

TEACHERS' CONTINUOUS PROFESSIONAL DEVELOPMENT: AUSTRALIAN EXPERIENCE

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Despite an extensive body of research the issues of teachers' continuous professional development are of particular importance for modern pedagogical theory and practice. The article outlines the features of public school teachers' professional development in Australia. The study employed a range of theoretical and applied research methods, namely comparative and historical, induction and deduction, logical, analytical, descriptive and statistical as well as questionnaires and interviews. The article specifies the functions of teacher professional development, its elements and components. It analyses the legislative basis and the genesis of Australian teachers' professional development standards. The article identifies the specificities of teacher professional development implementation in Australia. The results show that teacher professional development is a continuous process of deepening knowledge, improving skills and competencies, forming values and attitudes. The methods helped in revealing the interconnection between continuous professional development and educational reforms, the forms, models and methods of CPD of Australian and Ukrainian teachers. The results of the survey showed the potential for the system of Ukrainian continuous teacher education development and the possibilities of Australian experience adaptation taking into account our rich educational traditions.

Keywords: Australia; public school teacher; continuous professional development; professional development standards; teacher education.

Introduction

The modern knowledge society is characterised by globalisation processes, increased competition in the field of education and science, the foundation of transnational educational institutions and the opening of universities' branches outside the country. Recently, there has been renewed interest in education, which becomes the chief priority of highly developed countries and its financing being one of the largest items of budget expenditures. Recent developments in education have heightened the need for continuous professional development (CPD) of public school teachers. Responsibility for the results of their activities is increasing. Providing teachers with appropriate and timely opportunities for professional development, comprehensive support from school leaders, colleagues, parents and the system of continuing teacher education is a means of enhancing students' learning outcomes as well as improving teaching and school activity in general.

The past decade has seen rapid economic and social development of Australia. Recent evidence suggests that Australia is one of the countries that play a crucial role in the international educational environment. Extensive research has shown that Australian universities provide transnational education and rate in the world's best universities lists. According to the international student evaluation rank, the educational achievement results of Australian students are in top five among 30 OECD countries (Daniels, 2009). It has previously been observed that the adult literacy rate is 99% in the country (Daniels, 2009). The updating of initial teacher education programmes is taking place in Australia at the turn of twenty and twenty-first centuries. The systems of teacher professional standards are being created on the national level, supplemented by the standards of state and territory teacher registration bodies, and form the legal basis of public school teachers' professional development in Australia. Data from several studies suggest that the cooperation between universities and schools is enhanced to obtain quality professional experience and research intensification in the sphere of teacher professional development.

Conceptual framework

The existing body of research on continuous pedagogical education suggests that the problem of teacher professional development in different countries is the research subject of a range of scholars (Opfer & Pedder, 2011; Skilbeck & Connell, 2004; Villegas-Reimers, 2003; Day & Sachs, 2009; Desimone, 2011). There is a growing body of literature that highlights the methodology of CPD research (Mukan & Kravets, 2015; Mukan, Myskiv & Kravets, 2016b). More recent attention has focused on the improvement of professional development programmes (Murray, Mitchell & Dobbins, 1998; Saunders, 2014). A great deal of previous research into public school teachers' CPD has focused on its content (Van Driel & Berry, 2012,

Fullan & Hargreaves (1992), Huberman (1989; 1993), Sowder (2007), Goldschmidt & Phelps (2010), Mukan, Kravets & Khamulyak (2016). A considerable amount of literature has been published on pre-service (Baker, Scott & Showers, 1997) and in-service (Mukan, Myskiv & Kravets, 2016a; Borko, Jacobs & Koellner, 2010; Avalos, 2011) teacher education. What we know about elements and principles of effective professional development is largely based upon studies of Ball & Cohen (1999), Van Veen, Zwart & Meirink (2012). Cochran-Smith & Lytle (1999), Elmore (2002). To date, a number of studies demonstrated the role of the multicultural component of professional development (Craven, Yeung & Han, 2014). Albion (2001), Pearson (2003), Yaremko & Mukan (2012) and Prestridge (2014) showed the peculiarities of information and communication technologies used in professional development. Gable & Burns (2005), Hooker (2008), Sutherland, Scanlon & Sperring (2005), Butler & Schnellert (2012) and Watson (2005) examined the models, methods and forms of professional development.

The analysis presented in this article is drawn from a broader qualitative study examining the peculiarities of public school teachers' CPD in Australia. The aim of this paper is to present the results of the study of its specificity. The authors defined the following objectives: to investigate professional development of public school teachers as a scientific and educational problem; to analyse the legislative basis and the genesis of public school teachers' professional development standards in Australia; and to determine the peculiarities of teacher professional development implementation in the system of continuing teacher education in Australia.

