Reflection Article

Emergency remote teaching in *stricto sensu* graduate courses during the covid-19 pandemic: a reflection study*

Ensino remoto emergencial na pós-graduação *stricto sensu* durante a pandemia da covid-19: estudo de reflexão

Docencia remota de emergencia en posgrado stricto sensu durante la pandemia de covid-19: estudio de reflexión

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Abstract

Objective: to reflect on remote teaching, used during the covid-19 pandemic, in *stricto sensu* graduate studies in the university context. **Method:** this is a reflection study, supported by a bibliographical survey that allowed the recognition of the predominance of the technical focus, analyzed in the light of authors whose theoretical framework articulates education and university with social relations. **Results:** the analysis of remote teaching demands an investigation into its relationship with changes that have been taking place at universities in the neoliberal scenario, valuing education and society projects with a marketing focus, influencing knowledge production, researcher and professor training. **Conclusion:** going beyond the technical dimension to appropriating the ethical-political dimension present in remote teaching and its possible post-pandemic developments is fundamental, as the educational act's potential, in terms of the meeting between professor and student and appropriation of knowledge, is not effectively achieved in remote teaching.
Descriptors: COVID-19; Education, Graduate; Teaching; Pandemics; Universities

Resumo

Objetivo: refletir sobre o ensino remoto, utilizado na pandemia da covid-19, na pós-graduação *stricto sensu* no contexto da universidade. **Método:** estudo de reflexão, apoiado em levantamento bibliográfico que permitiu o reconhecimento do predomínio do enfoque técnico, analisado à luz de autores cujo referencial teórico articula a educação e a universidade às relações sociais. **Resultados:** a análise do ensino remoto demanda uma investigação acerca da sua relação com mudanças que vêm se processando na universidade no cenário neoliberal, valorizando projetos de educação e sociedade com foco mercadológico, influenciando a produção do conhecimento, a formação do pesquisador e do professor da educação superior. **Conclusão:** ultrapassar a dimensão técnica para a apropriação da dimensão ético-política presente no ensino remoto e nos seus possíveis desdobramentos pós-pandêmico é fundamental, pois o potencial do ato educativo, em termos do encontro entre professor e aluno e da apropriação do conhecimento, não é efetivamente alcançado no ensino remoto.
Descritores: COVID-19; Educação de Pós-Graduação; Ensino; Pandemias; Universidades

Resumen

Objetivo: reflexionar sobre la enseñanza a distancia, utilizada durante la pandemia de covid-19, en los estudios de posgrado stricto sensu en el contexto universitario. **Método:** se trata de un estudio de reflexión, sustentado en un levantamiento bibliográfico que permitió reconocer el predominio del enfoque técnico, analizado a la luz de autores cuyo marco teórico articula la educación y la universidad con las relaciones sociales. **Resultados:** el análisis de la enseñanza a distancia exige una investigación sobre su relación con los cambios que se vienen produciendo en la universidad en el escenario neoliberal, valorar proyectos de educación y sociedad con enfoque de marketing, incidiendo en la producción de conocimiento, la formación de investigadores y docentes de educación superior. **Conclusión:** ir más allá de la dimensión técnica para apropiarse de la dimensión ético-política presente en la enseñanza a distancia y sus posibles desarrollos pospandemia es fundamental, ya que las potencialidades del acto educativo, en cuanto al encuentro entre docente y alumno y la apropiación del conocimiento, no se logra efectivamente en la enseñanza remota.
Descriptores: COVID-19; Educación de Postgrado; Enseñanza; Pandemias; Universidades

Introduction

In 2020, globally, the covid-19 pandemic interrupted in-person activities for 91% of students. In more than 150 countries, the adoption of protective measures resulted in the interruption, whether temporary or not, of educational institutions' activities, such as schools, colleges and universities.[1] This measure was based on scientific statistics, which estimated a period of around 90 days of quarantine.[2]

In Brazil, the Ministry of Education (MEC), under Ordinance 343 of March 17, 2020, authorized teaching activities in digital media, replacing in-person classes, due to the immediate

reality imposed by the covid-19 pandemic.[3] Thus, Higher Education Institutions (HEIs) maintained part of their activities remotely, using virtual platforms to continue teaching, including in the context of graduate studies. However, it should be noted that the synchronous system imposes difficulties on students and professors, especially with regard to online resource management, quality of devices for accessing the internet and difficulty in usability in the interface of some applications used.[4]

