

Formar la cultura profesional de un futuro especialista en el campo de la educación física y el deporte adaptativo

Forming the professional culture of a future specialist in the field of adaptive physical education and sport

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Resumen. El estudio de la cuestión de las características de la organización de la educación física y el deporte adaptativo se está volviendo cada vez más popular en la investigación social y pedagógica. En particular, en todo el mundo y en la República de Kazajstán se presta cada vez más atención a la ampliación de oportunidades para las personas con discapacidad. Por eso en este momento es necesario estudiar activamente los procesos relacionados con la formación y la formación de la competencia profesional de los especialistas de esta categoría. Por tanto, el objetivo del artículo es analizar los medios y enfoques disponibles para la formación educativa y profesional de los futuros empleados en el ámbito de la cultura física y el deporte adaptativo. Para este estudio se utilizaron diferentes medios metodológicos, entre los que destacan los enfoques funcional y dialéctico y el método de análisis y síntesis, comparación, clasificación y generalización. Los resultados del trabajo realizado son conclusiones teóricas y prácticas que se relacionan con el tema en estudio y revelan su esencia. En particular, al inicio del artículo se estudiaron los términos básicos, en particular, educación física adaptativa y competencia profesional de un especialista en deportes adaptativos para caracterizar completamente el objeto de investigación. A su vez, el componente final revela enfoques y formas específicas de implementar la formación e impartir conocimientos profesionales a los futuros especialistas. El valor práctico de este estudio se revela en el hecho de que puede usarse para diferentes propósitos, tanto como material metodológico para disciplinas académicas y cursos para la formación de especialistas en esta categoría, como como material adicional para personas que deseen mejorar su calificación profesional. Los futuros trabajos de investigación deberían identificar las especificidades de la formación del profesorado en educación física adaptativa y deporte.

Palabras Clave: Educación, pedagogía especial, corrección, rehabilitación, personas con discapacidad, educación física adaptativa, deporte adaptativo

Abstract. The study of the issue of features of the organisation of adaptive physical education and sport is becoming increasingly popular in social and pedagogical research. In particular, since all over the world and respectively in the Republic of Kazakhstan more and more attention is paid to the expansion of opportunities for people with disabilities. That is why at the moment it is necessary to actively study the processes connected with training and formation of professional competence of specialists of this category. Hence, the purpose of the article is to analyse the available means and approaches to the educational and professional training of future employees in the sphere of adaptive physical culture and sports. Different methodological means were used for this study, among which, functional and dialectical approaches and the method of analysis and synthesis, comparison, classification, and generalisation. The results of the work done are theoretical and practical conclusions that relate to the issue under study and reveal its essence. In particular, at the beginning of the article the basic terms, in particular, adaptive physical education and professional competence of a specialist in adaptive sports were studied to fully characterise the object of research. In turn, the final component reveals specific approaches and ways of implementing training and imparting professional knowledge to future specialists. The practical value of this study is revealed in the fact that it can be used for different purposes – both in the form of methodological materials for academic disciplines and courses preparing specialists in this category and as additional material for persons wishing to improve their professional qualification. Future research papers should identify the specificities of teacher training in adaptive physical education and sport.

Keywords: Education, special pedagogy, correction, rehabilitation, people with disabilities, adaptive physical education, adaptive sport

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Introduction

The adaptive physical education and sport are becoming increasingly popular in academic circles. In this study, the focus is more on the algorithm for training and equipping future professionals with the necessary professional skills and knowledge. This process is of utmost priority and importance as it allows for the full integration of people with disabilities and impairments into the social environment. Furthermore, the level of knowledge and qualifications of the specialist determines the effectiveness of his/her future professional activity, which will be manifested in the provision of accessible and special means and mechanisms of

physical education and sport to those in need. Thus, there is an increasing need to form new and improve existing systematic curricula, which in turn will aim to prepare students to work with people with disabilities. In addition, new areas of knowledge, in particular inclusive education, should be further explored, and relevant specialised training courses should be developed and implemented, which should not only provide educational and vocational training for students in line with current global standards but also carry out continuous improvement of future professionals' skills and abilities (Zagrevskiy and Zagrevskiy, 2020).

