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Selecting for Honors Programs: A Matter of Motivational Awareness

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INTRODUCTION

The honors programs at the Universities of Applied Sciences in the Netherlands were almost all initiated around 2008 and thus so far have yielded few data about outcomes, but we have a broad consensus that the honors programs should provide a better-than-average professional for the workplace and should give students a chance to perform to the best of their abilities. With this shared mission, we have had an ongoing discussion during our recruitment process about what criteria to use in the selection process. In January of 2012, there was an online discussion on the NCHC listsery about the role of the GPA in honors recruitment and retention in the U.S. Because Rotterdam University of Applied Sciences does not use grade-based admission requirements, relying instead on a competence profile that is added onto the existing competence profile the discipline uses, we were asked to provide insight into our methods. This request, combined with the NCHC email discussion, provided a reason to analyze the available literature concerning factors that lead to successful completion of an honors degree and that produce excellent and successful professionals. We have reviewed current selection criteria according to three models of excellence in order to determine the best criteria for accomplishing the mission of honors.

BACKGROUND

Rotterdam University of Applied Sciences is a multidisciplinary University of Applied Sciences (UAS) with over 32,000 students in roughly eighty different disciplines divided over eleven educational departments. In 2010, Rotterdam UAS started implementing an honors program after preparations that began in 2008. Two questions were of primary importance to the design of the program: what profile does Rotterdam UAS want to use for the honors program, and which students will be admitted to the program? The Universities of Applied Sciences had little to no information or experience on honors programs in 2008, so in 2007 Eijl, Wolfensberger, Schreve-Brinkman, & Pilot conducted a survey focused on excellence and honors programs. Based on this survey, Rotterdam UAS, as an institution for vocational education, consulted with its partners in the workplace and its relevant stakeholders to define an "excellent professional" as one who can "actualize innovative solutions with a practical function to the taking in hand of societal relevant problems while working together with others" (HR). The slogan "Surpass Yourself" was already in use at Rotterdam UAS to stimulate students to perform to the best of their abilities and linked up well with our definition of an excellent professional. We then developed our definition by describing five competencies that will be discussed later in this essay.

Initially, "Innovation Labs" were developed for the final year of the honors curriculum. These twenty-week labs are the essence of the honors program, with students performing multidisciplinary research for a real client and eventually offering them a solution or problem-solving approach. We now have two years of experience with these kinds of projects, and in September 2012 the third crop of students will start the labs. The number of students in the honors program is rapidly increasing, so we need to define a more exact recruitment policy that identifies students who fit our profile of an "excellent professional."

Extensive research exists on admission criteria for honors students. The most common criterion is the grade average (GPA in the U.S.) in a student's previous education. However, the survey by Eijl et al. shows that using a different set of criteria—for instance, motivation—also leads to good results and that a causal link between the GPA and success in honors is by no means a given.

Our concern is whether the construction of the current honors program of Rotterdam UAS links up sufficiently with the theoretical framework surrounding it and whether there is enough research available on which to further develop the program, and so our two primary research question is: "Which factors are sufficient for making a reliable prognosis for professional excellence, and how can these factors be used to further develop recruitment for honors programs?" Our assumption in response to our research questions is that sufficient factors for making a reliable prognosis can be found in instruments through which potential honors students are detected early in the process so that they can start their orientation phase early in their education and improve their academic and professional qualities more

RON WEERHEIJM AND JESKE WEERHEIJM

effectively. Accordingly, student counselors need to be better equipped to quickly recognize such qualities in all students.

METHODS

We did research in the literature of educational sciences research to find factors that produce a reliable prognosis of student success in their education. Based on the factors we found, we devised a system focused on subject and place as primary factors in educational success. With this system as a model, our goal was to offer a point of reference for teachers to use in the efficient and sufficient recruitment of students for the honors program. Because the honors programs at the Universities of Applied Sciences are still in their early years and have yielded few data on recruitment, we looked at recruitment criteria for regular education, where a lot more evidence was available. Among the multiplicity of literature surveys examining success in education from different angles, we focused on which recruitment methods were effective for the intended further education. Although most of the surveys we examined were administered to non-honors students, they were useful because they focused on personal qualities of students that were relevant to the honors program.