Currently, it is noted that the educational process follows scientific and technological innovations. On the other hand, if the volume and dimensions of these actions are considered, they can have the opposite objective, preventing pedagogical advancement.[5-6] In this way, these innovations allowed the beginning of remote teaching as a temporary and alternative change in an emergency crisis scenario, making use of remote strategies for teaching situations that would be presented in person.[7]

It is understood that, despite the end of the covid-19 pandemic context, the experience of remote teaching may influence *stricto sensu* graduate course maintenance, the focus of this study, with forms of didactic-pedagogical organization similar to that experienced during the emergency. This demands reflections on the educational act's intentionality to target citizen, researcher and professor training, committed to producing knowledge production and training professionals in order to meet social needs.

It is worth noting that the so-called Emergency Remote Teaching (ERT) refers to a temporary change to an alternative form of teaching in an emergency, crisis scenario. Given this scenario, it uses remote strategies for teaching situations that would be presented in person or hybrid, and, at the end of the crisis or emergency situation, the teaching proposal previously developed will be returned.[7] Distance learning is a modality provided for in the Brazilian National Education Guidelines and Bases Law, regulated by specific decrees.

It is understood that these concepts, from a broader point of view, in terms of educational projects' intentionality, can dialogue with each other. The offer of *stricto sensu* graduate studies via distance learning is not on the agenda in this text. The focus is on reflections on remote teaching, understanding that its emergency use needs to be critically analyzed, as it could interfere with future decisions, also involving the scope of *stricto sensu* graduate studies.

Thus, it is highlighted that concerns about educational quality must be maintained in the

HEI scenario, specifically in *stricto sensu* graduate student training for research and teaching. Based on the above, this study aimed to reflect on remote teaching, used in the covid-19 pandemic, in *stricto sensu* graduate studies.

Method

This is a reflection study. To support the achievement of the objective, initially, a bibliographical survey was carried out in order to identify aspects presented in the literature on the topic. For the search strategy, the acronym PCC (Patient/Concept/Context) was used, respecting the uniqueness of each informational resource. The crossings were carried out using the following descriptors and keywords: P – "education, graduate/*Educação de Pós-Graduação*" OR "Graduate" OR "master/*mestrado*" OR "Masters Degrees" OR "Doctoral Degrees" OR "doctorate/*doutorado*" OR "phd"; C – "teaching/*ensino*" OR "remote learning/*ensino remoto*" OR "elearning"; C – "COVID-19" OR "coronavirus infections/*Infecções por Coronavirus*".

The search was carried out in six databases: National Library of Medicine National Institutes of Health (PubMed); Cumulative Index to Nursing and Allied Health Literature (CINAHL); Web of Science; Education Resources Information Center (Eric); Latin American Literature in Health Sciences (LILACS); and Nursing Database (BDENF). Studies published between 2020, when the covid-19 pandemic began on the global stage, and September 2023, with research results related to the purpose of research and in all languages, were included. Duplicate manuscripts were considered only once. Additionally, manual searches were conducted in the reference lists of retrieved and included studies with the purpose of identifying references not retrieved in the databases consulted.

The studies identified in the bibliographic survey[8-16] served as a basis for preparing general comments, with the intention of approaching the predominant way in which remote teaching has been considered within the scope of graduate education on the global stage. Then, reflections are presented, from a critical perspective, about remote teaching in *stricto sensu* graduate studies, in the national scenario, from authors[17-24] who study education and university in the light of a theoretical framework that links education to social relations, therefore allowing understandings that go beyond the technical scope and incorporate current interests.

Results and discussion

Emergency remote teaching on the global stage: notes from the literature

The references consulted present, for the most part, operational/technical aspects in relation to the consequences of remote teaching, without a critical in-depth analysis of its broader implications for education.

