

Internal Marketing Strategy for Educational Services

L N Tsarakhova¹, S V Kabanov¹

¹Federal State Budgetary Educational Institution of Higher Education "North Ossetian State University named after Kost Levanovich Khetagurov", Russia

E-mail: carahova_larisa@mail.ru, sevlka@mail.ru

Abstract. Educational marketing is a promising sector of economy. This marketing seeks to meet the demand for education while bringing prosperity and development to educational institutions. Educational marketing expands every year, as the demand for education evolves. Over the past five years, higher education in healthcare and pharmaceuticals has changed drastically. There emerged new agents, the Federal State Educational Standard for Pharmacy has changed its requirements, and so did employers, while specialist accreditation was made mandatory. Search for novel learning processes is what characterizes education today. Simulation-based training is becoming 'bread-and-butter'. This forces universities to adopt state-of-the-art marketing strategies. A university's marketing strategy revolves around greater competitiveness, gaining competitive advantage in the education and labor market, efficient coordination of internal and external communications, and creating/reinforcing the university's positive image. To promote educational services, a university needs a set of marketing methods tailored to two objectives: to advertise its educational services and to convince the customer these services will be a worthy investment. The university's image is key to that. To reach the top of the market and to consolidate their positions there, universities complement their conventional educational services with novel programs, R&Ds, advertising, PR, etc. Success in self-promotion is a function of service quality, the quality-price ratio (QPR), and the university's and/or its employees' image. Universities have to plan, develop, implement, and evaluate their marketing strategies if their educational service promotion efforts are to succeed.

1. Introduction

Educational marketing is a promising sector of economy. This marketing seeks to meet the demand for education while bringing prosperity and development to educational institutions [1]. Global experience suggests a large-scale modernization of educational marketing as education itself becomes a service. Educational marketing expands every year, as the demand for education evolves [7]. Russian universities are facing ever greater challengers of socioeconomic globalization, stronger competition in education and labor markets, limited resources, changes in customers' demand, etc. [2, 9]. Over the past five years, higher education in healthcare and pharmaceuticals has changed drastically: there emerged new agents, the Federal State Educational Standard for Pharmacy has changed its requirements, and so did employers, while specialist accreditation was made mandatory; on top of that, simulation-based training is becoming 'bread-and-butter'. This situation forces universities to adopt state-of-the-art marketing strategies.

Educational marketing has its own specifics [3] that boils down to what distinguishes a university from a manufacturer or a service provider:

- a focus on transforming the customer’s personality, to help them gain value as a person, an employee, a citizen;
- greater customer engagement in service provision;
- intense customer-provider interaction;
- the outcome cannot be duly evaluated until the graduate gets to put their knowledge and skills into practice, while it also depends on the graduate’s working and living conditions;
- the university bears social responsibility for the specialists it trains;
- the greater demand is met, the greater demand arises [2, 5].

A university’s marketing strategy revolves around gaining competitive advantage in the education and labor market, efficient coordination of internal and external communications, and creating/reinforcing the university’s positive image [2].

Today, global informatization means education consumers (the term is used interchangeably with ‘customers’ hereinafter) gain access to ever more data. Agent-to-agent interface is communication-based [4]. The specific features of educational marketing affect the marketing communications as a complex. A university may reach out for individuals, groups, organizations, authorities, public structures, whether directly or indirectly. All of this is addressed in the university’s marketing strategy [2].

To promote its educational services, a university needs a set of marketing methods tailored to two objectives: to advertise its educational services and to convince the customer these services will be a worthy investment. The university’s image is key to that. To reach the top of the market and to consolidate their positions there, universities complement their conventional educational services with novel programs, R&Ds, advertising, PR, etc. Success in self-promotion is a function of service quality, the quality-price ratio (QPR), and the university’s and/or its employees’ image. Universities have to plan, develop, implement, and evaluate their marketing strategies if their educational service promotion efforts are to succeed.

