Executive summary of the research project

Feasibility Study of Post Graduate Studies in Higher Education

Moderator: Masoumeh Gharun

Research objectives

The overall purpose of the project is to develop a guideline map for postgraduate studies of higher education graduates

Partial or Subsidiary Objectives:

1- Determine the existing databases of employment status of higher education graduates.

2- Identify critical bottlenecks for tracking employment status of higher education graduates

3- Perform comparative studies and identifying similar projects in other countries

4. Draw a road map and follow-up steps for trace of graduates

5. Determining the employment status of higher education graduates in the sample

6- gathering information about the gap between education and job in the sample

Research Questions

A) In the conceptual design section:

1. What are the principles and procedures of graduates job-situation tracking?

2. How is the conceptual framework of job surveys designed?

3. What are the procedures for graduates job-situation tracking?

B) In the pilot study section of the project:

1. In which areas and sectors the graduates work?

2. What is the expecting time for employment of graduates?

3. To what extent do graduates of higher education qualify for their future job?

4. Does the training provide the necessary employment skills in the labor market?

Methodology (research method, community and statistical sample, analytical method ...)

The methodology for implementing trace studies projects, has two main aspects. Conceptual framework design and full implementation of the project. At the conceptual framework, a summit of experts and representatives of the university and collaborator agencies was executed, and based on the international experiences, the road map, the trace path, the main bottlenecks for tracking, the collaborative institutions and organizations, the method of data collection (questionnaire or exchanging data in statistical databases, the selection of variables and statistical fields) Was elaborated. In the

second phase, the implementation process involves collecting and processing data and generating information, analyzing, and reporting. This stage involves ongoing checking and updating the databases, addresses and call numbers of graduates and all kinds of executive affairs and coordination are regularly renewed. Given that this project is being implemented for the first time in Iran, the first phase of the project had the main important, and In the pilot implementation, a sample of the statistical community has been questioned and its results have been reported.

In this way, the following activities have been taken:

1. The introduction of graduate tracking research methods includes of theoretical foundations, practical experiences regarding methods and data collection and specifications of such statistical databases in other countries including:

    1.1 Preparation of the trace plan and identifying the bottlenecks for tracking,

    1.2 Identifying Collaborative Institutions and Organizations

    1.3 Determining the method of data collection (survey or data transfer between statistical databases),

    1.4 Selection of variables and statistical fields

2- Pilot implementation, including:

2.1- Identification of the statistical population and data collection centers for tracking graduates.

2.2- Providing contact information and sending questionnaire

2.3- Collecting and extracting data

2.4. Analyzing and reporting

Therefore, the project was carried out in the following steps:

Stage One: theoretical and comparative studies and setting up a panel for reaching a consensus on the follow-up map.

Step Two: Inviting the University's representatives (target community) and related executive agencies involved in the follow-up road map (identification of bottlenecks)

Stage Three: A pilot implementation of follow-up using statistical databases as the main source for pursuing students at national level or the labor market on the basis of statistical surveys with a "centralized approach."

Step Four: Sampling from the target community and sending the questionnaire through centralized and approach. In this way, the questionnaire was sent and by the institute and the data were collected.

Step Five: Final Reporting and Documentation

The main tool for collecting data in these studies in the implementation stage was a questionnaire with a combination of the main, optional and specific questions. The main questions are the same in all disciplines and sections and usually contains personal data, but optional questions, based on the

purpose of tracking graduates and some emphasis on some subjects, can be different in more scans. The same main questions make it possible to compare and monitor overall specifications, while Optional questions is useful for specific educational planning of universities.

The content of the questionnaire includes demographic information, curriculum, individual abilities at graduation, career paths (continuing education at a higher level or employment), the requirements for the first job activity, duties and job opportunities and, finally, recommendations for improving the program. A sample was selected from the target statistical population in various disciplines and levels. Subsequently, after gathering addresses from IRPHE statistical database, the questionnaires were sent to the alumni. In conducting the centralized process, the employment status of graduates were extracted from statistical databases of cooperative organizations, such as insurance and tax records, and compared with the first survey data.