Methodology

According to the aim of our research, we used theoretical and applied research methods. A major advantage of the comparative and historical method is that it allowed studying documents, regulations and laws on education, scientific and educational literature, curricula and programmes. Induction and deduction are particularly useful for the collection of research material, its generalisation and interpretation of individual pedagogical phenomena. A logical method was employed to reveal the laws of creating concepts and judgments in the field of professional development of teachers. The study used an analytical method in order to obtain versatile information about the theoretical and practical aspects of continuous professional development. Descriptive and comparative methods were chosen to help understand the professional development peculiarities of Australian public school teachers, its content, methods and forms of its implementation. Statistical methods were used to verify the information received by comparing data published in various scientific sources. Among applied methods we used questionnaires and interviews of public schools teachers and school leaders for collecting primary pedagogical information as well as questionnaires and surveys of scientific and pedagogical workers, administration and students of faculties and schools of education, representatives of educational organisations and associations of Australia for identifying the features of cooperation with general education schools with the help of modern IT technologies. We have developed a questionnaire including most widely used professional development models, forms and methods abroad and in Ukraine. A total of 100 teachers participated in our survey with the help of modern ICT (Skype, e-mail, social networks). There were 50 teachers from Australia (states of New South Wales, Victoria, Queensland and Australian Capital Territory) who work in public, private and Catholic schools. Ukrainian participants were from Western and Central regions (Lviv, Ternopil, Vinnytsia, Volyn', Zhytomyr) who work in primary and secondary schools. The results of our survey are presented in Table 1.

Results

Several reports have shown that professional development of teachers is a topical scientific and pedagogical problem. The current study found that professional development is carried out on the basis of humanistic, acmeological, personal, activity, content and instrumental approaches as well as systemic, structural, functional, axiologic, andragogic, intercultural, competency and constructivist ones.

Our results support the idea that professional development of public school teachers is a continuous process of deepening knowledge, improving skills and competencies, forming values and attitudes that begins at the stage of initial teacher training and lasts throughout the professional activity of the teacher. Its goal is to enhance the teaching and learning process, improve the school's performance and the professional community as a whole.

The analysis has shown that in Australia the functions of professional development are extension, renewal and growth as well as the incentives for professional development being personal and systemic ones (Webster-Wright, 2009).

The present study has determined that the development of the phenomenon and the interpretation of "professional development" concept is characterised by several stages (Grundy & Robinson, 2009): the first

stage (1960's–1970's – postgraduate education as professional development), second stage (1980's – school as the place of professional development, interest in educational reform), third stage (1990's – professional development as a component of work agreements, not personal decisions of teachers). Maclean & McKenzie (1991), Huberman (1989, 1993) offer the classifications of career development stages for teachers. They emphasise the factors that influence professional growth of teachers (biography, previous experience, etc.).

As mentioned in the literature review, professional development and educational reforms are interconnected. Improving student learning outcomes depends on effective and relevant professional development. Our results are in line with recent studies indicating that the main principles of highly effective professional development that meets the needs of teachers are as follows: it is closely connected with work at school and teaching practice and is mostly school-based; the difference between achievement standards and real results of students is being analysed; teachers are involved in defining their needs according to which professional development is provided; it is continuous, presupposes follow up evaluation and support of further learning; models effective learning practice at school and corresponds it; clear goals and missions are defined and particular pedagogical problems are solved on the basis of research or practice; support from administration, school leaders; work in groups of teachers and school networks (Hawley & Valli, 1999; Elmore, 2002). In Australia professional development is based on the principles of continuing education, and creation of the necessary conditions for the professional development of teachers being one of the key tasks of modern educational reforms.

We have reviewed the programme documents approved by Australian State and Territory Education Ministers that determine the role and the place of education in the country, its goals and means of achieving them, and the vision of the teaching profession future. In particular, the analysis of such documents as Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008), The Adelaide Declaration on National Goals for Schooling in the Twenty-first Century (Education Council, 1999), Blueprint for Government Schools: Future Directions for Education in the Victorian Government School System (Victoria. Department of Education and Training, 2003), Teachers for the 21st Century: Making the Difference (Department of Employment, Education, Training and Youth Affairs, 2000), Report of the consultation on future directions for public education and training. “One size doesn't fit all” (New South Wales Department of Education and Training, 2005) has been carried out.