It should be noted that in the Republic of Kazakhstan

the reforming of the sports movement of people with disabilities began in the period from 1990 to 2000, through the creation of special physical education and recreation organisations, national sports federations of people with various disabilities, specialised boarding schools, sections, institutions, organisation and holding of competitions, festivals, celebrations, etc. Kazakhstan seeks to develop a unified state mechanism for the management and provision of adaptive sports (Futorny et al., 2020). In addition, more and more state and public figures and organisations are being involved in supporting such projects aimed at the continuous provision of people with disabilities with systematic physical activities and motor activity for their unhindered social integration. At the same time, analysing the procedure for the development of adaptive physical education and sport in Kazakhstan at the moment, it can be noted that the main obstacle to the successful implementation of this process is the lack of an adequate number of highly qualified professionals, which include teachers, coaches, trainers, and other persons who interact with people with disabilities in the course of their professional activities. This is the reason why the field of education is presently experiencing dynamic reforms, with a focus on developing new educational programs and courses designed to prepare such professionals. (Maslova, 2020; Bermejo Díaz et al., 2021).

Particular attention should be paid to such an educational programme as “Adaptive Physical Education and Sports”, as it is focused on the professional training of qualified physical education teachers and specialists in adaptive physical education and sport. Thus, graduates of such courses are fully equipped with a range of specialist skills and knowledge to help them effectively realise their potential in their future activities. In addition, it should be understood that such individuals are endowed with a high degree of social and civic responsibility, but can also fully fulfil their own professional responsibilities related to teaching and education of people with disabilities and impairments in various establishments, in particular educational, correctional, and sports institutions (Avsiyevich et al., 2016). A pivotal aspect that holds significant importance in the future professional endeavors of specialists is their commitment to continuous learning and professional development through specialized courses and webinars. This dedication ensures that individuals working in the field of adaptive physical education and sports can adeptly respond to evolving social and economic dynamics while effectively carrying out their responsibilities. (Kashuba et al., 2020; Mujica Johnson et al., 2022; 2023).

Based on the above, the main aim of this study is to analyse in depth the existing mechanisms and methods used in higher education institutions in Kazakhstan to train professionals to work with people with disabilities and to facilitate their successful socialisation. The objectives of this study are:

- defining the essence of the concept of adaptive physical education and sport;

- determining the procedures for the training of specialists in the field;
- analysing the specifics of the training process;
- a retrospective analysis of foreign experience in the field;
- developing recommendations to improve the competence and knowledge of future professionals (Hamrayeva, 2022).

Materials and Methods

The field of adaptive physical education and sport is quite broad in its content, which is why it requires an in-depth study. This study focuses directly on the process and algorithm of professional training of future specialists in this category. That is why different methodological tools in their content and purpose were used in the course of the study. First of all, the functional methodological approach should be mentioned, as it is the basis of the work. It was the basis for defining the aim and the research plan, dividing the whole process into several stages. This approach provided a common basis for the implementation of the objectives. The dialectical approach, which is the main focus of the study, is not responsible for the organisational framework, but for its substantive content. Through its use, all the necessary elements relating to the issue under study were revealed, i.e. the theoretical structure was defined. In addition, the course of the study proceeded precisely from general theoretical definitions to specific, clearly revealing its object.

Next, attention should be paid to the method of analysis and synthesis, as they were of significant importance in the work. The method of analysis made it possible to divide the question under study into different elements to reveal in-depth the properties and characteristics of each of them. As for the method of synthesis, its priority is to examine and bring together the individual parts of the issue into a coherent whole and in the process establish the links and commonalities between them. In addition, a comparison method was applied in the work, based on which different tools and methods used to implement effective training of future specialists in the field of adaptive physical education and sport were compared. This method also made it possible to identify the positive and negative features of each of them, which made it possible to formulate recommendations for the development and improvement of this process. The classification method played a significant role in the practical part of the article, as it allowed considering different approaches to the formation of professional culture in specialists according to different properties. Moreover, on its basis, possible measures necessary for the implementation and active modernisation of this sphere of professional training were reviewed.

Finally, to draw conclusions and thus analyse the results of the study, a generalisation method was used. This method made it possible to analyse the object of scientific

work and to form a promising direction for future research. The research work was carried out in three phases. In the first stage, the general organisational components were identified, which helped to define the aim of the article and to formulate the work plan. Furthermore, a theoretical analysis of the issue under study was carried out. The second stage examined several specific and general approaches that are basic in the process of training and shaping the professional competence of future trainers. In the final stage, the results were examined, from which conclusions were drawn.