Relevance and Scientific Significance. The Republic of North Ossetia — Alania (RNO—Alania) has three schools that train pharmacists: Federal State Budgetary Institution of Higher Education Khetagurov North-Ossetian State University (NOSU); Federal State Budgetary Institution of Higher Education North-Ossetian State Medical Academy (NOSMA); and State Budgetary Institution of Vocational Education North-Ossetian Medical College under the Ministry of Health of RNO—Alania (NOMC). Despite the abundance of pharmaceutical training, HR in pharmaceuticals are far from reaching redundancy. This labor market in the Republic is closely related to the Republic’s geography. RNO—Alania is one of Russia’s most densely populated regions. Places that contain the bulk of the population have a density in excess of 140 people per sq. km. While 30% of Russia’s total population is rural and 70% is urban, RNO—Alania’s ratio is 50-50 [11]. This creates a peculiar pharmaceutical labor market, including its rural parts. On the one hand, some graduates leave the region for major cities, mainly Moscow and St. Petersburg, where they build a successful career. Despite the Republic’s generally favorable labor market in pharmaceuticals, schools that train such specialists compete for student. Retail pharmacists is the most sought-after position in this market [10]. Indeed, today’s employers actually equalize the positions of retail pharmacists, general pharmacists, and pharmacists-in-charge both functionally and salary-wise. This gives rise to a question: why would anyone do 5 years of university training and 2 years of residency to make a retail pharmacist’s career if a 3-year NOMC program is enough for that, let alone the a three-fold difference in tuition fees? This has predictably resulted in a greater intake of applicants that want to study Pharmacy at NOMC. In the current situation, internal marketing strategy is essential to develop, as it is crucial to the university’s competitiveness.

Labor market evolution requires universities to devise novel approaches to educational marketing [13, 14]. Scientifically backed educational marketing is what enables a university to be competitive and in demand. This is proven by the experience of the firm Marketing Works. Their skillfully done marketing of education trainings boosted the yearly cash inflow by 470%. Overview of published marketing strategies employed by universities shows that the following marketing communications are

critical to success: advertising, public relations, direct marketing, tradefairs and exhibitions, as well as Web presence [15, 17]. Aside from the common marketing strategies, a university will need internal marketing of its educational services, something that will distinguish the school from competing universities to help quickly build a relationship of trust between the customer (a student and/or their parents) and the supplier (the university).

Statement of Problem This research seeks to devise an internal educational marketing strategy for the Faculty of Dentistry and Pharmacy, Khetagurov North-Ossetian State University. This requires:

- ✓ analysis of regulatory framework for education,
- ✓ analysis of the Federal State Educational Standard for Pharmacy,
- ✓ analysis of the professional standards in pharmacy: Pharmacist-in-Charge, Industrial Pharmacist for Pharmaceutical Research, Pharmaceutics Validation (Certification) Specialist, Pharmacy Manager, Industrial Pharmacist for Drug Quality Control, Industrial Pharmacist for Drug Quality Assurance, Pharmacist-in-Charge and Analyst, Industrial Pharmacist for Pharmaceutical Manufacturing [1],
 - ✓ analysis of the skills covered by the curriculum and testing newly trained pharmacists for compliance with the FSES and professional standards,
 - ✓ analysis of the primary specialist accreditation requirements,
 - ✓ analysis-based internal educational marketing strategy.

2. Theory

The education market has evolved drastically: universities now have to compete fiercely, while the values and requirements of their target audience have changed considerably. These factors force universities to devise strategies and tactics for their marketing concepts, which is critical to success.

Educational marketing research focuses on supply and demand (the economic relations between actors in the market for education); market boundaries and segments, as well as their capacity in terms of potential students, with an emphasis on duration of training; internal and external marketing environment; the market situation; competitiveness of educational services; the behavior of market actors, i.e. suppliers and middlemen, actual and potential customers, and competitors; possible marketing strategies and different solutions to marketing problems [6].

Educational marketing is divided into internal and external marketing. Internal marketing seeks to evaluate the importance of educational services in the evolutionary context of higher education. Russia's Education Act regulates educational management and provides a framework for educational business. It draws a clear borderlines between the powers of government agencies and universities [12]. Pursuant to the law, universities can fairly independently devise their curricula, teaching aids, study plans and programs for the majors they offer [12]. This boosts the significance of internal marketing, which, if done properly, is what makes a university competitive and recognizable.

One important trait of education as a service is that it depends on the customer's competence, i.e. the total of knowledge and the social skills they have acquired to use the learning outcomes in the post-marketing period, i.e. to work in the pharmaceutical industry [16]. This is what makes internal marketing fundamental.

