

UDK 37.014.3:502.131.1
 DOI: 10.7251/FIN2004035P
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PREGLEDNI RAD

Obrazovna politika i reforma obrazovanja za održivi ekonomski razvoj

Education Policy and Reform for Sustainable Economic Development

Rezime

Obrazovanje se definiše kao aktivnost od opšteg društvenog interesa, što ukazuje na njegov značaj ne samo za razvoj pojedinca već i za napredak društva u cjelini. Poboljšanje kvaliteta obrazovanja je neophodno jer se smatra ključnim za međunarodnu konkurentnost i ekonomski razvoj. Da bi se postigla ekonomska efikasnost obrazovanja u nacionalnoj ekonomiji, neophodno je obezbijediti primjenjiva znanja i vještine, uskladiti obrazovne programe i tržište rada, posebno u novoj sferi digitalnog poslovanja i tehnoloških inovacija. Obrazovanje je povezano sa dugoročnim poboljšanjima ekonomske performansi kroz prenos novih znanja i ideja, pružajući kapacitet za inovacije i poboljšavajući sveukupno znanje i vještine stanovništva. Kao i drugi važni državni segmenti, obrazovna politika suočava se sa novim izazovima u neizvjesnim okolnostima. Era globalizacije i visok nivo međunarodne trgovine zahtijevaju da uspješne zemlje imaju konkurenntske prednosti, gdje su obrazovanje i obuka glavni faktori u određivanju učinka nacionalne ekonomije. Uprkos svim ovim činjenicama, nezaposlenost, slaba zaposlenost, neusklađenost stvarnih vještina ljudi sa potrebama tržišta rada podržavaju dalji održivi razvoj evropskih društava. Ovaj rad analizira trenutnu situaciju i dostignuti nivo reformi obrazovanja u Republici Srpskoj i ukazuje na izazove obrazovnih politika koji su pred nama.

Ključne riječi: obrazovanje, održivi ekonomski razvoj, obrazovna politika, mjere reforme obrazovanja.

Abstract

Education is defined as an activity of general social interest, which indicates its significance not only for the development of the individual, but also for the progress of society as a whole. Improving the quality of education is essential because it is considered crucial to the international competitiveness and economic development. In order to achieve the economic effectiveness of education in the national economy, it is necessary to provide applicable knowledge and skills, harmonize educational programs and the labor market, particularly in the new sphere of digital business and technological innovations. Education is associated with long-term improvements in economic performance through the transfer of new knowledge and ideas, providing capacity for innovation and improving the overall knowledge and skills of the population. As well as all other essential state segments education policy is facing new challenges in uncertain circumstances. The era of globalization and the high level of international trade require that successful countries have competitive and comparative advantages where education and training are major factors in determining the performance of the national economy. Despite all these facts, unemployment, underemployment, mismatches between people's actual skills and the needs of the labour market undermine the further sustainable development of European societies. This paper analyzes the current condition and achieved level of education reforms in the Republic of Srpska and points out the challenges of education policies that lie ahead.

Keywords: education, sustainable economic development, education policy, reform measures

UVOD

Povezanost obrazovanja i dugoročnog ekonomskog rasta i razvoja može se posmatrati kroz poboljšanje cijelokupnog znanja i vještina stanovništva, osiguravajući kapacitet za inovacije i prenos novih znanja i ideja. Ekonomski rast vođen je novim idejama, otkrićima koja rezultuju boljim proizvodima i efikasnijim proizvodnim tehnologijama, što ukazuje na to da je ljudski kapital pokretačka snaga. Kvalitetna obrazovana radna snaga povećava doprinos istraživanju i razvoju i osigurava da se inovacije više apsorbuju u proizvodnu strukturu koja na kraju dovodi zemlju do ekonomskog rasta.

Svaka država treba da bude društvo zasnovano na učenju i znanju, koje povezuje sve nivoe i vrste obrazovanja u skladno i transparentno jedinstvo. To omogućava stvaranje uslova za razvoj svih potencijala ličnosti i zajedničku odgovornost porodice i društva. Značajna ulaganja u ljudski kapital i učenje preduslov su da država postigne održivi ekonomski razvoj.

U Republici Srpskoj postoji inicijativa zasnovana na potrebama za unapređenje obrazovnog sistema već duži niz godina. Tokom 2019. godine pokrenute su inicijative i usvojeni zaključci o provođenju reformskih procesa u oblasti obrazovanja, s ciljem unapređenja obrazovnog sistema u Republici Srpskoj. U ovom radu ćemo analizirati i posebno se osvrnuti na ciljeve i korake reforme osnovnog i srednjeg obrazovanja i posebno posmatrati visoko obrazovanje.

Reforma obrazovanja u Republici Srpskoj donosi se u vrijeme socijalnih, ekonomskih, kulturnih i demografskih izazova, kada je imperativ stvaranje boljeg životnog standarda i kvalitetnijih uslova obrazovanja. Unapređenje obrazovnih politika i sistema obrazovanja nije samo zadatak već i obaveza. Trenutna situacija u obrazovanju zahtijeva da se svi ključni aspekti razvoja obrazovanja sveobuhvatno sagledaju i realno projektuju, uzimajući u obzir budući život i razvojne potrebe društva u Republici Srpskoj, posebno znajući činjenicu da su obrazovanje i nauka pokretačka snaga razvoja svakog društva.

Prenos novih saznanja i ideja primarna je misija obrazovanja i predstavljaju ključnu ulogu u pomaganju ljudima i društvima da se suoče sa dubokim promjenama i izazovima sadašnjice. Uprkos tim činjenicama, prema UNESCO-u, najmanje 260 miliona djece i mladih danas se ne školuje, a ako se ovaj trend nastavi, do 2030. godine više od 400 miliona djece neće imati osnovno obrazovanje, a 800 miliona mladih neće imati potrebne vještine za priključivanje modernoj radnoj snazi (UN, 2019). Prema Evropskom centru za razvoj stručnog ospozobljavanja, gotovo polovini cijelokupne odrasle populacije u EU potencijalno je potrebno unapređenje kvalifikacija ili prekvalifikacija. Nezaposlenost, slaba zaposlenost, neusklađenost stvarnih vještina ljudi i potreba tržišta rada podrivaju održivi ekonomski razvoj društava (CEDEFON, 2020).

Prema izvještaju Evropske fondacije za ospozobljavanje za 2018. godinu, većina stanovništva u Bosni i Hercegovini završila je osnovno ili srednje obrazovanje i otprilike tri četvrtine učenika viših srednjih škola upisano je u stručno obrazovanje i ospozobljavanje (VET). Procenat onih koji rano napuštaju školu je nizak, 5,1% u 2017. godini, a učešće u visokom obrazovanju gotovo se udvostručilo od 2000. godine. Samo 1,8% odraslih (u dobi od 25 do 64 godine) sudjelovalo je u cijeloživotnom učenju u 2017. Međutim, postotak mladih ljudi u dobi od 15 do 24 godine koji nisu u radnom odnosu, obrazovanju ili obuci smanjio se, sa 28% u 2010. na 24,3% u 2017. godini, a stopa zaposlenosti mladih povećala se sa 13,8% u 2016. na 17,6% u 2017. godini. Vidljiv je opšti pad nezaposlenosti, sa 27,6% u 2011. na 20,5% u 2017, dok je udio dugotrajno nezaposlenih i dalje visok (European Training Foundation, 2018).

Osnovni cilj ovog rada je ukazati na značaj unapređenja obrazovanja za ekonomski razvoj i pozitivne efekte reforme obrazovanja na buduće razvojne trendove u Republici Srpskoj. Svjesni činjenice da obrazovanje daje temelje za nacionalnu konkurentnost i produktivnost, ono bi takođe trebalo da bude osnova prema kojoj određujemo ekonomske i socijalne politike. Osnovni cilj reforme obrazovanja i unapređenja obrazovnih politika ogleda se u postizanju konkurentnosti zemlje na svjetskom tržištu koju karakterišu promjenjive tehnologije i proizvodne metode. Svrha težnje ka produktivnosti i intelektualnoj fleksibilnosti radne snage ogleda se u povećanju ekonomske i socijalne efikasnosti zemlje.

1. METODOLOŠKI OKVIR

Sprovedena analiza sadrži pregled stanja obrazovanja na globalnom nivou, prvenstveno zemalja Evropske unije i trenutnih trendova u Republici Srpskoj. Posmatrani period uključuje period od 2010. godine i projekcije za naredni desetogodišnji period. Praćeni su ključni pokazatelji i trendovi. Analizirane komponente podijeljene su u dva segmenta obrazovanja, gdje jedan uključuje osnovno i srednje obrazovanje, a drugi dio odnosi se na visoko obrazovanje.

Komparativnom analizom razložene su mjere u reformskim processima, kao i novi koncepti obrazovanja u nekoliko evropskih zemalja. Efikasnost i održivost stručnog obrazovanja i obuke očigledni su u Republici Srpskoj, kao i u drugim evropskim zemljama.

Glavni nalazi i zaključci u predstavljenom radu zasnovani su na izvještaju UNESCO-ovog globalnog akcionog programa i kroz nedavna istraživanja i radove o korelaciji između obrazovanja i održivog razvoja sa širokim spektrom pokazatelja. Globalna analiza budućih trendova i očekivanja temeljila se na Okvir Ujedinjenih nacija za obrazovanje za održivi razvoj 2030. Uočena kretanja i perspektive obrazovnih politika Republike Srpske zasnivale su se na detaljnoj analizi strategije i reformskih pravaca nadležnih ministarstava.

2. TEORIJSKA OSNOVA I PREGLED LITERATURE

Relevantne studije pokazuju da viši nivo i kvalitet obrazovanja doprinose ekonomskom razvoju i pozitivno utiču na produktivnost i inovacije, posebno kroz povećanje i poboljšanje kompetencija radnospособnog stanovništva, u smislu produktivnosti i efikasnijeg prenosa tehnologije i znanja iz obrazovnog sistema u ekonomiju i društvo. Ekonomske, socijalne i tehnološke transformacije glavni su izazovi svake države, a istovremeno se intelektualni kapital ističe kao najcijenjenija imovina. Srž ovih istraživanja su intelektualni kapital i znanje, veza između obrazovanja i ekonomskog razvoja, kao i obrazovanja i produktivnosti.