Findings by Separate Questions or Research Hypotheses

The predicted model for tracking graduates is a hybrid model, meaning that it acts as a centralized mode in some part and in a decentralized mode in another part. According to theoretical discussion and in accordance with the latest global experiences of trace studies, decentralized approaches for various reasons, including capacity building for universities and to make them a learning organization, and the specific needs of enterprises for production of high-quality data is preferred. In this approach, a national monitoring center along with universities will establish a communication network and provide the necessary tools and consultation. Considering that such a survey is unprecedented in Iran, it was decided that, in order to train and transfer knowledge to universities and higher education institutions, the core unit or monitoring center, would be located at IRPHE which through it, all necessary documents include literature, common practices, modalities, and the necessary infrastructure would make available to volunteers for conducting surveys. On the other hand, in order to be able to use the data collected for macro-imaging analyzes It is very necessary to promote a uniform and unified approach at the beginning of work. It is also important to create a central base or core that will carry out actions in all the centers in a coordinated and one-handed manner.

In this regard, the Iranian Graduate Survey Information System has been designed and implemented under the name IRANTRACE, which, of course, takes its initial steps and will be completed in the future.

The triple trace processes are depicted in the following figures.

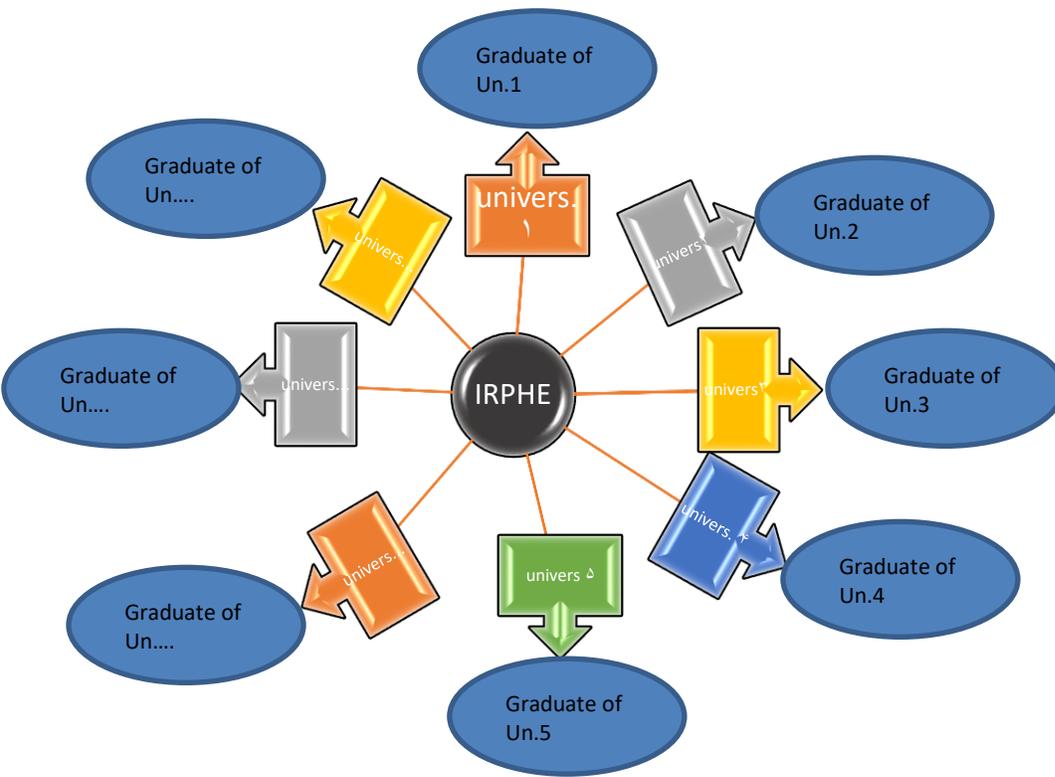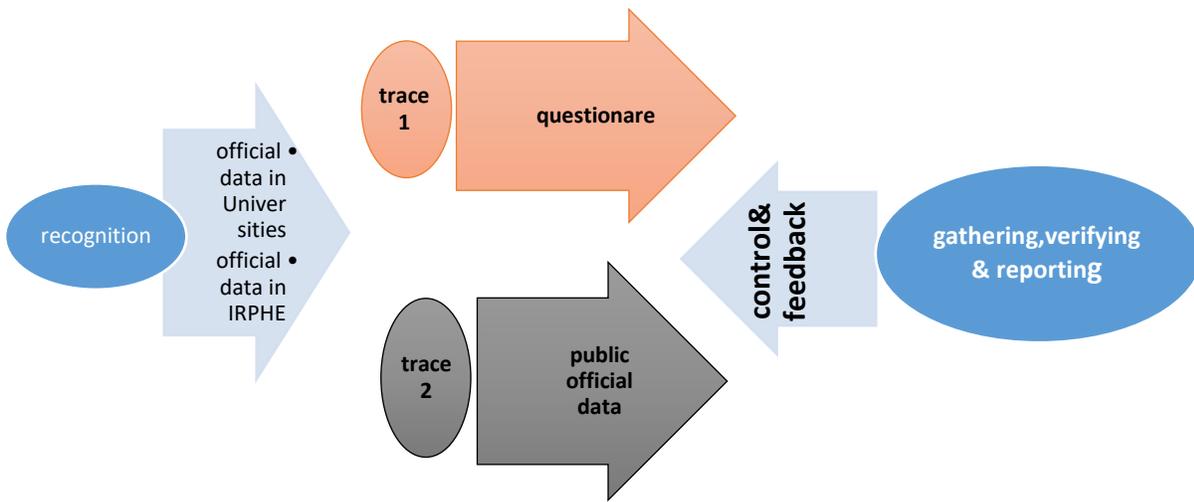Figure 1: The conceptual pattern of the trace in "Decentralized Process"