Applicability. The authors hereof have devised an internal marketing strategy based on the following components:

- (1) innovation learning processes (simulation-based learning),
- (2) development of standard operating procedures for learning.

One internal marketing strategy this research effort applies is a newly developed innovative learning process: simulation-based learning, which complements more conventional training of healthcare providers and is designed towards self-studies.

Pharmaceutical education providers currently offer very limited simulation-based learning, as the acquisition of practical skills pursuant to the curriculum is subject to extremely high technical requirements. In the current state of the art, pharmaceutical students have not only to learn the theory, but also to put it into practice. Pharmacist-in-charge curricula allocate a considerable time to

laboratory sessions to solidifying the theoretical knowledge and the learnt materials; laboratories must be appropriately advanced to that end.

Pharmaceutical industry develops at a fast pace; drug manufacturing facilities upgrade their equipment on a regular basis, which means students need access to equally advanced equipment if they are to succeed at work. This can be partially handled by virtual labs [18].

A pharmacist-in-charge's professional competence depends on the quality of their training in chemistry. This is why chemistry is at the heart of pharmacist-in-charge training. State-of-the-art hardware can run software to virtualize a chemical laboratory, which is important to learning.

Basic pharmacists-in-charge training is tied to training in chemistry. Conventional laboratory sessions are increasingly complemented with virtual laboratories.

A virtual computer laboratory is a hardware and software facility that uses virtualization to perform research and lab sessions computationally [20]. Designing a virtual chemical lab session is the enabler of simulation-based learning.

In this research, Khetagurov North-Ossetian State University's distance learning portal provides the toolkit for virtualization of learning.

A virtual lab session is an extension to the instrumental action of electronic learning media; at the same time, it improves students' understanding of chemistry and furthers their application of theoretical knowledge to real-world situations.

A virtual laboratory has a few advantages over its more conventional counterparts:

- ✓ no need to purchase or upgrade equipment;
- ✓ no need to use expensive reagents;
- ✓ special process conditions can be simulated, such as high temperature, excessive pressure, etc.;
- ✓ the process is highly visual and infinitely reproducible;
- ✓ no limits on the timeframe, i.e. students and researchers can analyze any chemical process regardless of how long or short it is;
- ✓ safety is not a concern;
- ✓ virtualization enables serial experimentation with input and output adjustments;
- ✓ saves time and prevents error in repeated experiments;
- ✓ a simulation laboratory can be accessed by students and Internet users alike.

The downsides to it is lack of interaction with the substance and zero hands-on experience with instrumentation and sundry equipment.

Optimal combination of virtual and actual lab sessions yields the best results. Simulation-based laboratories are optimal for early sessions, including safety training, while a more conventional laboratory is suitable for students who have acquired certain skills.

Creating a simulation-based laboratory for general and non-organic chemistry training in major Pharmacy has been a joint effort of the faculty members in Dentistry and Pharmacy, Chemistry, Biology, and Biotechnology, Mathematics and IT.

Beside experimentation in general and inorganic chemistry, the virtual simulation-based laboratory focuses on the safety of experiments. It visualizes the consequences of negligence. When a student sees an experiment on the screen, they learn how to handle the real experiment that will follow.

3D animation and virtual equipment give students an authentic experimentation experience, as they can learn how to combine the lab components into chemical sets as well as how to stage the experiment. The software contains virtual instruments to collect readings and also keeps the logs; a virtual assistant gives text and voice comments to guide the student. The latter can even write down the reaction equation by means of the built-in Chemical Equation Editor.

Hands-on experience shows the virtual laboratory fuels students' interest in future actual experimentation and is also beneficial for their practical skills.

Virtual learning environment has the today's student covered. Albeit such laboratories are expensive and high-maintenance, they show promise with respect to learning quality and attractiveness.