Obrazovanje za održivi razvoj je holističko i transformacijsko obrazovanje koje se bavi sadržajem i ishodima učenja, pedagogijom i stimulativnim okruženjem za učenje. Svoju svrhu postiže transformišući društvo u cjelini (UN, 2019).

Postoje empirijski dokazi da su kognitivne vještine stanovništva, a ne samo upis u školu, u velikoj mjeri povezane s individualnom zaradom, raspodjelom dohotka i ekonomskim rastom. Skreće se pažnja na kvalitet obrazovanja – obezbjeđujući da učenici i studenti zaista uče i stiču vještine. Kvalitet obrazovanja direktno utiče na zaradu pojedinca i mjeri se kao koncentracija na postignuća u školi. Ova istraživanja pokazala su sličnost u činjenici da je veći stepen školskog obrazovanja povezan sa većom individualnom zaradom (Mincer, 1975; Psacharopoulos, Patrinos, 2004; Heckman, Lochner, Todd, 2008).

INTRODUCTION

Correlation between education and long-term economic growth and development can be observed through the improvement of the overall knowledge and skills of the population, ensuring the capacity for innovation and the transfer of new knowledge and ideas. Economic growth has been driven by new ideas, discoveries that result in better products and more efficient production technologies, indicating that human capital is the driving force. Quality educated workforce increases returns to research and development and ensures that innovations are more absorbed into the productive structure which at the end brings country to economic growth.

Every country should be a society based on learning and knowledge, which connects all levels and types of education into a harmonious and transparent unity. This would enable the creation of conditions for the development of all personality potentials and joint responsibility of family and society. The substantial investment in human capital and learning is a precondition for country to achieve sustainable economic development.

In Republic of Srpska, there has been an initiative and an obvious need to improve the education system for many years. During 2019, initiatives were launched and conclusions were adopted on the implementation of reform processes in the field of education, with the aim of improving the educational system in the Republic of Srpska. In this paper, we will look especially at the goals and reform steps of primary and secondary education and separately higher education.

Education reform in Republic of Srpska is brought at a time of social, economic, cultural and demographic challenges, when any assessment of the creation of a better society is imperative. Thinking about a better education system is not only a task but also an obligation. The current situation in education requires all key aspects of the development of education to be comprehensively viewed and realistically projected, taking into account the future life and development needs of society in the Republic of Srpska especially knowing the fact that education and science are driving the strength of the development of any society.

Transfer of knowledge is the primary mission of education. It plays a central role in helping people and societies confront and cope with profound changes. Despite these facts, according to UNESCO at least 260 million children and youth today are out of school, and if this trend is not reversed, by 2030 more than 400 million children will lack basic primary education and 800 million youth will not have the skills needed to join the modern workforce (UN, 2019). According to the European Centre for Development of Vocational Training almost half of the entire adult population in the EU is in potential need of upskilling or reskilling. Unemployment, underemployment, mismatches between people's actual skills and the needs of the labour market undermine the sustainable economic development of societies (CEDEFOP, 2020).

From the European Training Foundation 2018 report, the most of the population in Bosnia and Herzegovina has attained primary or secondary education level and approximately three quarters of upper secondary students are enrolled in vocational education and training (VET). The percentage of early school leavers is low, at 5.1% in 2017, and participation in higher education has almost doubled since 2000. Only 1.8% of adults (aged 25 to 64) participated in lifelong learning in 2017. However, the percentage of young people aged 15 to 24 not in employment, education or training (NEETs) has been decreasing, from 28% in 2010 to 24.3% in 2017, and the youth employment rate increased from 13.8% in 2016 to 17.6% in 2017. There has also been a general fall in unemployment, from 27.6% in 2011 to 20.5% in 2017, while the share of the long-term unemployed remains high (European Training Foundation, 2018).

The main purpose of this paper is to show the significance of education in economic development and the effect of education reform on future development trends in Republic of Srpska. Aware of the fact that education provides the foundation for productivity and competitiveness, it

should also be the foundation on which we build most of our economic and social well-being. It is the key to increasing economic efficiency and social consistency. It increases the overall productivity and intellectual flexibility of the labor force. It helps to ensure that a country is competitive in world markets now characterized by changing technologies and production methods.

1. METHODOLOGICAL FRAMEWORK

Conducted analysis comprises an overview of the state of education at the global level, primarily the countries of the European Union and current trends in the Republic of Srpska. The observed period includes the period from 2010 and projections for the next ten-year period. The key indicators and trends were monitored. The observed components are divided into two segments of education where one includes primary and secondary education and the other part refers to higher education.

Comparative analysis observed measures in reform processes as well as new concepts of education in several European countries. Effectiveness and sustainability of vocational education and training is obvious in the Republic of Srpska along as in other Europe countries.

The main findings and conclusions in the presented paper are based on a review of the UNESCO Global Action Program and through recent researches and papers on the correlation between education and sustainable development with a wide range of indicators. The global analysis of future trends and expectations was based on United Nation's Education for Sustainable Development 2030 framework. Observed movements and perspectives on Republic of Srpska education profile was based on detailed analysis of strategy and reform directions of responsible Ministries.

2. THEORETICAL BASIS AND LITERATURE REVIEW

Various studies show that higher level and quality of education contributes to economic development and positively affects productivity and innovation, especially through increasing and improving the competencies of the working population, in terms of productivity and more efficient transfer of technology and knowledge from the education system to the economy and society. The economic, social and technological transformations are the main challenges of each country today and in the same time it puts the intellectual capital as the most valuable asset. The core of previous researches is intellectual capital and knowledge, the link between education and economic development as well as education and productivity.

Education for sustainable development is holistic and transformational education, which addresses learning content and outcomes, pedagogy and the learning environment. It achieves its purpose by transforming society (UN, 2019).

There is empirical evidence that the cognitive skills of the population, rather than mere school enrollment, are largely associated with individual earnings, income distribution, and economic growth. Attention is drawn to the quality of education - ensuring that pupils and students really learn and acquire skills. The quality of education directly affects an individual's earnings. The quality of education measures as the concentration on school attainment. These studies have shown a similarity in the fact that more school attainment is associated with higher individual earnings (Mincer, 1975; Psacharopoulos and Patrinos, 2004; Heckman, Lochner and Todd, 2008).

Značaj obrazovanja u ekonomskom razvoju je evidentan i prožima se kroz većinu istraživanja. Za ekonomiju, obrazovanje može povećati ljudski kapital u ukupnom privređivanju, što povećava produktivnost rada i time dovodi do višeg ravnotežnog nivoa proizvodnje (Mankiw, Romer, Weil, 1992). Takođe, može povećati inovativni kapacitet privrede – poznavanje novih tehnologija, proizvoda i procesa podstiče rast (Romer 1990; Aghion, Howitt, 1998), a može olakšati širenje i prenos znanja potrebnog za razumijevanje i obradu novih informacija i za primjenu novih tehnologija koje su osmislili drugi, opet podstičući rast (Benhabib, Spiegel, 2005).

Standardna metoda procjene efekata obrazovanja na ekonomski rast jeste procjena regresija rasta u cross-country analizi, gdje se posmatra prosječni godišnji rast bruto domaćeg proizvoda (BDP-a) po stanovniku tokom nekoliko decenija. Izražava se u funkciji parametra školovanja i skupa drugih varijabli koje se smatraju važnim za ekonomski rast. Obimna rana literatura o regresijama rasta među zemljama imala je tendenciju potvrđivanja značajne pozitivne veze između kvantitativnih mjera školstva i ekonomskog rasta (Krueger, Lindahl, 2001; Sianesi, Van Reenen, 2003).

Prema analizi Ozturka (2001), na primjer, istraživanje koje je sproveo Lucas (1998) pokazuje da veći nivo obrazovanja radne snage vodi većoj ukupnoj produktivnosti kapitala, jer je vjerovatnije da će obrazovaniji kadar lakše ultići inovacije, i tako uticati na ukupnu produktivnost. U drugim modelima generiše se slična eksternalija jer povećana edukacija pojedinaca podiže ne samo vlastitu produktivnost već i produktivnost drugih, s kojima komuniciraju, tako da ukupna produktivnost raste kako prosječni nivo obrazovanja raste (Perotti, 1993). Uticaj obrazovanja na prirodu i rast izvoza, koji pak utiču na ukupnu stopu rasta, još je jedan način na koji ljudski razvoj utiče na makroperformanse. Obrazovanje i vještine radne snage zemlje u razvoju utiču na prirodu njegove faktorske nadoknađenosti i, posljedično, na sastav njene trgovine. Tvrđilo se da čak i "nekvalifikovanim" radnicima u modernoj tvornici obično trebaju pismenost, računanje i disciplina, koja se stiče u osnovnoj i srednjoj školi (Wood, 1994).

3. REZULTATI ISTRAŽIVANJA I DISKUSIJA

3.1. Trendovi i izazovi u obrazovnim politikama

Okvir Ujedinjenih nacija za obrazovanje za održivi razvoj 2030. ističe da bi sistemi obrazovanja i osposobljavanja trebalo da postanu pravičniji i inkluzivniji te otvoreni i fleksibilni kako bi udovoljili novim potrebama i vještinsama. Cilj održivog razvoja ima za cilj osigurati jednak pristup pristupačnom i kvalitetnom obrazovanju i povećati broj ljudi koji imaju relevantne vještine za zapošljavanje. Iako se stručnjaci u evropskim vladama, akademskim institucijama, kao i tehnološkim kompanijama slažu da je ulaganje u digitalnu infrastrukturu zasnovanu na digitalnoj osnovi za obrazovanje i razvoj radne snage od presudne važnosti za transformaciju ekonomije, još uvijek postoje mnogi problemi u postizanju toga cilja (UNESCO, 2020).

