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PROFESIONALNE KOMPETENCIJE BUDUĆIH PEDAGOGA⁴

Rezime: Ekspanzija visokog obrazovanja širom sveta otvorila je pitanje o kvalitetu znanja diplomiranih studenata i njihovoj kompetentnosti da zadovolje zahteve buduće profesije. Obrazovanje i osposobljavanje studenata za profesionalni rad u našim uslovima realizuje se na različite načine, kroz: teorijska predavanja, vežbe, izradu seminarskih radova, projekata istraživanja, konsultativni rad, stručnu pedagoško-metodičku praksu. Ovo su samo neka od ključnih pitanja koja je potrebno razmotriti u sistemu univerzitetskog obrazovanja budućih pedagoga da bi ih osposobili za kvalitetno pedagoško delovanje. Cilj ovog istraživanja jeste da se na osnovu različitih klasifikacija postojećih kompetencija pedagoga konstruiše skala procene za ispitivanje značaja kompetencija budućih pedagoga, koje stižu tokom studiranja. Istraživanje je pokazalo da studenti visoko vrednuju profesionalna znanja pedagoga koja su neophodna za kvalitetno pedagoško delovanje, upoznati su sa područjima rada pedagoga i zahtevima struke. Takođe, uviđaju i značaj sticanja naučno-istraživačkih i profesionalnih kompetencija. Svi statistički parametri pokazuju vrlo ohrabrujuće i dobre podatke, jer cilj univerzitetskog obrazovanja i jeste osposobljavanje budućih pedagoga za kvalitetno pedagoško delovanje i izgrađivanje njihove ličnosti sposobne za snalaženje u raznim situacijama. Posebna vrednost rada sadržana je u tome što je obavljeno istraživanje koncipirano tako da je naglasak stavljen na analizu studijskih programa pedagogije iz ugla studenata. Uz blagovremeno informisanje o zahtevima struke i podsticanje interesovanja za istraživanje pedagoške prakse, moguće je podstaći i razvoj profesionalnih kompetencija mladih pedagoga.

Ključne reči: kompetencije, pedagogija, pedagozi, studenti, univerzitetsko obrazovanje.

Uvod

Danas se od fakulteta očekuje da obrazuju studente za život i rad u organizacijama društva znanja čije su osnovne vrednosti primenljivost znanja, aktivan odnos prema profesionalnom razvoju i celoživotno obrazovanje (Andrews & Higson, 2011: 411–422; Person & Rosenbaum,

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⁴ Napomena: Članak predstavlja rezultat rada na projektu „Pedagoški pluralizam kao osnova strategije obrazovanja” broj 179036 (2011–2014), čiju realizaciju finansira Ministarstvo za nauku i tehnološki razvoj Republike Srbije.

2005: 412–429; Zelloth, 2009). Iz ovih razloga fakultetu je namenjena uloga institucije koja proizvodi znanje koje se može upotrebiti u svakodnevnom životu i budućem profesionalnom radu, i sve to sa ciljem unapređivanja i oblikovanja postojećeg sistema vaspitanja i obrazovanja, kao i ostvarivanja kvalitetnijeg ličnog i profesionalnog razvoja budućih pedagoga (Kamenarac i Lucija, 2010: 216–228).

Rad pedagoga, kao stručnih saradnika u vaspitno-obrazovnim ustanovama, podrazumeva široko polje delovanja, od učešća u planiranju i programiranju rada škole, realizacije obrazovno-vaspitnog procesa, praćenja i vrednovanja aktivnosti, preko saradnje i rada sa učenicima, roditeljima i nastavnicima, pojedinačno i na nivou stručnih organa i institucija u školi i van nje, do istraživanja vaspitno-obrazovne prakse i njenog unapređivanja. Otuda podsticaji za napuštanje tradicionalnih modela obrazovanja (diploma za sva vremena), odnosno napuštanje formalnih okvira obrazovanja i nalaženje novih obrazovnih modela dolaze iz različitih oblasti pedagoškog rada (Matović, 2000: 606–615; Savović i Jevtić, 2000: 23–40). Svi oni upućuju na to da obrazovanje treba da podrazumeva sticanje permanentnih kompetencija, oslanjajući se na kreativnost, inovacije i autonomiju ličnosti.

Najznačajnija svojstva pojedinaca koja utiču na njegovo ostvarivanje u individualnom i socijalnom životu, a koja su istovremeno i kriterijum za usmeravanje razvoja njegove kompetentnosti jesu: autonomnost, tolerantnost, participativnost, otvorenost, i fleksibilnost (Đurišić-Bojanović, 2007: 211–224; Gojkov, 2004, 2013). Profesionalne kompetencije koje studenti steknu tokom fakultetskog obrazovanja predstavljaju glavni faktor produktivnosti, konkurentnosti i kvaliteta budućeg rada. Kompetenciju ćemo u ovom radu posmatrati kao pedagošku kategoriju, a kompetentnog pedagoga kao razvijenu ličnost koja pokreće društvo.

Kompetencijski pristup obrazovanju pedagoga

Kompetencijski pristup u visokom obrazovanju razvija se u Americi šezdesetih godina dvadesetog veka kao odgovor na izražene potrebe za reformom kurikuluma, posebno u oblasti obrazovanja učitelja i nastavnika. Zahtevi za reformom su bili uglavnom rezultat društvenih potreba, ali i rezultat izmenjene politike obrazovanja i delovanja zvaničnih državnih institucija. Tražilo se da visoko obrazovanje postane relevantnije, a njegovi rezultati opipljiviji i vidljiviji. Ova inicijativa se polako širila kroz obrazovni sistem Amerike, da bi dobila na značaju i u ostalim delovima sveta dvadesetak godina kasnije (Burke, 2005). Ovaj pristup bio je široko podržan jer je nudio jasniju sliku obrazovnih ishoda; postao je predikativniji i ukoliko je bilo njime upravljano na pravi način delovao je i efikasnije. Međutim, on je doneo značajan doprinos i na polju individualizacije učenja. Sa jasnijim ciljevima, postizana je veća motivacija i usmerenost na postignuće samih učenika (Houston & Howsam, 1972).

Osnovne opasnosti koje su pretile od kompetencijskog pristupa bile su od preteranog diferenciranja posebnih kompetencija i eventualnog gubitka uvida u celinu. Osnovni argument kritičara sastojao se u tome da kompetentna osoba poseduje karakteristike i sposobnosti opšteg tipa koje su više nego skup posebnih primenljivih veština. I drugo, da će ovaj pristup odvesti u birokratizaciju visokog školstva, te omogućiti spoljnu kontrolu, na uštrb obrazovanja, koje na visokoškolskom nivou predstavlja kompleksan proces u kome je neophodno prvenstveno steći konceptualna znanja, a zatim ih povezati sa praktičnim iskustvom (Burke, 2005; Bowden & Masters, 1993). Ove kritike su nastale uglavnom iz razloga što je razvoj kompetencijskog pristupa obrazovanju počeo iz pozitivističke perspektive, u kojoj je naglasak bio na tehničkim aspektima posla, a cilj da se jasno definišu kompetencije potrebne

za izvršavanje posla, što je vodilo sužavanju pojma kompetentnosti na obavljanje poslovnih zadataka, te usko povezivanje kompetencijskog pristupa sa stručnim osposobljavanjem.

Humanistička orijentacija, ipak, povezuje pojam kompetencija sa društvenim i intelektualnim aspektima posla koji se obavlja. Ona naglašava potrebe čoveka kao individue, te njegovu težnju ka razvoju i samoostvarenju. Iz ugla humanističke orijentacije, kompetencije su počele da se sagledavaju počevši od uspešnih i ostvarenih ljudi u određenom poslu.

Tako se došlo do stvaranja generičkih kompetencija, koje su obuhvatale i osobine ličnosti i socijalne veštine neophodne za profesionalno kompetentno delovanje (Burke, 2005; Chappell et al., 2000; Stanković, 2010). Takođe, sama priroda pristupa koja je u svojoj osnovi nosila ideju da je društvo dinamično i da je njegova perspektiva razvojnja, dovela je do razvoja i samog kompetencijskog pristupa, koji ne teži da postane konačan i jedini model, i čiji su početni nedostaci u velikoj meri prevaziđeni. Shvatan iz ugla savremene nauke, ovaj pristup ne preti da učini programe siromašnijim i manje zahtevnim u pogledu količine znanja, već im dodaje novi kvalitet. Ulaganjem u operacionalizaciju znanja, on ih čini čvršćim i stabilnijim. Za razliku od pristupa usmerenih na znanje, ovaj pristup obrazovanje posmatra mnogo šire i obuhvatnije.

Iz ugla profesionalnog obrazovanja pedagoga, to znači da je osim na posedovanje posebnih pedagoških znanja i veština, pažnja usmerena i na razvoj osobina ličnosti i profesionalnih veština koje su neophodne za uspostavljanje, građenje i unapređivanje odnosa kako s učenicima, tako i sa njihovim roditeljima, ali i kolegama. Kroz sistem univerzitetskog obrazovanja, pedagozi se pripremaju za učešće u planiranju i programiranju rada vaspitno-obrazovnih institucija, za organizaciju obrazovnih i drugih aktivnosti u njima, kao i za analitičko-istraživačku delatnost, u funkciji unapređivanja vaspitno-obrazovne prakse, što od njih zahteva adekvatna znanja, profesionalne veštine, ali i lične potencijale.