The next step is to develop standard operating procedures for the learning process. Standard operating procedures (SOP) are a crucial component to quality management in healthcare and pharmaceuticals, and the term has long been a buzzword. SOPs have been critical ever since the Ministry of Health's Order No. 647n dd. August 31, 2016 came into force on March 1, 2017. The Order title reads, "Approval of Good Pharmacy Practice Rules Applicable to Medicinal Drugs." The rules regulate the retail trade in pharmaceuticals and seek to provide people with high-quality and safe pharmaceuticals and medical devices. The intent is to create a pharmacy management system to improve the services and take further the personal responsibility of pharmacists general and pharmacists-in-charge while connecting the doctor, the patient, and the pharmacist.

Good Pharmacy Practice Rules require appropriately qualified personnel trained under a competence-based approach to learning. This is why universities seek to redesign their learning processes to train capable specialists [8]. As a young person becomes a student, which is a new social status for them, they have to learn a different behavior. A university should seek not only to give knowledge and teach specific skills, but also to help student get used to their new profession, love it, and get ready to the real job. Standard operating procedures are critical to a state-of-the-art learning quality management system. Clear and unambiguous SOPs prevent error in laboratory while helping track the entire learning process. Thus, the university is an environment that must be the first to adopt SOPs and to help students learn the concept of standard operating procedures. Application of SOPs in training will help students adapt more easily to actual pharmacy practices, to evolve specific pharmaceutical thinking, to better understand the professional complexity of pharmaceuticals as an industry. Students are expected not only to acquire specific knowledge and skills, but also to convert them into competence, practical skills, methods, informedness, and mental readiness to become part of a productive, state-of-the-art pharmaceutical industry. Chemistry classes must be the first to acquire their own SOPs, as they are the basics of Pharmacy curricula.

Standard operating procedures are instructions or stepwise guidelines to doing something.

For a student laboratory session, a SOP is a document that outlines what has to be done in the lab step by step. Thus, each laboratory session must be accompanied by specific SOPs. Standard operating procedures are what makes the laboratory session and its outcome consistent, coherent, predictable, and reproducible. All the SOPs of any laboratory session must follow a standard structure to be easily student-readable. SOPs are laboratory-specific, as they depend on the available equipment, materials, etc.

Standard operating procedures used in lab session must answer the following questions:

- ✓ How do you do that? (A detailed algorithm for the session).
- ✓ Who? (Detailed roles of students, teachers, and laboratory assistants).
- ✓ Where? (Which unit the SOP is for, name of the lab).
- ✓ When? (Time limits for the laboratory session described by this SOP; the procedure and conditions of laboratory work).

Standard operating procedures are critical to:

- ✓ coordination and coherence of action;
- ✓ correctness of laboratory work;
- ✓ quality of laboratory work;

Thus, a SOP is expected to be:

- ✓ concise, but well-detailed;
- ✓ drawn up by appropriately qualified faculty members;
- ✓ clear and understandable for any student, whether they excel or not;
- ✓ reviewed and approved by a Meeting of the Faculty Board;
- ✓ updated on a regular basis;
- ✓ made available to all the laboratory session participants (teachers, laboratory assistants, and students) in a convenient format.

The authors hereof have developed the SOP essentials structured as follows:

- ✓ Scope and purpose (scope of the SOP and the laboratory it applies to).

- ✓ Regulatory documents and other information sources (all orders, GOSTs, international guidelines, and standards referred to in the SOP).
- ✓ Terms and definitions.
- ✓ Abbreviations and their meanings.
- ✓ Materials and equipment.
- ✓ Environmental and ambient requirements.
- ✓ Personnel (who does the laboratory session and who is to be held responsible for it).
- ✓ A detailed procedure for the doer:
 - preparations (requirements to clothing, workspace, equipment, materials, etc.);
 - core part (a sequence of procedures each doer must follow during the laboratory session);
 - completion.
- ✓ Safety requirements.
- ✓ Actions to handle abnormal situations.
- ✓ References.
- ✓ Appendices (forms to be filled during the session).
- ✓ Log and change sheets.

3. Conclusions

Thus, a SOP is what guarantees clear-cut procedures, logically coherent and consistent action, and better learning outcomes; therefore, devising a SOP is critical to learning quality management.

The expediency of applying the internal marketing concept to educational service promotion is driven by the university's expansive communication space and its outstandingly large network of customers. The developed internal marketing system coordinates the means and methods of educational service promotion to create efficient learning space. The system is the most promising medium for university's communications with customers and general target audience.