THEORY

A major question in the literature is the role of GPA in a prognosis for academic success. The results vary from "no prognosis possible" to "some prognosis possible" and "partial prognosis possible" (Harackiewicz et al. [2002]; Leverett-Main; McClelland; Robbins et al.; Scager et al.). Few of these surveys indicate the kind of the education in which the GPA was acquired or the further education for which it serves as recruitment criterion. A Dutch study on enrollment in two separate bachelor's programs (van den Berg, Hofman, & Stoppelenburg) states that students with a fairly average GPA (7–7.5 on a 10-point scale) are more inclined to enroll in a second bachelor's program, thus voluntarily increasing their workload, than students with a high GPA (8–8.5). The implication here is that a high GPA is not necessarily a prognosis for success but might indicate instead a linkup between high grades and "coursing through" an easier curriculum, possibly indicating decreased persistence.

A factor other than GPA that has been studied as a predictor of success in education is motivation (Van der Hulst & Jansen; Linnenbrink & Pintrich; Nuland), with different forms of motivation investigated along with their effects on educational success. Goals that students set themselves (Harackiewicz et al. [2000]; Linnenbrink & Pintrich; Pekrun, Elliot, & Maier) contribute in different ways to educational success. The goal theory defines

and analyzes both short- and long-term performance goals (Harackiewicz et al. [1997]). Further, curriculum characteristics like the number of courses to be followed simultaneously or the attractiveness of courses to students contribute to educational success (Van der Hulst & Jansen); this survey, incidentally, finds a possible prognosis for educational success in technical education by using the average grades for mathematics and physics in previous education. A final and altogether different factor is the student himself. For instance, Finn and Rock found resilience to be a factor in educational success while Leverett-Main focused on having or developing analytical, creative, and practical skills.

From these different surveys, three separate factors can be deduced that together have an influence on a student's educational success: personal characteristics, motivation, and study environment.

CASE STUDY: ROTTERDAM UAS

Rotterdam UAS has, based on the standards of the national incentives program Sirius, chosen the development of "professional excellence" as a central theme for its honors program, in which learning to innovate is the essence of professional excellence in five separate competencies (Drenth & Veltman). These competencies together form the profile Learning to Innovate and can be described as followed:

1. Innovation-Driven Competence

To be able to contribute to the development of an innovative and professional production, the student will show an inquisitive attitude and will see and use, in a creative way, possibilities and opportunities to create innovation in the workplace.

2. Question-Driven Competence

To be able to act from an innovative point of view, the student will show awareness of his study environment, in which he will function as a professional and will see opportunities and possibilities to actualize innovation in the workplace.

3. Competence for Collaborative Learning

To be able to participate in innovative processes, the student will behave as a team player, showing that he is able to use communicational, cooperative, and networking skills that lead to his being able to effectively and efficiently contribute to product-oriented cooperation with all the professionals involved in the innovation.

4. Competence for Interactive Learning

To be able to guide his own permanent development, the student will acknowledge the necessity of lifelong learning and will work to gain the study skills required for this process.

5. Knowledge-Creation Competence

To be able to keep developing, improving, and updating his own knowledge, the student will learn not only within formal contexts (like school) but also in the workplace.

Generally these competencies as defined here are not a part of the regular bachelor's studies, are evaluated at a different and lower level, or are not featured simultaneously as one coherent evaluative profile. The competencies have been made into quantifiable criteria by formulating characteristics of attitude and behavior and by defining products as results in as concrete a way as possible (McClelland). A cumulative portfolio should demonstrate that a student has a thorough command of these competencies in as real a work situation as possible. In a criterion-referenced assessment interview, the student is interviewed by two different assessors.

The current layout of the honors curriculum is divided into two parts and is composed of additional program courses parallel to or partially embedded in the bachelor's program: a voluntary and optional part in the first two and a half years and an obligatory part in the last year and a half (figure 1).

The "recruiting & promotion" part of the program offers students a chance to discover their field of interest within their future profession. Each project in this period results in a product and is evaluated and assessed by means of the Learning to Innovate profile. Counseling and formative evaluation are centered in personal conversations to make the students comfortable with the competence profile and to give them practice negotiating the evidence supporting their own development toward becoming an "excellent professional." Selection is carried out in this semester based on motivation and progress; students should be active participants in this process and be able to show development or a desire to develop. Freedom of opportunity is the basis for this semester: if you prove yourself, you may proceed. This freedom makes "recruiting & promotion" attractive in that it offers the freedom to study multiple subjects or themes. The attractiveness of the program is important as students ask, "What's in it for me?" (Freyman). We need to discover at this stage in what ways students were not stimulated enough in their previous education and how they can be activated to work on challenging projects (Derriks & Vergeer): how can we help student counselors recognize student potential in as early a stage as possible, and how can we optimally motivate prospective honors students? Since the Dutch educational situation involves almost no competition between students or competition to be admitted into a discipline (a selection process before admission is customary only in a few specific disciplines such as art or music), student counselors need instruments at their disposal that can contribute to recognizing potential in individual students interested in the honors program (Leverett-Main).