A strong relationship between social, cultural and economic development of the society and public school teachers CPD has been reported in the literature. In the country, education is a top priority for Australian state and territory governments. Its funding, including the professional development of teachers, is one of the largest items of public expenditures. Comprehensive school education plays a key role in building a democratic, just and multicultural society, fostering the formation of successful, creative individuals and active citizens of the state. These tasks are addressed directly to teachers who use the potential of collaboration with school leaders, parents, the community, education departments and the government.

We have explored the evolution of professional standards for Australian public school teachers, starting from conducting research in the field of standardisation, decentralisation and unification. The analysis has demonstrated that the interest in teacher professional standards appeared in 1990's when such standards were approved in the USA. Consequently, as the result of foreign experience investigation and taking into account the Australian peculiarities of teaching professional teaching standards were introduced in states and territories of Australia at the beginning of the twenty-first century. However, the process of standardisation was developing, and at the beginning of 2010's Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership, 2011) were approved.

The results of this study indicate that the content of New South Wales teacher professional standards is the basis of national standards. Professional standards of teachers from other states and territories of Australia describe the peculiarities of transition to national standards of professional development (Professional Standards for Queensland Teachers (Queensland College of Teachers, 2006), Northern Territory Professional Standards for Teachers (Teacher Registration Board of the Northern Territory, 2011), Professional Teaching Standards for Registration in South Australia (Teacher Registration Board of South Australia, 2011). As Australian experience shows, standards for Graduate and Proficient teacher are the grounds for compulsory certification, Highly Accomplished and Lead teacher being the basis for voluntary certification. It has been found out that Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership, 2011) provide continuous growth of the teacher, determine the content

of professional development as well as serve as the basis for planning, assessment of teacher professional development, accreditation of initial teacher education programmes.

In general, modern system of continuing teacher education in Australia is flexible, multi-level and multifunctional. It has been revealed that future teachers can acquire initial education in universities, colleges, institutes and Technical and Further Education (TAFE) institutions (they are mostly state-owned) in all states and territories of Australia.

The analysis of the specialities and educational levels offered by higher education institutions in Australia indicates that training of future teachers for preschool, primary and secondary education, work with children with special needs, indigenous pupils as well as for special education is carried out there. Initial teacher education programmes are divided into two main categories: undergraduate (Bachelor of Education), single or double degree programmes lasting 4-5 years; graduate (Bachelor [Honours], Masters or Graduate Diploma) for the duration of 1-2 years. Graduate entry programmes allow individuals with an undergraduate degree to gain additional pedagogical training. Postgraduate teaching programmes, in addition to Master of Teaching degree (Primary or Secondary), also offer specialisation in assessment, gifted education, special education, educational leadership as well as training of Masters in higher education.

It is important to note that Faculties and Schools of Education of Australian universities are centres for continuing teacher education. They offer programmes of initial, postgraduate and additional teacher education, professional learning and development programmes, as well as conduct research and implement professional development programmes for teachers, actively collaborate with schools and other educational institutions.

In the current study, we have found out that teacher training is carried out in accordance with the Australian Qualifications Framework (2013), which consists of ten levels and provides flexibility and multi-level education, the ability to move from one educational level to another. The main task of teacher education programmes in Australia is the training of highly skilled teachers able to function professionally in modern society. Educational levels in Australian initial teacher education (Bachelor, Master and Graduate Diploma) depend on previous experience.

The results of this study have shown that there are some peculiarities of initial teacher education programmes in Australia. They include the integration of information and communication technologies, obtaining professional experience under the guidance of a mentor, keeping a teaching portfolio and reflexive practice. It has been clarified that the accreditation of initial teacher education courses falls within the competence of universities. The Departments of Education in the States and Territories of Australia are accountable for the registration or licensing of teachers.

We have analysed the structure and the functions of the Australian State and Territory Teacher Registration Boards. They are responsible for the registration/certification of teachers, the accreditation of initial teacher education programmes, the approval of professional development programme providers, the monitoring of standards and professional ethics adherence by teachers, the testing of teachers for compliance with the pedagogical profession, providing teachers with proper and timely information. Teacher Registration Boards include the representatives of public and private schools, school leaders, university representatives and the individuals appointed by Ministers of Education and Australian State and Territory Education Departments.

Another important finding is that methods and forms of professional development of Australian public school teachers are based on the principles of effective professional learning. They include: professional learning teams (action research, examination of student work, lesson study, study groups, case discussions), peer observation, mentoring, coaching, in-house programmes of the institution, external consultant/critical friend, external workshops, accredited courses, structured professional reading, personal professional reading, practicum/school visits, online learning and professional conversations. The advantages and disadvantages of methods and forms of professional development, as well as peculiarities of their use, have been highlighted.

