

AN APPROACH STIMULATING THE COMPETITIVENESS AND SUSTAINABLE DEVELOPMENT OF ACADEMIC INSTITUTIONS: IMPLEMENTATION AND RESULTS

Svilen Kunev, Diana Antonova, Svilena Ruskova
University of Ruse “Angel Kanchev”, Bulgaria

Abstract. The article presents a methodical approach aimed at stimulating career development and improving the quality of life of scientists and employees in an academic environment. For this purpose, an author’s concept was built for the integration of representatives of interested parties in the definition of problem areas, the development of measures and solutions supporting working conditions and career development. The testing was carried out in real conditions in 2024 at Ruse University “Angel Kanchev”. The results of the fieldwork are divided into five thematic directions and support: improving the conditions for career and personal development of those employed in an academic environment; increasing social responsibility towards employees and society on the part of universities, adapting to modern requirements and guidelines of strategic documents at the national and European level, stimulating the competitiveness and sustainable development of academic institutions.

Keywords: career development; quality of life; academic development

JEL: I23, I31, O15

1. Introduction

Research on the contemporary development of the academic career and the quality of life of teachers in university structures is the subject of numerous European projects, national programs and leading authors (WEForum, 2023; Schwab, 2021; Krugman, 2020; Molhova & Biolcheva, 2023; Sterev & Milusheva, 2023). Two main research directions can be distinguished, which are related to different theoretical approaches (Modise, 2023). The first strand refers to human resource management either in traditional or emerging managerial approaches (Ion, 2020), psychology and organizational theories and considers careers as individual fields within academic growth within organizations or between organizations themselves (Lee, 2023). The key word here is career (Lee, 2023). The second strand is related to the labor

market and focuses on inclusion, mobility, change and career paths. The key word here is trajectory (WEForum, 2023). In the first approach, the main mechanisms serving to understand the new career models are management changes, such as the academic network, for example, the flat hierarchy, new forms of organization of the educational and research process, and the reengineering (restructuring) of business processes for which personnel are trained and specialists. In the second approach, the driving mechanisms are different: increasing the flexibility of the labor market, developing skills and training programs, creating or eliminating jobs in a specific business or professional field or geographical region (Deneva et al., 2022), security or insecurity. However, the change in individual attitudes towards academic work is an important point in both approaches (Gueorguiev & Kostadinova, 2021; Atanasova & Venelinova, 2022).

Although several theories deal with either the individual or the collective dimensions of research careers and learning within specific disciplinary boundaries (psychology, human capital economics, management, artificial intelligence management, etc.), others consider a combination of the two, from a cross-disciplinary perspective. Among these attempts, the concept of the „career anchor“ is defined as a combination of three components: a process of awareness of one’s own talents and abilities, which are constructed through professional successes; developing individual motivation and individual needs; self-perceived values and attitudes resulting from interaction with organizational culture (Ford, 2021; Biolcheva & Sterev, 2024). Adam Sheingate (Fioretos et al., 2016) suggests eight types of career anchors: based on security/stability; based on autonomy/independence; based on the way of life (life style); based on technical/functional competencies; on the basis of general management competencies; based on entrepreneurship and creativity through age (Todorova, 2024); of the service or dedication to a particular cause; based on pure challenge (When Engagement Doesn’t Lead to a Wedding, 2007; Cloud, or Silver Linings, 2007; Dunn, 2020). Each individual builds his career by referring to one or several “career anchors” that take on a structured form after some initial work experience. Beyond the classic distinction between an “objective” career (defined by academic organizational policies and community concepts) and a “subjective” career (a personal perception of one’s career path), career anchors can remain strong and stable throughout the work experience even if drastic changes in both objective and subjective careers, strategies and policies of educational academic structures.

2. Methods and materials used in approach application

The type of the research approach is from the group of exploratory studies, combining case base approach with qualitative instruments of research as focus group method, team discussions, exploratory data analysis and some descriptive statistics methods. Application of the approach is performed by an academic team

of researchers with expertise, scientific excellence and experience in the fields of corporate social responsibility, human resource management, enterprise resource planning, organisational management. The experiment and testing are done in April 2024 in the premises of University of Ruse “Angel Kanchev” and includes participants at regional level – from the Ruse municipality.

The type of invited participants is corresponding to the general goal of the approach and covers the following areas (Table 1):

Table 1. Types of participants from area domains and specific organisations

Area domain	Relevant specific organisations in the area
Academia and research	<ul style="list-style-type: none"> • Academics from Research Funding Organizations • Academics from Research Performing Organizations • Representatives of relevant to the topic projects • Representatives of the University (internal staff and students)
Government & public sector (policy makers)	<ul style="list-style-type: none"> • Representatives of the local authorities • Representatives of the regional authorities • Representatives of the national authorities
Industry & business	<ul style="list-style-type: none"> • Representatives of start-up incubators • Representatives of STEM related companies
Civil society	<ul style="list-style-type: none"> • Representatives of start-up incubators • Representatives of STEM related companies
Media	<ul style="list-style-type: none"> • Media representatives

From a methodological perspective the piloting the approach includes data collected with the help of in-dept interviews and team decision making processes, that were performed in a face-to-face contact during the specific event done for approbation.

