livro de atas

livro de atas

livro de atas

conference proceedings

conference proceedings

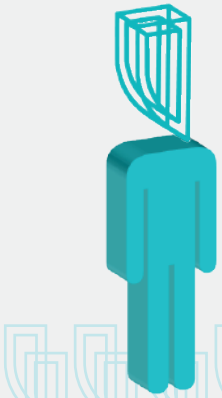
conference proceedings

VI Encontro International
de Formação na Docência

6th International Conference
on Teacher Education

INCTE'22
international
conference on
teacher education

http://incte.ipb.pt/



INCERTEZAS E DESAFIOS
NA INVESTIGAÇÃO
EM EDUCAÇÃO

UNCERTAINTIES AND CHALLENGES
IN EDUCATIONAL RESEARCH

INCTE'22

international conference on teacher education

Bragança . 2022

Título | Title
VI Encontro International
de Formação na Docência | Livro de Resumos

6th International Conference
on Teacher Education | Book of Abstracts

Editores | Editors
Elisabete Mendes Silva, Instituto Politécnico de Bragança

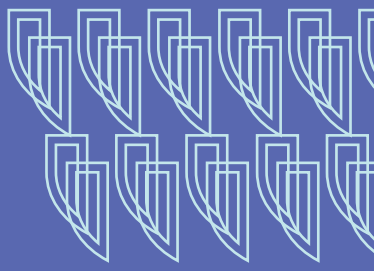
Co-autor(es) | Co-authors
Cristina Mesquita, Manuel Vara Pires, Rui Pedro Lopes | Politécnico de Bragança

Editores de Comunicação e Design | Communication and Design Editors
Jacinta & Carlos Casimiro da Costa | Instituto Politécnico de Bragança

Publicação | Publisher
IPB | Instituto Politécnico de Bragança

Morada | Address
Escola Superior de Educação de Bragança
Campus de Santa Apolónia
5300-253 Bragança . Portugal
http://incte.ipb.pt/
incte@ipb.pt

ISBN + Handle
978-972-745-301-6 | http://hdl.handle.net/10198/25401



Presidência da Comissão Organizadora | Conference Chairs
Cristina Mesquita | Instituto Politécnico de Bragança, Portugal
Elisabete Mendes Silva | Instituto Politécnico de Bragança, Portugal
Manuel Vara Pires | Instituto Politécnico de Bragança, Portugal

Comissão Organizadora | Organising committee
Adorinda Gonçalves | IPB, Portugal
Angelina Sanches | IPB, Portugal
Jacinta Costa | IPB, Portugal
Luís Castanheira | IPB, Portugal
Maria do Céu Ribeiro | IPB, Portugal
Paula Vaz | IPB, Portugal
Rui Pedro Lopes | IPB, Portugal

Organizado por | Organised by

Apoios | Sponsors

Comissão científica | Scientific committee

Adorinda Gonçalves (IPB, Portugal)
Alexandra Soares Rodrigues (IPB, Portugal)
Alexia Dotras Bravo (IPB, Portugal)
Amélia Marchão (IPPortalegre, Portugal)
Ana Garcia Valcárcel (USAL, Espanha)
Ana Paula Florêncio Aires (UTAD, Portugal)
Ana Paula Laborinho (FEA, Portugal)
Ana Paula Martins (UMinho, Portugal)
Angelina Sanches (IPB, Portugal)
António Guerreiro (UAlgarve, Portugal)
António Nóvoa (ULisboa, Portugal)
António Vasconcelos (IPS, Portugal)
Ariana Cosme (UPorto, Portugal)
Assunção Folque (UEvora, Portugal)
Carla Araújo (IPB, Portugal)
Carla Guerreiro (IPB, Portugal)
Carlos Neto (ULisboa, Portugal)
Carlos Teixeira (IPB, Portugal)
Catarina Vasques (IPB, Portugal)
Chee Hoo Lum (NIENTU, Singapura)
Christine Pascal (CREC, Reino Unido)
Claúdia Martins (IPB, Portugal
Cristina Martins (IPB, Portugal)
Cristina Mesquita (IPB, Portugal)
Daniela Gonçalves (ESEPF, Portugal)
Delmina Pires (IPB, Portugal)
Domingos Fernandes (ULisboa, Portugal)
Eduardo Lopes (UEvora, Portugal)
Elisabete Mendes Silva (IPB, Portugal)
Elza Mesquita (IPB, Portugal)
Evangelina Bonifácio (IPB, Portugal)
Feliciano Henriques Veiga (ULisboa, Portugal)
Fernando Martins (IPC, Portugal)
Flávia Vieira (UMinho, Portugal)
Gabriela Portugal (UAveiro, Portugal)
Gianina Ana-Massari (UAICDIasi, Roménia)
Graça Santos (IPB, Portugal)
Haroldo Bentes (IF do Pará, Brasil)
Helena Rocha (UNova, Portugal)
Henrique Teixeira-Gil (IPCB, Portugal)
Ilda Ribeiro (IPB, Portugal)
Isabel Cabrita (UAveiro, Portugal)
Isabel Chumbo (IPB, Portugal)
Isabel Vale (IPVC, Portugal)
Isolina Oliveira (UAberta, Portugal)
Jacinta Costa (IPB, Portugal)
João Carvalho Sousa (IPB, Portugal)
João Cristiano Cunha (IPB, Portugal)
João Formosinho (UMinho, Portugal)
Joaquim Machado (UCP, Portugal)
Jorge Ramos do Ó (ULisboa, Portugal)
José Manuel Cardoso Belo (UTAD, Portugal)
Juan-Carlos Hernández Beltrán (USAL, Espanha)
Juan R. Coca (UVal, Espanha)
Juan Gavilán (UConcépcion, Chile)
Juha Lahtinen (TAMK, Finlândia)
Júlia Oliveira-Formosinho (UCP, Portugal)
Leoncio Vega-Gil (USAL, Espanha)
Leonor Santos (ULisboa, Portugal)
Lina Fonseca (IPVC, Portugal)
Lourdes Montero (USC, Espanha)
Luciana Cabral Pereira (IPB, Portugal)
Luís Castanheira (IPB, Portugal)
Luís Menezes (IPV, Portugal)
Luís Sebastião (UEvora, Portugal)
Luisa Panichi (UPisa, Itália)
Manuel Meirinhos (IPB, Portugal)
Manuel Vara Pires (IPB, Portugal)
Maria Antónia Mezquita-Fernández (UValladolid, Espanha)
Maria Assunção Flores (UMinho, Portugal)
Maria da Conceição Martins (IPB, Portugal)
Maria do Céu Ribeiro (IPB, Portugal)
Maria do Céu Roldão (UCP, Portugal)
Maria do Nascimento Mateus (IPB, Portugal)
María Dolores Alonso-Cortés (ULeón, Espanha)
Maria Isabel Castro (IPB, Portugal)
Maria João Cardona (IPSantarém, Portugal)
Maria José Rodrigues (IPB, Portugal)
Maria Raquel Patrício (IPB, Portugal)
Marília Castro Cid (UEvora, Portugal)
Mário Cardoso (IPB, Portugal)
Maja Ljubetic (USplit, Croácia)
Mark Daubney (ILeiria, Portugal)
Marta Saracho Aranaíz (IPP, Portugal)
Mercedes López-Aguado (ULeón, Espanha)
Miguel Angél Santos Guerra (UMálaga, Espanha)
Miguel Ribeiro (UniCamp, Brasil)
Nélia Amado (UAlgarve, Portugal)
Neusa Branco (IPSantarém, Portugal)
Olga Santos (IPLeiria, Portugal)
Paula Maria Barros (IPB, Portugal)
Paula Vaz (IPB, Portugal)
Paulo Afonso (IPCB, Portugal)
Pedro Mucharreira (ULisboa, Portugal)
Pedro Tadeu (IPG, Portugal)
Pilar Gútiez Cuevas (UCMadrid, Espanha)
Rosa Novo (IPB, Portugal)
Rui Pedro Lopes (IPB, Portugal)
Rui Trindade (UPorto, Portugal)
Rui Vieira (UAveiro, Portugal)
Sandie Mourão (UNova, Portugal)
Sandra Regina Soares (UNEB, Brasil)
Sani Rutz da Silva (UTFPR, Brasil)
Sara Barros Araújo (IPP, Portugal)
Sofia Bergano (IPB, Portugal)
Sónia Galinha (IPSantarém, Portugal)
Susana Carreira (UAlg, Portugal)
Susana Colaço (IPSantarém, Portugal)
Tatjana Devjak (ULubljana, Eslovénia)
Tony Bertram (CREC, Reino Unido)
Vítor Gonçalves (IPB, Portugal)
Vítor Hugo Manzke (IFSul, Brasil)