Results

The study of the issue of professional training of future specialists in the field of adaptive physical education and sport occupies an important place not only in pedagogical scientific doctrine but also in social doctrine. This is because at the moment the whole world, including Kazakhstan, is forming and developing approaches to implement the socialisation of people with disabilities and impairments. The main obstacle to this process has undoubtedly been the lack of high-quality human resources, as they are the main element that establishes the link between people with disabilities and society. However, before considering the means and tools actively used in the educational process in the formation of professional competence of future specialists in this sector, it is necessary to study its essence. This approach will allow analysing the sphere of adaptive physical education and sport, establishing its features and based on them identifying effective tools and mechanisms that can help students acquire the necessary professional knowledge and skills. In addition, knowledge of the properties inherent in the process of working with people with disabilities and impairments will provide curricula with all the necessary aspects that future professionals will master and thus form an appropriate level of competence (Rotarou et al., 2021).

Therefore, the concept of adaptive physical education should be understood as a comprehensive system of sport and recreational activities aimed at the rehabilitation and adaptation to the general social environment of people with disabilities, and at overcoming the psychological barriers that in turn constitute an obstacle to a fulfilling life. In addition, it is important for this concept to create awareness of the need for people with disabilities to make a personal contribution to the social development of society as a whole. On this basis, it can be established that the purpose of adaptive physical education, as a type of physical education, is to improve the vitality of the person who has persistent health impairments (Ilderbayev et al., 2022). The attainment of such a result usually occurs with the formation and consolidation of an optimal regime, based on which the normal and smooth functioning of the natural and formed motor features and moral forces, their interaction and cooperation to achieve the maximum result of self-development, especially in the context of social and personal development, which are extremely important for the person in

question, is possible. In addition, a certain goal must be given deep inner content. In particular, this is possible in the form of understanding the body as an external form of internal content, which in turn forms factors for the consolidation and development of physical culture in the individual and the implementation of the greatest possible self-realisation in society (Zavalishina et al., 2020).

It should be also noted that adaptive physical education and sport are characterised by different methods of achieving its objectives. Thus, the practical exercise method is one of them, which is based on the motor activities of people with physical disabilities. As a rule, all possible approaches and methods of training are systematically used in the process of interaction with such categories of persons. Special attention should be paid to the personal characteristics of the individual to incorporate them into the curriculum and select more appropriate tools and mechanisms. The level of physical capacity, knowledge, and skills of the person engaged in adaptive physical education or sport should also be analysed. Previous experience, both visual and motor, in this area of physical education also plays a significant role. Thus, it can be observed that this method is one of the most universal ones (Zaslavskaya and Malafiy, 2019).

Further, it is necessary to consider the method of visualisation, since this aspect is one of the main and at the same time special qualities of the implementation of teaching methods during the familiarisation of the person and the use of objects and phenomena by people with disabilities and impairments. Thus, in the analysis of various subjects and elements necessary for practising adaptive physical education and sports, this method is used. In addition, the process of its implementation consists in a step-by-step familiarisation of the person with sports equipment, respectively, in the beginning, there is an examination of each element in parts, in particular, the specialist invites him/her to analyse the shape, surface, colour of a certain object (Ayazbekov et al., 2022). Only after this process does the person begin to use it in the process of individual exercises and physical tasks set by the trainer. An important method of interaction between a specialist and people with disabilities is the remote-control method, which can also be called verbal control. Its essence is non-verbal communication, which leads to verbal control by the trainer over the mentee. As a rule, the method can be revealed based on expressions such as: “turn right”, “turn right”, “go back”, and “four steps back”. When using this method, the practitioner should be mindful of the timbre and volume of the speech and the individual characteristics of the person engaged in adaptive physical education or sport (Lund and Ayers, 2020).