Pedagoške implikacije savremenog sistema obrazovanja i vaspitanja ukazuju na sve složeniju ulogu pedagoga (stručnih saradnika), u predškolskim ustanovama i školama. Funkcija i značaj istraživanja koja preduzimaju pedagozi sagledava se iz ugla povezanosti istraživačkog rada i procesa evaluacije rada, pretpostavki i mogućnosti razvijanja saradničkih odnosa u školi i uloge praktičara u procesu istraživanja (Hebib i Matović, 2012: 67–82). Zbog toga njihovo univerzitetsko obrazovanje mora biti usklađeno sa zahtevima i izazovima savremenog društva i njegovog obrazovnog sistema, koji podrazumeva kompetencijski pristup. Poslednjih godina na studije pedagogije prijavljuje se više kandidata nego što može da se upiše. To nameće potrebu provere kvaliteta selekcije prijavljenih kandidata (Matović, 2010: 62–72), jer kroz sistem univerzitetskog obrazovanja budućih pedagoga, studenti se pripremaju za učešće u planiranju i programiranju rada vaspitno-obrazovnih institucija, za organizaciju obrazovnih i drugih aktivnosti u njima, kao i za analitičko-istraživačku delatnost, a u funkciji unapređivanja vaspitno-obrazovne prakse, što od njih zahteva adekvatna znanja, profesionalne veštine, ali i lične potencijale.

Preuslov dobre afirmacije pedagoga jeste kvalitetna priprema za zanimanje i razvijanje sistema opštih i profesionalnih saznanja i iskustava. Samo onaj pedagog koji poseduje kompetencije u različitim aspektima pedagoškog delovanja, kritički promišlja o sebi i svom vaspitnom radu, menja i unapređuje svoj rad, te oblikuje podsticajno okruženje u školi, može biti zadovoljan i može očekivati da napreduje u svojoj profesiji.

Od mladih ljudi se očekuje da izgrade intelektualne veštine višeg reda, da se osposobe da planiraju unapred i da predviđaju posledice svojih odluka i akcija, zatim da razvijaju altruizam, empatiju, međusobno razumevanje i sposobnosti komunikacije i veštine vođenja, upravljanja i saradnje. Profesionalne kompetencije pedagoga podrazumevaju njegovu kvalitetnu stručnu osposobljenost, sposobnost delotvornog povezivanja pedagoške teorije i prakse, u kojoj ima ulogu kreatora (Jurić, 1977; Kopas-Vukašinić i Maksimović, 2011: 688–702; 2010: 587–602; Trnavac, 1996), kao i spremnost za promene, fleksibilnu upotreba znanja i kreativnost, kao najznačajnije lične kompetencije ljudi u savremenim uslovima života. Znanje, kreativnost, inicijativnost i spremnost za promene uslov su razvoja, opstanka i uspeha organizacija, ali i pojedinaca (Đurišić-Bojanović, 2007: 211–224; Gojkov, 2013). Prilagođavanje sistema obrazovanja strategiji razvoja društva, zahteva i reformu nastavnih planova i programa u pravcu obezbeđivanja funkcionalne, kompjuterske i tehnološke pismenosti, podsticanje kreativnosti, razvoj kritičkog mišljenja i odgovarajućih veština kod pojedinaca. Pored toga, praksa pokazuje da su zahtevi koje postavlja buduća profesija dobar indikator koje veštine je potrebno razvijati kod mladih stručnjaka.

Definisanje ishoda obrazovanja kroz kompetencije predstavlja raskid sa dugoročnom tradicijom u obrazovanju tokom koje su se kroz ciljeve definišala znanja kojima treba ovladati. U izveštaju Evropske komisije od 2003. god. stoji da uključivanje istraživanja u kurikule visokog obrazovanja doprinosi razvoju onih kompetencija koje su značajne u mnogim oblastima profesionalnog delovanja, a ne samo u istraživačkom radu (*Commision of the European Communities, 2003*). Kompetencije potrebne za društvo znanja, prema pomenutom izveštaju, usko su povezane sa istraživačkim kompetencijama. Univerzitetu oduvek svojstvena uloga istraživačke institucije – sada dobija nova značenja. Istraživanje ne služi samo produkciji znanja, već istraživački rad na univerzitetu dobija i vaspitno-obrazovnu ulogu. Misija univerziteta zasnovana na konceptu *obrazovanje i istraživanje* menja se ka konceptu *obrazovanje putem istraživanja*. Sa aspekta pojedinca to znači otklanjanje prepreka koje se mogu postaviti njegovom društvenom napredovanju i ličnom razvoju (Đurišić-Bojanović, 2007: 211–224).

Kompetencije, za razliku od znanja, ne mogu se naučiti iz udžbenika, one podrazumevaju da čovek nosi zakonitosti samorazvoja i samorealizacije, kao i svet koji ga okružuje (Jermakov, 2011). Uzimajući u obzir ovo određenje, kao i daleko jednostavnije, ali jednako sadržajno određenje Suzića (2013) da je kompetencija sposobnost na delu, možemo zaključiti da je kompetencijski pristup utoliko pedagoški zahtevniji. Zarad lakše i efikasnije operacionalizacije, Staničić (2003) kompetencije stručnih saradnika deli na lične koje obuhvataju opšte ponašanje i reagovanje, stručne koje obuhvataju znanja iz struke za stvaranje vizije, razvojne koje pomažu unapređenju procesa, akcijske koje podrazumevaju efikasno delovanje u praksi i socijalne koje utiču na međuljudske odnose. Sa drugog aspekta, baveći se profesionalnim kompetencijama, više autora (Jermakov, 2011; Žižak, 1997: 1–10) slaže se da one obuhvataju tri elementa: profesionalna znanja, profesionalne veštine i lične potencijale pojedinca. Suštinski sličnu, iako terminološki drugačiju podelu, navodi i Jermakov (2011) izdvajajući tri nivoa kompetencija. Prvi nivo jeste ključni ili opštekulturni nivo koji obuhvata kompetencije koje izlaze iz okvira obrazovanja, imaju metapredmetno i socijalno-kulturno značenje (ovaj nivo kompetencija je analogan ličnim potencijalima pojedinca u napred navedenim podelama). Zatim, drugi nivo ili opšteobrazovni koji se odnosi na sve nastavne predmete u okviru obrazovne oblasti koji bi se mogao poistovetiti sa profesionalnim znanjima, i treći nivo ili predmetno-privatni koji se odnosi na specijalne kompetencije koje se formiraju u okviru pojedinih nastavnih predmeta i ovaj nivo predstavlja profesionalne veštine.

Na osnovu iznetih stavova i definicija možemo konstatovati da profesionalne kompetencije pedagoga podrazumevaju posedovanje opštih i posebnih pedagoških znanja koja moraju biti sistematizovana i naučno zasnovana; zatim veština koje će omogućiti kompetentno delovanje, a koje podrazumevaju metodičke veštine i veštine evaluacije i naučno-istraživačkog rada, kao i korišćenje savremenih nastavnih sredstava i informaciono-komunikacionih tehnologija; kao i osobine ličnosti koje su neophodne za uspostavljanje, građenje i unapređivanje odnosa sa učenicima, njihovim roditeljima, i kolegama, te uspešno obavljanje ostalih zahteva profesije.

Današnji obrazovni sistem priprema mlade za život u XXI veku, za profesionalni i životni radni vek. To je razlog što je pedagogija životno upućena na futurologiju obrazovanja. Ako sada u školi deca usvajaju ona znanja koja će im biti potrebna u budućnosti, fakulteti moraju sagledati koja su to znanja, veštine i sposobnosti potrebne za život u tom vremenu. Suzić (2005) navodi 28 kompetencija za 21. vek, koje su osnova za razumevanje ličnih potencijala svakog modernog čoveka, a posebno za građenje modela modernog pedagoga. Kako nam obim rada nije dozvoljavao da se bavimo svakom od kompetencija posebno, posebnu pažnju obratili smo na sledeće kompetencije: sposobnosti razumevanja, metakognitivnog, kritičkog i kreativnog mišljenja, emocionalna svest, samokontrola i prilagodljivost, interpersonalne veštine i radno-akcione kompetencije, kao što su: savestnost, odgovornost, istrajnost i inicijativnost

Metodološki okvir istraživanja

Predmet ovog istraživanja jesu refleksije studenata pedagogije o profesionalnim kompetencijama za buduću poziv. Cilj ovog istraživanja je utvrditi mišljenja studenata o efikasnosti studijskih programa pedagogije u razvijanju profesionalnih kompetencija.

U istraživanju je korišćena deskriptivna metoda. Instrument PKP (Profesionalne kompetencije budućih pedagoga) posebno je sačinjena za potrebe ovog istraživanja. Vrednosti KMO i Bartlet testa (Bartlett-test) pokazuju da je faktorska analiza opravdana, a instrument konstruisan za potrebe istraživanja validan. Kako bismo proverili da li je skup podataka prikladan za faktorsku analizu *Kaiser-Meyer-Olkin (KMO) test* treba da je veći od 0,3, a da je vrednost *Bartlet testa* značajna, tj. da vrednost treba biti 0,05 ili manja.