Mnoge trenutne pedagoške metode ne zadovoljavaju potrebe učenika koji imaju poteškoće u učenju ili jezičke barijere. Standardni način pedagogije i tradicionalno učenje temelje se na kvalitetu učitelja i rijetko nude kreativne mogućnosti ljudima s različitim stilovima učenja. Digitalno učenje kroz različita tehnološka rješenja može ponuditi zanimljive mogućnosti za korištenje multimedijskih informacija i primjenu akademskih i profesionalnih vještina za rješavanje stvarnih radnih problema i situacija koje se mogu povezati, simulirati ili izraziti kao virtualna stvarnost u školama. Većina nastavnika, učitelja i trenera još uvijek nema vremena ili

pedagoškog znanja i vještina za prelazak predviđenih programa u kompletno okruženje za e-učenje.

Neosporna je činjenica da se obrazovanje uveliko digitalizuje, ali uslijed pandemije COVID-19 dolazi do zatvaranje škola u 185 zemalja, što pogodila 1,54 milijarde učenika. Ovo je pokazalo veliko oslanjanje obrazovanja i stručnih časova na fizičko nastavno okruženje. Čak i ako su dostupne mrežne alternative, nastavnici i učenici širom svijeta borili su se sa sadržajem i kvalitetom e-učenja ili čak s pristupom internetu. Situacija u stručnom obrazovanju i osposobljavanju (VET) postala je još gora, jer pandemija pogodila praktično učenje – poput učenja zasnovanog na radu i praksi – koje je u većini sektora moralo biti obustavljeno. Priroda stručnog i tehničkog obrazovanja, kao i razvoj radne snage, u velikoj je mjeri specifična jer se učenje odvija u stvarnom okruženju i situacijama i kroz njih.

Područje obrazovanja i osposobljavanja takođe se mijenja u pogledu organizacije i pedagogije. Veliki američki tehnološki giganti uvođe planove za poboljšanje visokog obrazovanja i stručnih škola nudeći fleksibilne mogućnosti obrazovanja onlajn kako bi pomogli Americi i ostalim zemljama da se oporave i obnove u situaciji u kojoj su desetine miliona ljudi nezaposlene. Slično tome, Evropi je potrebna pažnja i ulaganje u restrukturiranje pristupa stručnom, visokom obrazovanju i razvoju radne snage za milione studenata i zaposlenih.

3.2. Analiza reforme i očekivani rezultati

Istraživanja pokazuju da je u modernom društvu, društvu znanja, važno postići potrebne kompetencije i prihvati novi koncept obrazovanja, koji je uslovljen očekivanim ishodima učenja, posebno u vremenima digitalnih i inovativnih promjena u društvu. Društvo i ekonomija danas zahtijevaju modernizaciju obrazovnog sistema i visok stepen njegove usklađenosti s potrebama privrede i tržišta rada. Da bi se Republici Srpskoj omogućilo jačanje obrazovnog i ekonomskog sistema, preduzeti su koraci za poboljšanje postojećeg kvaliteta i efikasnosti obrazovanja modernizacijom kurikulumu zasnovanih na ishodima učenja.

Strategija zapošljavanja koju je usvojila Vlada RS jasno naglašava potrebu provođenja ekonomskih reformi i povećanja zaposlenosti, kao ključnih faktora u ekonomiji zasnovanoj na znanju, a da bi se ona provela, jedan od presudnih trenutaka je povezivanje obrazovanja i tržišta rada. Kvalitativna analiza potrebnih kompetencija za tržište rada, broja zaposlenih, profil potrebnog osoblja i opšta analiza tržišta lokalne zajednice osnova su programskih sadržaja srednjeg stručnog obrazovanja, zasnovanih na znanju, vještinama i kompetencijama.

U prethodnom periodu u Republici Srpskoj problemi su uka-zivali na neusklađenost potreba tržišta rada sa ishodima učenja srednjoškolaca i diplomaca. Prije nekoliko godina otkrivene su potrebne promjene u upisnoj politici u srednje škole i fakultete s ciljem usmjeravanja i unapređenja vještina i kompetencija. Ovo je posebno važno za borbu protiv nezaposlenosti, stvaranje ekonomskog rasta i konačno stvaranje društva blagostanja. U tom smislu, postojeći obrazovni sistem treba poboljšati i osigurati obaveznu saradnju između srednjih stručnih škola i onih preduzeća i institucija u kojima se obavlja profesionalna praksa. Praktična obuka i sticanje radnog iskustva tokom učenja smjerovi su kojima treba posvetiti posebnu pažnju u narednom periodu kako bi se postigli pozitivni efekti obrazovnog sistema kao generatora ekonomskog rasta i razvoja.

3.2.1. Koraci ka reformi osnovnog i srednjeg obrazovanja u Republici Srpskoj

Da bi se postiglo kvalitetno obrazovanje, koje odgovara potrebama ekonomskog, kulturnog i socijalnog razvoja Republike, primarni razvojni cilj treba da bude unapređenje obrazovnog sistema Republike. Budući da su kurikulumi jedan od osnovnih elemenata tog sistema, potrebno je promijeniti postojeće obrazovne programe, jer su oni

The importance of education in economic development is evident and extends throughout most of researches. For an economy, education can increase the human capital in the labor force, which increases labor productivity and thus leads to a higher equilibrium level of output (Mankiw, Romer and Weil, 1992). It can also increase the innovative capacity of the economy - knowledge of new technologies, products, and processes promotes growth (Romer 1990; Aghion and Howitt, 1998). And it can facilitate the diffusion and transmission of knowledge needed to understand and process new information and to implement new technologies devised by others, again promoting growth (Benhabib and Spiegel, 2005).

The standard method of estimating the effect of education on economic growth is to estimate cross-country growth regressions where average annual growth in gross domestic product (GDP) per capita over several decades. It is expressed as a function of measures of schooling and a set of other variables deemed important for economic growth. A vast early literature of cross-country growth regressions tended to find a significant positive association between quantitative measures of schooling and economic growth (Krueger and Lindahl, 2001; Sianesi and Van Reenen, 2003).

According to the Ozturk (2001) review, the previous research conducted by Lucas (1998), for example, shows the higher the level of education of the work force the higher the overall productivity of capital because the more educated are more likely to innovate, and thus affect everyone's productivity. In other models a similar externality is generated as the increased education of individuals raises not only their own productivity but also that of others with whom they interact, so that total productivity increases as the average level of education rises (Perotti, 1993). The impact of education on the nature and growth of exports, which, in turn, affect the aggregate growth rate, is another way in which human development influences macro performance. The education and skills of a developing country's labor force influence the nature of its factor endowment and consequently the composition of its trade. It has been argued that even 'unskilled' workers in a modern factory normally need the literacy, numeracy, and discipline, which are acquired in primary and lower secondary school (Wood ,1994).

3. RESEARCH RESULTS AND DISCUSSION

3.1. Current trends and challenges in education policies

United Nation's Education for Sustainable Development 2030 framework has aligned that education and training systems should become more equitable and inclusive as well as open and flexible to meet new skill needs. The sustainable development goal aims to ensure equal access for all to affordable and quality education and increase the number of people who have relevant skills for employment. Although experts in European governments, academic institutions as well as technology companies agree that investing in digital, cloud-based infrastructure for education and workforce development is absolutely critical for engaging and preparing people for the transformation of the economy, many problems still exists in reaching this goal (UNESCO, 2020).

Many current pedagogy methods do not cater to learners with learning difficulties or language barriers. The standardized way of pedagogy relies on discipline and rigid scheduling, with students being in the same room at the same time. Traditional learning is based on the quality of the teacher and it rarely offers opportunities for people with different learning styles. Digital learning solutions can offer engaging opportunities for utilizing multimedia information and applying academic and vocational skills to solving real work problems and situations that could be connected, simulated, or expressed as virtual

reality in schools. Most teachers, educators and trainers still do not have time or pedagogic knowledge and skills for transitioning their courses and programs to complete e-learning environment.

It is an indisputable fact that education is being widely digitized, but the blockade due to the COVID-19 pandemic is forcing the closure of schools in 185 countries and affecting 1.54 billion students. This showed a great reliance of education and training on the physical teaching environments. Even if online alternatives are available, teachers and learners around the world struggled with usability, content and quality of e-learning or even with access to internet. The situation in vocational education and training (VET) got even further. It hits practical learning - like work-based learning and apprenticeships - which had to be suspended in most sectors. The nature of vocational and technical education as well as workforce development is heavily context-specific, in other words, learning takes place in and through real-world environments and situations.

The field of education and training is also changing with regards to organization and pedagogy. Large American technology giants are introducing plans to improve higher education and TVET by offering flexible online education opportunities to help America recover and rebuild in a situation where tens of millions are unemployed. Similarly, Europe needs quick attention and investment in restructuring access to higher education, TVET and workforce development for millions of students and employees.

3.2. Reform analysis and results

Research shows that in modern society, the knowledge society, it is important to achieve the necessary competencies and accept a new concept of education that is conditioned by the expected learning outcomes, especially in times of information and innovation changes in society. Society and the economy today require the modernization of the education system and a high degree of its harmonization with the needs of the economy and the labor market. In order to enable the Republic of Srpska to strengthen the educational and economic system, steps have been taken to improve the existing quality and effectiveness of education through the modernization of modular curricula based on learning outcomes.

The employment strategy adopted by the Government clearly emphasizes the need to implement economic reforms and increase employment, as key factors in the knowledge-based economy, and in order to implement it, one of the crucial moments is to connect education and the labor market. Qualitative analysis of the necessary competencies for the labor market, the number of employees, the profile of the required staff and general analysis of the local community market are the basis for the program contents of secondary vocational education, based on knowledge, skills and competencies.

In the previous period in Republic of Srpska, the problems pointed out the inconsistency of labor market needs with the learning outcomes of high school students and graduates. Several years ago, the necessary changes in the enrollment policy in secondary schools and faculties were detected with the aim of directing and improving skills and competencies. This is especially important for tackling unemployment, creating economic growth and ultimately creating a welfare society. In this sense, the existing education system should be improved and mandatory cooperation between secondary vocational schools and those companies and institutions in which professional practice is performed should be ensured. Practical training and gaining work experience while learning are directions that need special attention in the coming period in order to achieve the positive effects of the education system as a generator of economic growth and development.

sada orijentisani na predmet i nedovoljno integrисани u obrazovni proces, kao i činjenicu da nema dovoljno vertikalne i horizontalne mobilnosti, posebno na nivou srednjeg obrazovanja.