The specific event for application of the approach is aimed at promoting how equal opportunities of men and women can unlock their research potential, stimulating the career development and improving the quality of life, and also boosting the performance of the academic organizations. Indicators for success of the event are attendance of the workshop, emerging a discussion, emerging new co-operations. The custom designed event structure includes the following elements: (1) registration of invited participants, (2) opening session with defining the event goal, (3) presentation of the thematic scope and clarification of the topic characteristics, (4) group discussions on the need for equal opportunities of men and women

for career development and improving the quality of life in academic context, (5) presentation of equality plan measures already undertaken in an academic organization in order to receive feedback and new ideas for improvements, (6) discussion on the defined measures and options for cooperation with stakeholders in the specific dimension.

The core element in the event structure in the team-working session with all the present stakeholder representatives. It is done under the approach □World Café□, which is intentionally chosen - it is useful and interesting in that it allows shared team work to formulate innovative ideas, but it builds on other familiar brainstorming methods by adding a phased rotation of the teams on the discussed problems to achieve higher quality of proposed solution ideas. The team of the Department of Management and Social Activities, organizer of the event and coordinator of the activities of the ATHENA project, has been applying this approach for nearly a decade to stimulate university-business links, to support the professional development of its students, as well as to implement the HEInnovate concept of European Commission for the formation of entrepreneurial universities with strong applied and research activity.

In this stage the representatives of the different types of stakeholders are grouped in teams (tables) and are asked to elaborate decisions and ideas on pre-defined topic, relevant to the main one. Here, a specifically designed instrument for supporting team decision-making is applied. It includes the problem addressed, the idea definition, the idea components, the ways of collaboration with academia, other comments. Figure 1 represent the visual design of the instrument.


Table №		
Problem addressed:		
		
IDEA FOR DECISION:		
Components of the idea:	What is the purpose of the decision?	
	Implementation steps?	
	Alone or with partners?	
	Possible results?	
	Stakeholders?	
	Risks and hazards in the process?	
	The university can help us with:	<ul style="list-style-type: none"> <li style="width: 33%;">• Expertise, know-how <li style="width: 33%;">• Organizing events <li style="width: 33%;">• Good practices, experience <li style="width: 33%;">• Education, trainings <li style="width: 33%;">• Project development <li style="width: 33%;">• Joint developments and analyses <li style="width: 33%;">• Laboratories, technology <li style="width: 33%;">• Research and testing <li style="width: 33%;">• Audit services
Other comments:		

Figure 1. Tailored-made instrument for supporting team decision-making

3. Results and discussion

As mentioned above, the approach approbation is done in April 2024 in the premises of University of Ruse “Angel Kanchev” – the university library. The seminar has been participated by 25 external stakeholders, including managers and representatives of business organizations related to production, trade, processing of raw materials, consulting services, as well as the Municipality of Ruse, public and educational institutions, the Bulgarian Academy of Sciences, and also the non-governmental sector through the Rotary Club – Ruse. From the different groups of stakeholders, the number of participants is as follows:

Academia and Research:

- academics from Research Funding Organizations: 1
- academics from Research Performing Organizations: 2
- representatives of the University (internal staff and students): 13

Government & public sector (policy makers):

- representatives of the local authorities: 2
- representatives of the national authorities: 1

Industry & business: representatives of STEM related companies: 15

Civil society: representatives of associations, related to Equality, Career development: 2

In **Stage One** the goal of the event, the topic background and previous experience and achievements in the specific domain are presented to the participants. This is a

triggering point for the next stage and stimulates the participants to think innovate and cooperate. Figure 2 shows a moment from that stage.



Figure 2. Stage One – topic background and goal setting of the event

In **Stage Two** teams of participants are formed to discuss specific question, relevant to the general topic. Those questions derive from the results, achieved with the consortium of Horizon project ATHENA, in which the University of Ruse “Angel Kanchev” is an academic partner from Bulgaria. Six groups are formed by the organisers and in each of them includes representatives of the different stakeholders are included to analyze and formulate solutions on the issues related to:

- access to career development opportunities,
- occupation of professional positions and economic independence;
- determination of remunerations, additional material incentives and scholarships;
- stimulating participation in management decision-making;
- building a harmonious working environment;
- overcoming stereotypes in various spheres of public life.

The above mentioned topics are not initially announced to the teams in the beginning, they get their discussion question just after the guidance rules are presented and explained by the moderator. Then the discussion in each team starts within the preannounced time limit of 20 minutes and by using the instrument, displayed in Figure 1. The next Figure 3 demonstrates moments from the teams’ working session.



Figure 3. Stage Two – teams’ discussion during approbation

In **Stage Three** each team presents its idea, aimed to form a solution for the discussion question. The time limit is one minute per team, which they use to orally represent the solution and its main components. The aim here is to focus on the feasibility, effectiveness and organisational and social impact of the suggested solution. Figure 4 displays the ideas presentation and exchange of comments among teams.