Among these consequences identified, with the abrupt change from in-person to remote teaching, the feeling of overload stands out, which increased slightly during the pandemic, and damage to students' mental health, such as difficulty concentrating, lack of motivation and mental fatigue.[8-12] This situation was worsened by the social distancing measures adopted globally. Therefore, given this psychologically unfavorable environment, HEIs should offer psychosocial support to their student body, which, however, still does not occur uniformly.[10] It is also worth highlighting the finding of recurring physical problems, such as back pain, neck pain, headaches and eye disorders in graduate students' lives.[9]

However, during this period, students became more vulnerable to technical problems that could compromise the use of digital platforms, as a virtual learning environment, including failures in internet connectivity and the need to master the platforms used.[9-10,11,13-14]

From graduate students' perspective, acceptance of emergency remote teaching is conflicting. Regarding the advantages of this teaching modality, its flexibility stands out, mainly, as it allows students to review recorded content, with benefits for their learning, according to their perspective.[8,10] On the other hand, students are less satisfied with the assessment process and there is difficulty on the part of professors in identifying devices used as a way to obtain better performance.[14] These factors contribute to a distance from practice, limited to the virtual experience.[10]

The experience of using this teaching modality is also quite variable. It is noted that academic responsibility is essential when using virtual learning environments, as if students read the subject that will be covered during the class in advance, there will be greater performance in their learning.[15] Participating in remote activities at home can also bring greater convenience,[9-10,13] but, on the other hand, activities were added that were not seen in in-person teaching, such as domestic[9] and family duties.[10]

Regarding the future perspective, students, in general, still prefer in-person education to

remote education. The exception was mainly for students who have family or work responsibilities, and for professional development events. In this case, exclusively for theoretical classes, there is a preference for online and recorded classes, due to the possibility of watching them at any time, thus noting a future interest, post-pandemic, in a hybrid learning system.[8,10-11]

An experience report on emergency remote teaching, carried out from direct observation and participation in curricular component activities, based on Paulo Freire's perspective, showed that the result obtained in the discipline, offered in a virtual environment, was satisfactory, as it facilitated the action-reflection-action process in teaching-learning in teaching practice, based on theoretical principles about teaching in health. This result was achieved through the construction and reorganization of teaching plans and lesson plans, which provided opportunities for this type of process, aiming to meet the post-pandemic scenario.[16]

Considering the impact of emergency remote teaching, it is necessary to discuss its implications beyond the technical and even psychological aspects, questioning the adaptive content that, in general, impart to using the remote modality. Thus, some discussions tend to support the persistence of the essence of this way of teaching, even with the end of the pandemic. It is therefore urgent to expand remote teaching, contextualized in the current university scenario, in order to guarantee the quality of teaching in graduate programs.

Emergency remote teaching: a critical look at graduate teaching in national universities

Understanding the implications of emergency remote teaching in *stricto sensu* graduate studies, especially with regard to the risks of maintaining similar models at the end of the pandemic, demands to explain some aspects of Brazilian public universities that have been demarcating the forms of management, teaching work process and training projects.

Since the 1990s, higher education policies in Brazil have been guided by international organizations such as the World Bank, UNESCO and the World Trade Organization, which has imprinted an economistic view on education and knowledge production. For the World Bank, the knowledge produced at universities and its dissemination have the potential to increase each country's competitiveness in the globalization scenario.[17]

Considering the context of the State Administrative Reform, in the 1990s, changes in the

way of managing universities in the phase of capitalism governed by neoliberalism make it clear that universities transform from an institution to a social organization, which implies establishing technocracy as a practice that believes it is possible for universities to be run according to the standards and criteria with which companies are managed:[18]

> The institution has society as its principle and normative and evaluative reference while the organization only has itself as a reference, in a process of competition with others that have set the same particular objectives [...]^[18:187] (own translation)

This perspective ends up inserting universities into the operational logic. Thus, its historical civilizational and humanistic mission is being diluted as this institution becomes subservient to the purposes of the globalized, media and market economy. In this regard, some tasks related to training and science are prioritized, such as expanding opportunities for new types of jobs, creating new areas of technological application and other innovation products, with the intention of optimizing processes and increasing consumption. On the other hand, fundamental questions that refer to human destinies are left empty or forgotten. Spaces are opened for the dictatorship of academic productivism to the detriment of questioning, critical analysis and contestations, in short, of intellectual work focused on essential issues of human life and society.[19]