Program početne obuke i usavršavanja nastavnika i stručnih saradnika, direktora i onih koji obavljaju stručno-pedagoški i administrativni nadzor u oblasti obrazovanja treba da odgovara savremenim prvcima razvoja obrazovanja. Ishod tog procesa je programska jednakost na visokoškolskim ustanovama, adekvatan i kvalitetan profesionalni razvoj nastavnika, pedagoga i svih aktera u obrazovnom procesu.

Šest glavnih ciljeva/pravaca u kojima će se odvijati reformski procesi detaljno su predstavljeni u daljoj analizi i uključuju sljedeće aktivnosti:

- 1) povećati obuhvat djece predškolskim vaspitanjem i obrazovanjem;

- 2) inovirati program predškolskog vaspitanja i obrazovanja i donijeti nove nastavne planove i programe za učenike osnovnih i srednjih škola;
 - 3) inovirati udžbenike, štampane i digitalizovane, u skladu s novim nastavnim planovima i programima;
 - 4) izmijeniti pristup saznavanju, koji treba da se pomjeri s konцепцијe poučavanja na koncepciju učenja, što će dovesti do operativnih i funkcionalnih znanja kod učenika;
 - 5) obezbijediti programe stručnog usavršavanja vaspitno-obrazovnih radnika;
 - 6) jačati povezanost obrazovanja sa tržistem rada.¹
- Sve pomenute aktivnosti prati usvajanje novih ili izmjena postojećih zakonskih rješenja.

Tabela 1. Glavni pravci i mјere u reformskim procesima

Glavni pravci u reformskim procesima	Mјере
1. Povećati obuhvat djece predškolskim vaspitanjem i obrazovanjem	<ul style="list-style-type: none"> 1.1. Podsticanje javno-privatnog partnerstva u procesu formiranja novih predškolskih ustanova i djelovanju postojećih 1.2. Nastavak izgradnje predškolskih ustanova iz republičkog i budžeta lokalnih zajednica i iz grant sredstava 1.3. Uvođenje stimulativnih mјera za roditelje kroz naknadu (dijela) troškova boravka djece u predškolskoj ustanovi 1.4. Uvođenje besplatnog predškolskog vaspitanja i obrazovanja za djecu sa smetnjama u razvoju i djecu bez roditeljskog staranja 1.5. Kontinuirano obezbjeđivanje stimulativnog okruženja za razvoj djece 1.6. Rekonstrukcija i adaptacija postojećih objekata 1.7. Uskladivanje (dijela) zakonske regulative koja se odnosi na ekonomske aspekte reforme predškolskog vaspitanja i obrazovanja 1.8. Uvođenje poludnevnih i trosatnih predškolskih programa 1.9. Podizanje svijesti roditelja, stručne i ostale javnosti o važnosti i značaju ranog učenja i učešća kroz predškolsko vaspitanje i obrazovanje 1.10. Povezivanje sa prijedlogom mјera populacione politike Republike Sрpske
2. Inovirati program predškolskog vaspitanja i obrazovanja i donijeti nove nastavne planove i programe za učenike osnovnih i srednjih škola	<ul style="list-style-type: none"> 2.1. Modernizacija programa predškolskog vaspitanja i obrazovanja Republike Sрpske 2.2. Definisanje ishoda učenja u sveobuhvatnom razvojnem programu predškolskog obrazovanja, prilagođenom osnovnim karakteristikama različitih poremećaja kod djece Osnovno obrazovanje: 2.3. Razvoj novih planova i programa za osnovno obrazovanje sa fokusom na ishode učenja, sveobuhvatan razvoj i efikasno kontinuirano obrazovanje 2.4. Promjene u organizaciji nastave s ciljem veće podrške razvoju i učenju 2.5. Podsticanje razvoja kompetencija važnih za život u 21. vijeku 2.6. Razvoj kurikulum za učenike sa smetnjama u razvoju koji su prilagođeni osnovnim karakteristikama različitih smetnji kod djece Srednje obrazovanje: 2.7. Izrada kurikulum za srednje stručno obrazovanje i obrazovanje u skladu sa standardima zanimanja i potrebama tržista rada 2.8. Uskladivanje nastavnih programa u srednjem obrazovanju i vaspitanju sa zahtjevima vremena u kojem živimo 2.9. Izrada kurikulum za opšte srednje obrazovanje sa fokusom na ishode učenja koji osiguravaju efikasno kontinuirano obrazovanje i cijeloživotno učenje 2.10. Izrada kurikulum za stručno obrazovanje učenika sa invaliditetom
3. Inovirati udžbenike, štampane i digitalizovane, u skladu sa novim nastavnim planovima i programima	<ul style="list-style-type: none"> 3.1. Donošenje standarda kvaliteta udžbenika 3.2. Kontinuirano promovisanje izrade udžbenika 3.3. Podsticanje razvijanja različitih digitalizovanih materijala 3.4. Izdavanje novih udžbenika u skladu sa udžbeničkim standardom i novim nastavnim programima

¹ Ministarstvo prosvjete i kulture Republike Sрpske

3.2.1. Steps towards primary and secondary education reform in Republic of Srpska

In order to achieve quality education, appropriate to the requirements of economic, cultural and social development of the Republic, the primary development goal should be to improve the educational system of the Republic. Since curricula are one of the basic components of that system, it is necessary to change the existing education programs, because they are now subject-oriented and insufficiently integrated into the educational process, as well as there is not enough vertical and horizontal mobility, especially at the level secondary education.

The program of initial training and education of teachers and professional associates, principals and those who perform professional-pedagogical and administrative supervision in the field of education should correspond to modern directions of education development. The outcome of that process is program equality at higher education institutions, adequate and high-quality professional development of teachers, pedagogues and all actors in the educational process.

The main six goals/directions in which the reform processes will move, are detailed presented in further analysis and comprise:

- 1) Increase the coverage of children with preschool education,
- 2) Innovate the program of preschool education and adopt new curricula for primary and secondary school students,
- 3) Innovate textbooks, printed and digitized, in accordance with the new curricula,
- 4) Change the approach to learning that needs to move from the concept of teaching to the concept of learning that will lead to operational and functional knowledge in students,
- 5) Provide professional development programs for educational workers,
- 6) Strengthen the connection between education and the labor market.¹

All of the mentioned activities are accompanied by the adoption of new or amendments to existing legal solutions.

Table 1. Main directions and measures in reform processes

Main directions in reform processes	Measures
1 Increase the coverage of children with preschool education	<ul style="list-style-type: none"> 1.1. Encouraging public-private partnership in the process of forming new preschool institutions and the operation of existing ones, 1.2. Continuation of construction of preschool institutions from the national and local community budgets and from grant funds, 1.3. Introduction of stimulative measures for parents through compensation (part) of the costs of children's stay in a preschool institution, 1.4. Introduction of free pre-school education for children with disabilities and children without parental care, 1.5. Continuous provision of a stimulating environment for children's development, 1.6. Reconstruction and adaptation of existing buildings, 1.7. Harmonization (part) of legislation related to the economic aspects of the reform of preschool education, 1.8. Introduction of half-day and three-hour preschool programs, 1.9. Raising awareness of parents, professionals and the general public about the importance and significance of early learning and participation through preschool education, 1.10. Linking to the proposal of population policy measures of the Republic of Srpska.
2 Innovate the program of preschool education and adopt new curricula for primary and secondary school students	<ul style="list-style-type: none"> 2.1. Modernization of the Preschool Education Program of the Republic of Srpska, 2.2. Defining learning outcomes in a comprehensive development program of preschool education, adapted to the basic characteristics of various disorders in children. Basic upbringing and education 2.3. Development of emerging plans and programs for primary education with a focus on learning outcomes, comprehensive development and effective continuing education, 2.4. Changes in the organization of teaching with the aim of greater support for development and learning, 2.5. Encouraging the development of competencies important for life in the 21st century, 2.6. Developing curricula for students with disabilities that are adapted to the basic characteristics of various disabilities in a child. Secondary education and upbringing 2.7. Development of curricula for secondary vocational education and upbringing in accordance with occupational standards and labor market needs, 2.8. Harmonization of curricula in secondary education and upbringing with the requirements of the times in which we live, 2.9. Development of curricula for general secondary education and upbringing with a focus on learning outcomes that ensure effective continuing education and lifelong learning, 2.10. Developing a curriculum for vocational education and upbringing of students with disabilities
3 Innovate textbooks, printed and digitized, in accordance with the new curricula	<ul style="list-style-type: none"> 3.1. Adoption of textbook quality standards, 3.2. Continuous promotion of textbook development, 3.3. Encouraging the development of various digitized materials, 3.4. Publishing new textbooks in accordance with the textbook standard and new curricula.