Figure 2: The conceptual pattern of the trace in "Centralized Process"

Trace 1: A centralized approach based on stakeholder announcements and requests

Trace 2: A centralized registered approach based on planning organizations or academic centers request

Centralized approach

This process is designed to be conducted by the Institute. The first application of this approach is that, based on the needs of policy making and planning, and in particular that the employment status of graduates is not transparent due to the lack of information and statistics, this need is felt for a particular group or sub-system of higher education Surveys will be conducted. Such needs cannot be postponed by the length of a university survey, and in such cases, centralized scanning is required. A focused scrolling strategy was developed to answer this question.

Another use of this process is that universities and institutions that, for various reasons, such as the lack of required resources and expert skills, require that their graduates to be traced by the institution, can register and send Graduates addresses, to conduct surveys by the institute and use the results.

Decentralized approach

The first and most important application of graduate surveys is in countries which universities and higher education institutions work in a competitive context and get feedback from customers to improve their curriculum. In this case, each university performs regular surveys to promote its quality and ensure survival, and places its results on the eyes of its customers, including independent quality assurance agencies. For this reason, each university can access to Iranian Graduate Survey Information System (IRANTRACE) for some guidance about method of scrolling, the type of questions, international experiences, etc. and then apply the results of tracking for the educational planning. In this manner, there will an automatically adaptation between the labor market needs and the content of educational programs.
In the Iranian-designed navigation network(IRANTRACE), the process is designed to allow the university to navigate it through association with the Institute, that means, the Institute will provide specialized university-specific needs and transfers knowledge and experience to them and, to some extent, this cooperation leads to concordance. By providing general and confidential results, it will help create a comprehensive database of graduates' employment.

In this process, each university, by visiting the survey network, read the necessary documentation, receive a questionnaire file and proceed to the scrolling. Also, In this Process, it is anticipated that, in order to save resources and increase speed and accuracy in scrolling, each university invites its graduates to complete an online questionnaire by visiting the scrolling site and then receive the results.

centralized registered approach

The two previous processes, and in particular the decentralized process, encounter problems such as low response rates, address fails, and most importantly length of time, while for some planning needs, the instant reliable data on the employment status of graduates are needed. To this end, a centralized registered approach was developed in which the employment status of graduates detected through the existing databases in related registering databases. The actions and coordination carried out for the design of this process have described in the project final report. Here's how to proceed, by sending a list of the personal specification of graduates, specially identification number, to the partner organizations, and analyzing the results returned back from them. Implementing this process on the network is actually sending and receiving Excel files to partner organizations, but in the advanced stages, and the required fields of information would be extracted directly through online access.