Figure 4. Stage Three – ideas presentation and World Café exchange of opinions

In **Stage Four** two activities are implemented - presentation of equality plan measures already undertaken in an academic organization so that the participants are fostered to share their feedback and new ideas for improvements, and this contributes for the discussion on the defined measures and options for cooperation with stakeholders in the specific dimension. Figure 5 shows moments from the closing discussion.



Figure 5. Stage Four – academic experience and discussion for improvements

Additionally, all the participants are asked to fill-in a customly designed individual assesment and feedback form, paper based, anonymously. The form has several sections: general assesment of the event, core features of event,

aspects of event organisation, eventual future participation in similar initiatives, demographic questions, recommendations. All the questions, except demographic and recommendations, use 5-step Likert scale for assessing level of agreement or level of performance. Figure 6 represents the initial qualitative statistical calculations per main features of the event by type of stakeholders and general average for the whole audience. The scale starts from 1 – very weak, to 5 – very good.

Features of event	Average	Students	Academia and Research	Government & public sector	Industry & business	Civil society
There is practical relevance to my work	3.99	3.81	4.00	4.54	4.60	4.33
It is useful for me and my activities	4.12	3.96	4.25	4.46	4.40	5.00
The information were presented in an accessible and understandable way	4.39	4.26	4.58	4.62	4.40	5.00
The content was well structured	4.32	4.19	4.50	4.62	4.60	4.33
I had the opportunity to ask my questions	4.21	4.14	4.42	4.00	4.40	5.00
The lecturers responded exhaustively to the questions asked by the participants	4.27	4.13	4.42	4.54	4.60	4.67
The duration was enough for this type of event	3.75	3.50	4.17	4.23	4.20	4.67
Would you like to participate in other similar events in the future?	4.54					
	4.20	4.00	4.33	4.43	4.46	4.71

Figure 6. Assessment of the approach core features from approbation

Results show that the general evaluation of the approbation event is above good (4,20), with the maximum grading of accessibility and understandable information (4,39). Some adjustments could be made in the event duration since its score is not so high (3,75). The distribution of opinions among types of stakeholders show that the highest grading is of the civil society representatives (4,71), followed by industry and business participants (4,46), government and public sector participants (4,43). A little bit more critical are the students (4,00), but their assessment is also good. A very stimulating result is that for the readiness for future participation in similar events – close to the maximum (4,54). This might be an evidence that the here presented approach is well constructed, applicable in practical environment and with high level of inclusiveness of representatives of interested parties.

4. Conclusion

The methodical approach, presented in this paper, is specifically aimed at stimulating the career development and improving the quality of life of scientists and

employees in an academic environment. This implies from the core nature of academic work, which often does not have strict working time and the creative and thought process in it coincides with the work-life balance concept. Approach's main added value is the innovative way for equal and simultaneous inclusion of representatives from the main stakeholder groups – Academia and research, Government & public sector (policy makers), Industry & business, Civil society, Media – who, with the help of qualitative instruments of research as focus group method, team discussions, exploratory data analysis and some descriptive statistics methods, go through a four-stage process of formulating innovative ideas for solving problems, relevant to the general topic. The team work is organized under the “World Café” discussion format - it builds on other familiar brainstorming methods by adding a phased rotation of the teams on the discussed problems to achieve higher quality of proposed solution ideas.

The practical approbation of the authored methodology, done in 2024 at University of Ruse “Angel Kanchev” allowed obtaining results into five thematic directions – access to career development opportunities, occupation of professional positions and economic independence; determination of remunerations, additional material incentives and scholarships; stimulating participation in management decision-making; building a harmonious working environment; overcoming stereotypes in various spheres of public life. The suggested solutions in the five directions by the participants with applying the specifically designed instrument for supporting team decision-making are relevant to and support: improving conditions for career and personal development of those employed in an academic environment, increasing social responsibility towards employees and society on the part of universities, adaptation to current requirements and guidelines of strategic documents at the national and European level, stimulating of the competitiveness and sustainable development of academic institutions.

The approbation evaluation, done with a a customly designed individual assessment and feedback form calculations per main features of the event and by type of stakeholders, show that some minor changes in the approach – ex. timing and ways for motivating individual participants in sharing opinion in discussion round, might be needed. In general, consecutive application of the approach in different problem areas in the future will be valuable for validating its internal structure and process design and would contribute to precise measuring of its effectiveness and success indicators.

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✉ **Dr. Svilen Kunev, Assoc. Prof.**

ORCID iD: 0000-0001-8726-935X

Department of Management and social activities
University of Ruse "Angel Kanchev"
Ruse, Bulgaria
E-mail: snkunev@uni-ruse.bg

✉ **Prof. Diana Antonova, DSc.**

ORCID iD: 0000-0002-6060-6974

Department of Management and social activities
University of Ruse "Angel Kanchev"
Ruse, Bulgaria
E-mail: dantonova@uni-ruse.bg

✉ **Dr. Svilena Ruskova, Assoc. Prof.**

ORCID iD: 0009-0005-2449-5639

Department of Management and social activities
University of Ruse "Angel Kanchev"
Ruse, Bulgaria
E-mail: rsuskova@uni-ruse.bg