¹ Ministry of education and culture of Republic of Srpska

4.	Izmijeniti pristup saznavanju, koji treba da se pomjeri s koncepcije poučavanja na koncepciju učenja, što će dovesti do operativnih i funkcionalnih znanja kod učenika	4.1. Izmjena upisne politike na nastavničkim fakultetima i inoviranje programa inicijalnog obrazovanja nastavnika 4.2. Podsticanje korištenja aktivnih oblika učenja/nastave (interaktivna nastava, problemska, projektna, tematska nastava...) i veće metodičko-didaktičke fleksibilnosti u nastavi 4.3. Uvođenje novog, jedinstvenog pristupa izučavanju predmeta od nacionalnog značaja, sa Srbijom 4.4. Unapređenje procesa praćenja učenja i napredovanja učenika 4.5. Unapređenje procedura praćenja razvoja i ponašanja učenika 4.6. Usklađivanje pravne regulative sa potrebama i zahtjevima nastave usmjerene na učenika i učenje
5.	Obezbijediti programe stručnog usavršavanja vaspitno-obrazovnih radnika	5.1. Donošenje standarda rada nastavnika, vaspitača, stručnih saradnika i direktora 5.2. Uspostavljanje sistema vrednovanja kvaliteta rada vaspitno-obrazovnih radnika i direktora 5.3. Uspostavljanje sistema akreditacije programa stručnog usavršavanja vaspitno-obrazovnih radnika i direktora 5.4. Razvijanje koncepta licenciranja direktora vaspitno-obrazovnih ustanova 5.5. Jačanje partnerstva škola i vrtića sa visokoškolskim ustanovama 5.6. Promocija primjera dobre prakse 5.7. Uključivanje nevladinog sektora i lokalnih zajednica kroz različite oblike podrške

Izvor: adaptacija autora, Ministarstvo prosvjete i kulture, <https://www.vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/mpk/Documents>

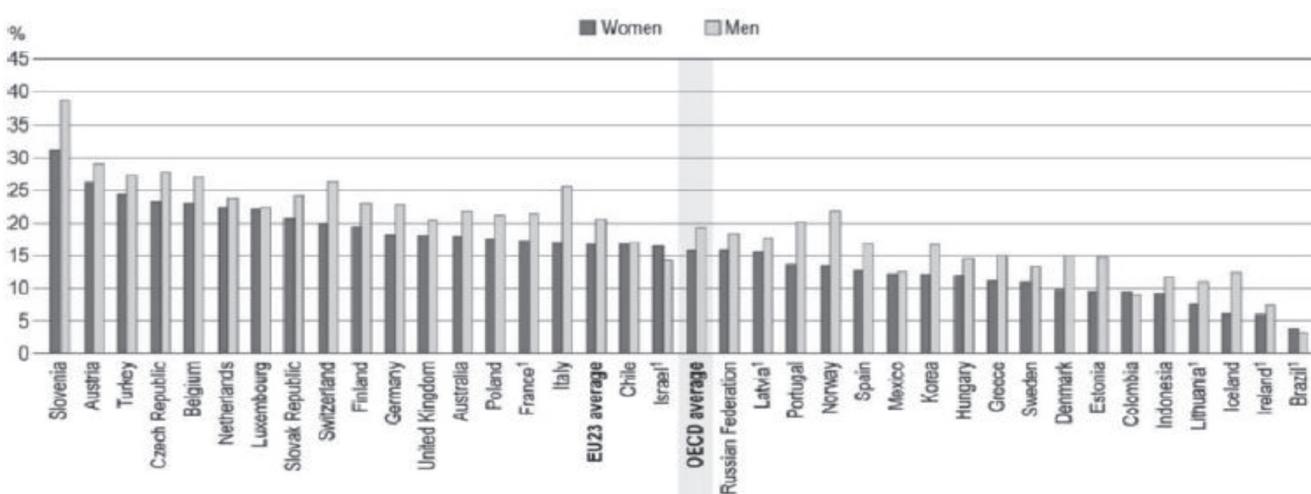
Ključna uloga je u inovativnom programu i usvajanju novih nastavnih planova i programa za učenike osnovnih i srednjih škola. Veoma važan instrument za dalji napredak vidi se u konceptu dualnog obrazovanja, kao potvrđenom instrumentu ekonomskog razvoja. Prednosti dualnog modela obrazovanja su višestrukе, kako za učenike, tako i za cijelokupnu ekonomiju i društvo. Dualni sistem obrazovanja, koji primjenjuju mnoge evropske zemlje, doveo je do toga da je nezaposlenost mladih u tim zemljama manja od 10 posto.

U Republici Srpskoj većina stanovništva se obrazuje u srednjem stručnom obrazovanju, a istovremeno dolazi do čestih promjena na tržištu rada, te se kvalitet srednjeg stručnog obrazovanja mora kontinuirano unapređivati. Da bi učenici usvojili znanja, stekli vještine i kompetencije potrebne za rad i zapošljavanje, pristupilo se modernizaciji modularnih nastavnih planova i programa zasnovanih na ishodima učenja. Modernizacija nastave podrazumijeva veću zastupljenost praktične nastave koja se obavlja u školi ili kod poslodavaca. Suština poboljšanja i jačanja modularne metodologije u nastavnim planovima i programima jeste u obezbjeđivanju vertikalne i horizontalne prohodnosti unutar programa u okviru jedne ili više

struka. Povećanje kapaciteta stručnih škola, kao direktni odgovor na potrebe tržišta, ostvariće se kroz preraspodjelu fonda časova kojim bi se povećao broj časova praktične nastave. Mentorji koji provode učenike kroz složen proces praktične obuke moraju biti jednakо kvalitetno obučeni i sa profesionalne strane i sa pedagoškog aspekta.

Sveukupni cilj jačanja srednjeg stručnog obrazovanja jeste iskoristiti potencijale koje klasično dualno obrazovanje pruža jednom društvu. Tokom dualnog obrazovanja stiču se sve potrebne kompetencije, vještine i znanja, a u skladu sa potrebama tržišta rada. Ovaj vid obrazovanja omogućava užu povezanost privrednih potreba i obrazovnog sistema, a rano usmjeravanje učenika u sektore koji će im omogućiti brže zapošljavanje i bolju profesionalnu karijeru danas se ističu kao prioritet. Praksa iz evropskih zemalja pokazuje da je dualni sistem obrazovanja izuzetno uspješan i da učeniku nudi perspektivu za napredovanje u karijeri i priprema ga za budući samostalni život. Sa stanovišta poslodavaca i privrede, ovim vidom obrazovanja smanjuje se nezaposlenost i generiše bazu za dalji ekonomski rast i razvoj države (Topić Pavković, 2019).

Slika 1. Stručno obrazovanje i osposobljavanje u 2017. godini (mladi od 15 do 24 godine, prema polu)



Izvor: OECD (2019)

4	Change the approach to learning that needs to move from the concept of teaching to the concept of learning that will lead to operational and functional knowledge in students	4.1. Changing the enrollment policy at teacher training colleges and innovating the initial teacher education program, 4.2. Encouraging the use of active forms of learning / teaching (interactive teaching, problem-based, project, thematic teaching ...) and greater methodological and didactic flexibility in teaching, 4.3. Introduction of a new, unique approach to the study of subjects of national importance, with Serbia, 4.4. Improving the process of monitoring student learning and progress, 4.5. Improving procedures for monitoring student development and behavior, 4.6. Harmonization of legal regulations with the needs and requirements of teaching focused on students and learning.
5	Provide professional development programs for educational workers	5.1. Adoption of work standards for teachers, educators, professional associates and principals, 5.2. Establishment of a system for evaluating the quality of work of educational workers and principals, 5.3. Establishment of an accreditation system for professional development programs for educational workers and principals, 5.4. Developing the concept of licensing directors of educational institutions, 5.5. Strengthening the partnership of schools and kindergartens with higher education institutions, 5.6. Promotion of examples of good practice, 5.7. Involvement of the non-governmental sector and local communities through various forms of support.

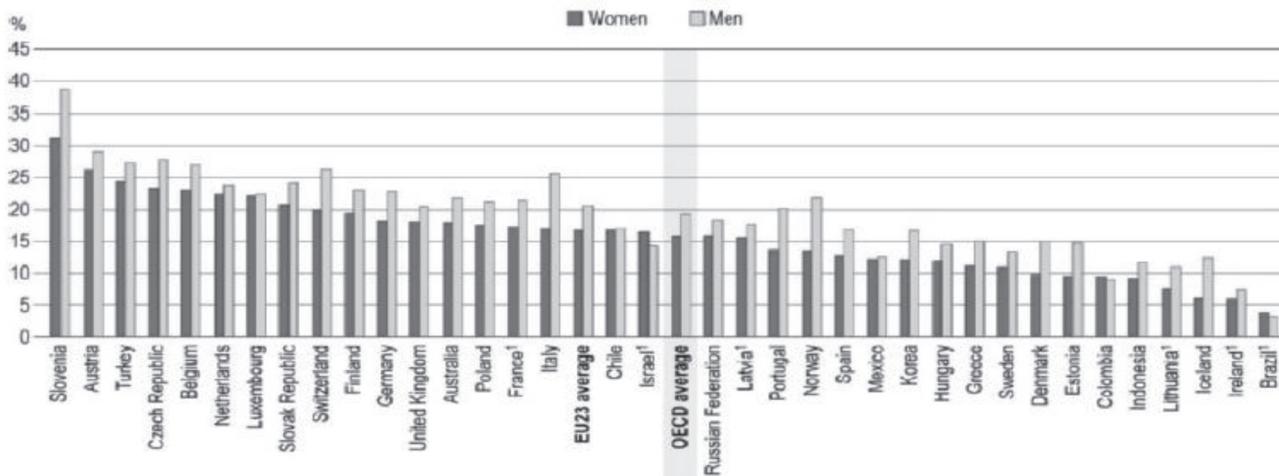
Source: adapted by author, Ministry of Education and Culture, <https://www.vladars.net/sr-SP-Cyril/Vlada/Ministarstva/mpk/Documents>

The key role is in innovative program and adoption of new curricula for primary and secondary school students. A very important instrument for further progress is seen in concept of dual education as an confirmed instrument of economic development. The advantages of the dual model of education are multiple, both for students and for the entire economy and society. The dual system in education, applied by many European countries, has led to youth unemployment being less than 10 percent in those countries. In the Republic of Srpska, the majority of the population is educated in secondary vocational education, and at the same time there are frequent changes in the labor market, so the quality of secondary vocational education must be continuously improved. In order for students to acquire knowledge, acquire skills and competencies needed for work and employment, the modernization of modular curricula based on learning outcomes was approached.

Modernization of teaching implies a greater representation of practical classes that are conducted at school or at employers. The essence of improving and strengthening the modular methodology in curricula is in providing vertical and horizontal mobility in program within one or more professions. Increasing the capacity of

vocational schools as a direct response to the needs of the market will be achieved through the redistribution of the fund of classes which would increase the number of hours of practical classes. Mentors who guide students through a complex process of practical training must be equally well trained both professionally and from a pedagogical point of view. The overall goal of strengthening secondary vocational education is to use the potentials that classical dual education provides to a society. During dual education, all the necessary competencies, skills and knowledge are acquired in accordance with the needs of the labour market. This type of education enables a closer connection between economic needs and the education system, and early referral of students to sectors that will enable them faster employment and a better professional career stand out today as a priority. Practice from European countries shows that the dual education system is extremely successful and that it offers the student a perspective for career advancement and prepares him for a future independent life. From the point of view of employers and the economy, this type of education reduces unemployment and generates a basis for further economic growth and development of the state. (Topić-Pavković, 2019)

Figure 1. Vocational education and training in 2017 (15-24 year-olds, by gender)



Source: OECD (2019)

Stručno obrazovanje i osposobljavanje mogu igrati presudnu ulogu u suzbijanju nezaposlenosti mladih. Tokom ekonomskog pada, poput recesije 2008. godine, ovaj model se pokazao kao snažan alat u rješavanju problema nezaposlenosti u zemljama poput Austrije, Njemačke i Švicarske. Ove zemlje efikasno koriste programe stručnog osposobljavanja, posebno usmjereni na potencijalni nastavak školovanja (Dolado, 2015).