Tabela 1: *KMO i Bartletov test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.792
Bartlett's Test of Sphericity	Approx. Chi-Square	1643.111
	df	406
	Sig.	.000

S obzirom na to da vrednost KMO testa iznosi 0,792, a Bartletov test pokazuje da je vrednost statistički značajna, tačnije iznosi $p = 0,00$, možemo potvrditi da je faktorska analiza opravdana (Tabela 1).

Na osnovu postavljenog cilja izdvojena su dva zadatka: (1) izdvojiti faktore iz skale KPGO koji opisuju refleksije studenata o profesionalnim kompetencijama pedagoga; (2) ispitati da li postoji statistički značajna razlika u odgovorima studenata druge, treće, četvrtre i master studenata pedagogije.

Hipoteze su sledeće:

- 1) Pretpostavlja se da će biti izdvojeni faktori koji su orijentisani na profesionalna znanja pedagoga, naučno-istraživačke veštine, neophodne kompetencije za obavljanje budućeg poziva.
- 2) Pretpostavlja se da postoji statistički značajna razlika u odgovorima između studenata različitih godina studija.

Namerni uzorak je onaj u kome istraživač namerno bira uzorak, pojedince, grupe, varijable itd., koji će po njegovoj proceni najviše doprineti istraživanju (Kožuh i Maksimović, 2012). Namerni uzorak je onaj koji je svojevajno odabran, jer postoje ubedljivi podaci o tome da on veoma reprezentativan za celokupnu populaciju (Gilford, 1968). Zato je našim istraživačkim uzorkom obuhvaćeno 122 studenata druge, treće i četvrte godine osnovnih studija, kao i studenti master studija Departmana za pedagogiju Filozofskog fakulteta u Nišu, tokom školske 2013/14. godine. Varijabla godina studija operacionalizovana je tako da nam pokaže različite stavove studenata o profesionalnim kompetencijama koje su stekli dosadašnjim studiranjem. Zato je u obzir uzeta refleksija i samoevaluacija studentata o ličnim potencijalima, naučno-istraživačkim veštinama, znanjima i kompetencijama za sprovođenje pedagoških istraživanja, a koje su jako neophodne za svet nauke u koji će kročiti. Prva godina studija nije predstavljala uzorak istraživanja, jer su na početku obrazovanja i znanja i kompetencije će tek sticati proučavanjem različitih pedagoških disciplina. Zato je na osnovu postavljenog predmeta, zadataka i hipoteza istraživanja izvršen ovakav odabir uzorka istraživanja. Istraživanjem je bilo obuhvaćeno 45 studenata druge godine, 20 studenata treće godine, 43 studenata četvrte godine i 14 studenata master studija pedagogije. Struktura ispitanika prema godini studija prikazana je u Tabeli 2.

Tabela 2: Struktura ispitanika prema godini studija

Godina studija	f	%	Validni %	Kumulativni %
Druga	45	36,9	36,9	36,9
Treća	20	16,4	16,4	53,3
Četvrta	43	35,2	35,2	88,5
Master	14	11,5	11,5	100,0
Ukupno	122	100,0	100,0	

Analiza rezultata istraživanja

Po Kajzerovom kriterijumu u izdvajanju faktora oslanjamo se samo komponente čija je karakteristična vrednost 1 ili više. U Tabeli 3 jasno se mogu videti 8 faktora koji imaju karakteristične vrednosti 1 ili više. Tih 8 komponenta objašnjavaju ukupno 66,93% varijanse.

Tabela 3: Faktorska analiza skale PKP – Profesionalne kompetencije pedagoga

	Karakteristični koren	% varijanse	Kumulativni %	Karakteristični koren	% varijanse	Kumulativni %
Lični potencijali	7.367	25.404	25.404	6.286	1.677	21.677
Naučno-istraživačke veštine	3.769	12.998	38.402	3.157	10.885	32.562
Profesi-onalna	2.144	7.394	45.797	2.386	8.227	40.788

znanja						
Područja rada pedagoga	1.683	5.804	51.601	2.119	7.307	48.095
Savetodavni rad i praksa	1.170	4.035	55.636	1.550	5.345	53.440
Uloga pedagoga	1.152	3.973	59.610	1.376	4.746	58.186
Neophodne kompetencije	1.098	3.785	63.394	1.315	4.535	62.721
Znanja	1.026	3.539	66.934	1.222	4.213	66.934

Faktorskom analizom sa Varimaks rotacijom ekstrahovani su faktori, a korišćen je kriterijum karakterističnog korena preko 1 za dobijanje faktora. Podaci dobijeni postupkom faktorske analize pokazuju da instrument napravljen za potrebe ovog istraživanja ima dobre metrijske karakteristike. Procenat dobijene varijanse je visok i iznosi 66,93 što značajno prevazilazi očekivanja za instrumente koji se konstruišu za potrebe istraživanja u društvenim i humanističkim naukama.

U matrici je predstavljena faktorsku zasićenost na svakom faktoru (Tabela 4). Kao kriterijum minimalnog zasićenja stavki uzeta je vrednost 0,44. Sva ostala zasićenja uglavnom su iznad ove vrednosti što se može i uočiti. Zadržano je svih 29 stavki podeljenih u 8 faktora koje su imenovane u skladu sa sadržajem koje obuhvataju.

Tabela 4: Matrica strukture rotacije faktora

Rotated Component Matrix ^a								
Komponente								
	Lični potencijali	Naučno-istraživačke veštine	Profesionalna znanja	Područja rada pedagoga	Savetodavni rad i praksa	Uloga pedagoga	Neophodne kompetencije	Znanja
1	.881	.054	.107	.054	.028	-.035	-.074	-.034
2	.853	.104	.021	.026	-.019	.072	-.165	-.038
3	.826	-.007	.044	.037	-.070	-.126	.057	.078
4	.758	-.026	-.057	-.165	.081	.332	.053	.047
5	.713	.134	.222	.116	.175	-.070	-.331	-.057
6	.690	.102	.110	.074	.217	-.328	.058	.142
7	.687	-.072	.095	.307	.027	.160	.081	.220
8	.677	-.073	.136	.269	-.181	.199	-.264	.018
9	.658	.249	.200	-.027	-.215	.180	.106	-.121
10	.655	-.061	.067	.030	.479	.157	.113	.140
11	.603	-.206	.191	.263	-.017	.326	-.144	.138
12	.064	.813	.126	.129	-.159	.024	.162	-.101
13	.018	.742	.163	.003	.114	.041	-.151	.037
14	-.014	.710	.070	.189	.204	.008	.185	.075
15	.082	.627	.154	.040	.242	-.142	-.119	-.019
16	-.044	.494	-.132	.113	.134	.426	-.312	-.313
17	.003	.481	.221	-.395	.479	-.238	.040	.113
18	.150	.054	.740	-.034	.005	.116	-.056	.095
19	.126	.206	.739	-.106	.040	.019	-.113	.111
20	.118	.380	.691	.007	-.232	-.050	.120	-.045
21	.148	-.020	.607	.402	.279	.155	.153	-.263
22	-.053	.151	.053	.733	.204	.092	-.043	.026

23	.323	.052	-.070	.674	-.027	-.077	.056	.288
24	.208	.286	-.138	.577	.042	.140	.108	-.245
25	.166	.214	-.053	.284	.613	.312	.159	.086
26	-.066	.246	-.036	.038	.440	-.064	-.002	-.194
27	.253	-.065	.290	.125	.052	.678	.157	-.022
28	-.179	.027	-.024	.083	.111	.083	.847	.096
29	.148	.039	.083	.062	-.049	.018	.094	.816

Prvi faktor odnosi se na *lične potencijale* i obuhvata 11 stavki kojima su ispitane refleksije studenata o profesionalnim kompetencijama za buduće zanimanje (studije pedagogije podstiču razvijanje svesti o sopstvenoj kogniciji i sposobnost evaluacije sopstvenog rada, kritičkog mišljenja, fleksibilnog i kreativnog mišljenja, svest o svojim i tuđim emocijama, samopouzdanja i samokontrole, prilagodljivosti i otvorenosti za nove ideje, osposobljavanje za grupni rad i saradnju, razvoj pozitivne nenasilne komunikacije, tolerancije i demokratskih vrednosti, savesnosti i odgovornosti, istrajnosti i inicijativnosti). Od mladih ljudi se očekuje da izgrade intelektualne veštine višeg reda, da se osposobe da planiraju unapred i da predviđaju posledice svojih odluka i akcija, ali i emocionalne kompetencije, kao što su altruizam, empatija, međusobno razumevanje i sposobnosti komunikacije i veštine vođenja, upravljanja i saradnje. Znanje, kreativnost, inicijativnost i spremnost za promene uslov su razvoja, opstanka i uspeha organizacija, ali i pojedinaca (Đurišić-Bojanović, 2007; Gojkov, 2013). Rezultati pokazuju da studenti visoko vrednuju sve stavke "ličnih potencija" koje budući pedagozi treba da poseduju.