Finally, the method of stimulating motor activity should be considered, which, in turn, consists in the implementation of activation and encouragement of people with disabilities to engage in adaptive physical education and sport. Moreover, in the process of implementing this method, the trainer needs to select an individual approach to the mentee, as the essence of his or her professional activity should be aimed not only at the physical development of

people with disabilities but certainly at their successful socialisation as well. Thus, one of the tasks to be realised in this field is to motivate and encourage people with disabilities, in particular, to inspire them and give them the feeling of joy of movement, thereby helping them to free themselves from their inferiority complex, and to overcome their sense of fear of society. In addition, attention should also be paid to empowering these individuals with self-confidence, i.e., to create a situation of success that will ultimately allow them to achieve the desired outcome (Lambert et al., 2020).

Hence, having analysed the most common methods of implementing adaptive physical education and sport, this type of activity is more effective than medication therapy. It should be understood that such physical activity is exclusively individualised. This condition plays the most important role in the analysis of the process of adaptive physical education because in the absence of such property there will be no effectiveness from the classes, which indicates the necessity of individual selection of training programs and exercise sets. However, to achieve that the person with a disability can become a full member of society and at the same time be as physically developed as possible, the whole process of preparing and conducting classes should be under the clear supervision and guidance of a specialist in adaptive physical education and sport. On this basis, it can be affirmed that the process of forming and consolidating professional competence in a given field is extremely important for the development of society. In addition, the priority of education and training of such personnel is stipulated by the UN resolution adopted on December 9, 1975. This legal act enshrines not only the rights of people with disabilities but also those conditions that must be ensured by state and public structures. This set of conditions should include conditions of the living environment, and the motivation from society, provision of medical care, psychological adaptation and creation of social conditions, including individual transport, methodological, technical, and professional support. Thus, the training of specialists in adaptive physical education is one manifestation of the formation of such special conditions to facilitate the socialisation of people with disabilities and impairments (Gochoo et al., 2021).

Discussion

After reviewing the theoretical part of the article and examining the main features of the object of research, it can be established that for adaptive physical education and sport the main and priority direction is the formation and provision of people with disabilities and impairments with motor activity, biological and social conditions, which brightly reflect on the human body, its feelings and psychological and emotional state. Thus, it is necessary to agree that the main goal of the professional activity of specialists in adaptive physical education is to involve people with

persistent disabilities in regular and comprehensive exercises, which as a result should provide such a person with a lost connection with society, to form, and to provide appropriate conditions for their future interaction with society. At the same time, adaptive physical education and sport help to achieve not only the physical but also the psychological rehabilitation of these people, helping them to achieve not only active social integration but also their physical development (Lacio et al., 2021). In addition, the implementation of physical education and sport is an essential tool for the normal functioning of people with disabilities, as it aims at enabling them to acquire and increase their own level of physical fitness, which in turn is a must in this process (Trybulski et al., 2022). Thus, these skills are necessary for people with disabilities because only with these skills can they use the elements necessary for living in society, including wheelchairs, prosthetics, orthoses, and crutches. It is important to note that the essence of such modifications and improvements is not only the restoration of body functions necessary for living but also the development of the individual's capacity for work and the acquisition of work skills (Savliuk et al., 2020).

Considering the process of formation and endowment of future specialists with professional culture, it is more multidimensional in its essence. First of all, the fact should be considered that there is an educational programme 6B01403, namely “Adaptive Physical Education and Sports”, in Kazakhstan at the moment. Thus, it is responsible for training future specialists in this field and allows the state to implement one of its responsibilities relating to support and provision of all the necessary conditions for the socialisation of people with disabilities and impairments. Students who gain knowledge based on this education programme can draw up individual plans for physical rehabilitation, improving or fully restoring vital human functions such as speech, walking, and limb movement (Erbaş et al., 2021). In addition, future professionals may rehabilitate parts of the body affected by illness or injury, either fully or partially, depending on the individual characteristics and capabilities of the mentee. Moreover, in their future professional activities, students may even prepare people with disabilities to participate in several important competitions, including Paralympic competitions. It should also be noted that these professionals tend to organise and run various sporting events in different adapted sports, which also helps the process of social inclusion of people with disabilities.

