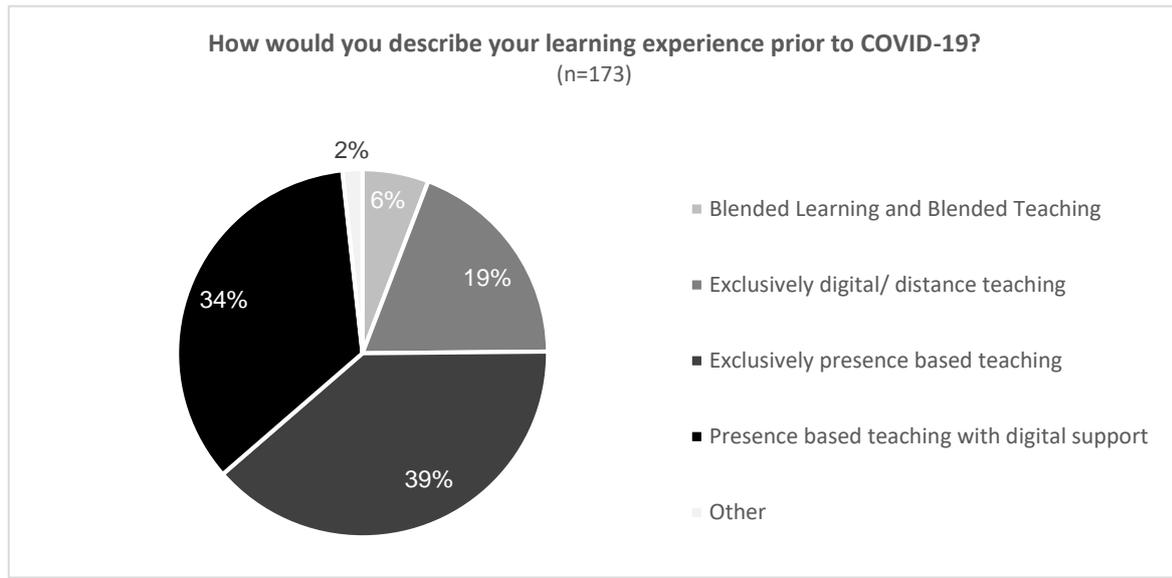
Without deeper research, only vague assumptions about possible reasons for the latter value can be formulated here. One reason may of course be that some teachers are indeed more difficult to reach, possibly because they also have or had difficulties with the conversion to completely digital work. Another reason could be, for example, an increased desire on the part of students for social exchange which could probably be accompanied by an increased need to talk to and request feedback from teachers. This also becomes clear below in the context of teaching, but other studies also suggest this result (Jung, Horta, Postiglione, 2021; Schütte et al., 2020). Teachers may lack the time resources to cope with the increased requests from students.

Closely related to communication with students are also teaching and learning aspects and settings that had to be offered in different formats than usual during the pandemic. The following remarks therefore deal with the corresponding results of the survey on the perception of teaching.

3.2. Teaching

To determine a starting point, students were asked what formats their courses mainly had before the COVID-19 pandemic: 39% indicated presence-based teaching, 35% presence-based teaching with digital support, only 19% of respondents had exclusively digital teaching before and only 6% blended learning and teaching (**Error! Reference source not found.**).

Figure 4: Learning experience



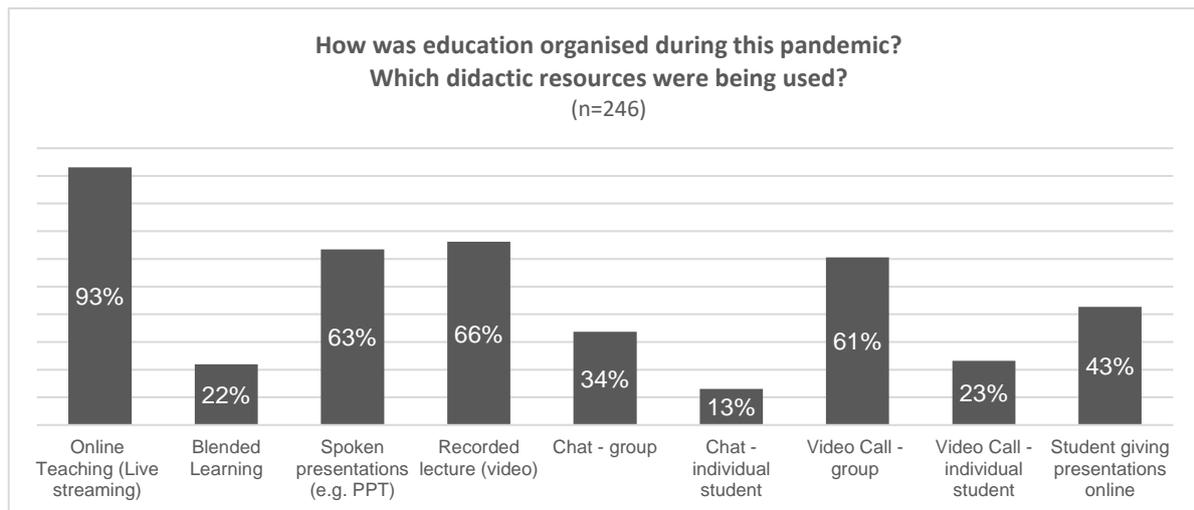
Source: Authors

The dominance of presence-based teaching before the pandemic is an interesting finding, which certainly opens up questions about the state of digital transformation of HEIs. This suggests that in many cases ERT approaches were used to offer solutions that work as quickly as possible. ERT here means, precisely:

“a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances” which “involves the fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated” (Hodges et al., 2020, 6).