Among the main models for the professional development of future teachers within school-university partnerships, we distinguish shadowing professional teachers, legitimate peripheral participation activities and practice teaching.

On the question of ICT use, this study has found that methods and forms of professional development based on the use of information and communication technologies cover award courses at universities ("Computing for Teaching and Learning"), courses initiated by employing authorities ("Technology in Learning and Teaching", "Computing Across the Primary Curriculum", Programs of Research in Information Technology Centre) and Lighthouse Schools ("Navigator Schools' Project", "Technology School of the Future") as well as discussions on electronic networks and participation in conferences related

to ICT. The model of teacher professional development based on the use of information and communication technologies has been described. Also, separate subjects connected with ICT usage in education have been analysed.

In order to support our theoretical findings concerning continuous teacher professional development in Australia, we have conducted a comparative survey of models, forms and methods of professional development of teachers from Australia and Ukraine (see Table 1).

Table 1. A comparative survey of models, forms and methods of professional development of teachers from Australia and Ukraine

Teachers' CPD: models, forms and methods	Australia 50 participants from New South Wales, Victoria, Queensland, ACT	Ukraine 50 participants from Lviv, Ternopil, Vinnytsia, Volyn', Zhytomyr
Professional development school	50%	0%
School network / Teachers' network	55%	46%
Collegial development	60%	36%
Case-based study	15%	23%
Reflective practice	58%	47%
Project-based model	23%	19%
Teachers' narratives	46%	28%
Self-directed development	27%	34%
Seminars, workshops, summer institutes, conferences, courses	19%	58%
Observation of excellent practice	12%	27%
Teachers' participation in new roles	23%	5%
Portfolio	65%	58%
Action research	42%	36%
Inter-institutional collaboration	65%	44%
Supervision, coaching, mentoring	39%	45%
School leadership programme	69%	15%
Other	4%	2%

The results of our comparative survey show that in Australia teachers participate more in collegial development (60%), professional development schools (50%), school leadership programmes (69%). While in Ukraine a great number of teachers visit seminars, workshops, courses (58%), create portfolios (58%) and a lot of them participate in school networks (46%). The other models, forms and methods of professional development have got a comparatively equal percentage. In particular, they include, for example, action research (42% in Australia and 36% in Ukraine), self-directed development (27% in Australia and 34% in Ukraine), project-based model (23% in Australia and 19% in Ukraine). So, our findings confirm the fact that Australian teachers participate in various forms and methods of professional development. In Ukraine, as our results show, some models, forms and methods are unknown of (e.g. professional development schools) or are not so widely used (like collegial development or inter-institutional collaboration).

Discussion

These results further support the idea of the relevance of public school teachers' professional development problem. Not only the efficient initial teacher education is important but also the continuous professional development of those who are working as well as the induction of beginning teachers. Our results correspond to the findings of the leading scholars who support the idea that modern secondary school teachers should be prepared for rapid, fundamental changes and meet the requirements of time and progressive educational policy trends, which is possible only in case of their continuous professional development (Sadovets', 2011). We treat professional development from the position of its being central and essential for the teaching profession. Our ideas are in accordance with Grungy and Robinson (2009) who suggest that the necessity of continuous development in the teaching profession should be considered its characteristic feature. Our results take into account the notion of continuous education that is line with Deciatov's (2011) treatment of continuous education as the philosophic and pedagogic concept according to which education is the process encompassing the whole life of a person (p. 12).

It can be thus suggested that professional development of public school teachers is a complex social and cultural phenomenon and multifunctional system of interconnected components as well as a continuing

process of deepening knowledge, perfecting skills and competencies, forming values and attitudes starting at the point of initial teacher education and continuing throughout all professional activity. Its purpose is to enhance the learning and teaching process, improve the performance of schools and the professional community in general. It is based on a variety of scientific approaches (systemic, structural and functional, andragogic, competency, personal, content, activity, constructivist, humanistic, acmeological, axiologic, instrumental, intercultural). The classifications of teacher career development stages, as well as factors (personal, social, cultural, professional environment, colleagues, pedagogical preferences, career development stage, etc.) influencing teacher professional growth, have been analysed.