References

- [1] Apazov A D, Nevolina E V, Loskutova E E, Kosova I V 2016 Assessment of qualifications of specialists in the field of pharmacy *Bulletin of Roszdravnadzor* **5** pp 124-127
- [2] Afanasyev V Ya, Cherkasov V V 1999 Educational services marketing *Marketing* **5** pp 68-76
- [3] Afonichkin A I, Gorelik O M, Volokhin S B 2002 Improving the competitiveness of educational services of higher education in the region (on the example of the Samara region) *Marketing of educational services (M.: MESI)*
- [4] Balov G L 1998 *Marketing Dictionary and bibliography* (SPb.: publishing house SPbSUEF) 74 p
- [5] Gureeva A N 2017 Media communication activities of Russian universities in the Internet space (2014 - 2016): dissertation ... Ph.D. in Philology: 10.01.10 Protection: FSBEI HE Moscow State University named after M.V. Lomonosov 184 p
- [6] Gutkevich A E 2008 Marketing aspects of the activities of a higher educational institution dis. for a job. scientist step. Cand. econ. Sciences: specialty 08.00.05 Economics and Nar Novosibirsk household
- [7] Kaydashova A K 2011 Marketing tools for regulating demand for higher education services *Bulletin of the Orenburg State University* **4** pp 55 - 59
- [8] Kalmykova O Yu 2004 Chemistry training for first-year students based on an adaptive system: Dis. ... cand. ped Sciences: 13.00.02: (Samara) 190 p
- [9] Kostyukov A V, Bolshakov S N 2006 Regional aspects of ensuring the competitiveness of educational services of higher education *Education and society* **3** pp 39- 43
- [10] Levkova I N, Tsarakhova L N 2010 Assessment of the possibility of moving to the first stage of a two-level education system - a bachelor's degree in pharmaceutical education in the Republic of North Ossetia-Alania *Man and medicine: Thes. doc XVIII Ros. nat. Congr. Apr* (M.) pp 611 - 612

- [11] Levkova I N, Tsarakhova L N 2013 Studying the possibility of innovative transformations in the pharmaceutical personnel training system in the Republic of North Ossetia *Bulletin of Roszdravnadzor* (Moscow: Federal State Budgetary Institution IMTSEUAOOSMP of Roszdravnadzor) **1** pp 61-66
- [12] 2017 Marketing in industries and fields of activity: Textbook. allowance Ed. Dr. econ. sciences, prof. ON. Nagapetian (M.: High school textbook) 272 p
- [13] Moiseeva N K, Piskunova N N, Kostina G D 1999 Marketing and competitiveness of an educational institution (university) *Marketing* **5** pp 77-89
- [14] Neretina E A, Makarets A B 2013 The use of integrated marketing communications in the promotion of educational services of the university *Modernization of education* **1(70)** pp 3-12
- [15] Protasevich A R 2009 Improving the information and representative function in the entrepreneurial activity of a Russian university: dissertation ... candidate of economic sciences: 08.00.05 (Place of protection: State. University of Law) (Moscow) 193 p
- [16] Saginova O V 2002 Marketing of higher education: basic concepts, new trends and prospects *Marketing of educational services: materials of the seminar* (M.: MESI)
- [17] Sarsenova E A 2017 Strategies of modern marketing in the field of educational services *Issues of Economics and Management* **1** pp 54-57
- [18] Tsarakhova L N, Kabanov S V 2018 The use of simulation technologies in the formation of a laboratory workshop for medical specialties within the framework of a classical university *International Science Project* (Turku, Finland) **11** Part 1 pp 15-17
- [19] Tsarakhova L N, Choniashvili D Z, Tsarakhov O A 2017 Features of the preparation of pharmaceutical personnel in simulation conditions within the framework of a classical university *Traditions and innovations in the training of personnel at a medical university: dedicated to the 85th anniversary of the Belarusian State Medical University: materials of an inter-university educational and methodological conference with international participation* (Ufa: Publishing House of FSBEI HE BSMU of the Ministry of Health of Russia) pp 377 - 379
- [20] Cheremisina E N, Antipov O E, Belov M A 2012 The role of a virtual computer laboratory based on cloud computing technology in modern computer education *Distance and virtual training* **1** pp 50-55