With the full or partial transformation to digital teaching at the beginning of the pandemic and continuing during the pandemic, some preferences emerge in terms of the tools used. For example, 93% of the questioned students indicated that their courses were live streamed, 66% referred to recorded lectures (videos) and 61% to video calls in group format. Other approaches such as blended learning, group chats, individual video calls and online presentations by students were mentioned less frequently (**Error! Reference source not found.**). Similar results were also found in the teacher survey (Schütte et al., 2021).

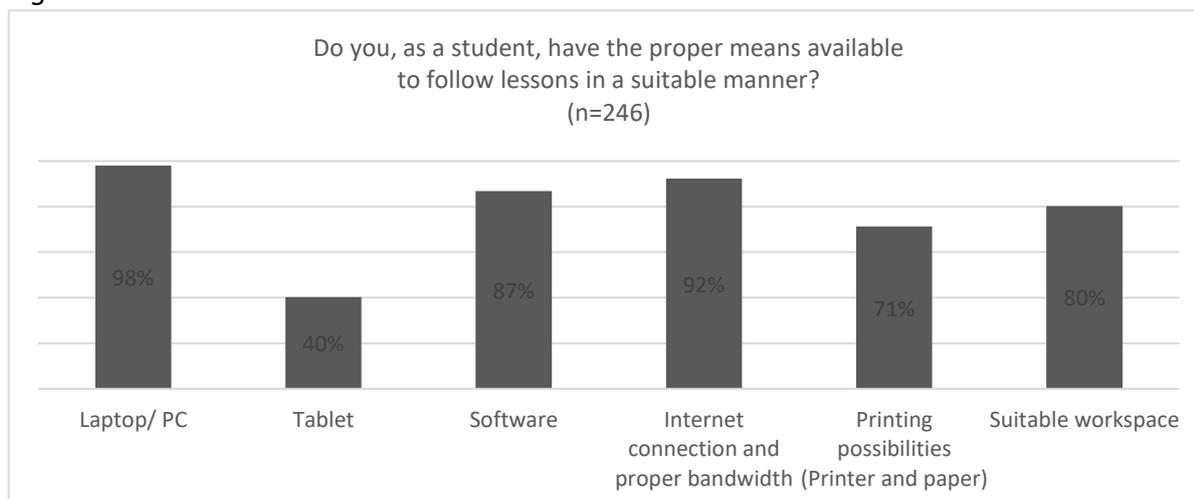
Figure 5: Didactic resources



Source: Authors

This was followed by questions about students' technical resources and possible (as yet unmet) needs for the digital teaching situation. The answers were clear. Whether in terms of hardware (laptop, PC), software or infrastructure (work space, bandwidth, internet connection), the majority of respondents seem to have the necessary technical resources (**Error! Reference source not found.**).

Figure 6: Available resources

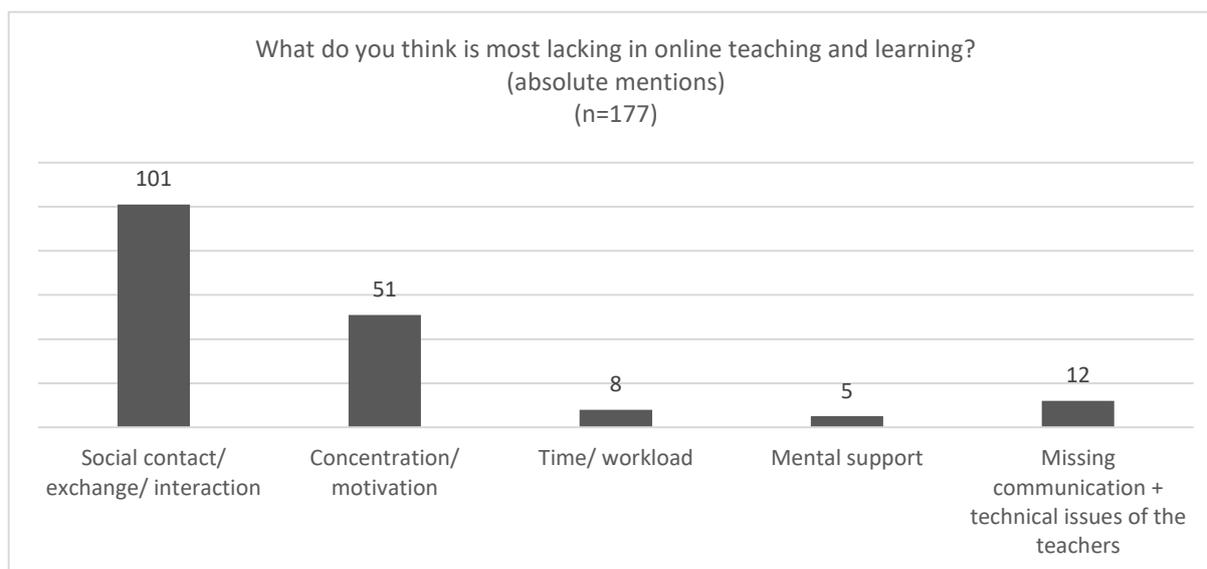


Source: Authors

A desire for additional support is expressed by some, particularly in terms of providing quiet and/or supervised spaces on campus. It is interesting to note that the questioned teachers in the first survey most frequently assumed deficits with regard to the technical equipment of students (Schütte et al. 2021).

When asked, "Think about your personal situation. What do you think is most lacking in online teaching and learning?" the majority of the students surveyed referred to social contacts, exchange and interaction as well as individual motivation and concentration (**Error! Reference source not found.**).