Drugi faktor odnosi se na *istraživačke veštine* i obuhvata 6 stavki (sticanje teorijskih znanja neophodnih za kvalitetno pedagoško delovanje, primena metoda i tehnika istraživačkog rada, teorijsko osmišljavanje i praktična primena u praksi, tehnike intelektualnog rada: proučavanje literature i korišćenje naučnih izvora, poznavanje strukture pisanja naučnog izveštaja, osposobljenost za primenu nastavnih pomagala i tehnologije). Baveći se profesionalnim kompetencijama, više autora (Jermakov, 2011; Žižak, 1997) slaže se da one obuhvataju tri elementa: profesionalna znanja, profesionalne veštine i lične potencijale pojedinca. Ukoliko uđemo u suštinu, primetićemo da svi odgovori studenata koji se odnose na faktor „istraživačkih veština” sadrže u sebi ova tri elementa o kojima pomenuti autori govore.

Treći faktor odnosi se na *profesionalna znanja* i obuhvata 4 stavke (neophodnost strukturiranih znanja iz svake oblasti, softverska podrška kao sastavni deo obrazovanja, spremnost za permanentno obrazovanje, inovacije u nastavi). Znanja obuhvataju sva relevantna znanja koja ojačavaju i podupiru profesionalne veštine (Žižak, 1997). Rezultati pokazuju da studenti visoko vrednuju profesionalna znanja stečena tokom studiranja.

Četvrti faktor odnosi se na *područja rada pedagoga* i čine ga 3 stavke (informisanost o područjima rada pedagoga, informisanost o zahtevima struke, osposobljenost za kvalitetno pedagoško delovanje na svim poljima). Univerzitetsko obrazovanje je priprema studenata pedagogije za zanimanje stručnih saradnika u vaspitno-obrazovnim ustanovama. Ona podrazumeva sistematsko i komplementarno delovanje svih nosilaca realizacije nastavnih aktivnosti, sa ciljem sticanja znanja i iskustava, zatim razvoj profesionalnih kompetencija mladih pedagoga. Studenti pedagogije moraju biti orijentisani na istraživanje pedagoške prakse na svim područjima rada u funkciji njenog unapređivanja. Posebnu važnost ima to što je ovaj podatak visoko vrednovan iz ugla studenata pedagogije.

Peti faktor odnosi se na *savetodavni rad i praksu* i obuhvata 2 stavke (poznavanje opštih karakteristika savetodavno-pedagoškog rada i osposobljenost za istraživanje vaspitno-obrazovne prakse). Rezultati istraživanja pokazali su da studenti pedagogije tokom svog univerzitetskog obrazovanja pre svega žele da se osposobe za kvalitetan savetodavni rad, kojim bi mogli efikasno da deluju u vaspitno-obrazovnoj instituciji i da pomažu deci, mladima ili odraslim osobama sa kojima saraduju.

Šesti faktor odnosi se na *ulogu pedagoga* u sticanju kompetencija i obuhvata 1 stavku (poimanje uloge pedagoga i značaj sticanja kompetencija za savetodavni rad sa akterima vaspitanja i obrazovanja). Studenti pedagogije visoko vrednuju profesionalne kompetencije pedagoga, i pre svega, odnose se na posedovanje posebnih pedagoških znanja i veština, ali i na osobine ličnosti koje su neophodne za uspostavljanje, građenje i unapređivanje odnosa sa svim akterima vaspitno-obrazovnog procesa.

Sedmi faktor odnosi se na *neophodne kompetencije* i čini ga jedna stavka (razvoj neophodnih kompetencija za obavljanje budućeg poziva). Studenti pridaju značaja profesionalnim znanjima, profesionalnim veštinama i ličnim potencijalima pojedinca.

Osmi faktor odnosi se na *pedagoška znanja* i čini ga jedna stavka (sticanje znanja neophodnih za razvijanje i usavršavanje novih modela učenja). Studenti se osposobljavaju da analiziraju mogućnosti, karakteristike i specifičnosti primene modela u istraživanju (Matović, 2000). Sve karakteristike dobijenih faktora možemo preneti i na objašnjenje faktora – pedagoška znanja. Budući pedagozi moraju sticati neophodna znanja, veštine i kompetencije za kvalitetno obavljanje budućeg poziva i stalno će biti usmereni ka usavršavanju tih znanja.

Pedagogija je životno upućena na budućnost obrazovanja. Ako studenti usvajaju ona znanja koja će im biti potrebna u budućnosti, fakulteti moraju sagledati koja su to znanja, veštine i sposobnosti potrebne za život u tom vremenu (Suzić, 2005). Faktorskom analizom dobijenih rezultata uočavamo da su studenti svesni značaja profesionalnih kompetencija za budući poziv, kao i da su studijski programi koncipirani tako da podstiču razvoj tih kompetencija.

Utvrđivanje statističke značajnosti putem F testa na osnovu dobijenih faktora ANOVA

Analiziranjem stavova studenata pedagogije o ličnim potencijalima, istraživačkim veštinama, profesionalnim znanjima, područjima rada školskih pedagoga, savetodavnom radu i praksi, ulozi pedagoga u sticanju kompetencija, neophodnih kompetencija za rad i znanja o pedagogiji dolazimo do zanimljivih saznanja.

Tabela 5: Utvrđivanje statističke značajnosti putem f testa na osnovu dobijenih faktora ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Lični potencijali	Between Groups	91.134	3	30.378	.845	.472
	Within Groups	4242.210	118	35.951		
	Total	4333.344	121			

Istraživačke veštine	Between Groups	541.288	3	180.429	15.549	.000
	Within Groups	1369.236	118	11.604		
	Total	1910.525	121			
Profesionalna znanja	Between Groups	22.259	3	7.420	1.479	.224
	Within Groups	591.840	118	5.016		
	Total	614.098	121			
Područja rada pedagoga	Between Groups	14.709	3	4.903	1.203	.312
	Within Groups	480.996	118	4.076		
	Total	495.705	121			
Savetodavni rad i praksa	Between Groups	94.816	3	31.605	1.972	.122
	Within Groups	1891.151	118	16.027		
	Total	1985.967	121			
Uloga pedagoga	Between Groups	.069	3	.023	.043	.988
	Within Groups	62.554	118	.530		
	Total	62.623	121			
Neophodne kompetencije	Between Groups	68.827	3	22.942	1.009	.391
	Within Groups	2683.378	118	22.740		
	Total	2752.205	121			
Znanja	Between Groups	14.745	3	4.915	.504	.680
	Within Groups	1151.386	118	9.758		
	Total	1166.131	121			

Poređenjem aritmetičkih sredina F testom, među studentima druge, treće, četvrtne godine i među studentima master studija pedagogije izdvojila se statistički značajna razlika koja se tiče drugog faktora koji se odnosi na *istraživačke veštine* ($p=0,00$) i to kroz: sticanje teorijskih znanja neophodnih za kvalitetno pedagoško delovanje, primenu metoda i tehnika istraživačkog rada, teorijsko osmišljavanje i praktičnu primenu u praksi, tehnike intelektualnog rada: proučavanje literature i korišćenje naučnih izvora, poznavanje strukture pisanja naučnog izveštaja, osposobljenost za primenu nastavnih pomagala i tehnologije. Studenti su u odgovorima bili ujednačeni. Na ostalim ispitivanim faktorima nije uočena statistički značajna razlika u odgovorima ispitanika, a tiče se njihove percepcije o značaju ličnih potencijala za istraživački rad, profesionalnih znanja, uloge pedagoga u istraživačkom radu, neophodnih kompetencija, savetodavnog rada i prakse.

Funkciju i značaj istraživanja koju će preduzimati i realizovati budući pedagozi sagledava se iz ugla povezanosti istraživačkog rada i procesa evaluacije rada, uloge praktičara u procesu istraživanja. Karakteristike istraživanja koja pokreću i realizuju pedagozi analiziraju se sa stanovišta prirode problema proučavanja, svrhe istraživanja, uzorka/ispitanika, metoda i

tehnika prikupljanja i obrade podataka (Hebib i Matović, 2012). Zato je neophodno kod studenata, budućih pedagoga, razviti istraživačke veštine i učiniti ih kompetentnim za obavljanje budućeg poziva i kvalitetno pedagoško delovanje.