Regarding the essence and basic principles of the educational programme in question, it should be noted that it is formed on the basis of the professional standard “Pedagogue”, certainly taking into consideration the opinions and recommendations of the stakeholders, usually formed in the context of the category of employers directly implementing rehabilitation activities. Thus, it can be established that one of the main tasks in the process of professional training of specialists in this field is to develop and

consolidate the theoretical basis of knowledge, which is the basis for a person to master the necessary level of professional culture and competence, within the bachelor degree programme in 6B01403 – “Adaptive Physical Education and Sports”. Besides, the tasks of the educational process can also include the formation of necessary skills required by employers in the conditions of the modern labour market; improvement of skills necessary for successful assimilation and reproduction of the received knowledge during future professional activity in the sphere of adaptive physical culture and sports. Moreover, during the formation of professional knowledge in student coaches, considerable attention should be paid to the development of their personal qualities, in particular stress tolerance, composure, understanding (Blauwet et al., 2021).

M. Serrano Brazo et al. (2023) emphasized that in-service training is a fundamental element in the continuing professional development of teachers. In-service training for PE teachers in compulsory secondary education should be designed with a focus on specialization, practicality, and responsiveness to the evolving needs of both teachers and students. By addressing these characteristics and design considerations, these training programs can contribute significantly to the professional growth and effectiveness of PE educators.

The comprehensive development of different aspects of professional competence will provide future professionals with the necessary skills to promptly solve problems that may arise during the implementation of adaptive physical education and sports activities. Besides, it is important to pay the necessary amount of attention to the process of students' research and project activities, in the context of adaptive physical education and sport, as this allows not only to improve their personal knowledge and skills but also allows developing of this field as a whole, by searching new approaches and means for implementing such professional activity (Avsiyevich et al., 2021). An equally important task for the learning process, the subjects of which are future specialists in the field of rehabilitation of people with disabilities and impairments, is to consolidate the interconnected mechanism of general obligatory competencies formed on the basis of general scientific and special skills and knowledge (Han, 2021).

Based on this, the process of shaping the professional culture of specialists when working with people with disabilities and impairments consists in their mastery of certain means and mechanisms necessary to implement effective physical, spiritual, and intellectual self-reflection and development, and also consolidation of psychological literacy, the culture of thinking and behaviour in the process of professional activity. Thus, to analyse this process and highlight its main features, it is necessary to consider the functions facing it. Consequently, future coaches from this field are obliged to carry out active educational, educational, sports, organisational, and recreational work. In order to perform this function, the specialist should simultaneously develop a set of necessary knowledge and competencies which will be

necessary for him/her both for direct implementation of adaptive physical education classes and a number of other activities (Jarosz et al., 2021). Moreover, the future specialist should be prepared in his professional activity to work with different categories of subjects. Thus, he/she needs to develop the skills of organising and implementing activities in different types of adaptive sports in social groups such as pre-schools and schools related to special remedial educational institutions, sports sections, organisations, and institutions that aim to help such individuals with social inclusion and physical development (Dickson et al., 2021).

The formation of professional culture in future specialists in adaptive physical education is also possible by equipping them with science-based mechanisms and tools that can be actively applied during training or professional activities, to implement the rehabilitation of people with disabilities. At the same time, the training of coaches for adaptive physical education and sport also consists in their adaptation to the implementation of effective adaptation, rehabilitation, correctional and restorative activities, which can take place even within rehabilitation and health institutions, specialised rest homes or sanatoriums (Slivkina et al., 2020). Also, in the formation of professional culture, future professionals acquire the skills necessary to carry out the development and implementation of special plans for the organisation and implementation of accompaniment of several tourist activities involving people with physical disabilities relating to various areas of life (Greer et al., 2019). Thus, as a result of successful completion of the educational process within the framework of the considered educational programme, the graduate acquires a high level of knowledge and professional culture. Consequently, the skills obtained help the specialist to further develop his or her multidisciplinary knowledge directly in the field of adaptive physical education and sport, which in turn enables the individual to gain long-term career development and a high prospect of earning a proper salary and jobs availability in general (Rum et al., 2021).

J. R. Sanabria Navarro et al. (2023) emphasized that correlation between physical activity and job performance is a subject of increasing interest in both academic research and corporate environments. Studies have shown that there is a positive association between physical activity and job performance. Regular physical activity can lead to improved energy levels and enhanced alertness. Employees who engage in physical exercise tend to be more awake and focused during work hours, which can result in better job performance. Group physical activities or exercise classes can foster a sense of camaraderie among employees. Stronger team dynamics can positively impact collaboration and overall job performance.