Figure 7: Lack



Source: Authors

This result indicates the importance of social aspects in teaching and learning at HEIs (Jung et al., 2021; Schütte et al., 2021). However, it also suggests that the digital formats and approaches chosen so far do not adequately address social aspects of teaching and learning, yet.

Finally, students were asked about how they would see teaching at HEIs in the future and what teaching formats they would prefer then. It seems clear that very few would prefer their courses to be exclusively online. Many would like to see a mixture of online and face-to-face teaching, characterized more by presence and less by digitality. Possibly the desire to return to a (new) normality, which also resembles a little the time before COVID-19 and allows at least a little social exchange on site again, resonates here. Against this background, it seems reasonable to draw some conclusions about how the post-COVID-19 normality in teaching at HEIs could be shaped.

4. Conclusions

Two main findings can be drawn from the above results of the survey: first, that the technical conditions do not present a major hurdle for the vast majority of students, and second, that the importance of interaction between teachers and students cannot be overestimated. More concretely, some core aspects can be identified in the two fields of communication and teaching that should be retained as an orientation for a new standard of university teaching, but also some aspects that need improvement from the students' point of view.

1 Open, regular, timely and transparent information

Numerous students were critical about the information policy of their HEIs. This demonstrates a need on the part of the students for open and, above all, regular communication that follows reliable principles or rules at all times. The information should be distributed comprehensively and promptly in order to give the students certainty in planning their future course of studies.

2 Encourage teachers to go digital

In particular, the students emphasized the fact that their teachers are more easily accessible, but at the same time it was pointed out that this is highly dependent on the teachers individually as to how well and quickly they can be contacted by their students. The HEIs should therefore provide their teachers with the necessary technology and software and train them in the use of digital communication tools wherever this may be necessary. Supportive offerings could help in closing the gap between digitally affine and less affine teachers and impart necessary skills and confidence to work in a digital environment.

3 Digital lectures, presence-based labs

The students' distinct demand for flexibility in their studies has its limits when practical formats, such as laboratories, practical training or tutorials, are part of the course program. In the future, these formats will have to be delivered again in a more face-to-face format. In contrast, traditional lecture formats intended merely to impart knowledge, e.g. by lecture, may be continued in digital or hybrid formats according to the students. This increases flexibility in the planning of studies and at the same time allows the repetition of particularly relevant content and thus an adaptation of the speed of teaching to the individual needs of each student.

4 Binding rules for communication and teaching

The change in the way students interact with lecturers and in teaching at HEIs, as well as the dissolution of the former structures, has probably led to changes in students' expectations regarding the availability of lecturers, but also in students' commitment to their studies. Therefore, new and clear agreements between teachers and students are needed in order to prevent a constant pressure on the part of the teachers to be available and at the same time to give the students the certainty that their concerns will be heard and that they will be taken seriously in their demand for answers. At the same time, HEIs and their students need to develop new models to ensure that students remain committed to their studies and do not get "lost", even in phases of reduced presence.

5 Social networking and bonding required

Against the expectations of the lecturers, the technical challenge was of lesser concern to the students. Rather, the vast majority of students were lacking social interaction with lecturers but also with other students. It is crucial for HEIs to work on solutions for social interaction and networking among students, but also for the connection between lecturers and students, for future phases of reduced presence. For example, the creation of digital meeting and interaction spaces that serve only as a place or forum for socializing and having a chat without a fixed goal or topic could be an option.

For future studies, priority should be given to investigating how ad hoc crisis communication with students, but also within the university to the lecturers, can be organized better and made more efficient. In particular, clear communication channels and intervals need to be predefined, and the accessibility of students needs to be ensured at all times for the lecturers, considering data protection aspects. This requires further research in crisis communication at higher education institutions. Furthermore, depending on the methods used in higher

education teaching in the future (e.g. hybrid teaching), a long-term study is needed to investigate whether and what changes can be observed in the students' commitment to their studies and to the university. For example, a change in the rate of successful graduations or the rate of dropouts as well as the average duration of studies could be seen as signs of a changing educational landscape in higher education, to which further adaptation measures might be necessary.

References

1. Boer, H. de (2021). COVID-19 in Dutch higher education. *Studies in Higher Education*, 46(1), 96-106.
2. Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), 1-6.
3. Daniel, J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49, 91-96.
4. Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The Difference Between Emergency Remote Teaching and Online Learning. Retrieved from: <https://medicine.hofstra.edu/pdf/faculty/facdev/facdev-article.pdf>
5. Jung, J., Horta, H., & Postiglione, G. A. (2021). Living in uncertainty: the COVID-19 pandemic and higher education in Hong Kong. *Studies in Higher Education*, 46(1), 107-120.
6. Milman, N. B. (2020). This Is Emergency Remote Teaching, Not Just Online Teaching: There's a difference. *Education Week*. Retrieved from: <https://www.edweek.org/leadership/opinion-this-is-emergency-remote-teaching-not-just-online-teaching/2020/03>
7. Mohmmed, A. O., Khidhir, B. A., Nazeer, A., & Vijayan, V. J. (2020). Emergency remote teaching during Coronavirus pandemic: the current trend and future directive at Middle East College Oman. *Innovative Infrastructure Solutions*, 5(3).
8. Pascault, L., Jütte, B. J., La Noto Diega, G., & Priora, G. (2020). Copyright and Remote Teaching in the Time of Coronavirus: A Study of Contractual Terms and Conditions of Selected Online Services. *SSRN Electronic Journal*.
9. Schütte, P. M., Gabriel, A., & Lotter, A. (2020). Impressions and Theses from Emergency Remote Teaching at The Chair of Public Safety and Emergency Management of The University of Wuppertal (during COVID 19). *Proceedings of 2020 Global Education, Teaching & Learning Conference (GETL 2020)* 41-52. Zagreb: Innovation Institute.
10. Schütte, P. M., Van der Sypt, G., Gabriel, A., & Kretschmer, S. (2021): Teaching in higher education during COVID 19 pandemic – Empirical findings and assumptions based on results of an online-survey in a European context. *7th International Conference on Higher Education Advances (HEAd'21)*, 189-197. València: Universitat Politècnica de València.