This university scenario is becoming increasingly stronger in Brazil and is linked to the political-economic and social situation that, since 2016, has been marked by the intensification, in a broader scope, of low economic growth in this time of crisis. The combination of political-institutional instability with the economic-social and health crisis was permeated by a false controversy between ensuring isolation/social distancing or maintaining economic activities, and, through a superficial and simplistic opposition between economy and life, the economy continued to be victorious. The population, especially the poorest, was more at risk of contamination and death from the virus.[20]

At this historical moment, focusing specifically on public universities, some consequences of the imposed fiscal adjustment are highlighted, including: stagnation and reduction in the expansion of enrollments and courses; deregulation and attacks on labor rights; light teaching aimed at market demands or developed through the distance learning (DL) modality; and cutting resources for the development of research, with the advancement of commercial logic in determining knowledge production.[20]

Decisions regarding teaching at universities, including graduate studies during the pandemic, were therefore part of this broader situation. Furthermore, even though it is an emergency strategy, it needs to be problematized and analyzed, as experiences with remote teaching, as already mentioned, tend to remain, acquiring increasingly strengthening contours of an education and society project with marketing focus.

Remote teaching during the pandemic was often not sufficiently considered critically, being focused on the ideological bias that characterizes technological progress in the capitalist mode of production, that is, under the focus of neutrality. Especially the private sector celebrated the opportunity offered by the pandemic to revolutionize teaching practices. Background problems, such as those related to Brazilian students' inequalities, precarious infrastructure of schools and training purposes, remained in the background or forgotten in moments of debates and decision-making.[21]

Furthermore, there is a very restricted conception that knowledge is increasingly accessible on networks to be accessed, with an emphasis on student autonomy and engagement in learning, through individual initiative to the detriment of the need for school infrastructure, policies and teaching work. It must be remembered that teaching work, considering DL experiences, can be marked by divisions (professors, tutors, facilitators), with different contractual forms, in addition to the presence of control of activities mediated by computerized systems. This is, therefore, precarious workforce and the emptying of its intellectual dimension. The purpose of education is much more directed towards adapting to the contemporary world's demands, moving away from the perspective of changing the existing social reality.[21]

The purpose of education and therefore of school is at stake. The purpose of school is the socialization of historically accumulated knowledge, allowing each human being, as a social being, to "humanize" themselves. Thus, this process involves school knowledge – which implies the selection of fundamental cultural elements that promote the humanization of individuals – as well as objective conditions and professors' pedagogical work.[22-23] These ideas can also be extended to the scenario of *stricto sensu* graduate studies, understanding that this educational purpose, in a broad view, remains present, even in graduate studies' specificities, as a training space for researchers and professors.

Remote teaching entails impoverishment not only due to a certain "coldness" present in

the relationships between those who participate, for instance, in a synchronous activity, considering technological issues, but also because there are limits in carrying out pedagogical work that allows for in-depth teaching content, taking into account the difficulties in diversifying approaches in order to enable professors and students to share the same spaces, times and sharing that characterize in-person education.[23]

Thus, remote teaching needs, in fact, to be understood as a strategy that needed to be developed, representing a provisional reality. However, by responding to economic interests, it can leave its mark on universities, including the didactic-pedagogical organization of graduate courses. The reference to brands, from the authors' perspective, means the relationship that the remote experience may have with the excessive incorporation of teaching technologies without the proper structure and professor training, mainly, without the necessary discussion about the present privatist interests that distance themselves from training that favors the critical appropriation of knowledge. Moreover, it is worth considering the possible physical and mental losses resulting from work intensification and precariousness.[23] From this perspective, technology that could support human beings in better conditions to enjoy their free time ends up greatly increasing working hours.

Another aspect that needs to be highlighted is that the publicization of experiences, given the new scenario experienced in the world with the covid-19 pandemic, was intensified, with academic productivism as its bias. Professors and researchers were encouraged to expand their academic productions on the newly discovered new subject, which resulted in mass production, in a short period, including journals' assessment processes, of the so-called fast science model. Even researchers who pursue their productions on other themes were compelled to follow the productivist logic that acquires, at this time of pandemic, even more prominent contours, given the work overload imposed by remote activities in professors' work process.[24] This fact had and continues to have direct repercussions on graduate students who, together with their supervisors, are led to the incessant production of scientific articles, participation in countless events and daily meetings.