Tabela 6: Post hoc test za utvrđivanje statističke značajnosti

Dependent Variable	(I) Godina	(J) Godina	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Istraživačke veštine	Druga	treća					
		četvrta	-3,08941*	,72644	,000	-5,0388	-1,1400
		master	-6,72063*	1,04245	,000	-9,5180	-3,9233
	Treća	druga	2,67778*	,91545	,025	,2212	5,1343
		četvrta	-,41163	,92198	1,000	-2,8857	2,0625
		master	-4,04286*	1,18702	,005	-7,2282	-,8575
	Četvrta	druga	3,08941*	,72644	,000	1,1400	5,0388
		treća	-,41163	,92198	1,000	-2,0625	2,8857
		master	-3,63123*	1,04818	,004	-6,4440	-,8185
	Master	druga	6,72063*	1,04245	,000	3,9233	9,5180
		treća	4,04286*	1,18702	,005	,8575	7,2282
		četvrta	3,63123*	1,04818	,004	,8185	6,4440

Tabela 6 nam prikazuje grupe ispitanika među kojima postoji statistički značajna razlika na nivou 0,05 ili manjem, a tiče se faktora *Istraživačke veštine*. Na osnovu dobijenih rezultata vidimo da se druga godina statistički značajno razlikuje od studenata četvrte godine, ali i od studenata master studija pedagogije ($p=0,00$) kada su u pitanju istraživačke veštine stečene tokom studiranja. Ovu tvrdnju posebno vrednuju studenti master studija ($M=-6,72$), te nas ovaj podatak ne iznenađuje jer u ovom domenu oni imaju najviše iskustva. Studenti treće godine se statistički značajno razlikuju od studenata druge ($p=0,03$) i studenata master studija ($p=0,01$). Studenti četvrte godine se statistički značajno razlikuju u odgovorima od studenata druge godine, koji su tek na početku sa upoznavanjem značaja i karakteristika naučno-istraživačkog rada ($p=0,01$) i masterovaca koji su svesni značaja posjedovanja ovih veština i tako visoko vrednuju ovaj faktor ($p=0,00$). Studenti master studija pedagogije se statistički značajno razlikuju od studenata druge, treće i četvrte godine na nivou $p<0,05$. Naše pretpostavke o razlikama u percepciji kompetentnosti među studentima su se obistinile. Slično istraživanje (Huić i sar., 2010) pokazalo je da studenti iako prolaze kroz isti obrazovni program ipak se razlikuju s obzirom na praktično iskustvo koje imaju i njihovu percepciju važnosti praktičnih veština.

Studenti koje smo obuhvatili uzorkom visoko vrednuju sticanje i značaj teorijskih znanja neophodnih za kvalitetno pedagoško delovanje, primenu metoda i tehnika istraživačkog rada, teorijsko osmišljavanje i praktičnu primenu u praksi, tehnike intelektualnog rada: proučavanje literature i korišćenje naučnih izvora, poznavanje strukture pisanja naučnog izveštaja, za razliku od studenata koji su na nižim godinama studija.

Zaključna razmatranja

Rad pedagoga, kao stručnih saradnika u vaspitno-obrazovnim ustanovama, podrazumeva široko polje delovanja, od učešća u planiranju i programiranju rada škole, realizacije obrazovno-vaspitnog procesa, praćenja i vrednovanja aktivnosti, preko saradnje i rada sa učenicima, roditeljima i nastavnicima, do savetodavno-pedagoškog rada. Ovim istraživanjem,

ukazujemo na značaj sticanja profesionalnih kompetencija studenata u procesu globalizacije obrazovanja. Budući pedagog mora biti praktičar i teoretičar prakse. Mora biti orijentisan na doživotno obrazovanje, jer se njegovo obrazovanje nikada ne može smatrati završenim.

Podaci dobijeni istraživanjem ukazuju na stvarno stanje među budućim pedagozima u njihovim pogledima na kompetencije koje stižu tokom studiranja. Podaci su zadovoljavajući. Studenti visoko vrednuju profesionalna znanja pedagoga koja su neophodna za kvalitetno pedagoško delovanje, upoznati su sa područjima rada pedagoga i zahtevima struke. Takođe, uviđaju i značaj sticanja naučno-istraživačkih i profesionalnih kompetencija, teorijsko osmišljavanje i praktičnu primenu u praksi. To je zaista bitan podatak o refleksijama studenata na ovu temu. Studenti smatraju i potvrđuju da studije pedagogije razvijaju kompetencije za obavljanje budućeg poziva, svest o sopstvenoj kogniciji i evaluaciji sopstvenog intelektualnog rada. Takođe, iskazuju pozitivne stavove da studije podstiču razvoj kritičkog, kreativnog i fleksibilnog mišljenja. Zatim, preferiraju nenasilnu komunikaciju, podstiču odgovornost, savesnost, istrajnost i inicijativnost. Podatke do kojih smo došli, prikazali smo tabelarno, putem faktorske analize, pa nam svi statistički parametri pokazuju vrlo ohrabrujuće i dobre podatke, jer cilj univerzitetskog obrazovanja i jeste osposobljavanje budućih pedagoga za kvalitetno pedagoško delovanje i izgrađivanje njihove ličnosti sposobne za snalaženje u raznim situacijama.

Ispitujući stavove pedagoga putem faktorske analize zaključili smo da oni visoko vrednuju sledeće faktore koji se odnose na profesionalne kompetencije neophodne za budućnost (značaj razvoja ličnih potencijala kroz studije za kvalitetno obavljanje budućeg poziva, značaj posedovanja istraživačkih veština, profesionalnih znanja i spremnost za permanentno obrazovanje, značaj informisanosti o područjima rada pedagoga i zahtevima struke, značaj savetodavno-pedagoškog rada, kao i uloge pedagoga u sticanju profesionalnih kompetencije za kvalitetan rad u vaspitno-obrazovnoj praksi.

Ovo je dokaz da uz blagovremeno informisanje o zahtevima struke i podsticanje interesovanja za istraživanje pedagoške prakse, moguće je podstaći i razvoj profesionalnih kompetencija mladih pedagoga.

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Biografske note

Jelena Maksimović (1977) je vanredni profesor na Odseku za pedagogiju Filozofskog fakulteta u Nišu. Odbranila je doktorsku disertaciju pod naslovom *Uloga akcionog istraživanja u poboljšanju obrazovnog rada* 20. maja 2011 na Filozofskom fakultetu Univerziteta u Istočnom Sarajevu pod mentorstvom prof. dr Veljka Bandura. Od 2011. godine radi kao vanredni profesor na Odseku za pedagogiju Filozofskog fakulteta gde predaje pedagošku metodologiju i istraživanje u pedagogiji. Objavila je dve monografske studije i pet udžbenika. Objavila je sto dvadeset istraživačkih radovakao celine, u naučnim časopisima i kao saopštenja sa skupova. Uključena je u projekat *Pedagoški pluralizam kao osnovna strategija obrazovanja* (broj 179036) koji finansira Ministarstvo za nauku i tehnološki razvoj Republike Srbije od januara 2011 do decembra 2015. Takođe je kao istraživač uključena u internacionalni *Tempus*

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Jelena Petrović (1976) diplomirala je i stekla zvanje mastera na Filozofskom fakultetu u Prištini (Kosovsak Mitrovica). Radi na Filozofskom fakultetu u Nišu od 2002. godine kao saradnik u nastavi na Odseku za pedagogiju. Tokom 2014. godine bila je u šestomesečnoj studijskoj poseti na Univerzitetu u Indijani u SAD-u kao nosilac Fulbrajtove stipendije. Trenutno radi na izradi svoje doktorske disertacije pod naslovom: *Intelektualno i emocionalno vaspitanje u reformnoj pedagogiji sa početka 20. veka – aktuelnost izvornih shvatanja*. Angažovana je na internacionalnom *Tempus istraživačkom projektu: Obrazovno liderstvo (EdLead)* od decembra 2013. do decembra 2016. Njeno profesionalno interesovanje uključuje teme kao što su istorija obrazovanja, komparativna pedagogija i savremene obrazovne teorije.

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PROFESSIONAL COMPETENCIES OF FUTURE PEDAGOGUES⁴

Summary: The worldwide expansion of higher education introduced the problem of quality of knowledge that graduate students possess, as well as question whether they are competent to fulfill the requirements of their future profession. Education and training for professional work, in our educational system, is realized in various ways: through lectures, exercise classes, seminar paper writing, research projects, consultative work and practice in educational methodology. These are only some of the key themes concerning university education of pedagogues-to-be that should be considered if we are to train them to perform a high-quality educational work. The purpose of this research is to construct an evaluation scale that will examine the importance of competencies the future pedagogues are acquiring during studying. It is constructed on the basis of different classifications of competencies of a pedagogue. The research has shown that the students highly value professional knowledge that is necessary for a high-quality educational work, and that they are familiar with the area of work and the requirements of their future profession. They also acknowledge the importance of acquisition of competencies in scientific and professional research. All of the statistical parameters give quite encouraging and affirmative data, since the purpose of university education, after all, is to train the future pedagogues for high-quality educational work and to develop their personalities so that they can manage a variety of situations. Particular significance of this paper resides in the fact that the research performed was conceptualized in such a manner as to emphasize the analysis of the pedagogy studies program from the students' point of view. Timely information regarding the profession's requirements and encouraging interest in research of educational practice can encourage further development of young pedagogues' professional competencies as well.

Key words: pedagogy, students, pedagogues, university education, competencies

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Introduction

Nowadays, graduate schools are expected to educate students to live and work inside knowledge society organizations, the essential values of which are applicability of knowledge, active attitude towards professional development and lifelong education (Andrews & Higson, 2011: 411-422; Zelloth, 2009; Person & Rosenbaum, 2005: 412-429). For these reasons, graduate school is given a role of an institution that produces knowledge which can be used in everyday life and professional work, with the goal to improve and adjust the existing education system, as well as to improve personal and professional development of future pedagogues (Kamenarac i Lucija, 2010: 216-228).

The job of a pedagogue as a counselor in educational institutions includes a wide array of tasks, such as participation in planning of the school's curriculum, supervising the realization of educational process, tracking and evaluation of activities, collaboration and work with students, parents and teachers, as well as research and improvement of the educational practice. He is supposed to work individually, and as a part of professional body of experts and institutions that operate both inside and outside of a school. Therefore, incentives to abandon traditional models of education (lifetime diploma), that is, to abandon the formal framework of education, and to find new educational models, all come from the field of practical educational work (Matović, 2000: 606-615; Savović i Jevtić, 2000: 23-40). All of them indicate that education should imply acquisition of permanent competencies, relying on creativity, innovations, and personality autonomy.