Current State of Implementing Formative Assessment and its Obstacles in Primary and Lower-Secondary Schools in the Czech Republic

Jiří Suchánek

Palacký University Olomouc
Olomouc, Czech Republic
e-mail: jiri.suchanek01@upol.cz

Jitka Nábělková

Palacký University Olomouc
Olomouc, Czech Republic
e-mail: jitka.nabelkova@upol.cz

Abstract

The theoretical study deals with implementation of formative assessment in primary schools and lower secondary schools. The aim of this study is to present the current state of implementation of formative assessment and its obstacles in the educational reality of Czech primary and lower secondary schools. To fulfill this goal, the study has the following sub-goals:

- to characterize formative assessment and its benefits for students
- on the basis of previous knowledge to describe the current state of implementation of formative assessment in the Czech Republic
- to identify and specify the obstacles affecting the implementation of formative assessment in primary and lower secondary schools in the Czech Republic

In this study, the authors rely on previous annual reports or theoretical and case studies conducted by both Czech and foreign authors. The results of the presented study suggest that there are various obstacles which can prevent teachers from conducting formative assessment in the classroom. In this study, the authors chose a method of critical research.

Keywords

Primary school, lower secondary school, teacher, pupil, implementation of formative assessment

1. Introduction

Implementation and use of formative assessment in the Czech primary and lower secondary schools is facing criticism. Despite the proven benefits of formative assessment from abroad (Black & Wiliam, 1998, 2010), teachers in Czech primary and lower secondary schools still prefer summative assessment (NÚV¹ 2019, ČŠI² 2018, 2020). Similar findings follow from the OECD³ report (2012). However, there is not much evidence of the need to implement formative assessment in Czech schools, as according to Laufková (2016) only a small amount of research deals with the issue of assessment in Czech schools. This is also supported by the statements of the authors Straková and Slavík (2013). They also note that existing research has only a theoretical basis and, in addition, it is not linked to specific subjects.

Thus, this study discusses the issue of implementation of formative assessment and the need for its implementation into teaching at primary and lower secondary schools in the Czech Republic. The aim is to present the current state of implementation of formative assessment and its pitfalls in the educational reality of Czech primary and lower secondary schools. The author relies on the current annual report or theoretical and case studies conducted by both Czech, and foreign authors. As a research approach of the theoretical study the author has chosen methods of critical research which according to Hendl (2005, p. 140): *"puts emphasis on the value-oriented research and action that should lead to a change"*.

However, to understand the issues, it is necessary to characterize the term "formative assessment" at the beginning and also state the benefits that formative assessment might bring to pupils within the successful implementation in teaching.

2. Characteristics of Formative Assessment and its Benefits for learners

Like many terms, the term "formative assessment" has been taken from a foreign language. The most likely from Latin, where "formo" means to shape or to give a shape (Starý & Laufková, 2016, p. 11). In the Czech language, it is most often used in the sense of personality formation, within the framework of human ontogenesis, so it is connected with human personality. However, the roots of formative assessment are in the USA, hence the term came to us, so it was taken from English, from the word *"formative education"* (Whiting, Van Burgh, and Render, 1995). This term was first mentioned by the author Scriven in 1967 (Whiting et al., 1995). However, it was the publication by Bloom, Hastings and Madaus, Handbook on Formative and Summative Evaluation on Student Learning (Bloom et al., 1971), thanks to which a greater attention was given to formative assessment.

Significant interest in formative assessment then came, especially in the 1990s, thanks to the authors Dylan Wiliam and Paul Black, who published two important texts in the field of formative assessment research, namely *Assessment and Classroom Learning* and *Inside the Black Box*. Both authors concluded that formative assessment (more than the use of summative assessment) could contribute to better results of students, especially weaker

¹ National Institute for Education

² Czech School Inspectorate

³ Organisation for Economic Co-operation and Development

students. The one of the most cited academics to conduct research in formative assessment, Dylan Wiliam, defines formative assessment as follows:

"Assessment becomes formative when teachers, pupils or their classmates acquire, analyze and use evidence of pupil performance in order to decide on further teaching practices that are likely to be better or based on better foundations than would be the decisions they would make if they did not have the evidence." (Wiliam & Leahy, 2016, p. 8)

It is important to mention here that there is no clearly valid and universally accepted definition. To some extent, however, this definition corresponds with Obst's assertion and, according to his opinion, the purpose of formative assessment is to continuously provide students with diagnostic information - evidence of learning and progress in their learning: *"This is not about comparing students with each other, but mostly about criteria evaluation - "whether it approaches (or does not approach) the stated objective", "differs from it in these items". The purpose of formative assessment is to tell everyone individually where they are on the way to the goals of teaching, and especially how to proceed."* (Kalhous & Obst, 2009, p. 407) According to Obst, therefore, it is not about an effort to determine who knows worse and who knows better, but rather how to do it so that everyone can do well.

