Stakeholder view of competency profiles (pedagogical, professional, social and personality) graduate of the physics education

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Abstract. Departing from the increasingly fierce world of work, every study program at various universities needs to prepare graduates that are able to compete for the global world. This study aims to determine the level of competence of undergraduate graduates of physics education program UIN Sunan Gunung Djati Bandung, especially pedagogic, professional, social and personality competencies as well as efforts to improve the weakness of prospective teachers in welcoming the world of work. The method used is survey. The subjects of this study are graduates of physics education program. The instrument used is a questionnaire filled by the supervisor of graduate users. Analysis of data obtained based on a percentage of answers to respondents, then qualified as the good category, good, enough and less. The result of the research shows that physics education physics graduate of UIN Sunan Gunung Djati Bandung pedagogic competence has a good qualification (69%), professional competence has a good qualification (68%), social competence has a good qualification (67%) and well-qualified personality competence (71%). Thus, in general, the competence of physics education program graduates UIN Sunan Gunung Djati Bandung is good and acceptable by stakeholders.

1. Introduction
The increasingly fierce competition in the world of work, the high ranks as agents providing employment need to prepare graduates that are able to compete with the global world. One of the study programs managed by UIN Sunan Gunung Djati Bandung at the Faculty of Tarbiyah and Teaching is Physics Education. The activity of tracing graduates that take part in the world of work through tracer studies is expected that higher education institutions can obtain information about possible shortcomings in the education process and learning process and can be the basis of planning activities for future improvement. [1-3].

The main object of the alumni search study is to examine the process of transition from higher education to the world of work, analysis of the relationship between higher education and the world of work from the point of view of individual goals such as job satisfaction and work position, income, job security and type of work [4-6]. Tracer study aims to evaluate the results of education and training organized by a particular institution and examine evaluating current and future career and employment
opportunities/prospects of graduates by considering the relevance of the world of work with provisions provided during education [7-9].

The purposes of this research are (1) to know the satisfaction of graduate users in the world of work; (2). Knowing the relevance to graduate competencies are pedagogics, personality, social and professional, in the world of work; (3). Knowing the weaknesses and obstacles faced by graduates in the world of work, especially in the world of education.

2. Methods
The research method used is a survey method of graduates of the Physics Education Study Program at UIN Sunan Gunung Djati and a survey of graduates at the place where graduates work. The population of this study consisted of 16 generations of the 1998 to 2014 generation of a total of 690 graduates. The sample collection used random sampling techniques from each generation so that 190 graduate users were obtained.

The instrument used in this study uses two types of questionnaires, namely the graduate questionnaire and the supervisor's assessment questionnaire at the place of employment of graduates. Data processing is calculated by determining the number of answers given by the respondent to a statement. After being calculated, then the answers from the respondents are presented and grouped into certain criteria. The criteria used in this study are divided into four criteria very, good, enough and less.

3. Results and Discussion
The results of a survey of users of the Physics Education Study Program UIN Sunan Gunung Djati Bandung, generally alumni spread to government and private institutions, are presented in Figure 1.

![Figure 1](image1.png)

**Figure 1.** The average absorption of alumni in the world of work.

Based on Figure 1, UIN's Physics Education alumni of Sunan Gunung Djati are spread across 47% of government institutions which are mostly in the world of education (schools), while in the private sector both at private schools and foundations and private companies and entrepreneurship by 53%.

Data showing pedagogical competence based on survey results are presented in Figure 2.

![Figure 2](image2.png)

**Figure 2.** The average percentage of graduates' pedagogic competence in the world of work.
In assessing pedagogic competencies which include the ability to innovate in facilitating learning, adaptive to changes in science and technology in learning and creativity shows a percentage of 27% of respondents said satisfaction levels are very good, 69% are good and 3% stateless satisfaction. This shows alumni of the Physics Education Study Program according to the use of graduates have been quite satisfying.

The survey results that show the personal competencies of graduates of the Physics Education Study Program at Sunan Gunung Djati State Islamic University are presented in Figure 3.

**Figure 3.** The average percentage of graduate personality competencies in the world of work.

Figure 3 shows the results of a survey of the percentage of user ratings on personality competencies related to ethics and morals, that FTK UIN Sunan Gunung Djati Bandung Physics Education Study Program alumni are very good and 47% and 53% respectively. Likewise, FTK UIN Physics Education Study Program Sunan Gunung Djati Bandung continues to conduct coaching activities so that the ethics and morals of graduates can be continuously improved so that graduates have high integrity that is possible to be able to become individuals that have honest, trustworthy, responsible, mature, polite, and good character.

Data showing social competence related to the ability to communicate, cooperate, leadership based on the survey results are presented in Figure 4.

**Figure 4.** The average percentage of graduates’ social competence in the world of work.
Figure 4 shows the users' response to the ability of social competence in the form of communication skills, collaboration, the leadership of FTK UIN Bandung Physics Education Study Program graduates with 48% good category, and 52% good category. Communication skills are one of the important factors that support the success of graduates in their work. The survey results show that graduates' communication skills are quite good. Correspondingly, FTK UIN Physics Education Study Program Sunan Gunung Djati Bandung also made various efforts to improve the communication skills of prospective graduates. It is expected that graduates can communicate well with their respective work environments. In addition, the ability to cooperate in a graduate team must be improved to be better.

The high assessment of the ability of teamwork is possible because alumni have a high commitment to their work so that they always maintain cohesiveness with their peers for the totality of the team. Good cooperation is supported by mutual trust, sincerity, mutual understanding, and tolerance. Team collaboration will also be developed in the development of student extracurricular activities. While the leadership ability must be owned by every graduate so that graduates can improve themselves when given more mandates or tasks. This can also limit workers and or will not give them the opportunity or opportunity to develop and train the spirit of leadership. To be a leader is to have a great sense of responsibility. The results of the survey of the users of the graduates related to the leadership spirit are good enough.

Data showing professional competence related to the field of expertise, especially physics based on the survey results are presented in Figure 5.

Figure 5 shows the response to the users related to expertise based on the field of science or professionalism obtained a good percentage of 32 %, and a good category of 68 %. Professionalism shows the commitment to the members of a profession to improve their professional abilities and continuously develop strategies that they use in doing work that is in accordance with their profession.

In general, the graduate users stated that the professionalism of graduates was good. FTK UIN Physics Education Study Program Sunan Gunung Djati Bandung also continues to improve graduate professionalism. As for the weaknesses and obstacles faced by graduates in the world of work, especially in the world of education, in terms of the ability to master foreign languages, especially English, as presented in Figure 6.
Mastery of English or the language of global communication is a provision for supporting the mastery of professional skills and the provision of self-development skills to keep up with the development of science and technology. According to the survey results, the mastery of graduates 'English is shown in Figure 6, students ' English skills need to be continuously improved so that graduates have more value when competing for jobs and for self-development during work.

4. Conclusions
We have successfully conducted research on Stakeholder views from competency profiles (pedagogical, professional, social and personality) physics education graduates. Based on the results of the study, information was obtained that the competence of graduates of the Physics Education Study Program of Sunan Gunung Djati State University Bandung was good and could be accepted by stakeholders. Even so, social and pedagogical competencies still need to be improved in order to compete with another college.

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