INCTE'22

É indiscutível que a situação pandémica, numa inusitada cobertura mundial, condicionou, condiciona e condicionará múltiplas dimensões das nossas vidas nos tempos (mais ou menos) próximos. Esta situação tem exigido esforços redobrados a todos os setores da sociedade para enfrentar circunstâncias ainda mais incertas, complexas e, certamente, desafiantes.
O INCTE, Encontro Internacional de Formação na Docência, tem vindo a mobilizar a comunidade científica e profissional para dar respostas adequadas aos sucessivos desafios a ultrapassar. Por isso, cá estamos de novo (de forma presencial ou de forma virtual) para retomar as nossas partilhas, discussões e reflexões, seguramente necessárias e importantes nestes momentos tão exigentes.
O INCTE'22, já na sua 6.ª edição, como Encontro com afirmação nacional e internacional, está empenhado, mais uma vez, na prossecução dos seus principais objetivos:

• Problematizar, no quadro do processo de Bolonha, as estruturas curriculares da formação de educadores e professores;
• Debater propostas didáticas inovadoras no âmbito da formação para a docência;
• Refletir sobre as práticas formativas nos diversos contextos;
• Analisar o contributo da formação na dinamização das instituições;
• Aprofundar a comunicação entre os diferentes intervenientes na formação numa perspetiva de educação para o desenvolvimento;
• Debater práticas de formação no ensino superior.

Além disso, o INCTE continua a centrar a edição deste ano na temática da investigação em educação, no sentido de realçar o papel do educador ou professor investigador nas suas vertentes praxiológica e epistemológica. Reafirmamos, assim, que o INCTE'22, subordinado ao tema Incertezas e desafios na investigação em educação, incorpora uma visão de investigação em educação multidimensional, multimetódica e plurivocal, numa perspetiva de compromisso e responsabilidade compartilhada de todos, investigadores educacionais, educadores e professores. Sintam-se muito bem-vindos em Bragança, presencial ou virtualmente.

A Comissão Organizadora do INCTE'22.

INCTE'22

It is unquestionable that the pandemic situation, in an unusual worldwide coverage, has conditioned, conditions and will condition multiple dimensions of our lives in the (more or less) near future. This situation has demanded redoubled efforts from all sectors of society to face even more uncertain, complex and, certainly, challenging circumstances.
INCTE, International Conference on Teacher Education, has been mobilising the scientific and professional community to give adequate answers to the succeeding challenges to be overcome. So, here we are again (in person or virtually) to recommence our shares, discussions and reflections, surely necessary and important in these demanding times.
INCTE'22, already in its 6th edition, as an already renowned Conference, is committed, once again, in the pursuit of its main objectives:

• To problematise, in the framework of the Bologna process, the curricular structures of the training of educators and teachers;
• To debate innovative didactic proposals in the context of training for teaching;
• Reflect on training practices in different contexts;
• Analyse the contribution of training in invigorating institutions;
• To deepen the communication between the different actors in training in a perspective of education for development;
• Discuss training practices in higher education.

Moreover, INCTE continues to focus this year's edition on the theme of research in education, to highlight the role of the educator or teacher-researcher in its praxeological and epistemological aspects. Thus, we reiterate that INCTE'22, under the theme “Uncertainties and challenges in educational research”, incorporates a multidimensional, multimethodological and plurivocal vision of educational research, under the banner of commitment and shared responsibility of all, educational researchers, educators and teachers.You are very welcome in Bragança, in person or virtually.

The Organising Committee of INCTE'22.

Objetivos e Eixos Temáticos

O INCTE'22, VI Encontro Internacional Formação na Docência, apresenta os seguintes objetivos:

Problematizar, no quadro do processo de Bolonha, as estruturas curriculares da formação de educadores e professores;
Debater propostas didáticas inovadoras no âmbito da formação para a docência;
Refletir sobre as práticas formativas nos diversos contextos;
Analisar o contributo da formação na dinamização das instituições;
Aprofundar a comunicação entre os diferentes intervenientes na formação numa perspetiva de educação para o desenvolvimento;
Debater práticas de formação no ensino superior.

O Encontro está estruturado em cinco grandes eixos temáticos:

Eixo Temático 1
Currículo e formação de educadores e professores
Este eixo temático integra as questões do currículo, da inovação curricular e as novas perspetivas curriculares, no âmbito da formação inicial ou continuada de educadores e professores, incluindo a discussão de modelos e processos curriculares de diferente natureza e de trabalhos ou propostas de formação de educadores e professores, nos diversos contextos.