3.2.2. Ciljevi unapređenja visokog obrazovanja u Republici Srpskoj

Prema pokazateljima OECD-a, srž intelektualnog kapitala je znanje, a razvoj i prenos znanja primarni je cilj visokog obrazovanja. Tercijarno obrazovanje stoga igra centralnu ulogu u pomaganju ljudima i društvima da se nose sa snažnim promjenama današnjice. Tražnja za vještinama i kompetencijama višeg obrazovanja je i ekonomski i socijalna. Stopa zaposlenosti odraslih sa tercijarnom diplomom je za oko devet procentnih poena viša nego kod onih sa višim srednjim obrazovanjem, a oni zarađuju u prosjeku 57% više. Takođe je vjerovatnije da će odrasli sa tercijarnim obrazovanjem biti boljeg zdravlja, brinuti se o životnoj sredini ili učestvovati u javnom životu (OECD, 2019).

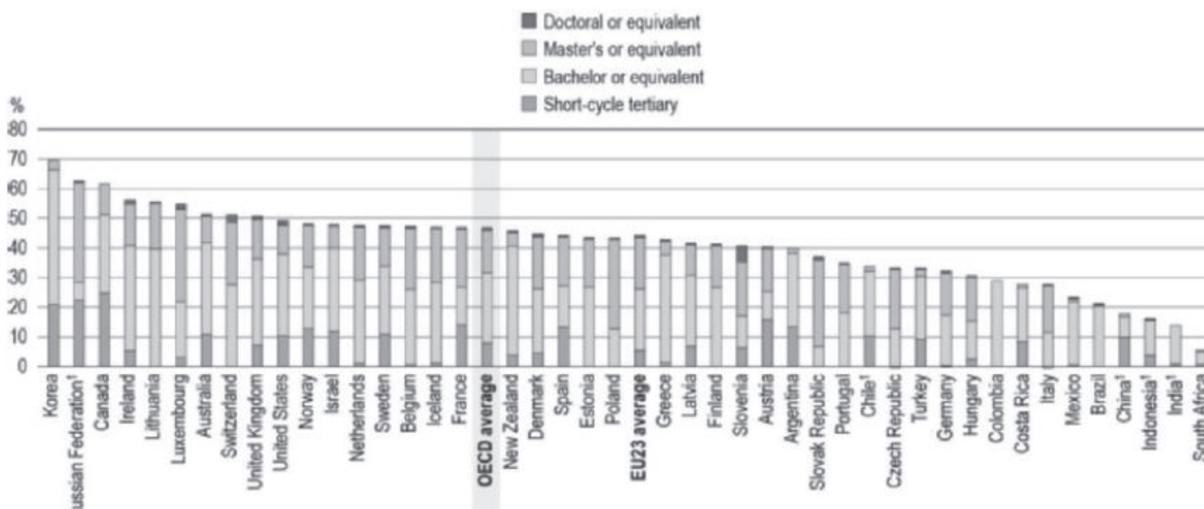
U Republici Srpskoj, planirane i predstavljene mjere za poboljšanje kvaliteta visokog obrazovanja sastoje se od tri faze: prva faza je faza analize stanja ier trenutni problemi pokazuju inertnost, nefleksibilnost i nepristupačnost.

nost, neprilagođenost globalnim tržišnim trendovima i zastarjele nastavne programe. Ovaj proces će dovesti do prvih koraka ka poboljšanju situacije u visokom obrazovanju. Druga faza promjena je takozvani period konsolidacije. A dugoročni period transformacije i reforme sistema visokog obrazovanja odnosi se na period do 2035. godine i predstavlja sistemski rješenja.

Kroz ovu reformu glavni cilj je pokušati približiti tržište rada univerzitetima, uvesti što više prakse na sve fakultete i učiniti studentsko znanje nakon diplome konkurentnim na tržištu i na međunarodnom nivou. Detaljne mjere unapređenja kvaliteta nastave na fakultetima, unapređenja akademskog osoblja, studentskog standarda, mobilnosti studenata i profesora, definisane su novim Zakonom o visokom obrazovanju Republike Srpske (Ministarstvo za naučnotehnološki razvoj, visoko obrazovanje i informaciono društvo, 2020).

Prema zvaničnim podacima, broj učenika koji upisuju tercijarno obrazovanje globalno je kontinuirano rastao u posljednje dvije decenije i očekuje se da će nastaviti rasti do 2030. godine (OECD, 2018). Udio mladih odraslih osoba u visokom obrazovanju (starosti 25–34 godine) povećao se sa 35% u 2008. na 44% u 2018. Ovaj porast mogao bi odražavati porast potražnje za kvalifikovanom radnom snagom, veću potražnju za tercijarnim obrazovanjem, povećanje bogatstva i sve veći broj politika finansijske podrške za promociju pristupa tercijarnom obrazovanju (Owens, 2017).

Slika 2. Distribucija osoba 25–34 godine sa tercijarnim obrazovanjem u 2018. godini (nivo tercijarnog obrazovanja)



Izvor: OECD (2019)

Prema podacima, u Češkoj, Francuskoj, Mađarskoj, Italiji, Luksemburgu, Poljskoj, Portugalu, Ruskoj Federaciji, Slovačkoj, Sloveniji i Španiji, obrazovani sa magistarskim ili ekvivalentnim diplomama čine najveći udio odraslih sa tercijarnim obrazovanjem. To bi moglo odražavati različite obrasce organizacije tercijarnog obrazovanja u zemljama, s tim što neke zemlje imaju jaču tradiciju dugih programa prvog stepena koji vode direktno do magistarske kvalifikacije. U prosjeku, u zemljama OECD-a oko 1% mlađih odraslih osoba ima doktorsku ili ekvivalentnu kvalifikaciju, iako je u Luksemburgu, Švicarskoj i Sjedinjenim Državama taj udio oko 2%. Slovenija ima najveći udio odraslih sa doktorskom ili ekvivalentnom kvalifikacijom, pri čemu udio odraslih koji imaju kvalifikaciju na ovom nivou iznosi oko 5% (OECD, 2019).

Pregled pokazuje da mladi sa najnaprednjim kvalifikacijama (magisterske i doktorske ili ekvivalentne studije) uglavnom imaju najbolje izglede za zaposlenje. U nekim zemljama prednost u zapošljavanju za dodatni korak sticanja magisterske ili ekvivalentne kvalifikacije je značajna, dostižući najmanje 10 procenntih poena u Argentini, Čileu, Luksemburgu, Slovačkoj i Turskoj. Mladi doktorandi takođe imaju značajne ishode zapošljavanja, sa stopom zaposlenosti od 90% ili više

u 16 od 26 zemalja sa dostupnim podacima. Doktorska obuka zahtijeva znatna ulaganja kako pojedinaca tako i vlasta, kao ključnu tačku ulaska u karijeru u akademskom istraživanju. Kandidati za doktorat takođe imaju tendenciju da se intenzivnije specijalizuju za mnoga polja studija nauke i tehnologije s velikom potražnjom na tržistu rada.

Dužina i kvalitet školovanja koje pojedinci pohađaju u različitim zemljama zavise od brojnih faktora koji uključuju nivo ekonomskog, kulturnog, tehnološkog i socijalnog razvoja. To takođe ima uticaj na njihov prelaz iz škole na tržište rada, kao i uslovi na tržištu rada, ekonomsko okruženje i kulturni kontekst. U nekim zemljama mlađi ljudi tradicionalno završavaju obrazovanje prije nego što traže posao, dok su u drugim zemljama obrazovanje i zapošljavanje istovremeni.

ZAKLJUČAK

Kvalitetan sistem obrazovanja za društvo znanja, sa jednakim mogućnostima i razvojem svakog pojedinca, dopriniće održivom

Vocational education and training can play a crucial role in tackling youth unemployment. During economic downturns, such as the 2008 recession, they have proved to be a powerful tool in addressing youth unemployment in countries such as Austria, Germany and Switzerland. All three have efficiently used vocational training programmes, particularly targeted at potential school dropouts (Dolado, 2015).

3.2.2. Higher education progress goals in Republic of Srpska

According to the OECD indicators the core of intellectual capital is knowledge, and the development and transfer of knowledge is the primary mission of higher education. Tertiary education thus plays a central role in helping people and societies to cope with profound changes. The demand for higher-order skills and competencies is both economic and social. The employment rate of adults with a tertiary degree is about 9 percentage points higher than for those with upper secondary education only, and they earn on average 57% more. Tertiary-educated adults are also more likely to be in good health, take care of the environment, or participate in public life. (OECD, 2019)