Results of the pilot implementation of the centralized process

In the first step of the pilot study of centralized process, the tracking questionnaire for 1800 graduates of undergraduate level from the two comprehensive universities of Mashhad and Tabriz, which have been graduated in 2013, was sent to their email addresses. In the proposal of the plan, it was decided that this stage should be carried out at the University of Tehran, taking into account the problems encountered by the University, and in order to include the University of Tehran in the pilot phase, 484 Ph.D. graduates of this university in different years were questioned.

In this try, 115 responses were received. Of these, 61 were undergraduate graduates and the rest were PhD graduates. According to the sample of each course, it is clear that the response rate of PhD graduates is twice as others. The reason for this can be a few points. Firstly, the economic participation rate of PhD graduates is much higher than undergraduates, and probably a significant part of undergraduate graduates are essentially not job seeker, and have not been motivated to respond. The second reason is the credibility and accuracy of email addresses, saying that the number of invalid emails was lower. The third reason is that higher-level graduates have a better understanding of labor market issues and problems, and so their responsiveness is greater. For detailed results of this survey, please refer to the detailed report.

In the pilot implementation of the centralized registered approach, a list of names and national identification codes of the graduates from six top universities in academic year of 1993-1392, were searched in the Social Security data base, recognizing if there is a security detraction record for them. Of the 1,420 names transmitted, 707 people had a security detraction record in 1394. The details of these results are also illustrated in the final report.

Results of the decentralized process

In this process, the tracking of the graduates of each university is carried out by the university itself and the institution acts as a guide in conducting such surveys, and then its results (in case of willing) are sent to the institute. Based on the experience gained from interactions with the university in this process, it felt that the universities did not know enough about the necessity, history, tools and knowledge needed conducting trace studies, and it became clear to the research team that this knowledge and Also, relevant global experiences must be described in a workshop for universities.

To this end, by recognition of the international related centers and experts in the world, especially in Europe, and based on the latest experiences in the implementation of focused and decentralized surveys in the form of large networks, we decided to hold workshops inviting an international expert. This empowerment was twine ended. Initially, university authorities should make aware of the necessities of trace studies and legal provisions of the Sixth Development Plan objectives. On the other hand, university experts must be informed about Concepts, key points, tools and scanning methods. Therefore, the university's empowerment planed by inviting the university's deputies, representatives of the related offices, and managers from National Planning and Management Organization to participate in the workshop during 2 -3 May 2017, conducting by a German expert.

The documentation of the meeting and the workshop have been uploaded in the IRANTRACE site so that the host universities, according to their needs can refer to it at any time.

Since the ability of universities to conduct surveys is very limited or there is still no legal incentive for them, centralized and centralized registered tracking cover most of the work, requiring the promotion of

expert and informatics capabilities in The institute. In this regard, it has been decided that the survey network be designed and the necessary documentation for training universities, an online questionnaire , and other information about processes be placed in website . To facilitate these processes, and based on the latest world-class experiences of graduate surveys, the e-Scrolling Network was designed to be found in the first step of universities in the context of existing knowledge and international experiences, and in The second step is to speed up the navigation process online and with faster access to data and documentation.

Recommendation

1- Due to the necessity of mind development and infrastructure provision for innovative and voluntary actions of universities in tracking graduates, using internal capacity or the IRPHE facilities, with aim to recognize the shortcomings of their educational programs and training courses, all the legal and incentive tools necessary to encourage them for joining to this enterprise must be used.

2- Due to the limited facilities and insufficient abilities of many universities (even top universities) and the need for conducting centralized surveys by the Institute, at the request of universities or policy-makers for making aware of the graduates employment status, necessary software (laws and regulations, etc.) and hardware (financial, human, and equipment) facilities for the Institute for Research and Higher Education Planning , must be consecrated as soon as possible.

3. Considering the experience gained from the exchange of information between the statistical databases of the Institute and the partner organizations, and the necessity of the institution's electronic port connection, the technical and legal support necessary for the recognition of the institution as a conductor of the implementation of trace study, as the communication port of the education sector(An excellent electronic cluster of 14) must be provided and parallel activities will be eliminated.

The network is accessible in the following address.

www.irphe.ac.ir/irantrace