Eixo Temático 2
Didática e formação de educadores e professores
Este eixo temático integra aspetos dos diferentes saberes disciplinares em contexto escolar abarcando a reflexão sobre os contributos da didática na formação de educadores e professores para uma construção progressiva de formas de compreender e agir conscientemente em situações educativas.

Eixo Temático 3
Práticas educativas e supervisão pedagógica
Este eixo temático integra o desenvolvimento de práticas de formação de educadores e professores nas escolas, compreendendo a problematização dos papéis a desempenhar pelos diversos intervenientes, numa perspetiva de trabalho colaborativo e da construção de uma identidade profissional consciente, empenhada e responsável.

Eixo Temático 4
Formação docente e educação para o desenvolvimento
Este eixo temático integra aspetos formativos do ensino e da aprendizagem relacionados com a promoção de uma cidadania global responsável, abrangendo a discussão de projetos e práticas educativas potenciadoras de uma educação para o desenvolvimento.

Eixo Temático 5
Práticas pedagógicas no ensino superior
Este eixo temático integra as questões relacionadas com os desafios pedagógicos que enfrenta o ensino superior na atualidade, abrangendo a discussão, partilha e disseminação de experiências pedagógicas vividas neste nível de ensino.

Objectives and Research Topics

NCTE'22, 6th International Conference on Teacher Education, focuses on the following objectives:

To discuss, within the framework of the Bologna process, the curriculum structures of educators and teachers training;
To discuss innovative didactical proposals within the framework of training for teaching;
To reflect on training practices in different contexts;
To analyze the contribution of training in the dynamization of the institutions;
To gather a deep insight about the communication between the various actors in training in a perspective of education for development;
To discuss educational practices in higher education.

The Conference covers five main research topics:

Research Topic 1
Curriculum and training of educators and teachers
This research topic integrates issues of curriculum, curricular innovation and new curricular perspective, in the context of the initial or continuous training of educators and teachers, including the discussion of curriculum models and processes of different nature and of works or proposals for the training of educators and teachers, in different contexts.

Research Topic 2
Teaching and training of educators and teachers
This research topic integrates aspects of different disciplinary knowledge in school context, covering the reflection on the contributions of teaching in the training of educators and teachers for a gradual construction of ways to understand and act consciously in educational situations.

Research Topic 3
Educational practices and pedagogical supervision
This research topic integrates the development of training practices of educators and teachers in schools, comprising the problematization of the roles to be played by the various actors, in a perspective of collaborative work and the construction of a mindful, committed and responsible professional identity.

Research Topic 4
Teacher education and development education
This research topic integrates formative aspects of teaching and learning related to the promotion of a responsible global citizenship, including the discussion of possible projects and educational practices of education for development.

Research Topic 5
Pedagogical practices in higher education
This research topic integrates issues pertaining to the pedagogical challenges that higher education currently faces, comprising discussion, sharing and dissemination of pedagogical experiences undertaken at this level of education.

Índice

INCTE 2022 – VI Encontro Internacional de Formação na Docência

Nota de abertura 1

Incertezas e desafios na investigação em educação 3
Elisabete Mendes Silva, Cristina Mesquita, Manuel Vara Pires, Rui Pedro Lopes

Mesa Redonda 3

Roundtable – Research in education: aims and challenges 5
Elisabete Mendes Silva (moderador)
Letizia Cinganotto, Maria Pacheco Figueiredo, Michiel Heijnen (intervenientes)

Reflections on the round table discussion 7
Michiel Heijnen

Currículo e Formação de Educadores e Professores 11

A prática como componente curricular na perspectiva da legislação brasileira 13
Francisco Jucivânio Félix de Sousa, José Claudio Del Pino

App learning: uma nova forma de aprender 24
Socorro Aparecida Cabral Pereira Pereira, Maria de Cassia Passos Brandão Gonçalves, Josué Leite dos Santos Santos

As emoções em contexto educativo 35
Eve Gonçalves, Luis Castanheira

Conexões entre os conteúdos científicos e o dia a dia dos alunos 43
Liliana Gonçalves, Adorinda Gonçalves

Conexões externas com as transformações geométricas isométricas: propostas de futuros professores 54
António Guerreiro

Contribuição da educação ambiental para a sustentabilidade na educação básica 65
Eduarda Oliveira, Carlos Silva

Do simbólico às regras: contributos das brincadeiras e dos jogos 78
Carla Patrícia Gonçalves, Carlos Silva

Gestão e integração curricular: trajeto(s) para a relevância do ensino e aprendizagem 91
Daniela Gonçalves, Helena Marques

Infância, leitura e escrita: uma proposta de formação de professoras 99
Monica Correia Baptista, Ana Carolina Silva Correia, Ana Claudia Figueiredo Brasil Silva Melo

Monitorização com base no currículo na triagem de risco na leitura 111
Joana Maria Moura Teixeira Coelho Pires, Paula Marisa Fortunato Vaz, Ana Paula Martins

Provisório

Gamificación y escape room en educación superior: experiencia de diseño y creación 915
Paula Puente-Torre, Víctor Abella-García

La investigación como base del aprendizaje: proyectos de trabajo en la universidad 921
Francisco José Pozuelos-Estrada, Francisco P. Rodríguez-Miranda, Francisco J. García-Prieto, Jose R. Mora-Marquez

Resultados de la implementación CLILHE en una asignatura de ingeniería gráfica 934
M. Esther Baños-García, Esteban García-Maté, Carlos Melgosa

STE(A)M no futuro da educação 946
Nelson Quina, Lucía Fuente, Mário Cardoso

The portal smart-pedagog.kz as means of increasing digital competencies of future teachers 952
Klara Buzaubakova

Uma experiência pedagógica com recurso ao GeoGebra 962
Edite Cordeiro, Paula Maria Barros

Vozes em projeção: diálogos de leituras na escrita 974
Ana Elvira Gebara, Sandra Moreira

¿Qué habilidades identifican los futuros maestros de educación infantil en una indagación? 985
Yolanda Golías Pérez, Juan Carlos Rivadulla López, Óscar González Iglesias

"A Moleirinha" de Guerra Junqueiro no contexto atual do ensino superior: um desafio? 994
Lídia Santos

Índice de Autores 1005

Provisório

The portal smart-pedagog.kz as a means of increasing digital competencies of future teachers

O portal smart-pedagog.kz como meio de aumentar competências digitais de futuros professores

Klara Buzaubakova[1], 0000-0002-9124-9893
klara_1101@mail.ru

[1]*Taraz Regional University named after M.Kh. Dulaty, Kazakhstan,*

Abstract

The article defines the technological aspects of the formation of digital creative competencies of future teachers in the conditions of distance education in the Republic of Kazakhstan and reveals the essence of the concepts: "smart-online pedagogical workshop"; "smart-online pedagogical studio"; "smart-online pedagogical piggy bank"; "smart-online coaching"; "smart-online co-worker"g; "smart - online virtual laboratory"; "smart-online digital content". Effective ways of forming digital and creative competencies of future teachers have been identified, a methodology has been developed within the framework of distance education in modern Kazakhstan and a new model for the formation of digital and creative competencies of future teachers in the conditions of distance learning has been proposed - the pedagogical educational portal www.smart-pedagog.kz. The structure and content of the pedagogical educational portal are disclosed: "smart-online pedagogical workshop", "smart-online pedagogical studio"; "smart-online coaching"; "smart-online coworking"; "smart - online virtual laboratory"; "smart-online digital content". The study within the framework of the grant project AP09259497 "Improving the system of teacher education in the new reality of Kazakhstan: technological and methodological aspects of the formation of digital competencies of future teachers in distance learning of the Republic of Kazakhstan" is funded by the Ministry of Education and Science of the Republic of Kazakhstan.