Formative assessment also often includes verbal assessment. If there is to be some feedback towards the student, it cannot do without words, either orally or in writing (Starý & Laufková, 2016). E.g. Wiliam (2011) in his publication *Embedded Formative Assessment* states that if a teacher uses verbal assessment, pupils' performance is increased by up to 30% compared to regular grading. It is also true that both successful and less successful students maintain a positive attitude during the educational process (Starý & Laufková, 2016). Nevertheless, there are more of similar benefits. E.g. Laufková (2017a) mentions as a positive the fact that formative assessment improves performance, especially of pupils with poorer academic results, but also with special educational needs, which has also been proven before (e.g. Black & Wiliam, 1998). As a result, inequalities between pupils are reduced and also fair access to education is achieved, thanks to which a pupil can achieve a maximum of their development. For formative assessment, the assessment according to the individual relational norm is most often used, where there is no comparison between the performances of pupils (as it is the case with the assessment according to the social relational norm). The student's performances are evaluated on the basis of their own previous performance, which leads the student to reflect on their own success and the so-called metacognition, i.e. reflection of their own learning processes and understanding of their own thought processes (Starý & Laufková, 2016).

Other benefits include a positive classroom climate, internal motivation of students, or taking responsibility for their own learning (Stiggins & Chappuis, 2008), which contributes to the development of, for example, learning competencies. Another developed competence is also social and personal competence, where pupils develop the already mentioned metacognition (Floréz & Sammons, 2013). It is the evaluation of key competencies that is relatively problematic in the Czech educational reality of schools. Although the RVP (Curriculum Framework) wants to develop key competencies, assessment tools focus mainly on assessing the curriculum and knowledge achieved. Czech education is thus criticized for not working more closely with formative assessment (NÚV, 2019).

For a comprehensive understanding of formative assessment, it is also very important to mention its methods / strategies,⁴ because we will refer to them further in this study. According to Wiliam and Thomson (2008), these are as follow:

- 1) Assessment of where students are during the learning process, what difficulties they go through, how they understand the material.
- 2) Feedback. A teacher gives students feedback, which moves them further in the learning process.
- 3) Clearly defined criteria for success and reassurance that students understand them.
- 4) Mutual (peer) assessment and support of students in the learning process. Pupils work together and help each other.
- 5) Self-evaluation of performance (self-assessment). A student evaluates their own performance, works individually to improve.

The extent to which certain methods are implemented in primary and lower secondary schools (i.e. the extent to which formative assessment is implemented) at present is discussed in the following chapter.

3. The Current Situation of Tackled Problems in the area of Implementation of Formative Assessment in the Czech Republic

Although there is evidence that formative assessment can lead to achieving better educational results, (e.g. Bell & Cowie, 2001; Black & Wiliam, 1998, 2005; Floréz & Sammons, 2013; Fluckiger et al., 2010; Hattie & Timperley, 2007; Wiliam, 2010;) there is still not enough research to support teachers who want to implement formative assessment in teaching (Andersson & Palm, 2018). We also encounter a lack of studies that focus on educating about formative assessment among educators (Schmeider & Randel, 2010). As mentioned in the introduction, it is no different in the Czech Republic (Laufková, 2016; Straková & Slavík, 2013). According to OECD (2012), little emphasis was placed on the skills assessment of future teachers in their training in the Czech Republic. This includes, for example, insufficient definition of educational goals, insufficient work with criteria or insufficient feedback from the teacher. However, it should also be mentioned here that according to the TALIS⁵ report (2019), Czech teachers make extensive use of strategies that support the clarity and comprehensibility of teaching, which are a prerequisite for formative assessment and good learning results. As many as 89% of teachers surveyed said they set clear targets at the beginning of their teaching, which is a percentage higher than the EU average (81%). However, the question is whether teachers do not confuse the topic of the lesson with its goal. Also, knowledge of criteria for evaluation of students is an important part of an assessment process. Individual teachers have different award criteria that they do not introduce to their pupils, nor are teachers able to specify them. Because Czech teachers do not use work with criteria systematically, it would be useful to change the situation. This change should also be implemented into different subjects. (Straková & Slavík, 2013; Žlábková & Rokos, 2014).

The unfavorable situation in Czech primary and lower secondary schools also prevails within peer assessment and autonomous assessment. According to ČŠI (2018): *"pupils are not led to*

⁴ In Czech environment the term "method" is used, whilst abroad we are more likely to see the term "strategy."

⁵ Teaching and Learning International Survey

take an active part in the assessment process, opportunities for their autonomous and mutual assessment are created rather sporadically. Formative assessment as an effective tool for monitoring and evaluating pupils' progress and as a means of providing feedback on educational progress and for strengthening motivation to learn in teachers' work is absent." The most recent report from the ČŠI (2020) confirms that the situation has not improved in the context of the use of the relevant formative assessment methods. According to this report, the methods of self-assessment and peer assessment are used only minimally.

According to the ČŠI (2019/2020, 2021), however, a positive finding - in relation to the current emergency situation caused by the COVID-19 pandemic - is the predominant verbal assessment in more than half of primary and lower secondary schools. The high incidence of providing more detailed feedback on the work of pupils without its evaluation is also positive, as stated by up to two fifths of primary and lower secondary schools. In some schools, there was also a more frequent self-evaluation, but in comparison with other schools, it was only a per mile of the total number of schools. It should also be mentioned that these are the results that were collected in an exceptional situation, and thus during online learning, which has its own specifics compared to contact learning.

In the field of research on peer and autonomous evaluation (self-evaluation), case studies in particular also appear in the Czech environment. Within peer evaluation we can mention the research of Rokos and Lišková (2019), in this research it turned out that students did not benefit much from the peer evaluation, due to the fact that they were not able to formulate advice and ideas that should be formative, i.e. the nature of feedback. Another example is the study by Laufková.⁶ While in an earlier study (2013) peer assessment was not observed – according to the author it was used to a limited extent - in the study later (in 2017) peer evaluation was observed within work of one of the teachers. Peer assessment was also appreciated by the pupils. Similar statement can be attributed with mentioning Laufková's studies in the framework of autonomous assessment of pupils.