Therefore, researchers, regardless of their specific area of study, are responsible for critical appropriation of knowledge production at universities, involving tensions between meeting social needs and market demands. It is also worth considering that, in addition to training for research, *stricto sensu* graduate studies must to train professors, as they provide

opportunities for theoretically based discussions that promote critical analysis of students in relation to using the remote strategy, helping to understand it in broader social relations. Graduate students, in addition to researchers, will be the future professors of HEIs, which is why they need to be able to critically analyze the directions that education, especially higher education, including *stricto sensu* graduate studies, has taken in the context of neoliberal policies. Technological incorporation in this way needs to be recognized as an object of discussion in its relations with precarious teaching work.

Conclusion

It is understood that experiences with remote teaching as an emergency strategy during the covid-19 pandemic need to be contextualized in the political-economic scenario that marks the current university as an institution aligned with marketing purpose.

In this scenario, education, including *stricto sensu* graduate studies, the focus of this study, tends to move away from the intention of promoting the solid appropriation of historically constructed knowledge, which is essential for researcher and professor training. It is also understood that the solid base of knowledge that allows the understanding of the area of knowledge itself inserted in broader social relations has implications for decision-making, by future researchers and professors, in facing tensions between the market and social needs.

It is understood, based on reflections based on authors who study education and universities, from a critical perspective, that it is essential that professors and managers, involved with *stricto sensu* graduate studies, go beyond the technical dimension to appropriate the ethical-political dimension present in remote teaching and its possible post-pandemic developments.

Thus, it is up to students and professors to critically analyze the moment they are experiencing, taking care to ensure that forms similar to remote teaching are not simply incorporated within the scope of *stricto sensu* graduate studies, given the losses that they cause for both researcher and professor training. It is worth highlighting that these losses need to be taken care of in collective and guidance processes. Although it cannot be denied that, throughout the pandemic, attempts may have been made to deal with the indicated limits, it is necessary to be clear that the educational act's potential, in terms of the meeting between professor and student and appropriation of knowledge, is not effectively achieved in remote

teaching.

From the above, it is expected that the reflections highlighted can trigger new perspectives and support the continuity of discussions about teaching in *stricto sensu* graduate studies with regard to relationships between didactic-pedagogical choices and current policies, without denying that this is an approach to the topic, since the study was generated during the turbulent pandemic period, also involving the experiences of students who were beginning *stricto sensu* graduate studies. In this regard, moving away from one's own experience towards analytical reach is a gradual process.

Finally, it was highlighted the need for new research that critically and in-depth analyzes remote teaching, including its political and pedagogical implications, especially in health and nursing, in order to guarantee the continuity of quality teaching at universities.

References

1. United Nations Educational, Scientific and Cultural Organization (UNESCO). COVID-19 Educational disruption and response [Internet]. Geneva (CH): UNESCO; 2020 [cited 2021 Sept 06]. Available from: http://www.iiep.unesco.org/en/covid-19-educational-disruption-and-response-13363

2. World Health Organization (WHO). Global research on Coronavirus disease (COVID-19) [Internet]. Geneva (CH): World Health Organization; 2020 [cited 2021 Sept 06]. Available from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov

3. BRASIL. Ministério da Educação (BR). Portaria nº 343, de 17 de março de 2020. Dispõe sobre a substituição das aulas presenciais por aulas em meios digitais enquanto durar a situação de pandemia do Novo Coronavírus - COVID-19. Brasília (DF): Ministério da Educação, 2020. Disponível em: https://abmes.org.br/legislacoes/detalhe/3017/portaria-mec-n-343. Acesso em: 05 dez. 2021.

4. Gusso HL, Archer AB, Luiz FB, Sahão FT, Luca GG, Henklain MHO, et al. Ensino superior em tempos de pandemia: diretrizes à gestão universitária. Educ Soc. 2020;41:e238957. doi: 10.1590/ES.238957

5. Sordi MRL. Docência no ensino superior: interpelando os sentidos e desafios dos espaços institucionais de formação. Educ Rev. 2019;35(75):135-54. doi: 10.1590/0104-4060.67031

6. Oliveira WA, Silva JL, Scarpini NAM, Munõz SS, Silva MAI, Gonçalves MFC. Professor training in health postgraduate studies: analysis of an experience. Rev Bras Enferm. 2018;71(6):3293-8. doi: 10.1590/0034-7167-2017-0319