Keywords: digital competence, smart-online pedagogical workshop, smart-online pedagogical studio, smart-online coworking, smart - online virtual laboratory.

Resumo

O artigo define os aspetos tecnológicos da formação de competências criativas digitais de futuros professores nas condições de educação a distância na República do Cazaquistão e revela a essência dos conceitos "oficina pedagógica inteligente-online"; "estúdio pedagógico inteligente-online"; "cofrinho pedagógico inteligente-online"; "coaching inteligente-online";"colega de trabalho inteligente-online" g; "laboratório virtual inteligente-online"; "conteúdo digital inteligente-online". Formas eficazes de formar competências digitais e criativas de futuros professores foram identificadas, uma metodologia foi desenvolvida no âmbito da educação a distância no Cazaquistão moderno e um novo modelo para a formação de competências digitais e criativas de futuros professores nas condições de ensino a distância foi proposto – o portal educacional pedagógico www.smart-pedagog.kz., a estrutura e o conteúdo do portal educacional pedagógico são divulgados: "workshop pedagógico online inteligente", "estúdio pedagógico online inteligente";"coaching online inteligente"; "smart-online coworking"; "smart-online virtual laboratory";"smart-online digital content". O estudo no âmbito do projeto AP09259497 "melhorar o sistema de formação de professores na nova realidade do Cazaquistão: aspetos tecnológicos e metodológicos da formação de competências digitais de futuros professores no ensino à distância da República do Cazaquistão" é financiado pelo Ministério da Educação e Ciência da República do Cazaquistão.

Provisório

Palavras-chave: competência digital, oficina pedagógica smart-online, estúdio pedagógico smart-online, coworking smart-online, laboratório virtual smart-online.

1 The importance of creating digital portals in increasing digital competencies of future teachers

In order to transform education into the central link of the new model of economic growth in the 21st century, it is necessary to focus the training program on critical thinking, the development of self-seeking skills and distance learning.

There is a need to modernize the system of pedagogical education, to create digital and creativ competence of future teachers in the new state of Kazakhstan.

By adapting the experience of international centers of pedagogical and vocational education to the Kazakh market in the current conditions, we need to prepare future teachers with high digital and creative competencies.

The factors that create the need to create a digital educational process of education and training are three components of a digital society: the digital generation (a new generation of students with special socio-psychological characteristics); new digital technologies that form the digital environment and develop in it; the digital economy and new requirements for the personnel it forms.

The dynamic development of society at the present stage and the depth of computerization of social institutions, digitalization of all spheres, other factors require further informatization, change of education. These conditions led to a change in social values and led to a network identification of a person. Today, a person needs not only new practical skills and theoretical knowledge, but also the ability to constantly improve these knowledge and skills.

The purpose of the study is to develop a methodology for the development of technological and methodological aspects of the formation of digital and creative competencies of future teachers in the context of distance education within the framework of the Kazakh and European integration of education in the new state of Kazakhstan. Creating different digital portals became actual and urgent in increasing digital and creative competencies of future teachers nowadays. That is why we came to the conclusion to create portal smart-pedagog.kz for teachers, for future teachers, i.e. for students, for MA students, for PhD students also.

The main tasks of the study are as follows:

1) to determine the theoretical-methodological, innovative-technological and network-methodological foundations for the formation of digital-creative competencies of future teachers in the context of distance education in Kazakhstan in the new conditions;
2) to develop of a model for the formation of digital creative competencies of future teachers in the Republic of Kazakhstan in the context of distance education within the framework of the integration of Kazakh and Russian education, determination of integrative methodology and implementation mechanisms;
3) to establish of a single joint network-methodological link in order to study, use, study, and promote innovative practices in the context of distance education in the training of globally competitive teaching staff in Kazakhstan in the new conditions;
4) to identify effective ways to develop digital and creative competencies of future teachers in the context of distance education in Kazakhstan in the new conditions

Provisório

Distance learning – training carried out using information and communication technologies, telecommunications tools in indirect (remote) or incomplete indirect mutual educational work of the student and teacher.

1.1 Developing digital and professional competencies of a future teacher in the context of distance learning

For the implementation of distance learning technologies in Kazakhstani universities, the "Moodle" distance learning system is used as the main tool. Software support of distance learning is carried out on the basis of interaction between the automated information environment "Platonus" and "Moodle" support system, which allows you to freely access the exit code.

The author Jusubaliyeva D. (1997) indicates the features of distance learning:

1) careful and detailed planning of the student's activities and organization, clear formulation of the tasks and goals of training, delivery of the necessary educational materials;
2) maximum possible interactivity between the student and the teacher, feedback between the student and the educational material, providing the opportunity for group training;
3) the presence of effective feedback that allows the student to receive information about the correct progress on the way from learning to education (p. 12).

Today, information and communication technologies are compatible in all areas of human life. Modern information technologies, along with various didactic methods and tools, are actively used in the educational process.

Some authors (Bidaibekov E., Aldiyarov K.T.) noted that in order to fully interact with students in interactive learning, teachers often have to release some of the material for independent study at home. This method contributes to improving the quality of the learning process: the student gets acquainted with the lecture information at an individual pace and, if necessary, performs practical tasks based on previously studied educational material. The widespread use of video frames and presentations for educational purposes, as well as electronic textbooks, teaching aids and workshops, has become an effective way to maximize students' information opportunities. Field experts believe that a technically improved form of distance learning is the e-learning system (2015).

The researcher A. K. Markova (1996) describes the types of professional competencies and identifies the types of competencies in distance learning in her works.