The results of our research are in agreement with those obtained earlier and indicate that professional development of Australian public school teachers occupies one of the leading places in scientific studies of Ukrainian (issues of Australian higher education reform, multicultural education of Australian teachers, training of teachers at Australian universities, training to work with gifted children, organisational and pedagogical conditions for professional development of public school teachers in Australia) and foreign (various aspects of the problem of public school teachers' professional development in Australia, advantages and disadvantages of professional development programmes, introducing innovative forms and methods of professional development, ensuring a smooth transition from initial teacher education to teaching practice) scholars.

The current study has found that the genesis of professional development standards for Australian public school teachers can be traced. Teacher professional development takes a leading place in the context of the social, cultural and economic development of the society which is reflected in a number of policy documents approved by Australian State and Territory Education Ministers. Three periods have been defined: I period (the end of the twentieth century) – investigations of foreign experience; II period (2000–2010) – decentralisation of the standardisation process; III period (2010 – present) – unification of professional development standards.

Another important finding is that in Australia at the beginning of the 21st century professional development of public school teachers is carried out according to National Standards specifying knowledge, skills and attitudes of teachers. The framework of standards includes four career stages of teachers (Graduate, Proficient, Highly Accomplished and Lead), three domains of teaching (professional knowledge, professional practice and professional engagement) and seven standards (know students and how they learn; know content and how to teach it; plan for and implement effective teaching and learning; create and maintain supportive and safe learning environments; assess, provide feedback on student learning; engage in professional learning; engage professionally with colleagues, parents/ carers and the community).

In this study, we have characterised the system of continuing teacher education in Australia and have defined that it covers several levels that are interconnected and complementary. The responsibilities of the Australian State and Territory Ministries of Education include the development of policies in the field of continuing teacher education, financing of education and professional development programmes for educators. Universities, colleges, institutes and TAFEs carry out the initial and postgraduate training of teachers, development of teacher professional learning programmes and conduct investigations in the field of education. Australian State and Territory Teacher Registration Boards perform functions of regulating pedagogical profession development, licensing and certification of teachers, monitoring compliance with professional development and professional ethics standards, cooperating with ministries of education, schools, universities and teacher unions for the professional development of teachers. Professional organisations, associations and unions of teachers, school leaders, school principals and independent providers are developing teacher professional development programmes, while Australian private and Catholic schools provide opportunities for the professional development of teachers on the site.

Contemporary continuing teacher education is based on Australian Qualifications Framework, which covers ten levels and provides flexibility, versatility and multifunctionality. It is characterised by the following structure: initial teacher education (selection of entrants for teacher education programmes, programmes for obtaining the degree of Bachelor, Master, Diploma / Certificate of Education, PhD programmes) and in-service teacher education (programmes for obtaining the degree of Bachelor, Master, Diploma / Certificate of Education, PhD programmes, professional development).

The results of this study show that in Australia initial teacher education can be obtained in all states and territories. Schools and faculties of education of universities, colleges, institutes and TAFEs offer programmes of initial teacher education of the graduate level (Bachelor, lasting 4-5 years), postgraduate teacher education programmes (Bachelor with Honors, Master's degree, duration 1-2 years) and graduate entry programmes (Diploma / Certificate of Education, lasting 1-2 years) for all levels of school education as well as special education and indigenous education.

It is interesting to note that professional development of Australian public school teachers is based on National Standards which presuppose mastering or enhancement of knowledge, formation and development of skills and development of professional values through the use of formal and informal learning. Formal learning is offered by official providers (workshops, seminars, online learning), schools and employers (professional development days, action research, projects, mentoring), organisers of conferences, seminars and printed teaching materials. Informal learning includes reading and discussing professional literature, professional or collegial meetings, discussions of professional practice, participation in the development of policy or practice in education.

Conclusions

The results of our study showed that teachers' professional development is an interconnected system and a continuous process. It has its functions, elements and components. The experience of Australia demonstrates that the problem is of particular relevance both in educational theory and practice. Thus, in Australia, teacher professional development standards are implemented taking into consideration teacher career stages, their needs and the requirements to their knowledge, skills, competencies and attitudes. Formal and informal professional development includes a range of models, forms and methods corresponding to the needs and expectations of Australian teachers.

The findings of our comparative survey exemplified the models, forms, methods that Australian and Ukrainian teachers participate in. It should be noted that some forms and methods are rarely used or not used at all in Ukraine in comparison with Australia.

Further studies are to be conducted in order to validate the detailed insights into the implementation of the innovative programmes for the professional development of Australian public school teachers as well as the programmes of teacher education at Australian universities and colleges. Future trials should assess the impact of foreign experience over the use of effective methods and forms of professional development for teachers. The findings of our study complement those of earlier ones and provide valuable insights into the problem of public school teacher CPD research.

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