

Why Measure Competencies

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Abstract

The relationship between higher education and the world of work has been discussed for the past few decades in terms of, among others, contribution of higher education to the labour market. Graduates' competencies are debated concerning the readiness of higher education graduates to enter the labour market. Competencies are, in fact, considered more important in the recruitment process than the degree itself. It is therefore important to measure competencies of the graduates at a certain point of time after graduation to see the gap between acquisition of competencies during study time and requirement by the labour market, through tracer study.

This paper will present the importance of competencies and examples of how to analyse them for the purpose of general curriculum development and evaluation of education in preparing students to become future graduates who are (more) ready to enter the world of work.

Introduction

There are about 4200 higher education institutions in Indonesia. The number is increasing indicating, among others, the interest of communities sending their children to higher education institutions -- for a better future -- is also getting higher. Their expectation of higher education is high since graduates receive a better social status, as educated member of the community with their Sarjana¹ title(s) attached to their names. The increasing number of people admitted to higher education is in line with the government's intention of increasing gross participation rate of higher education in Indonesia which is now around 31%, the lowest among Asean countries.

The number of graduates produced from Indonesian education institutions, however, does not actually meet the demand of industries or communities who expect that having attained the highest level of education, graduates must be ready not only to compete as they enter labour market but also to maintain their jobs or even climb their career paths smoothly.

¹ Sarjana titles, Sarjana One (bachelor's degree), Sarjana Two or Master's degree and Sarjana 3 (Doktorate degree) which is attached to the name of a person who has earned the degree(s). In Indonesia a person attaches all degrees (provided that he/she has more than one), not only the highest.

It is long been heard that industries claim that higher education graduates lack competencies and incapable of handling real work, despite their status as higher education graduates. More often than not, industries invest some more just to equip graduates they hire or about to hire with certain competencies needed for them. What certain competencies needed for graduates to enter labour market and how to actually measure them so that higher education can better prepare their students in entering the competitive labour market?

Concepts of Competencies

Competency is simply understood as “the capacity of a person in handling certain assignment”. Competency is integrated knowledge, skills and attitude that can be used at work to perform, to support organizational goals (Dewulf in Van Loo and Sameijn, 2004: 334). It is frequently associated with 'skill' or 'qualification' (Van Loo and Semeijn, 2004: 333). In the human resource perspective, competency refers "to the potential (behaviour) of people in their working environment and at the same time to the discipline that is specialized in the use of relevant knowledge with respect to this issue" (Van Loo and Semeijn, 2004: 334). Hartle, furthermore, describes competency as a characteristic of an individual that has been shown to drive superior job performance but divides it into visible competencies, such as knowledge and skills, and underlying elements of competencies, such as motives and traits (in Delamare-Le Deist and Winterton, 2005; also see Spencer and Spencer, 1996).

In curriculum, competencies are understood as the ability to demonstrate skills required and at work they are understood as areas of personal capability that enable people to perform successfully in their jobs by achieving outcomes or completing tasks effectively.

How Are Competencies Addressed in the Curriculum?

Nowadays the question of competencies of higher education graduates come to the surface because the community demands that those graduating from higher education are required to possess certain competencies, some claims a ticket to get a job easily. The problems arise when many graduates are not able to get employed right after graduation or fail to pass smoothly in the transition phase, ie. from higher education to labour market.

The curriculum of higher education in Indonesia is actually regulated in government's law, minister of education and culture (no minister of research, technology and higher education)'s decrees, based on which higher education institution build their curricula.

Concerning the number and the many types² of higher education institutions in Indonesia, it is important that the government regulate a set of guidelines on how to build a curriculum. For a sarjana degree program, for example. The decree of the Minister of Education and Culture Number 232/U/2000, Chapter 2, Article 2 on the Guidelines on Curriculum Design in Higher Education, states that a *Sarjana* program is aimed at preparing graduates to: (a) possess the basic science and skills in certain expertise so he/she is able to find, understand, explain and solve problems in the for productive activities and services to the community with attitude and behaviour which is agreeable to the norms of the society; (c) be able to show a good attitude and behaviour in his/her workplace and among the community; and (d) be able to keep up with the advancement of science, technology, and/or arts in the area of his/her expertise. Further, the guidelines also help institution to decide whether a study program designs a curriculum with 144-160 credit for a sarjana degree. It states: the load of a sarjana one degree consists of a minimum of 144 up to a maximum of 160 credit units which can be collected in minimum 8 semesters and maximum 16 semesters after high school level (Chapter III, article 5).

Further, aside from the basic knowledge and skills that a graduate should possess, in the Decree of the Minister of National Education No. 045/U/2002, about Core Curriculum of Higher Education, a graduate should also possess three competencies, i.e., core competency, supporting competencies, and other special competencies that are related to the core competency. Curriculum of higher education is designed to provide students with certain competencies that are related to their fields of study during the study, which take approximately 4 years, and afterwards they are expected to be able to practice their competencies in their designated workplaces. Concerning the three competencies, the curriculum of a program should be designed in order that the graduates possess the five elements of competencies as follows (article 2): (a) foundation of personalities; (b) mastery of science and skills; (c) ability to work; (d) attitude and conduct at work according to the level of expertise based on the mastery of science and skills; and (e) understanding of the norms in the community where he/she works.

² The types of higher education institutions in Indonesia cover: academy (offering a non degree/associate degree programs; institute: an institution which runs certain study programs or fields of study; politeknik: a vocational institution which offer non degree programs; university: an institution that runs multidisciplinary study programs, consisting natural and social sciences.