It is also necessary to pay attention to the fact that currently, the training of a qualified special coach in adaptive physical education and sport includes other academic disciplines, which include basics of genetics, general pathology, anatomy, physiology, pathology of visual, hearing, and

speech organs, psychopathology of childhood, general basics of neuropathology, basics of mental retardation, general pedagogy, general psychology, special psychology of people with permanent health defects, persons with hearing, vision, and speech impairments (Avsievich, 2012). Based on this, it can be established that the formation of professional culture in future trainers is an extremely broad process in terms of content, moreover, it includes a range of features arising from the integration of the above-mentioned disciplines. Having analysed the theoretical and practical foundations of the issue under study, the scientific and social relevance of the process of training specialists in adaptive physical education can be identified. Thus, it lies in the development and implementation of a systematic methodology that incorporates a comprehensive process of adaptation of disabled people to the different categories and social phenomena it encounters in the course of their daily activities (Krzysztofik et al., 2021). Furthermore, the significance of such training allows students to develop and even contribute to the formation of new academic disciplines, resulting in the development of the field of adaptive physical education and sport. The priority of providing such a learning process for society is since the vocational education and training programme discussed in the article is a completely new branch of knowledge and to a certain extent a science, which in turn co-operates in its content the basic principles relating to the theory and methodology of physical education, humanistic psychology, defectology, medicine, pathology, and prosthetics (Haurylchanka, 2022).

Hence, the level of success of specialisation in adaptive physical education can be determined by the range of abilities and professional skills acquired by the student to carry out activities with people with persistent disabilities in a healthy state. Thus, the result of successful formation of the professional culture of a future specialist is his/her ability to carry out joint activities with people with disabilities not only in the sphere of physical education but also in physical recreation, elite sports, or physical rehabilitation. The most important thing is that professionals are endowed with the necessary level of competence to interact with people of all ages and different groups and categories of disability, with hearing, vision, intellectual, musculoskeletal, and internal organ disorders. This versatility makes it possible to emphasise their professionalism and help develop the social inclusion of people with disabilities and impairments in various areas, in particular in pre-school educational institutions, specialised boarding schools, hospital complexes, rehabilitation organisations, sports clubs, and national teams in various adaptive sports. At the same time, the educational and professional training of future specialists should be based not only on the assimilation of a certain range of knowledge but also on the implementation of active practical activities. It is this approach that will allow students to both acquire and reproduce the obtained skills in the course of the learning process and carry out self-reflection and self-control. As a result of the internship, future specialists have an oppor-

tunity to identify their weaknesses, i.e. insufficiently mastered training topics and improve them accordingly, thereby improving their own competence level (Akhtyamova, 2020).

Conclusions

As a result of the conducted research, it can be established that the process of forming professional culture in future specialists in the sphere of adaptive physical culture and sport is an extremely high priority for the development of society all over the world, including Kazakhstan. Accordingly, it is through the training of highly qualified specialists that the state carries out one of the tasks associated with the implementation of the process of social integration into society of people with disabilities and impairments. Thus, the theoretical part of the article examined the essence of the concept of adaptive physical education and sport, and defined their features and properties, which as a result was taken as a basis for the development of the “Adaptive Physical Education and Sport curriculum”.

In the practical part of the study, the process of forming professional competence of future coaches to work with people with disabilities was studied directly. The main tools and mechanisms for its implementation were considered, and their effectiveness was determined. It should be established that the social importance of the formation and development of this training programme is extremely high for society and the state as a whole. In particular, since effective and successful training certainly affects the whole system of physical fitness and sports movement of people with disabilities, which as a result helps them to carry out not only physical but also psychological rehabilitation and adaptation. Moreover, engaging such people with a highly qualified trainer should motivate them to regain their lost connections with society, respectively develop the vital functions, and also skills and abilities needed to improve their level of performance.

Finally, much attention in the study was paid to such an aspect as complexity, i.e. systematic development of a specialist in adaptive physical education and sport. It has been established that the future specialist should acquire at a high level not only professional knowledge concerning the unconditional performance of physical exercises and elements or the development of an individual plan of rehabilitation and adaptation, but also personal, psychological, allowing to motivate the mentee to carry out such activities and self-development. In the following studies, it is necessary to examine the special conditions that are placed on the training process of teachers in the field of adaptive physical education and sport.

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