Despite the fact that the positive benefits of formative assessment in education are therefore proven and verifiable abroad and partly in the Czech Republic ⁷ (e.g. Black & Wiliam, 1998, 2010; Laufková 2017a), current educational policy in the Czech Republic counts with formative assessment not much, if at all, at least within the last updated version of the RVP ZV ⁸ with the effect from 2017 (MŠMT⁹, 2016). However, it is worth mentioning that the RVP is currently being revised and the planned Strategy for Educational Policy in the Czech Republic until 2030+ (MŠMT, 2020) is working with formative evaluation to a much greater and more fundamental extent; we can mention e.g. teaching support where there is evidence of learning, formative feedback or self - evaluation.

From the above statements it follows that in Czech schools there is not enough emphasis given on formative assessment and teachers prefer summative assessment, which is also discussed by the ČŠI (2018, 2020). According to these findings, students are not led to actively participate

⁶ Former Krabsová

⁷ Although the positive effects of formative assessment in the Czech Republic have not been proven in all respects (there are no research surveys of large samples), it can be assumed that despite cultural differences, the results could be similar in our country. (Laufková, 2017).

⁸ Framework Educational Programme for Basic Education

⁹ Ministry of Education, Youth and Sports

in the assessment process and the level of formative assessment is therefore very low, which is also influenced by the preference for frontal forms of work. ČŠI also points out the existence of a noticeable difference between primary schools and lower secondary schools, from the point of view both active participation of pupils, but also with regard to the extent to which they work with errors, that is to promote self-assessment, peer assessment (see above) and providing feedback. According to Laufková (2017a), another shortcoming of Czech schools is that they are unable to analyze the educational results of pupils and thus possibly improve their learning results. We can therefore argue that the implementation of the measures is insufficient in this respect. Pupils thus lose the benefits of formative assessment, which have been partially proven even in the Czech Republic.

4. Pitfalls of Implementation of Formative Assessment in primary and lower secondary schools in the Czech Republic

The issue of implementing formative assessment in Czech primary and lower secondary schools is relatively complex. It can be viewed from several angles. One of them lies in the misunderstanding of the principles of formative assessment on the part of the teacher. Teachers themselves must learn formative assessment and teach their pupils how to deal with it (Looney, 2011; Heritage et al., 2017), because: *"in contrast to the usual non-formative methods of assessment, it represents a fundamental change not only in the concept of teaching and learning, but even in the relationship between students and teachers. Pupils cannot hide their weaknesses, because effective learning lies precisely in their detection and elimination"* (Straková & Slavík, 2013, p. 279). Similar also arises from the OECD report (2012), which recommends strengthening competencies for pupil assessment, both formative and summative. However, understanding the formative assessment and its subsequent implementation is not easy for educators, without the professional development of teachers, their efforts may miss the effects (Hopfenbeck, 2018; Kahl, 2005).

However, in order for teachers to be "trained", teachers need to be intrinsically convinced of the benefits of formative assessment and also open to new changes. The absence of formative assessment methods can be caused not only by the lack of information on the practice of formative assessment in teaching (Rokos & Závodská, 2015; Rokos & Žlábková, 2019), but also by the conformity of teachers and reluctance to adapt to "new" assessment methods. Given that the implementation of formative assessment in schools requires changes and innovation, an interesting finding is one of the results of the TALIS report (2019), which shows that Czech teachers - compared to the EU - are less open to innovation. This finding may be a potential obstacle to the implementation of formative assessment, but certainly not the only one.

Usually when formative assessment is criticized, most often the reason is the lack of theoretical definition, (i.e. the difference between summative and formative assessment) which is associated with uncertainties in the field of methods, techniques and tools that formative assessment developed (Flórez & Sammons, 2013). In this case, for example, Wiliam (2011) strongly recommends, when implementing formative assessment, that a teacher chooses only one technique, which they gradually introduce, test, evaluate its effects, and consider its variation.

Teachers also often mention deficiencies such as misunderstanding, perfunctoriness and vagueness that a teacher may find himself in during implementation (Torrance, 2012). NÚV (2019) in support of Laufkova further mentions other deficiencies such as: (a) the difficulty of proving the effects of the results of the formative evaluation, which are apparent only after long-term operation; (b) extensive curriculum requirements within the curriculum - evidence of increasing amount of knowledge that pupils should learn. This fact may affect the complex grasp of formative assessment; (c) too many pupils in the class; (d) the already mentioned insufficient knowledge of the formative assessment, respectively absence of mentoring; (e) preparation time; (f) insufficient undergraduate preparation. According to Laufková (2017), it is also important to use the descriptive language of feedback in teaching (instead of the language of the assessor), which a teacher must also learn, and in the case of peer assessment, also pupils. According to EDUin (2016), it is generally true that formative assessment and its procedures must be adopted by students in order to adapt - ideally at the earliest possible age. The longer students are accustomed to other procedures in the evaluation, the longer the adaptation might last.

In implementing formative assessment, a supportive environment is also very important, especially on the part of school management, as well as the overall school culture (Heritage et al., 2017; Kahl, 2005). However, the implementation of formative assessment does not necessarily involve the whole school. According to Torrance and Pryor (2001) there is such an effective education in the framework of which experienced experts and teachers meet in a long term, and share their experience. E.g. according to Black et al. (2004) a three-year plan in the framework of which a small group of teachers-colleagues met and they support each other and shared their ways of teaching and assessment. Foreign studies (e.g. Wiliam, 2010) even Czech (e.g. Laufková, 2017) show though, the most effective is the implementation of formative assessment throughout the school, but especially abroad there is quite successfully developed so called professional learning community in formative assessment, the size of such groups is small, most often consisting of 5-10 teachers (Moss & Brookhart, 2019).