The most important traits that influence one's fulfillment in personal and social life, are at the same time the guiding principles in competency development, and they are: autonomy, tolerance, readiness to participate, openness, and flexibility (Gojkov, 2013; 2004; Djurišić-Bojanović, 2007: 211-224). Professional competencies acquired by students during their higher education represent the main factor of productivity, competitiveness, and the quality of future work. In this work, we will address the competency as a pedagogical category and a competent pedagogue as a person with developed personality that sets society in motion.

Competency-based approach in education of pedagogues

Competency-based approach in higher education was developed in America during 1960's as a response to expressed need for curriculum reformation, particularly in the teacher education area. This demand for reform generally originated from the needs of society, but it was the result of the new education policy and the influence of official state institutions as well. Higher education was demanded to become more relevant, and its results tangible and distinct. This initiative slowly spread through America's education system, only to gain in importance in the rest of the world twenty years later (Burke, 2005). This approach was widely supported because it offered a clearer picture of educational outcomes; it became more predictive and more efficient when properly used. Nevertheless, it brought a significant contribution to the area of the individualized learning. With goals made clearer, the better motivation was achieved and the focus on the achievements of students themselves was accomplished (Houston & Howsam, 1972).

Basic risks that came with competency-based approach included the excessive differentiation of specific competencies and possible loss of insight into the whole. The basic argument that critics advanced was that a competent person had general type characteristics and

capabilities which were more than just a bunch of individual applicable skills. Moreover, they argued that this approach would result in the bureaucratization of higher education, and allow for external control at the expense of quality of education. At higher level, it represents a complex process which requires first acquisition of conceptual knowledge, and then connecting that knowledge with practical experience (Burke, 2005; Bowden & Masters, 1993). These arguments are mainly built on the fact that competency-based approach in education had originated from a positivist perspective which emphasized the technical aspects of a job. Its goal at the beginning had been to clearly define competencies required for performing job tasks, and to closely connect the education with professional training.

However, humanistic orientation links the term competency to the societal and intellectual aspects of the job in question. It emphasizes the needs of a person as an individual as well as his aspiration towards self-development and self-realization. From the point of view of humanistic orientation, competencies are considered as qualities possessed by successful and accomplished people in a particular job.

That was how generic competencies were created, and they encompassed both personal characteristics and social skills necessary for professional and competent work (Burke, 2005; Stankovic, 2010; Chappell et al., 2000). Also, the nature of the approach itself carried the idea that society was dynamic and its perspective developmental, so it led to the development of competency-based approach, which didn't tend to become a final and sole model, and whose initial flaws were overcome to a large degree. From the standpoint of modern science, this approach doesn't threaten to impoverish school curriculums or make them less demanding in terms of amount of knowledge, but provides them with another quality. By investing into operationalization of knowledge, it makes them firmer and more stable. Unlike knowledge-oriented approaches, this approach understands knowledge in a much wider and more comprehensive manner.

In a light of professional pedagogue education, it means that the focus is not only on possessing particular pedagogical knowledge and skills, but also on the development of personal characteristics and professional skills necessary for establishing, building and improving relationships with students, their parents, and colleagues as well. During the process of university education, pedagogues get prepared to participate in educational institutions' curriculum planning, organizing educational and other activities, as well as performing analytical researches as a means to improve educational practice. All of these require adequate knowledge, professional skills, and personal potentials as well.

Educational implications of modern system of education point to the rising complexity of the role of pedagogue (as a professional counselor) in kindergartens and schools. Function and significance of the research undertaken by the pedagogues is evaluated against its success to connect scientific research and the process of evaluation, assumptions and possibilities to develop collaborative relationships in a school, and its potential to enhance the role of a practitioner in the research process (Hebib, Matovic, 2012: 67-82). That is the reason the university education of pedagogues must be adjusted to the requirements and challenges of modern society and its education system, which implies the competency-based approach. Ever since the past several years, the number of applications always overcomes the enrollment rate at pedagogy departments. Such situation imposes the need to check the quality of the selection of applicants (Matovic, 2010: 62-72), because the university education of pedagogues-to-be, prepares them to participate in educational institutions curriculum

planning, to organize educational and other activities, as well as to perform analyses and researches with the aim to improve educational practice, which requires them to possess adequate knowledge, professional skills, but personal potentials as well.

One of the pre-requirements for good affirmation of a pedagogue is a high-quality preparation for the profession, development of general and professional knowledge, gaining experience. Only a pedagogue who possesses certain competencies in various aspects of pedagogical work, a pedagogue who critically deliberates about himself or herself and his or her pedagogical work, improves the quality of work, and creates a stimulating environment in a school, can be satisfied and expected to advance in his/her profession.

Young people are expected to develop higher order intellectual skills, to be well trained in planning techniques and to be able to predict the consequences that their decisions and actions might bring, as well as to develop altruism, empathy, mutual understanding and communication, leadership, management and cooperation skills. Pedagogue's professional competencies imply high-quality professional qualifications, ability to effectively link educational theory and practice, where pedagogue assumes the role of a creator (Kopas-Vukasinović i Maksimović, 2011: 688-702; 2010: 587-602; Trnavac, 1996; Juric, 1977) as well as readiness for change, and flexible use of knowledge and creativity, which are considered to be the most important personal competencies in modern circumstances. Knowledge, creativity, ability to take initiative, and readiness to change are the keys to the development of both organizations and individuals (Gojkov, 2013; Djuricic-Bojanovic, 2007: 211-224). Adapting the educational system to the strategy of society development also requires the reform of curricula so that it provides functional, computer and technological literacy, stimulates creativity, and develops critical thinking and appropriate individual skills. Moreover, practice has shown that the requirements of future profession represent a proper indicator of the skills young professionals should develop.

Defining of educational outcomes in terms of competencies means breaking with a long-term tradition in education which defined its goals in terms of specific knowledge that should be acquired. According to the European Commission report from 2003, including research in higher education curriculums contributes to the development of competencies which are important for many areas of professional work, not only for the work on scientific research (*Commission of the European Communities, 2003*). The competencies required for knowledge economy are, according to the report mentioned above, closely related to scientific research competencies. The role of research institution, which has always been assigned to universities, gained new meanings now. Apart from its main function of producing new knowledge, research assumes an educational role at universities. The mission of the university based on the concept of *education and research* is being transformed towards the concept of *education through research*. It means removing obstacles which one may encounter on the way towards social advancement and personal development (Djuricic-Bojanovic, 2007: 211-224).

Competencies, unlike knowledge, cannot be learned from textbooks and this approach implies that the rules of self-development and self-realization can be found in an individual as well as in his environment (Jermakov, 2011). Taking this description into account, as well as a far less complicated but equally substantial description given by Suzic (2013) who claims that competency represents the capability to act properly on the spot, we can conclude that competency-based approach is, hence, more pedagogically demanding. For the sake of easier

and more efficient operationalization, Stanic (2003) divides the competencies of pedagogues into personal competencies which encompass general behavior and response; professional competencies which include professional knowledge required for creating a vision; developmental competencies which help the process of improvement; action competencies which imply efficient work in practice; and social competencies which influence interpersonal relationships. Analyzing professional competencies, several authors (Jermakov, 2011; Zizak, 1997: 1-10) agree that they include three elements: professional knowledge, professional skills and individual's personal potentials. Essentially similar, albeit terminologically different division, is made by Jermakov (2011), who distinguishes three levels of competencies. The first level is key or general cultural level, which includes competencies that go beyond the scope of education and have meta-object as well as social-cultural significance (this level of competencies is analogous to the individual's personal potentials stated in the division above). Then, the second level, or general education level, is the one which refers to all subjects present in some area of education, and it is analogous to the professional knowledge, while the third or subject-private level refers to special competencies that form within certain subjects and this level represents the professional skills.

Considering the stated views and definitions we can say that the professional competencies of a pedagogue ask for general and specific pedagogical knowledge which must be systematized and scientifically based; skills which allow for competent work, encompassing methodological, evaluation and research skills, and usage of modern teaching resources, information and communication technologies; and finally, personality traits which are necessary for establishing, building and improving relationships with students, their parents, and other colleagues, as well as successful bearing with other responsibilities of the pedagogue's profession.

Current educational system prepares young people for the 21st century life, for professional and life-style work. That is the reason why pedagogy is wholly committed to the futurology of education. If children are to acquire knowledge they will need in future, university has to find out what that knowledge is, what skills and capabilities their profession will require. Suzić (2005) states 28 competencies of the 21st century which are the basis for understanding the personal potentials of every modern man, and especially for the construction of the modern pedagogue model. As the scope of our research is not wide enough to deal with each competency individually, we paid particular attention to the following competencies: comprehension capability, metacognitive, critical and creative thinking, emotional awareness, self-control and adaptability, interpersonal skills and action competencies, such as conscientiousness, responsibility, persistence and the ability to take initiative.