1) Special or activity professional competence in distance learning characterizes the mastery of the activity at the highest professional level. It means not only special knowledge, but also the ability to apply it in practice;
2) Social professional competence in e-learning characterizes the development of ways of interaction in combination with the methods of professional communication adopted in the professional community;
3) Professional competence of the individual in learning process characterizes the mastering of methods of self-expression, means of preventing professional deformity with self-development. Here, the specialist himself has the ability to plan his professional activities, make decisions independently, and see the problem.
4) Personal Professional Competence describes the development of the factors of self-regulation, preparation for professional growth, adaptation to professional aging, and sustainable professional development (p. 58).

On the other hand, the author Orlov (2006) considering the context of distance learning, highlights the social significance of the teachers' work and their ability to influence the future of the state and society; their interaction with the team; the creative nature of the teacher's work, the multifunctionality and diversity of pedagogical activity; professional freedom, a high degree of

Provisório

independence, the ability to implement their ideas, ideas, plans, priorities of independent research work; opportunities for self-improvement and professional growth are important (pp. 75-76).

According to the scientist I. V. Robert (2008), information technology is a set of methods and techniques for collecting, processing, storing, distributing information, that is, providing information in order to improve the ability of social and technical management and expand people's knowledge (p.158).

Along the same lines, the researcher Ungarbayeva Sh.U. (2010) specifies that information and communication technologies are a set of computer equipment, means and methods of telecommunication that provide interactive software and methodological support for modern learning technology (p. 77).

Studying the research on the competence of a teacher, B. Barsei (2010) concludes that "the psychological state and the level of knowledge, the general culture of the individual, the combination of theoretical and practical training and experience in pedagogical activity, as well as the presence of many other qualities of a teacher are necessary in the way of mastering the abilities of people, including teachers, to perform a certain task. (p.106).

According to Semenova M.V. (2005) the concept of "professional competence" can be considered as a subject of professional activity: personal, activity, personal, communicative, creative, personality-oriented, personality-oriented (p. 64).

The components of competencies proposed by the well–known scientist N. V. Kuzmina (2000) can be listed as follows: special and professional, methodological, socio-psychological, differential-psychological, autopsychological competencies (p. 21).

On this subject the author Adolf V. A. (1998) notes that the professional competence of the future teacher can be structured as a system consisting of the following components:

1. Content – knowledge of the methodological and theoretical foundations of the subject area of education, knowledge of the psychological and pedagogical foundations of modern education, knowledge of the requirements for a modern teacher;

2. Technological and methodological project, communicative, design, creative, evaluation, information skills;

3. Personal and professional value relations, value relationships to events and people, willingness to take personal initiative and further professional growth (p. 271).

According to Vasnin V.I. (1998) professional competence is defined as "a set of psychological and psychophysiological characteristics of a person necessary for the implementation of psychophysiological actions" (p. 29).

1.2 The role of digital technologies in developing digital competencies of a future teacher

Digital ("advanced", "clever", "SMART") technologies form the core of the modern stage of technological development, retaining their dominant role in the near future. Currently, digitalization is a deep convergence of digital technologies with material and socio-humanitarian technologies and practices, including education. It is important to understand the place and role of digital technologies in any modern field of professional activity.

The author Menlibekova Zh. (2001) emphasizes that the didactic properties of many digital technologies (interactivity, multimedia, hypertext, personality, subculture, etc.) allow us to create a focused educational process taking into account the specificities of the digital society:

1) freedom to search for information in the global information network;
2) personality - the presence of unlimited opportunities for individual adaptation to the needs and features of each student, including the choice

Provisório

3) method of material transfer, difficulty level, pace;
4) interactivity – the ability to provide more subjectivity in the process of communication and interaction;
5) multimedia (polymodality) – ability
6) the process of integrated use of various perception channels (hearing, vision, movement) in education;
7) hypertext – freedom of movement through text; brief presentation of information (including in the form of information graphics), modularity of the text and the ability to choose it for continuous reading, reference nature of information, narrowing and expanding information, the use of cross-references, etc;
8) subculture-compliance with the usual image for the digital generation of knowledge of the World, emotional and psychological proximity, providing a state of comfort in contrast to the uncomfortable environment of traditional learning (p. 153).

Digital technologies provide prompt feedback to the student, teacher (in a number of cases and other interested entities), informing them about the progress and results of completing the task, strengths and weaknesses, the presence of gaps in the previous material, and providing personalized recommendations for eliminating identified problems, setting and adjusting close goals of educational work and scenarios for further development.

The essence of changes in the organization of the educational process in the context of digitalization is to increase its pedagogical effectiveness. This can be achieved, first of all, through the individualization of training – the transformation of a single and general educational process for all into a set of individual educational areas, which are created taking into account individual educational needs and requests.

Three different groups of technologies can be used in the digital educational process of education and training:

1) Information and communication technologies (ICTs) for universal purposes, such as office programs, image editors, internet browsers, telecommunication organization tools, augmented reality, etc.;
2) pedagogical technologies (teaching technologies), including those related to the use of ICT or based on their use;
3) production technologies that ensure the formation of the necessary competencies, knowledge, skills and abilities of future teachers.

Some authors, like Abdykerimova E. A., Turkmenbayev A. B. (2021) indicate the following leading functions of a teacher to be compliance with APA norms in the context of digitalization:

- design forms, teaching methods, working materials, as well as diagnostic and formative assessment tools and create a local educational environment for a specific training course saturated with development opportunities on this basis;
- design scenarios of training sessions based on various, dynamic forms of organization of educational activities and optimal sequence of use of digital and non-digital technologies;
- organization of individual and group activities of students (including individual, project, distributed network) in a digital educational environment;
- design and organization of educational critical communication situations, including network communications;
- organization of a reflexive discussion of personal experience;

Provisório

- formation and development of critical thinking in the process of searching and selecting information in a digital environment;
- manage students' learning motivation, including when working with a team, using facilitation tools, as well as carriers of role images of “successful adult” and “successful specialist”;
- integrating different living spaces of the digital generation-virtual and Real, to support student development in a real social and professional world;
- constant constructive interaction with other teachers working with the same student (study group, project group, etc.) (p. 95).

2 Creating and using educational pedagogical portal smart.pedagog.kz for developing digital competencies of a future teacher

In the course of digitalization, the transformation of the principle of education will be aimed at increasing the degree of structuring of the principle of learning. In this case, the methods and complex forms of teaching are implemented in accordance with the complexity of teaching tools used in the educational principle. Various forms of educational activities organization are increasing at a significant rate in the digital educational environment, they are dynamic in nature. This significantly increases the result of pedagogical activity of the principle of learning.

As a result of the research conducted in order to form digital competencies of future teachers www.smart-pedagog.kz a portal of educational pedagogical has been created.