The competencies stated in the above decrees are again emphasized in the Article 35 of Indonesian Law Number 12/2012, on Higher Education, which regulates curriculum of higher education, “ (1) Higher Education curriculum is a set of plans and arrangements regarding the objectives, content , and teaching materials and methods used to guide the implementation of learning activities to achieve the objectives of Higher Education; further, the decree of Minister of Research, Technology and Higher Education Number 49/2014 states about the standard of competencies of higher education graduates in Indonesia (articles 5-7): a minimum criteria of graduates’ qualification, that consists of attitude, knowledge and skills that should be stated at its learning outcomes.

Measuring Competencies

Competencies acquired in education are necessary not only for ensuring quick productivity returns on initial entry to the labor market but also for employability in term. (Allen, et al, 2005: 52)

Measuring a competence that consist of knowledge, skills and attitude can be tricky. Not because it is hard to measure but because it cannot be done during the study time but after a certain period of time after graduation once they are in workplaces. The diploma may say that one has completed a certain knowledge, stated in the course/subject, but whether or not he/she can use it in real work setting can only be proven later, lets say, two years after graduation.

Since there is no single theory that states rigidly which competencies are specifically required for a job, but there is a guidelines that at least some competencies that will help one not only in entering the labour market but also, as Allen et al (2005: 43) put it “for employability in the long term.” Knowing this and the fact that competencies are important for successful career after higher education, as academicians, it is about time that we measure how employable our graduates are in their respective workplaces.

Tracer study serves as tools in measuring competencies of the graduates in their respective workplaces. Indonesian standardized questionnaire on tracer study, lists 29 competencies to be measured of higher education graduates in Indonesia as follows:

- General knowledge
- Knowledge of their discipline

- Knowledge of other fields
- English
- Computer operation
- Critical thinking
- Communication
- Ability to do research
- Learning ability
- Working under pressure
- Time management
- Working independently
- Team working
- Problem solving ability
- Negotiation
- Analytical skills
- Tolerance
- Adaptability
- Loyalty
- Integrity
- Ability to work with people from different culture or background
- Leadership
- Ability to take responsibility
- Initiatives
- Program/project management
- Ability to present ideas/product/report
- Ability to document ideas & info
- Continuous learning ability

The above list at least represents the many competencies required by various industries in their recruitment, therefore it is important to measure them to get feedback for, among others, curriculum development. In analyzing them, we can use the following as alternative guidelines:

1. Decree Num 45/u/2002. The decree states the qualification of the graduates: (1) foundation of personalities, (2) mastery of science and skills; (3) ability to work; (4) attitude and conduct at work according to the level of expertise based on the mastery of science and skills; and (5) understanding of the norms in the community where he/she works.
2. Indonesian Qualification Framework (IQF) Level 6 descriptors, which covers (1) the Problem solving in the area of their discipline, (3) Soft skills (related to achievement of work performance);
3. Sitepu (2011) classifies competencies into (1) Knowledge, (2) personal competencies, (3) Interpersonal competencies
4. Patria (2014) classifies competencies into (1) Personal and organisational competencies, (2) Leadership, (3) Field-related competencies, (4) Interpersonal competencies;

The four alternatives are only examples that can be used to analyse competencies. The purpose is to help institutions in curriculum development to produce graduates that not only ready to get to the world of work but as graduates who are capable of using the sets of competencies in different work setting.

Conclusion

Higher education is in fact aware of the importance of competencies and therefore they take necessary action to guarantee that they are addressed in the curriculum. However, because competencies—job competencies especially, will only be usable on work setting, the measurement of competencies can only be done after a certain period of time after graduation, aiming at measuring how a certain competency is used or more important than others, for example.

Tracer study can serve as tools in the efforts to get feedback from the graduates, about their work situation, transitional period and competencies measurement. The purpose is to map the dynamic labour market and to map graduates' experience in the labour market. The results of competencies mapping can be used to develop a curriculum that is not remote from the labour market.

In the effort to produce better graduates, higher education institutions are expected to update themselves with information from the labour market, especially those related to competencies so that development of curriculum can accommodate competencies required of the labour market.

References

- Allen, Jim, Ger Ramaekers, Rolf van der Velden. 2005. "Measuring Competencies of Higher Education Graduates" in *New Directions for Institutional Research*, No. 126, Summer. Wiley Periodicals, Inc. Pp. 49-59.
- Patria, Bhina. 2014. *Identification of Problem-based learning components and their effects on graduates' competencies*. Dissertation. University of Kassel.
- Sitepu, Ied Veda. 2011. *Competencies of Higher Education Graduates: A Case of Universitas Kristen Indonesia*. Dissertation. Kassel: University of Kassel.
- Van Loo, Jasper, Judith Semeijn. (2004). "Defining and Measuring Competences" *Quality and Quantity*, No. 38. The Netherlands: Kluwer Academic Publishers. pp. 331-349.
- Teichler, Ulrich (2009). *Higher Education and the World of Work. Conceptual Frameworks, Comparative Perspectives, Empirical Findings*. Rotterdam/Taipei: Sense Publisher.
- Buku Panduan Pusat Karir (Career Center Guidelines). Dirjen Dikti. Tahun 2012.*
- SK Menteri Pendidikan Nasional (Decree of the Minister of National Education) No. 232/U/2000, on Guideline of Curriculum Development in Higher Education and Evaluation of Students Performance.*
- SK Menteri Pendidikan Nasional (Decree of the Minister of National Education) No. 045/U/2002, on Core Curriculum in Higher Education*
- UU No. 12 Tahun 2012 on Higher Education*
- SK Menteri Ristekdikti (Decree of the Minister of Research, Technology and Higher Education), Number 49/2014*