Another obstacle to successful implementation can also be educational documents, especially the Curriculum Framework. The current Czech school as an autonomous institution in the field of pupils' performance assessment is based on Act No. 561/2004 Coll., Specifically § 69, and Regulation No. 48/2005 § 14 to § 16. It stipulates that the use of various types of assessment is in diction of a school principal. It should also be pointed out that the law deals more with summative assessment, i.e. more precisely evaluation at the end of the evaluation period. Also, the current RVP emphasizes formative assessment rather only formally (MŠMT, 2016). Although this general anchoring in the legislation gives teachers a space for implementation of formative assessment, in the educational practice of schools this is manifested by the fact that we encounter different forms and levels of formative assessment across primary and lower secondary schools. This can lead to formative assessment being implemented inconsistently. It should also be mentioned that at present, Czech education does not have any tool that would monitor implementation of formative assessment in primary and lower secondary schools. In foreign countries, however, we encounter the tool by the author McMillan (2010), which monitors the level and form of formative assessment in classes. A detailed examination and possible modifications of this tool are considered by the author as one of the conditions for further research and the planned dissertation.

5. Discussion and Conclusion

The main goal of this study was to present the current state of implementation of formative assessment and its pitfalls in the educational reality of Czech primary and lower secondary schools. The starting point for the creation of this study is the unsatisfactory situation regarding the implementation of formative assessment in Czech primary and lower secondary schools. In this study, critical points in the implementation of formative assessment are pointed out.

From existing knowledge and studies, it is evident that the teachers of primary and lower secondary schools in the Czech Republic face many obstacles within implementation of formative assessment and they rather prefer summative assessment, even despite the fact that the positive impacts of formative assessment on academic performance of students are nothing unknown. Teachers do not have enough knowledge about the principles, methods or techniques of formative assessment. Teachers have to learn formative assessment themselves, as well as they must teach it their students, but this is almost impossible without further education of teachers or mentoring, as current teachers have not been systematically prepared for formative assessment in undergraduate study.

Furthermore, teachers mention as an obstacle the difficult provability of the effects of the results of formative assessment or extensive requirements for the schoolwork within the curriculum, which is also related to the time required for preparation. Very frequent pitfalls in the framework of implementation of formative assessment can also be obstacles on the part of the curriculum, in our case, RVP, or possible negative attitudes of teachers towards formative assessment. It should also be mentioned here that teachers should be open to innovation, collaborate and create a suitable environment for the implementation of formative assessment, preferably throughout the school. It is therefore clear from the study that the current educator trying to implement formative assessment in teaching is not in a simple situation. Given the proven benefits of formative assessment, it is thus obvious that this issue should be subjected not only to further scientific research, but also to the involvement and cooperation of pupils, teachers, principals or educational institutions.

References

1. Andersson, C., & Palm, T. (2018). Reasons for teachers' successful development of a formative assessment practice through professional development – a motivation perspective. *Assessment in Education: Principles, Policy & Practice*, 25(6), 576-597.
2. Bell, B., & Cowie, B. (2001). The characteristics of formative assessment in science education. *Science Education*, 85(5), 536-553.
3. Black, P., & Wiliam, D. (1998). Inside the Black Box: Raising Standards through Classroom Assessment. *Phi Delta Kappan*, 80(2), 139-148.
4. Black, P., & Wiliam, D. (2005). *Changing teaching through formative assessment: Research and practice*. Paris: OECD Publishing. Available at: <http://www.oecd.org/dataoecd/53/30/34260938.pdf>
5. Black, P., & Wiliam, D. (2010). Inside the Black Box: Raising Standards through Classroom Assessment. *Phi Delta Kappan*, 92(2), 81-90.