An educational pedagogical portal www.smart-pedagog.kz provides for the formation and development of digital competence of future teachers, which is reflected in the creative activity of creative thinking, methodological reflection, desire for innovation, creative use of innovative technologies, constant search for improving the educational process, systematic use of pedagogical innovations in their practice, the ability to independently search and find information; the ability to process, accumulate, sort the received information, among others.

2.1 The structure and content of the educational pedagogical portal www.smart-pedagog.kz

The educational pedagogical portal www.smart-pedagog.kz operates in 3 languages: Kazakh, Russian and English.

In the middle, there is a mobile application "Survey-Test" with the symbol "Google play".

In the upper-left corner is the "search" grid. You can search for the necessary information by writing the keywords of the information you are looking for.

On the 2nd field of the main page, 6 blogs are grouped: home page; news; about us; about the project; media; online Department (Figure 1).

On the main page of the educational pedagogical portal www.smart-pedagog.kz there is a blog "About us". In the "About Us" section of the portal, there is a brief information about the project manager and project members is provided.

On the main page of the educational pedagogical portal www.smart-pedagog.kz there is a blog "About the project".

In the section "About the project" of the portal there is a topic of the project, the relevance of the project, the methodology of research, the purpose of the project, the objectives of the project, and the expected results of the project are presented.

Also, there is a blog "media" on the main page of the portal www.smart-pedagog.kz. The media block of the portal consists of 2 parts: Video Gallery; Photo Gallery.

Provisório

In the section "Video Gallery" of the blog "media" of the portal of pedagogical education, 12 video lessons on the subject "pedagogy" are presented by the author of the project Buzaubakova K. D.

In the section "About the project" of the portal, the topic of the project, the relevance of the project, the methodology of research, the purpose of the project, the objectives of the project, the expected results of the project are presented.

In the block "Online Department" of the portal, special documents are issued on the opening of the online Department of "Pedagogy" of Taraz regional university named after M. Kh. Dulaty, which was opened within the framework of the project at Shadrinsk State Pedagogical University.

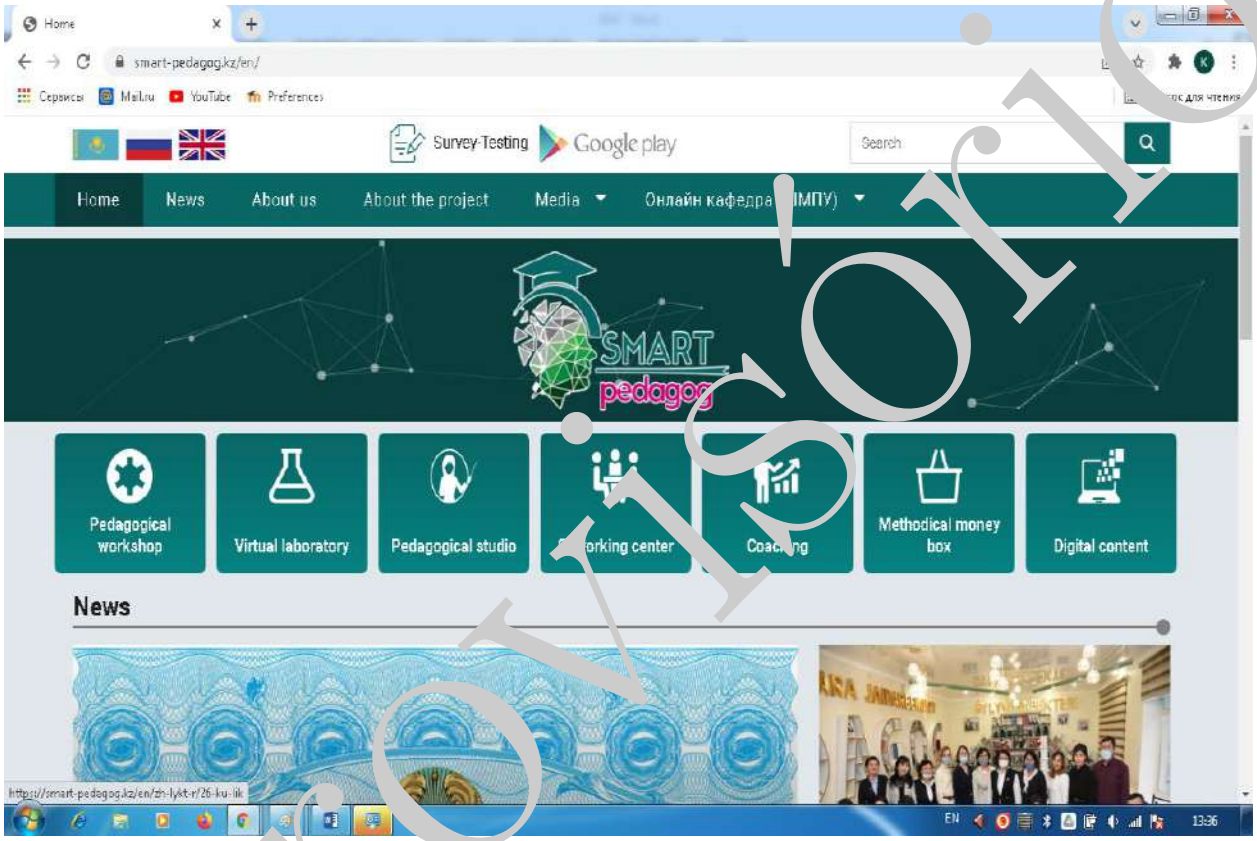


Figure 1 - The main page of the educational pedagogical portal www.smart-pedagog.kz

The advantage of the proposed educational pedagogical portal is that in the new conditions in Kazakhstan, a digital pedagogical hub (pedagogical campus) will be created to train teachers and improve the digital literacy and competencies of future teachers.

The digital pedagogical campus is an intelligent innovative virtual educational platform that provides access to all educational resources in education, distance learning and advanced training.

The digital pedagogical hub will be the smart-digital methodological office of the future teacher, where the digital and creative competencies of the future teacher are formed.

2.2 The peculiarities of the use of educational pedagogical portal www.smart-pedagog.kz

As the authors Buzaubakova K. D., Nurmanalieva U. T. (2021) suggest, the educational pedagogical portal www.smart-pedagog.kz was created and opened with the purpose of improving and increasing the digital creative competencies of future teachers in the Republic of Kazakhstan. Now it operates in the following areas and uses 7 online pedagogical resources:

1) smart-online pedagogical workshop (pedagogical center);

Provisório

2) smart-online pedagogical studio;
3) smart-online methodical piggy bank (basket);
4) smart-online coaching;
5) smart-online coworking center;
6) smart-online virtual laboratory;
7) smart-online digital content (p. 77).