The methodological scope of the research

The subject of this research is the opinion of students from pedagogy departments on professional competencies needed for their future profession. The purpose of this research is to determine the students' opinions on the efficiency of the pedagogy curriculum in developing their professional competencies.

Descriptive method was used for the research. PCP instrument (Professional competencies of future pedagogues) was created particularly for the needs of this research. The values of KMO and Bartlett tests show that factor analysis is justified, and that instrument created for the needs of research is valid. In order to check whether a data set is suitable for factor analysis

Kaiser-Meyer-Olkin (KMO) test should be higher than 0,3, and the value of Bartlett test should be significant, that is, its value needs to be 0,05 or less.

Chart 1: KMO and Bartlett test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.792
Bartlett's Test of Sphericity	Approx. Chi-Square	1643.111
	df	406
	Sig.	.000

Since the value of KMO test amounts to 0,792, and since Bartlett's test shows that the value is statistically significant, that is, it amounts to $p = 0,00$, we can confirm that the factor analysis is justified (Chart 1).

Based on the goal set, there are two tasks: 1) to distinguish factors which describe the students' reflection on professional competencies from the KPGO scale; 2) to examine whether there is a statistically significant difference between the answers given by the students of the second, third, fourth or master year of those who study pedagogy. Hypotheses are the following: 1) it is assumed that the distinguished factors will be oriented towards pedagogues' professional knowledge, scientific research skills, and competencies necessary for the profession; 2) it is assumed that there is a statistically significant difference between answers given by the students of different years.

A deliberate sample is the one where a researcher deliberately chooses the sample, individuals, groups, variables etc., which will, according to his estimation, contribute most to the research (Kozuh i Maksimovic, 2012). The deliberate sample is the one willingly chosen because there are convincing data suggesting that it is very representative of the whole population (Gilford, 1968). Therefore, our research sample includes 122 students of the second, third and fourth years of undergraduate studies, as well as the students of master studies of the Pedagogy Department of The Faculty of Philosophy in Nis, during the 2013/2014 school year.

The variable of the year of study is operationalized as to show us the different opinions of the students on the professional competencies they acquired studying up to that point. Therefore, the students' reflection on self-evaluation of the personal potentials, scientific research skills, knowledge, and competencies required for the implementation of pedagogical research which are quite necessary for the world of science they shall venture into, are taken into consideration. The first year was not included into the research sample since the first-year students are only at the beginning of education process, and they have yet to acquire knowledge and competencies by studying various pedagogical disciplines. That is the reason why such selection of the research sample was taken, based on the subject set, tasks, and research hypotheses. The research included 45 students of the second year, 20 students of the third year, 43 students of the fourth year and 14 master students of pedagogy. The structure of respondents organized according to their year of study is presented in Chart 2.

Chart 2: Respondents' structure according to their year of study

Year of study	f	%	Valid %	Cumulative %
Second	45	36,9	36,9	36,9
Third	20	16,4	16,4	53,3
Fourth	43	35,2	35,2	88,5
Master	14	11,5	11,5	100,0
Total	122	100,0	100,0	

The analysis of the research results

By the Kaiser's criterion of the process of distinguishing factors, we rely only on the components in which the characteristic root value amounts to 1 or more. In Chart 3, it can be clearly seen that there are 8 factors which have the characteristic root which amounts to 1 or more. These 8 components explain in total 66, 93% of the variance.

Chart 3: The factor analysis of the PCP scale – Pedagogues' professional competencies

	Characteristic root	Variance %	Cumulative %	Characteristic root	Variance%	Cumulative %
Personal potentials	7.367	25.404	25.404	6.286	1.677	21.677
Scientific research skills	3.769	12.998	38.402	3.157	10.885	32.562
Professional knowledge	2.144	7.394	45.797	2.386	8.227	40.788
Pedagogues' area of work	1.683	5.804	51.601	2.119	7.307	48.095
Counselling work and practice	1.170	4.035	55.636	1.550	5.345	53.440
The role of pedagogues	1.152	3.973	59.610	1.376	4.746	58.186
Necessary competencies	1.098	3.785	63.394	1.315	4.535	62.721
Knowledge	1.026	3.539	66.934	1.222	4.213	66.934

The factors were extracted using the factor analysis with varimax rotation, and the characteristic-root-above-1 criterion was used for getting the factors. The data acquired by the procedure of factor analysis show that the instrument created for the needs of this research has approving metrical characteristics. The percentage of acquired variance is high and amounts to 66, 93, which exceeds the expectations of instruments created for the needs of a research performed in social and humanistic sciences.

Factor saturation of each factor is represented in the matrix (Chart 4). The value picked as the criterion of minimum saturation of the items is 0, 44. All other saturations are mainly above

this value as can be seen. All of the 29 items are retained, divided into 8 factors, and are named in accordance with the content they include.

Chart 4: The Factor Rotation Structure Matrix

Rotated Component Matrix ^a								
	Components							
	Personal potentials	Scientific research skills	Professional knowledge	Pedagogues' area of work	Counseling work and practice	The role of pedagogues	Necessary competitions	Knowledge
1	.881	.054	.107	.054	.028	-.035	-.074	-.034
2	.853	.104	.021	.026	-.019	.072	-.165	-.038
3	.826	-.007	.044	.037	-.070	-.126	.057	.078
4	.758	-.026	-.057	-.165	.081	.332	.053	.047
5	.713	.134	.222	.116	.175	-.070	-.331	-.057
6	.690	.102	.110	.074	.217	-.328	.058	.142
7	.687	-.072	.095	.307	.027	.160	.081	.220
8	.677	-.073	.136	.269	-.181	.199	-.264	.018
9	.658	.249	.200	-.027	-.215	.180	.106	-.121
10	.655	-.061	.067	.030	.479	.157	.113	.140
11	.603	-.206	.191	.263	-.017	.326	-.144	.138
12	.064	.813	.126	.129	-.159	.024	.162	-.101
13	.018	.742	.163	.003	.114	.041	-.151	.037
14	-.014	.710	.070	.189	.204	.008	.185	.075
15	.082	.627	.154	.040	.242	-.142	-.119	-.019
16	-.044	.494	-.132	.113	.134	.426	-.312	.313
17	.003	.481	.221	.395	.479	-.238	.040	.113
18	.150	.054	.740	-.034	.005	.116	-.056	.095
19	.126	.206	.739	-.106	.040	.019	-.113	.111
20	.118	.380	.691	.007	-.232	-.050	.120	-.045
21	.148	-.020	.607	.402	.279	.155	.153	-.263
22	-.053	.151	.053	.733	.204	.092	-.043	.026
23	.323	.052	-.070	.674	-.027	-.077	.056	.288
24	.208	.286	-.138	.577	.042	.140	.108	-.245
25	.166	.214	-.053	.284	.613	.312	.159	.086
26	-.066	.246	-.036	.038	.440	-.064	-.002	-.194
27	.253	-.065	.290	.125	.052	.678	.157	-.022
28	-.179	.027	-.024	.083	.111	.083	.847	.096
29	.148	.039	.083	.062	-.049	.018	.094	.816

The first factor refers to *personal potentials* and includes 11 items used to examine the students' reflection on professional competencies required for their future profession (the pedagogy studies encourage the development of the consciousness of personal cognition and the ability to evaluate one's own work, and also the development of critical thinking, flexible and creative thinking, the consciousness of personal and other people's emotions, self-confidence and self-control, adaptability and openness towards new ideas, they also encourage group work and cooperation training, the development of positive non-violent communication, tolerance and democratic values, conscientiousness and responsibility, persistence and the ability to take initiative). It is expected from young people to develop higher order intellectual skills, to train themselves to plan in advance and to predict the consequences that their decisions and actions might bring, but to improve their emotional competencies as well, such as altruism, empathy, mutual understanding and communication as well as leadership, management and cooperation skills. Knowledge, creativity, the ability to take initiative and the readiness for changes are the keys to the development, survival and success of organizations, as well as of individuals (Gojkov, 2013; Djuricic-Bojanovic, 2007). The results show that the students highly value all "personal potency" items that future pedagogues should possess.

The second factor refers to *scientific research skills* and includes 6 items (the acquisition of the theory knowledge necessary for high-quality pedagogical work, the application of research methods and techniques, theorizing and applying theories in practice, intellectual work techniques: literature studying and the using of scientific sources, knowing of scientific report writing structure, being qualified to use teaching aids and technology). Concerned with professional competencies, several authors (Jermakov, 2011; Zizak, 1997) agree that they include three elements: professional knowledge, professional skills and individual's personal potentials. The point is that the students' responses regarding the "scientific research skills" factor include the 3 elements discussed by the authors mentioned.

The third factor refers to *professional knowledge* and it includes 4 items (the necessity of the structured knowledge of every area, software support as the integral part of education, the readiness for permanent education, and innovations in teaching). It includes all the relevant knowledge that strengthens and supports the professional skills (Zizak, 1997). The results show that students highly value the professional knowledge acquired during their studies.

The fourth factor refers to *pedagogues' area of work* and it includes 3 items (being informed about pedagogues' area of work, being informed about the profession's requirements, being trained for high-quality pedagogical work in all areas). University education prepares the students of pedagogy for the profession of counselors in educational institutions. It requires systematic and complementary work of all the people included in the realization of teaching activities, so these young pedagogues need to acquire knowledge and experience, and develop appropriate professional competencies. Pedagogy students must be oriented towards pedagogy practice research in all areas of work in order to be able to improve them. This information bears special significance because it is highly valued from the pedagogy students' perspective.