7. Hodges CB, Moore S, Lockee BB, Trust T, Bond A. The difference between emergency remote teaching and online learning [Internet]. Boulder (CO): Educause; 2020 [cited 2021 Dec 05]. Available from: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remoteteaching-and-online-learning

8. Gardner ME, Bodiya EC, Subramanian S. Remote learning barriers and opportunities for graduate student and postdoctoral learners in career and professional skill development: a case study. J Microbiol Biol Educ. 2021;22(1):22.1.74. doi: 10.1128/jmbe.v22i1.2451

9. Yücelsin-taş YT. Difficulties encountered by students during distance education in times of confinement in Turkey. Educ Res Rev. 2021;16(3):87-92. doi: 10.5897/ERR2021.4117

10. Azlan CA, Wong JHD, Tan LK, Huri MSNAD, Ung NM, Pallath V, et al. Teaching and learning of postgraduate medical physics using Internet-based e-learning during the COVID-19 pandemic - a case study from Malaysia. Phys Med. 2020;28:10-6. doi: 10.1016/j.ejmp.2020.10.002

11. Ramos-Morcillo AJ, Leal-Costa C, Moral-García JE, Ruzafa-Matínez M. Experiences of nursing students during the abrupt change from face-to-face to e-learning education during the first month of confinement due to COVID-19 in Spain. Int J Environ Res Public Health. 2020;17(15):5519. doi: 10.3390/ijerph17155519

12. Nizhenkovska I, Kznetsova O, Narokha V. Organising distance learning for Master's in Pharmacy in Ukraine during COVID-19 quarantine. Pharm Educ. 2020;20(20):59-60. doi: 10.46542/pe.2020.202.5960

13. Alghamdi AKH, Aldossari AT. Saudi education postgraduates' (Trainee teachers)' perspectives on distance education. World J Educ Technol Curr Issues. 2021;13(2):307-21. doi: 10.18844/wjet.v13i2.5715

14. Didenko I, Filatova O, Anisimova L. Covid-19 lockdown challenges or new era for higher education. Propós Represent. 2021;9(N Esp 1):e914. doi: 10.20511/pyr2021.v9nSPE1.914

15. Ousey K, Bullen B, Hodgson H, Atkin L. How has the COVID-19 pandemic changed the way we teach? Wounds UK [Internet]. 2021 [cited 2021 Dec 20];17(1):19-22. Available from: https://www.wounds-uk.com/journals/issue/639/article-details/how-has-covid-19-pandemic-changed-way-we-teach

16. Serra IVS, Lima JMM, Silva GTR, Santos JXP, Santana LS. Remote teaching during the COVID-19 pandemic: a viewpoint according to Paulo Freire's approach. Cogitare Enferm. 2022;27:e87466. doi: 10.5380/ce.v27i0.87466

17. Dias Sobrinho J. Universidade fraturada: reflexões sobre conhecimento e responsabilidade social. Avaliação. 2015;20(3):581-601. doi: 10.1590/S1414-40772015000300002

18. Chauí M. Escritos sobre a universidade. São Paulo: UNESP; 2001.

19. Dias Sobrinho J. Universidade em tempos de precarização e incertezas. Avaliação. 2018;23(3):736-53. doi: 10.1590/S1414-40772018000300010

20. Mancebo D. Pandemic and higher education in Brazil. Rev Eletrônica Educ. 2020;14:e4566131. doi: 10.14244/198271994566

21. Minto LW. A pandemia na educação: o presente contra o futuro? Rev Trab Política Soc. 2021;6(10):139-54. doi: 10.29404/rtps-v6i10.810

22. Saviani D. Escola e democracia. 44ª ed. Campinas: Autores Associados; 2021.

23. Saviani D, Galvão AC. Educação na pandemia: a falácia do "ensino" remoto. Universidade e Sociedade [Internet]. 2021 [acesso em 2021 dez 20];67:36-49. Disponível em: https://www.andes.org.br/img/midias/0e74d85d3ea4a065b283db72641d4ada_1609774477.pdf

24. Moura AC, Cruz AG. Ensino superior e produtividade acadêmica em tempos de pandemia. Rev Interinst Artes Educ. 2020;6:222-44. doi: 10.12957/riae.2020.51813

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