SMART-online pedagogical workshop (pedagogical center) – where future teachers get acquainted with the amazing secrets of the pedagogical profession as a result of viewing, analyzing, testing at the stage of pedagogical practice video lessons of an innovative teacher from Kazakhstan, Russia and other leading foreign countries; develops lessons on distance learning, etc.

SMART-online pedagogical studio - here future teachers acquire the knowledge, skills and abilities necessary for recording their first innovative online lessons on video; create and prepare their first video lessons.

SMART-online methodological basket - smart-future teacher master and acquire IT competencies for the study, application, dissemination of advanced innovative pedagogical experience of innovative teachers of Kazakhstan, Russia and other leading foreign countries.

SMART-online coaching - here future teachers acquire the necessary competencies for conducting pedagogical coaching, trainings on topical problems of pedagogy, cyberpedagogy, media pedagogy, digital pedagogy.

SMART-online co-working center is an open platform for creative teachers and future teachers; a pedagogical hackathon for creating educational start-up projects, a simulation center for creative future teachers who share their experience and ideas, where smart-future teacher will be able to demonstrate creative competencies related to conducting innovative research and research projects on topical problems of pedagogy, cyberpedagogy, media pedagogy, digital pedagogy.

SMART-online virtual laboratory future teachers conduct some laboratory work in virtual laboratories.

SMART-online digital content smart-the future teacher develops electronic content in his subject.

www.smart-pedagog.kz - the video gallery block of the portal of pedagogical education contains video lectures of the project manager on the discipline "Pedagogy" Buzaubakova K. D.

Also, www.smart-pedagog.kz on the portal of pedagogical education, you can access the web version and mobile application of the online test and online questionnaire "Smart-future teacher".

www.smart-pedagog.kz on the portal of pedagogical education, 10 questionnaires are presented in the online questionnaire "Smart-future teacher", there is an opportunity to choose a language by clicking on the above buttons.

www.smart-pedagog.kz on the portal of pedagogical education, you can access the web version of the online test "smart - future teacher". By clicking on the online test button" Smart - future teacher", the future teacher will have the opportunity to test their knowledge by passing a test consisting of 15 test tasks.

In the upper left there is a Search cell. You can find the information you need by typing in reference words for any information you are looking for. For example, if you type "project" in the Search cell, you can get the project data.

Conclusion

The contribution of the portal smart-pedagog.kz will be great in the formation and improvement of digital-creative competence of future educators.

Provisório

Distance learning is a qualitatively new and progressive type of learning, emerged through new information and technology opportunities and based on the idea of "open learning".

In the context of the digitization of the educational principle, the overall change in the activities of the future teacher is not to simplify, but to increase his/her intelligence and creative ability, even through the automation of complex operations (structuring of the curriculum, to design the scenario of the principle of teaching, selection of content and teaching materials according to the theme, verification of students' work, etc).

In the context of the digitization of the educational system, the role of active and interactive forms of learning is increasing. The principle of digitization creates new qualitative opportunities for providing didactic material and organizing the principle of learning (the emergence and dissemination in the lives of children and adolescents of new activities that are real in the context of socialization in the digital society).

The use of digital tools makes it possible not only to design and use a variety of necessary forms and methods of teaching, but also to automate the level and rate of growth of complexity depending on the educational results obtained by the student.

3 References

Abdykerimova E. A., Turkmenbayev A. B. (2021) The effectiveness of the use of new information technologies in higher educational institutions // *Science and Life of Kazakhstan*. - 2021. – pp. 91-97 [article in printed proceedings]

Adolf V.A. (1998) Professional competence of a modern teacher: *Monograph.- Krasnoyarsk,* 1998. – p. 310 [printed book]

Barsei B. (2010) Scientific and pedagogical bases of formation of professional and didactic competence of the future primary school teacher: diss… cand of ped. sciences. - Shymkent, 2010. – p. 348 [printed doctoral dissertation]

Bidaibekov.Yu., Aldiyarov K.T. (2015) The use of electronic resources in general technical disciplines at the Polytechnic College // *Bulletin of KazNPU named after N.E. Bauman. Series of Physical and Mathematical Sciences*. - 2015. - №1(49). - pp.157-161. [article in printed proceedings]

Buzaubakova K.D., Nurmanalieva U.T. (2021) Technological and methodological aspects of the formation of digital creative competencies of future teachers in the conditions of distance education in the Republic of Kazakhstan // *Bulletin of the Al-Farabi Kazakh National University, series of Pedagogical Sciences*.- №3(68).- 2021. – pp.71-82. [article in printed proceedings]

Dzhusubalieva D.M. (1997) Theoretical foundations of the formation of information culture of students in the conditions of distance learning. - Almaty, 1997. - p. 296 [printed book]

Kuzmina A.V. (1990) Professionalism of the teacher of the Master of industrial training.- M., 1990. – p. 119 [printed book]

Markova, A.K. (1996) Psychology of professionalism [Text]: to a scientific publication / A.K. Markova. - M.: - *International Humanitarian Fund Knowledge*, 1996.-p.312. [article in printed proceedings]

Menglibekova A.Zh. (2001) Social competence, essence, structure, content // *Higher School of Kazakhstan*. - 2001. - №4-5. - pp.153-159. [article in printed proceedings]

Orlov A.A. (2006) Professional Thinking of A Teacher As A Value.– Tula, 2006. -pp.75-76 [printed book]

Robert, I.V. (2008) Theory and methodology of informatization of vocational education (psychological and pedagogical technical aspects) 2nd edition, supplemented [Text] / I.V.Robert.-M.: IIORAO, 2008. – p. 274 [printed book]

Semenova M.V. (2005) Pedagogical conditions for the formation of professional competence of future teachers at the university: diss....cand. of ped. sciences:13.00.08. - Karaganda, 2005. – p. 162 [printed doctoral dissertation]

Ungarbayeva Sh. U. (2010) Pedagogical bases of improving the efficiency of using information and telecommunications technologies in the educational process of Higher Education. 13.00.01. diss… cand of ped. sciences. - Almaty, 2010. – p. 126 [printed doctoral dissertation]

Provisório

Vesnin V.R. (1998) Practical management: the manual of the frame work.- M., 1998. -p. 59 [printed book]
Provisório

Índice de Autores

Adorinda Gonçalves, 43, 552
Agostinho Sousa, 906
Albertina Raposo, 599, 646
Alexandra P. Carneiro, 383
Alfredo Jiménez Eguizábal, 856
Amélia Marchão, 725
Ana Boura, 591, 705
Ana Carolina Silva Correia, 99
Ana Claudia Figueiredo Brasil Silva Melo, 99
Ana Claudia Loureiro, 579
Ana da Luz Ferreira, 452
Ana Elvira Gebara, 974
Ana Isabel Rio Tinto de Matos, 477
Ana Isabel Rodrigues, 538
Ana Lampón Gude, 634
Ana Paula Martins, 111, 175, 187
Ana Paula Ramos Ferreira, 441
Ana Paula Zarcos, 513
Ana Piedade, 599, 646
Ana Pinto, 748
Angelina Sanches, 452
António Domingos, 477
António Guerreiro, 54, 393
António José Osório, 175
Armando da Assunção Soares, 311, 415
Artur Cunha Nogueira de Oliveira, 670