The fifth factor refers to *counseling work and practice* and it includes 2 items (knowing the general characteristics of pedagogical counseling work, and being trained to perform researches on educational practice). The results of the research show that the students of pedagogy, during their university education, primarily want to qualify for a high-quality

counseling work, and in that way become able to work effectively in an educational institution and help children, young people or adults with whom they cooperate.

The sixth factor refers to *the role of pedagogues* in competency acquisition process and it includes 1 item (understanding the role of a pedagogue and the importance of the acquisition of competencies required for counseling work in education). The pedagogy students highly value pedagogues' professional competencies, which mainly refer to the possession of particular pedagogical knowledge and skills, but also to personal characteristics necessary for establishing, building and improving of relationships with all the individuals concerned with educational process.

The seventh factor refers to *necessary competencies* and it includes one item (the development of competencies necessary for performing their future professions). The students find professional knowledge, professional skills and individual's personal potentials important.

The eighth factor refers to *pedagogical knowledge* and it includes 1 item (the acquisition of knowledge necessary for the development and refinement of new learning models). Students are taught to analyze the possibilities, characteristics and specificities of model application in researches they perform (Matovic, 2000). We can also attach all the characteristics of the obtained factors to the factors' explanation – pedagogical knowledge. Future pedagogues must keep acquiring knowledge, skills and competencies necessary for them to provide a high-quality work inside their profession, and they have to remain oriented towards improving their knowledge.

Pedagogy is wholly oriented towards the future of education. If students acquire knowledge which they will need in future, the university has to perceive that knowledge, and those skills and abilities that future life will require (Suzic, 2005). The factor analysis of the obtained results shows that the students are aware of the importance of the professional competencies for their future profession, and of the fact that curriculums are designed as to encourage the development of those competencies.

Determination of statistical significance by the means of F test based on the obtained ANOVA factors

We came up with interesting findings by analyzing the students' opinions regarding their personal potentials, scientific research skills, professional knowledge, and school counselor's area of work, counseling work and practice, the role of pedagogues in competency acquisition process, competencies necessary for work, and knowledge related to educational theory.

Chart 5: Determination of statistical significance by the means of F test based on the obtained ANOVA factors

		Sum of Squares	df	Mean Square	F	Sig.
Personal potentials	Between Groups	91.134	3	30.378	.845	.472
	Within Groups	4242.210	118	35.951		
	Total	4333.344	121			

Scientific research skills	Between Groups	541.288	3	180.429	15.549	.000
	Within Groups	1369.236	118	11.604		
	Total	1910.525	121			
Professional knowledge	Between Groups	22.259	3	7.420	1.479	.224
	Within Groups	591.840	118	5.016		
	Total	614.098	121			
Pedagogues' area of work	Between Groups	14.709	3	4.903	1.203	.312
	Within Groups	480.996	118	4.076		
	Total	495.705	121			
Counselling work and practice	Between Groups	94.816	3	31.605	1.972	.122
	Within Groups	1891.151	118	16.027		
	Total	1985.967	121			
The role of pedagogues	Between Groups	.069	3	.023	.043	.988
	Within Groups	62.554	118	.530		
	Total	62.623	121			
Necessary competencies	Between Groups	68.827	3	22.942	1.009	.391
	Within Groups	2683.378	118	22.740		
	Total	2752.205	121			
Knowledge	Between Groups	14.745	3	4.915	.504	.680
	Within Groups	1151.386	118	9.758		
	Total	1166.131	121			

By comparing arithmetical means by the means of F test between the students of second, third, fourth year and master pedagogy students we have come to a statistically significant difference concerning the second factor referring to *scientific research skills* ($p=0,00$) reflected in: the acquisition of theoretical knowledge required for high-quality pedagogical work, the application of research methods and techniques, theorizing and applying theories in practice, intellectual work techniques: literature studying and using of scientific sources, knowing of scientific report writing structure, being qualified to use teaching aids and technology. The students' responses were uniform. No significant statistical difference was discovered during the examination of the students' responses regarding the rest of the factors, and it was concerned with their perception of the significance of personal potentials for scientific research, professional knowledge, and the role of a pedagogue inside the work of research, as well as the importance of necessary competencies, counseling work and practice.

The function and significance of researches that is carried out by pedagogues is seen from the point of view of interconnectedness between research itself, the evaluation process, and the role of a practitioner in the process of research. The characteristics of the researches carried out by pedagogues are analyzed from the point of view of the nature of the problem being studied, the purpose of research, sample/respondents, methods and techniques employed in the process of data acquiring and processing (Hebib, Matovic, 2012). Therefore it is necessary

to develop students' scientific research skills and make them competent to perform their future job, and to train them to perform high-quality pedagogical work.

Chart 6: Post hoc test for the determination of statistical significance

Dependent Variable	(I) Year	(J) Year	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scientific research skills	Second	third					
		fourth	-3,08941*	,72644	,000	-5,0388	-1,1400
		master	-6,72063*	1,04245	,000	-9,5180	-3,9233
	Third	second	2,67778*	,91545	,025	,2212	5,1343
		fourth	-,41163	,92198	1,000	-2,8857	2,0625
		master	-4,04286*	1,18702	,005	-7,2282	-,8575
	Fourth	second	3,08941*	,72644	,000	1,1400	5,0388
		third	,41163	,92198	1,000	-2,0625	2,8857
		master	-3,63123*	1,04818	,004	-6,4440	-,8185
	Master	second	6,72063*	1,04245	,000	3,9233	9,5180
		third	4,04286*	1,18702	,005	,8575	7,2282
		fourth	3,63123*	1,04818	,004	,8185	6,4440

Chart 6 shows the groups of respondents between which there is a statistically significant difference with value of 0,05 or less, and it is concerned with the *scientific research skills* factor. Considering the results obtained, we can see that the second year is statistically significantly different from the fourth year, but also from the master students of pedagogy ($p=0,00$) in relation to scientific research skills acquired during their studies. This claim is particularly valued by the master students ($M=-6,72$), so this information does not surprise us since they are most experienced in this domain. The third year is statistically significantly different from the second year ($p=0,03$) and from the master students ($p=0,01$). The fourth year is statistically significantly different in terms of their responses from the second year, who are only at the beginning of being introduced to the importance and characteristics of scientific research ($p=0,01$), and from the master students who are fully aware of the importance of possessing those skills and who highly value this factor ($p=0,00$). The master students of pedagogy are statistically significantly different from the students of second, third and fourth years ($p<0,05$). Our hypotheses about differences in the perception of competencies between the students proved true. Similar research (Huić et al., 2010) showed that even though the students go through the same educational program, they are still different in terms of the practical experience they have and their perception of practical skills importance.

Unlike the first year students, the students included in the sample highly value the acquisition and significance of theoretical knowledge necessary for a high-quality pedagogical work, the application of scientific research methods and techniques, and intellectual work techniques: literature studying and using of scientific sources, knowing of scientific report writing structure.

Concluding remarks

The work of pedagogues as professional counselors in educational institutions implies a wide array of tasks, such as participation in curriculum planning, the realization of educational process, tracking and evaluation of activities, collaboration and work with students, parents

and teachers, and pedagogical counseling. This research indicates the importance of students' professional competencies acquisition as the part of process of globalizing education. The future pedagogue must be both a practitioner and a practice theoretician and has to be oriented towards lifelong education, since the process of the pedagogue's education can never be considered to be complete.

The results obtained by the research indicate the true condition of future pedagogues' opinions of the competencies they acquire during the course of studying. The results are satisfying. The students highly value the professional knowledge of a pedagogue necessary for a high-quality pedagogical work, and they are familiar with the area of work of a pedagogue and with the profession requirements. Also, they realize the importance of the acquisition of scientific research and professional competencies, the ability to theorize and to apply theories in practice. That really is significant information about students' reflection on this topic. The students consider and confirm that university education develops the competencies required for their future profession, and also their consciousness of personal cognition and the evaluation of personal intellectual work. Moreover, they express positive attitudes acknowledging that the studies encourage their development of critical, creative and flexible thinking. They also prefer non-violent communication; encourage responsibility, conscientiousness, persistence and the ability to take initiative. We presented the obtained data, using the tabular method by the means of factor analysis, so all of the statistical parameters indicate quite encouraging and positive results, since, after all, the aim of university education is to train future pedagogues for a high-quality pedagogical work and to improve their personality characteristics as to make them capable of bearing with various situations.

By examining the pedagogues' opinions by the means of factor analysis we concluded that they highly value the following factors referring to professional competencies necessary for their future: the importance of developing personal potentials throughout the study course required for a high-quality professional work, the importance of scientific research skills, professional knowledge and the readiness for permanent education, the importance of being informed about pedagogues' area of work and the profession requirements, the importance of pedagogical counseling work, as well as the role of pedagogues in the acquisition of the professional competencies required for a high-quality work in educational practice.

This is the proof that timely information regarding the profession's requirements and encouraging interest in pedagogical practice research can encourage the further development of young pedagogues' professional competencies as well.

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