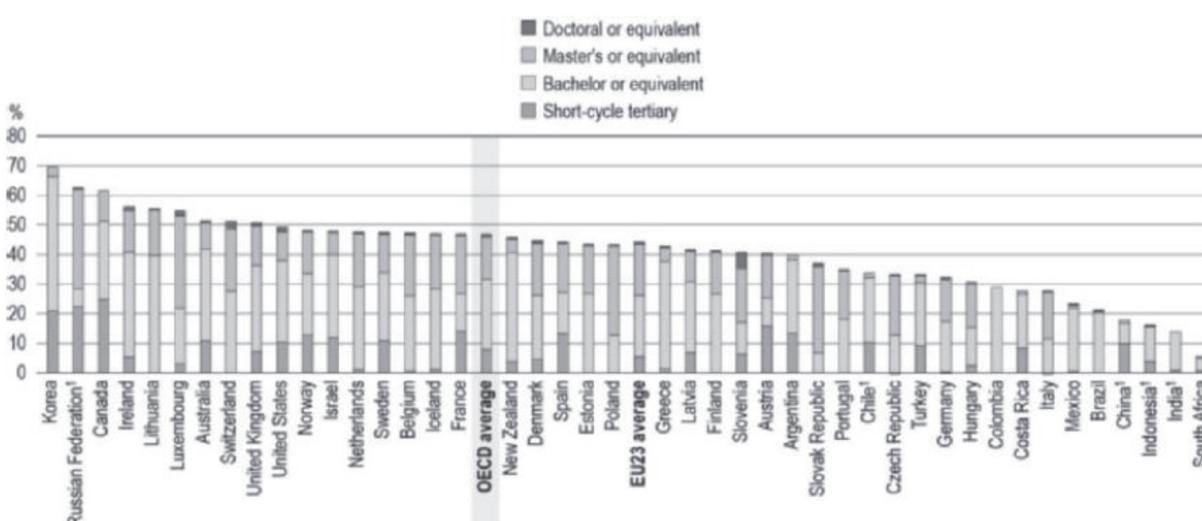
In Republic of Srpska, the planned and presented measures for higher education quality improvement consists of three phases: the first phase is the phase of the analysis of the situation since the current problems show inertia, inflexibility, lack of adaptation

to global market trends and outdated curricula. This process will lead to the improvement of the situation in higher education. The second stage of changes is so called a period of consolidation. And the long-term period of transformation and reform of the higher education system will refer to the period until 2035, and it represents system solutions. Through this reform the main goal is to try to bring the labor market closer to the university, introduce as many practices as possible at all faculties, and to make the student's knowledge after graduation competitive on the market and on international level.

Detailed measures of improving the quality of teaching at Faculties, advancement of academic staff, student standards, mobility of students and professors, are defined by the new Law on Higher Education in Republic of Srpska (Ministry of Scientific and Technological development, Higher Education and Information Society, 2020).

The number of students pursuing tertiary education globally has grown continuously over the past two decades and is expected to continue growing through to 2030 (OECD, 2018). The share of tertiary-educated young adults (aged 25–34) in OECD increased from 35% in 2008 to 44% in 2018. This increase could reflect a rise in demand for skilled labour, a greater demand for tertiary education, increasing wealth and the growing number of financial support policies to promote access to tertiary education (Owens, 2017).

Figure 2. Distribution of 25–34 year-olds with tertiary education in 2018 (level of tertiary education)



Source: OECD (2019)

In the Czech Republic, France, Hungary, Italy, Luxembourg, Poland, Portugal, the Russian Federation, the Slovak Republic, Slovenia and Spain, those with a master's or equivalent degree account for the largest share of adults with tertiary education. This might reflect different patterns of organisation of tertiary education across countries, with some countries having a stronger tradition of long first degree programmes that lead directly to a master's qualification. On average across OECD countries, about 1% of younger adults have a doctoral or equivalent qualification, although in Luxembourg, Switzerland and the United States the proportion is around 2%. Slovenia has the largest share of adults with a doctoral or equivalent qualification, where the share of adults holding a qualification at this level is about 5% (OECD, 2019).

The review shows that young adults with the most advanced qualifications (master's and doctoral or equivalent) generally have the best employment prospects. In most countries with available data, 25–34 year-old adults with a master's or equivalent qualification have employment rates at least as high as those with bachelor's or equivalent. In some countries, the employment advantage for

the additional step of earning a master's or equivalent qualification is considerable, reaching at least 10 percentage points in Argentina, Chile, Luxembourg, the Slovak Republic and Turkey. Young doctorate holders also have strong employment outcomes, with employment rates at 90% or higher in 16 of the 26 countries with available data. Doctoral training requires a substantial investment from both individuals and governments, as the key entry point into a career in academic research. Doctoral candidates also tend to specialise more heavily in many of the science and technology-related fields of study in high demand in the labour market.

The length and the quality of the schooling that individuals receive in different countries depends on a number of factors that include the level of economic, cultural, technological and social development. It also has an impact on their transition from education to work, as do labour-market conditions, the economic environment and the cultural context. In some countries, young people traditionally complete education before they look for work, while in other countries education and employment are concurrent.

ekonomskom i socijalnom razvoju Republike Srpske. Izuzetno je važna saradnja svih aktera uključenih u modeliranje i unapređenje obrazovnog i ekonomskog sistema i kreiranja obrazovnih politika. Koordinisani i sistematski rad na unapređenju kvaliteta obrazovnih politika i reformi jeste generator i instrument ekonomskog razvoja Republike Srpske.

Osnovni cilj i odgovornost Republike Srpske je da predškolske ustanove i škole budu sigurna i podsticajna mesta za razvoj i učenje sve djece. Škole bi trebalo da budu mesta na kojima se planirano i organizovano brine o djeci i mладима, što im omogućava da stiču i razvijaju nova saznanja i ideje. To će im pomoći da nauče i donose dobre odluke za sebe i druge, da budu aktivni i produktivni članovi porodice i društva u kojem će u potpunosti izraziti vlastitu kreativnost i potencijal.

Svrha obrazovnog sistema je da preuzeme ključnu ulogu u razvoju društva kroz kvalitetno obrazovanje, kao resurs za razvoj ekonomije i društva u cjelini. To će se postići poboljšanim obrazovnim politikama, otvorenošću prema drugim sistemima koji mogu dovesti do kreativnog razmišljanja na osnovu kojeg će mlada osoba znati kako i gdje pronaći relevantne informacije, kako i kada ih koristiti. Nekoliko mjera i preporuka definisano je u Akcionom planu za razvoj i provođenje kvalifikacionog okvira u Bosni i Hercegovini. Osnovni okvir kvalifikacija za Bosnu i Hercegovinu (BQF) važan je razvoj ka boljem kvalitetu obrazovanja u Bosni i Hercegovini, povećanom pristupu cijeloživotnom učenju i relevantnijim kvalifikacijama za građane i tržište rada.

Glavni cilj unapređenja obrazovanja u Republici Srpskoj jeste približiti tržište rada školama i univerzitetima, uvesti što više prakse i učiniti učenička i studentska znanja konkurentnima na tržištu i na međunarodnim nivou. To podrazumijeva podsticajnije okruženje za učenje, moderna i raznolika nastavna sredstva i izvore znanja. Sve to mora biti usklađeno sa dostignućima naučnog i tehnološkog razvoja, koja uz savremene i aktivne oblike nastave i učenja omogućavaju i funkcionalnije znanje. Podrazumijeva se i partnerstvo s porodicom, saradnja s lokalnom zajednicom, a prvenstveno se podrazumijeva kompetentan nastavnik, sposobljen da sve navedeno adekvatno uključi, poveže i usmjeri u jednom smjeru, prema učenicima i studentima.

IZVORI

1. Benhabib, J., Spiegel, M., M. (2005). Human Capital and Technology Diffusion. *Handbook of Economic Growth*, edition 1, volume 1, chapter 13, pages 935–966, Elsevier. Preuzeto 10. 11. 2020. sa: <https://ideas.repec.org/h/eee/grochp/1-13.html>
2. Dolado, J. (2015). *No Country for Young People? Youth Labour Market Problems in Europe*. Centre for Economy Policy Research. Preuzeto 25. 10. 2020. sa: <https://re.public.polimi.it/retrieve/handle/11311/1116782/456114/Youth%20unemployment%20in%20Greece%20%28CEPR%202015%29.pdf>
3. European Centre for the Development of Vocational Training (2020). Preuzeto 14. 10. 2020. sa: https://www.cedefop.europa.eu/files/9149_en.pdf
4. European Training Foundation (2020). Country Strategy paper 2020 update: Bosnia and Herzegovina. Preuzeto 11. 11. 2020. sa: https://www.etf.europa.eu/sites/default/files/_document/Country%20Strategy%20Paper%202017-20%20Actions%202020_Bosnia%20and%20Herzegovina%20.pdf
5. Heckman, J. J., Lochner, J. L., Todd, E. P. (2008). *Earnings Functions and Rates of Return*. Preuzeto 22. 8. 2020. sa: <http://ftp.iza.org/dp3310.pdf>
6. Howitt, Peter (2008). *Endogenous Growth Theory*. Preuzeto 11. 11. 2020. sa: https://www.researchgate.net/publication/311960681_Endogenous_Growth_Theory10.1057/978-1-349-95121-5_2545-1
7. Krueger, B., A., Lindahl, M. (2000). *Education for Growth: Why and For Whom?* Preuzeto 14. 10. 2020. sa: <https://www.nber.org/papers/w7591>
8. Lucas, R. (1998). On the Mechanics of Economic Development. *Journal of Monetary Economics*, Volume 22, Issue 1, p. 3–42. Preuzeto 18. 11. 2020. sa: <https://www.sciencedirect.com/science/article/abs/pii/0304393288901687>
9. Mankiw, G., Romer, D., Weil, N. D. (1992). *A contribution to the empirics of economic growth*. Preuzeto 14. 10. 2020. sa: https://eml.berkeley.edu/~dromer/papers/MRW_QJE1992.pdf
10. Mincer, J. (1975). *Education, Experience, and the Distribution of Earnings and Employment: An Overview*. Chapter pages in book p. 71–94. Preuzeto 14. 10. 2020. sa <http://www.nber.org/chapters/c3693>
11. Ministry of education and culture of Republic of Srpska (2020). Action plan for the implementation of reform processes in the field of preschool, primary and secondary education. Preuzeto 19. 10. 2020. sa: <https://www.vladars.net/sr-SP-Cyril/Vlada/Ministarstva/mpk/Documents>
12. Ministry of Scientific and Technological Development, Higher Education and Information Society of Republic of Srpska. (2020). Legal frame. Preuzeto 14. 10. 2020. sa: <https://www.vladars.net/eng/vlada/ministries/MST/legalframe/Pages/default.aspx>
13. OECD (2018). *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris. Preuzeto 19. 10. 2020. sa: <https://dx.doi.org/10.1787/eag-2018-en>
14. OECD (2019). *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris. Preuzeto 19. 10. 2020. sa: <https://dx.doi.org/10.1787/eag-2019-en>
15. Owens, T. (2017). Higher education in the sustainable development goals framework. *European Journal of Education*. Preuzeto 22. 1. 2020 sa: <http://dx.doi.org/10.1111/ejed.12237>
16. Ozturk, I. (2001). The Role of Education in Economic Development: A Theoretical Perspective. *SSRN Electronic Journal*. 10.2139/ssrn.1137541. Preuzeto 18. 11. 2020. sa: https://www.researchgate.net/publication/24116294_The_Role_of_Education_in_Economic_Development_A_Theoretical_Perspective/citation/download
17. Perotti, R. (1993). Political Equilibrium Income Distribution, and Growth. *Review of Economic Studies*, 60. Preuzeto 24. 1. 2019. sa: <https://www.jstor.org/stable/2298098?seq=1>
18. Psacharopoulos, George, Patrinos, Harry (2004). Returns to investment in education: a further update, *Education Economics*, 12, issue 2, p. 111–134. Preuzeto 22. 8. 2020. sa https://econpapers.repec.org/article/tafedecon/v_3a12_3ay_3a2004_3ai_3a2_3ap_3a111-134.htm
19. Sianesi, B., Van Reenen, J. (2003). The Returns to Education: A Review of the Macro-Economic Literature. CEE Discussion Papers 0006, Centre for the Economics of Education, LSE. Preuzeto 4. 4. 2020. sa: <http://www1.worldbank.org/publicsector/pe/pfma07/Sianesi.pdf>
20. Topić Pavković, B. (2019). Koncept dualnog obrazovanja kao instrument ekonomskog razvoja, *Zbornik radova* 14.