Betina Lopes, 906

Cacilda Helena Chivai, 415
Carla Guereiro, 683, 748
Carla Patrícia Gonçalves, 78
Carlos Melgosa, 934
Carlos Silva, 65, 78
Carlos Teixeira, 452
Carmen Palmero Cámara, 856
Carmen Romero-García, 836
Carolina Sousa, 465
Catarina Liane Araújo, 175
Cristiana Ribeiro, 567, 609
Cristiane de Fatima Budek Dias, 123
Cristina Di Giusto Valle, 856
Cristina Martins, 646
Cristina Mesquita, 3, 123, 567, 609, 811

Daniela Cunha, 823
Daniela Gonçalves, 91, 429
Delmina Pires, 248

Edgar Lamas, 350
Edite Cordeiro, 962
Eduarda Oliveira, 65
Elena Jimenez Garcia, 869
Elisabete Linhares, 224
Elisabete Mendes Silva, 3
Elza Mesquita, 823
Eniz Oliveira, 373
Enrique Martínez Jiménez, 393
Esteban García-Maté, 934
Estela Lamas, 350
Eva García Redondo, 670
Evangelina Bonifácio, 156
Eve Gonçalves, 35

Fabrício Bagatini, 373
Feliciano H. Veiga, 622
Fernanda Maria Leal, 187
Fernanda Vicente, 579
Francisca Costa, 748
Francisca Rejane Bezerra Andrade, 489
Francisco J. García-Prieto, 921
Francisco José Pozuelos-Estrada, 921
Francisco Jucivânio Félix de Sousa, 13
Francisco P. Rodríguez-Miranda, 921

Gabriela Gonçalves, 403
Gabriella D'Aprile, 883
Giambattista Bufalino, 883
Guataçara dos Santos Junior, 123

Hanuzia Ferreira, 489
Helena Marques, 91
Helena Santana, 213
Henrique Gil, 465
Henrique Ramalho, 658
Hugo Cruz Marques, 646

Inés Morales Aragones, 869
Isabel Barbosa, 300
Isabel Ferreira, 725
Isabel Lacerda, 646
Isabel Sousa, 362
Ivana Ribeiro, 513

Jaime Delgado, 165, 280, 332

Provisório

Jane Herber, 373
Javier Bobo-Pinilla, 165, 280
Javier Marcos-Walias, 165
Joana Costa, 711
Joana Maria Moura Teixeira Coelho Pires, 111
Joana Padrão, 711
Jorge Cardoso, 711
Jose R. Mora-Marquez, 921
Josué Leite dos Santos Santos, 24
José António Fernandes, 403
José Benjamim Ribeiro da Fonseca, 256
José Claudio Del Pino, 13, 373
José Matias Alves, 383
Juan Carlos Rivadulla López, 985

Klara Buzaubakova, 737, 952

La Salete Coelho, 646, 711
Leonor Teixeira, 646
Lidia Sanz Molina, 869
Liliana Gonçalves, 43, 552
Lino Marques Samuel, 156
Lucimar Fernandes, 248
Lucía Fuente, 946
Luis Castanheira, 35, 148, 811
Luísa Carvalho, 725
Lídia Magalhães, 148
Lídia Santos, 994

M. Asunción Robador González, 856
M. Camino Escolar Llamazares, 856
M. Esther Baños-García, 934
M. Isabel Luis Rico, 856
Magali Veríssimo, 350
Manuel Meirinhos, 579
Manuel Vara Pires, 3, 567
Margarida Silveira, 599, 646
Maria Alves de Melo, 489
Maria Azevedo, 567, 609
Maria Clara Martins, 761
Maria da Conceição Martins, 622, 693
Maria de Cassia Passos Brandão Gonçalves, 24
Maria José Rodrigues, 501, 609, 646, 906
Maria Lopes de Azevedo, 362, 894
Mariana Enes de Lima, 187
Mariana Godinho, 429
Marisa Batista, 785
Marta Uva, 646
Marta Vales, 894
María José Caride Delgado, 634
María Paz Gutiérrez, 634
María Victoria Vega, 332
Michiel Heijnen, 7
Monica Correia Baptista, 99
Mário Cardoso, 946

Natália Albino Pires, 441
Nelson F. P. Alves, 267
Nelson Quina, 946
Neusa Branco, 224, 288
Nélia Amado, 525

Olga Buzón-García, 836
Olga Santos, 906

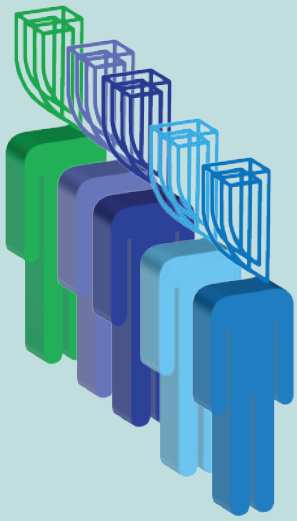
Patricia de Paz-Lugo, 836
Paula Catarino, 311
Paula Maria Barros, 403, 962
Paula Maria Machado Cruz Catarino, 256, 415
Paula Marisa Fortunato Vaz, 111, 187, 248
Paula Peres, 465
Paula Puente-Torre, 848, 915
Paulo Santos, 136
Perizat Kudabayeva, 737

Raimundo José Ribeiro Filho, 256
Raquel Santos, 761
Regina Mesquita, 501
Ribas Guambe, 339
Roberto Reinoso Tapia, 165, 280
Rodrigues Emídio Macuácua, 311
Rosário Santana, 213
Rui Pedro Lopes, 3, 799

Samir Zedam, 811
Sandra Fernandes, 646
Sandra Gonçalves, 799
Sandra Moreira, 974
Sandra Saúde, 538
Sara Borges, 711
Silvia García Ozores, 332
Socorro Aparecida Cabral Pereira Pereira, 24
Sofia Bergano, 646
Sonia Rodríguez-Cano, 324, 848
Susana Carreira, 198, 236
Susana Colaço, 288, 646
Susana Gómez Martínez, 869
Susana Gómez Redondo, 869
Sérgio Rui do Bento Pinto, 693

Tamara de La Torre Cruz, 856
Teresa Gonçalves, 646
Teresa Pataca, 599, 646

Provisório



Bragança . 2022