6. Black, P., Harrison, Ch., Lee, C., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. *Phi Delta Kappan*, 86(1), 8-21.
7. Bloom, B. S., Hastings, J. T., & Madaus, G. F. (2017). *Handbook on formative and summative evaluation of student learning*. New York, NY: McGraw-Hill.
8. ČŠI (2018). *Kvalita a efektivita vzdělávání a vzdělávací soustavy ve školním roce 2017/2018: Výroční zpráva České školní inspekce*. Retrieved from: https://www.csicr.cz/Csicr/media/Prilohy/Obr%C3%A1zky%20ke%20C4%8D%C3%A1nk%C5%AFm/2018/Vyrocn-zprava-CSI-2017-2018_final-verze.pdf
9. ČŠI (2020). *Kritéria hodnocení podmínek, průběhu a výsledků vzdělávání na školní rok 2020/2021*. Retrieved from: https://www.csicr.cz/Csicr/media/Prilohy/PDF_el._publikace/Krit%3%a9ria/Kriteria-hodnoceni-2020-2021-popis-kriteria_cistopis.pdf
10. ČŠI (2020). *Kvalita a efektivita vzdělávání a vzdělávací soustavy ve školním roce 2019/2020: Výroční zpráva České školní inspekce*. Retrieved from: https://www.csicr.cz/Csicr/media/Prilohy/PDF_el._publikace/V%3%bdro%c4%8dn%c3%ad%20zpr%3%a1vy/Vyrocn-zprava-Ceske-skolni-inspekce-2019-2020_zm.pdf
11. EDUin (2016). *Formativní hodnocení je skvělý nástroj pro lepší učení*. Retrieved from: https://www.eduin.cz/clanky/formativni-hodnoceni-je-skvely-nastroj-pro-lepsi-uceni/?gclid=Ci0KcQiAyKrxBRDHARIsAKCzn8y_oXnNURRFmEsHaG3vUHclmf5wSA3EVhXiZvWk4Z84xereW-q69uQaAnosEALw_wcB
12. Flórez, M. T., & Sammons, P. (2013). *Assessment for Learning: Effects and Impact*. London: CfBT Education.
13. Fluckiger, J., Vigil, Y. T., Pasco, R., & Danielson, K. (2010). Formative feedback: Involving students as partners in assessment to enhance learning. *College Teaching*, 58(4), 136-140.
14. Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
15. Hendl, J. (2005). *Kvalitativní výzkum: základní metody a aplikace*. Praha: Portál.
16. Heritage, M., Gerzon, N., & Mancuso, M. (2017). *Necessary Conditions for Successful Implementation of Formative Assessment*. Retrieved from: <https://www.gettingsmart.com/wp-content/uploads/2017/09/Necessary-Conditions-for-successful-implementation-of-Formative-Assessment-June-18-DRAFT.pdf>
17. Hopfenbeck, T. N. (2018). Classroom assessment, pedagogy and learning – twenty years after Black and Wiliam 1998. *Assessment in education-principles policy & practice*, 25(6), 545-550.
18. Kahl, S. (2005). Where in the world are formative tests? Right under your nose!. *Education Week*, 25(4), 11.
19. Kalhous, Z., & Obst, H. (2009). *Školní didaktika*. 2nd ed. Praha: Portál.
20. Laufková, V. (2016). *Formativní hodnocení*. Praha: PedF UK.
21. Laufková, V. (2017). Formativní hodnocení v zahraničí a v České republice. *E-Pedagogium*, 1, 89-99.
22. Laufková, V. (2017a). Formativní hodnocení v praxi české základní školy. *Pedagogika*, 67(2), 126-146.
23. Looney, J. W. (2011). Integrating formative and summative assessment: progress toward a seamless system? *OECD Education Working Papers*, 58, 1-64.
24. McMillan, J. H. (2010). The practical implications of educational aims and contexts for formative assessment. *Handbook of formative assessment*. 1st ed. (pp. 41-58). New York, NY: Routledge.

25. Moss, M., & Brookhart, S. (2019) *Advancing Formative Assessment in Every Classroom: A Guide for Instructional Leaders*. 2nd ed. ASCD.
26. MŠMT ČR (2016). *Rámcový vzdělávací program pro základní vzdělávání*. Praha: MŠMT ČR.
27. MŠMT ČR (2020). *Strategie vzdělávací politiky ČR do roku 2030+*. MŠMT ČR.
28. Novotná, K., & Krabsová, V. (2013). Formativní hodnocení: Případová studie. *Pedagogika*, 63(3), 355-371.
29. [NÚV \(2019\). *Analýza stavu hodnocení výsledků žáků v ČR a v zahraničí*. Praha: NÚV.](#)
30. OECD (2012). *Review on Evaluation and Assessment Frameworks for Improving School Outcomes – Country Reviews*. Paris: OECD Publishing. Retrieved from: <https://www.oecd.org/education/school/49479976.pdf>
31. OECD (2019). *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*. Retrieved from: <https://doi.org/10.1787/1d0bc92a-en>
32. Rokos, L., & Lišková, J. (2019). Kvalita vrstevnické zpětné vazby při badatelské úloze z biologie člověka v hodinách přírodopisu. *Pedagogická orientace*, 29(1), 43-72.
33. Rokos, L., & Žlábková, I. (2013). Pohledy na formativní a sumativní hodnocení žáka v českých publikacích. *Pedagogika* 63 (3), 328-354.
34. Starý, K., & Laufková, V. (2016). *Formativní hodnocení ve výuce*. Praha: Portál.
35. Stiggins, R., & Chappuis, J. (2008). Enhancing student learning. *District Administration*, 44(1), 42-44.
36. Straková, J., & Slavík, J. (2013). (Formativní) hodnocení – aktuální téma. *Pedagogika*, 63(3), 277-284.
37. Torrance, H. (2012). Formative assessment at the crossroads: Conformance, deformativní a transformativní hodnocení. *Oxford Review of Education*, 38(3), 323-342.
38. Torrance, H., & Pryor, J. (2001). Developing formative assessment in the classroom: Using action research to explore and modify theory. *British Educational Research Journal*, 27(5), 615-631.
39. Whiting B., Van Burgh, J. W., & Render, G. F. (1995). *Mastery Learning in the Classroom. Paper Presented at The Annual Meeting of The American Educational Research Association*. San Francisco, 18-22.
40. Wiliam, D. (2010). An integrative summary of the research literature and implications for a new theory of formative assessment. In *Handbook of formative assessment*. 1st ed. (pp. 18-40). New York, NY: Routledge.
41. Wiliam, D. (2011). *Embedded formative assessment*. Bloomington: Solution Tree Press.
42. Wiliam, D., & Leahy, S. (2016). *Zavádění formativního hodnocení. Praktické techniky pro základní a střední školy*. Praha: Čtení pomáhá, EDUkační LABoratoř.
43. Wiliam, D., & Thompson, M. (2008). Integrating Assessment with Instruction: What will it take to make it work?. In: *The Future of Assessment: Shaping Teaching and Learning*. 1st ed. (pp. 53-82). New York, NY: Routledge.



www.innovation-institute.eu

www.getconference.com

www.winter.getconference.com

ISSN 2584-4156