CONCLUSION

A quality system of education for a knowledge society, with equal opportunities and development of each individual will contribute to the sustainable economic and social development of the Republic of Srpska. The cooperation of all actors involved in modeling and improving the educational and economic system is extremely important. Coordinated and systematic work on the improvement of the quality of educational policies and reforms is a generator and an instrument of economic development of the Republic of Srpska.

The main goal and liability of the Republic of Srpska is to have preschool institutions and schools that are safe and stimulating places for development and learning of all children. Schools should be places where children and young people are cared for in a planned and organized way, which enable them to know, acquire and develop new findings and knowledge. That will help them to learn and to make good decisions for themselves and others, to be active and productive members of the family and society in which they will fully express their own creativity and potential.

The purpose of the education system is to take a key role in the development of society through quality education, as a resource for the development of the economy and society as a whole. This will be achieved through improved educational policies, openness to other systems that can lead to creative thinking based on which the young person will know how and where to find relevant information, how and when to use it. The several measures and recommendations are defined in Action plan for the development and implementation of the qualifications framework in Bosnia and Herzegovina. The baseline Bosnia and Herzegovina qualifications framework (BQF) is an important development towards better education quality in Bosnia and Herzegovina, increased access to lifelong learning and more relevant qualifications for citizens and the labour market. Part of the country's efforts to gain EU membership, work on the BQF is seen as creating the conditions for increased mobility, flexibility and competitiveness of the labour force.

The main goal for all levels of education in Republic of Srpska is to try to bring the labor market closer to the schools and universities, introduce as many practices as possible and to make the pupils and student's knowledge after graduation competitive on the market and on international level.

This implies a more stimulating learning environment, modern and diverse teaching aids and sources of knowledge. All this must be harmonized with the achievements of scientific and technological development, which, along with modern and active forms of teaching and learning, enable more functional knowledge. It also implies partnership with the family, cooperation with the local community, connection with the labor market, and primarily implies a competent teacher, trained to adequately incorporate, connect and direct all of the above in one direction, towards the pupils and students.

REFERENCES

1. Benhabib, J., and Spiegel, M., M. (2005). Human Capital and Technology Diffusion. *Handbook of Economic Growth*, edition 1, volume 1, chapter 13, pages 935-966, Elsevier. Retrieved November, 10th, 2020 from <https://ideas.repec.org/h/eee/grochp/1-13.html>
2. Dolado, J. (2015). *No Country for Young People? Youth Labour Market Problems in Europe*. Centre for Economy Policy Research.
3. European Centre for the Development of Vocational Training. (2020). Retrieved from 14.10.2020: https://www.cedefop.europa.eu/files/9149_en.pdf
4. European Training Foundation. (2020). Country Strategy paper 2020 update: Bosnia and Herzegovina. Retrieved from 11.11.2020: https://www.etf.europa.eu/sites/default/files/document/Country%20Strategy%20Paper%202017-20%20Actions%202020_Bosnia%20and%20Herzegovina%20.pdf
5. Heckman, J. J., Lochner, J.L. and Todd, E. P. (2008). *Earnings Functions and Rates of Return*. Retrieved from 22.08.2020: <http://ftp.iza.org/dp3310.pdf>
6. Mincer, J. (1975). Education, Experience, and the Distribution of Earnings and Employment: An Overview. Chapter pages in book p.71-94. Retrieved from 14.10.2020: <http://www.nber.org/chapters/c3693>
7. Howitt, Peter. (2008). *Endogenous Growth Theory*. Retrieved from 11.11.2020: https://www.researchgate.net/publication/311960681_Endogenous_Growth_Theory10.1057/978-1-349-95121-5_2545-1.
8. Krueger, B., A. and Lindahl, M. (2000). *Education for Growth: Why and For Whom?* Retrieved from 14.10.2020: <https://www.nber.org/papers/w7591>
9. Lucas, R. (1998). On the Mechanics of Economic Development. *Journal of Monetary Economics*, Volume 22, Issue 1, p. 3-42. Retrieved from 18.11.2020: <https://www.sciencedirect.com/science/article/abs/0304393288901687>
10. Mankiw, G., Romer, D. and Weil, N., D. (1992). *A contribution to the empirics of economic growth*. Retrieved from 14.10.2020: https://eml.berkeley.edu/~dromer/papers/MRW_QJE1992.Pdf
11. Ministry of education and culture of Republic of Srpska. (2020). Action plan for the implementation of reform processes in the field of preschool, primary and secondary education. Retrieved from 19.10.2020: <https://www.vladars.net/sr-SP-Cyril/Vlada/Ministarstva/mpk/Documents>
12. Ministry of Scientific and Technological Development, Higher Education and Information Society of Republic of Srpska. (2020). Legal frame. Retrieved from 14.10.2020: <https://www.vladars.net/eng/vlada/ministries/MST/legalframe/Pages/default.aspx>
13. OECD. (2018). *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris. Retrieved from 19.10.2020: <https://dx.doi.org/10.1787/eag-2018-en>.
14. OECD. (2019). *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris. Retrieved from 19.10.2020: <https://dx.doi.org/10.1787/eag-2019-en>.
15. Owens, T. (2017). Higher education in the sustainable development goals framework. *European Journal of Education*. Retrieved from 22.01.2020: <http://dx.doi.org/10.1111/ejed.12237>.
16. Ozturk, I. (2001). The Role of Education in Economic Development: A Theoretical Perspective. *SSRN Electronic Journal*. 10.2139/ssrn.1137541. Retrieved from 18.11.2020: https://www.researchgate.net/publication/24116294_The_Role_of_Education_in_Economic_Development_A_Theoretical_Perspective

- međunarodnog simpozijuma o korporativnom upravljanju – Održivi razvoj malih ekonomija u uslovima industrijske revolucije, str. 437–451, 22–24. 5. 2019, Teslić, Banja Vrućica. Banja Luka: Savez računovođa i revizora Republike Srpske.
21. United Nations (2019). Implementation of education for sustainable development in the framework of the 2030 Agenda for Sustainable Development. Preuzeto 20. 11. 2020. sa: <https://www.un.org/sustainabledevelopment/goal-of-the-month-archive/goal-of-themonth-february-2019-quality-education/>
22. UNESCO (2019). Implementation of education for sustainable development in the framework of the 2030 Agenda for Sustainable Development. Preuzeto 20. 11. 2020. sa: <https://undocs.org/en/A/74/258>
23. Wood, A. (1994). *North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-Driven World*. IDS Development Studies Series, Oxford University Press. Preuzeto 4. 4. 2020. sa: <https://econpapers.repec.org/bookchap/oxpobooks/9780198290155.htm>



- Education_in_Economic_Development_A_Theoretical_Perspective/citation/download
17. Perotti, R. (1993). Political Equilibrium Income Distribution, and Growth. *Review of Economic Studies*, 60. Retrieved from 24.01.2019: <https://www.jstor.org/stable/2298098?seq=1>
 18. Sianesi, B. and Van Reenen, J. (2003). *The Returns to Education: A Review of the Macro-Economic Literature*. CEE Discussion Papers 0006, Centre for the Economics of Education, LSE. Retrieved from 04.04.2020: <http://www1.worldbank.org/publicsector/pe/pfma07/Sianesi.pdf>
 19. Psacharopoulos, George and Patrinos, Harry, (2004), Returns to investment in education: a further update, *Education Economics*, 12, issue 2, p. 111-134. Retrieved from 22.08.2020:https://econpapers.repec.org/article/tafedecon/v_3a12_3ay_3a2004_3ai_3a2_3ap_3a111-134.htm
 20. Topić-Pavković, B. (2019). Koncept dualnog obrazovanja kao instrument ekonomskog razvoja: *Zbornik radova 14. Međunarodnog simpozijuma o korporativnom upravljanju - Održivi razvoj malih ekonomija u uslovima industrijske revolucije*, 437-451, Teslić, Banja Vrućica. Savez računovođa i revizora Republike Srpske, Banja Luka.
 21. United Nations. (2019). Implementation of education for sustainable development in the framework of the 2030 Agenda for Sustainable Development. Retrieved from 20.11.2020: <https://www.un.org/sustainabledevelopment/goal-of-the-month-archive/goal-of-the-month-february-2019-quality-education/>
 22. UNESCO. (2019). Implementation of education for sustainable development in the framework of the 2030 Agenda for Sustainable Development. Retrieved from 20.11.2020: <https://undocs.org/en/A/74/258>
 23. Wood, A. (1994). *North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-Driven World*. IDS Development Studies Series, Oxford University Press. Retrieved from 04.04.2020: <https://econpapers.repec.org/bookchap/oxpobooks/978019 8290155.htm>





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NAUČNI ČASOPIS ZA EKONOMIJU – 04/20