The "research & innovation" part of the program focuses on the innovative side of vocational practice in order to accentuate the necessity of continuous improvement in one's practices and knowledge within the domain of work (OECD; Stelsel). Between the fifth and sixth semesters, a selection procedure is carried out based on a motivational letter, a recommendation from a teacher, and an interview. Until now, the procedure has been an experiment; we have no proof of the effectiveness of our selection process, and there is a continuous PDCA (plan – do – check – act) program in place to develop and test our procedure.

In the sixth semester, an additional project (or task within an existing project) and an additional course are required; in the seventh semester, students

Year of Studies	Semester	Part of the Program	Obligatory Part of Curriculum Bachelor's and Honors Program	Additional Parts of the Honors Curriculum
1	1	recruiting &		add. project
	2	promotion		add. project
2	3	(voluntary)		add. project
	4			add. project
3	5		internship	additional
			(end of	research
			semester: last	assignment
			possibility to	
			enter into honors	
			program)	
	6	research &	add. theory	when starting
		innovation	and project	here: program
		(obligatory)		for late-bloomers
4	7		Innovation Lab	
	8		bachelor's thesis	research with
				Knowledge Center

Figure 1. Set-Up of the Rotterdam UAS Honors Program

participate in an Innovation Lab; and in the eighth semester, students graduate within their discipline but with an enhanced degree and with additional counseling from a lector involved with one of six Knowledge Centers. Especially in the last phase, linkage with research programs in the Knowledge Centers or research outside of the university is essential. The Knowledge Centers provide for projects and research subjects; they have a large network of clients or contacts at their disposal; and they have a feel for current developments in the vocational practice(s) of their domain. Since the Knowledge Centers have extraordinary expertise in the field of theoretical and practice-based research, they can provide lectors and researchers who are effective in counseling and evaluating students. In this period, the use of Knowledge Centers within the educational program is especially focused on deepening research questions and methods within the student's discipline. Cooperation with partners from the workplace itself is also a key educational ingredient.

The design of our honors curriculum has come about through the tight cooperation of a teacher-development team that includes a teacher from each educational department. These teachers are top-of-the-line when it comes to innovation and improvement of their own curricula or quality of education within their own departments. Their knowledge and experience have been pooled together to develop our program. Practical challenges concerning this cooperation mostly relate to the different time schedules of teaching and researching, the exchange of teachers and researchers, and the additional workload of involvement in the honors program. Solving these problems can seem hopeless, but we are trying to reach optimal cooperation with the Knowledge Centers and with the exchange of lectors, researchers, teachers, and students between the Knowledge Centers and disciplines.

Dividing the program into an optional and an obligatory part enables late-bloomers—students who only during their internship discover their passion for the discipline—to partake in the honors program. At the transition from "recruiting & promotion" to "research & innovation," an exploratory student assessment is made that becomes part of the admission process; the purpose of the assessment to determine the student's motivation, goals, and development in relation to the five competencies. In line with Freyman's recommendations, the teacher considers the student's breadth of interests, curiosity, primary learning questions, and ability as well as willingness to invest study time. "Learning for living, not just for making a living," according to Freyman, is an important motivation for honors students, and the questions our teachers have formulated are practically the same as Freyman's list even though they did not do a preliminary literature search or survey but formulated questions from their work experience. As soon as students are official participants in some part of the program, active involvement in and contribution to the honors community are mandatory. The honors communities are partly Communities of Learning, partly Communities of Practice, and, above all, strategies for creating internal and external effectiveness. These communities feature issues from the students' professional fields, on which the students work together with the Knowledge Center. Not only teachers but also lectors, researchers, professionals, and experts are important in the community. The communities also form a home base for the students and facilitate individual meetings in which counseling and feedback are given.

RECENT SURVEYS

Because "excellence" has been on the political agenda in the Netherlands for a couple of years now, several recent surveys have been developed and implemented to provide a coherent model and point of reference. Three such surveys and their results are discussed below.

THE SCHUURMAN MODEL

The model of excellence described by Schuurman, van den Berg, & Baeten concerns a survey conducted among young people, aged twelve to twenty-five, in different school systems; the survey focuses on their drive and motivation to perform or succeed. The survey is especially focused on the way to enhance students' success in their current or future education.

Because "excellence" is not a popular word among this group of young people, the term "exceptional" is mostly used, meaning being better at something than other people. The survey focuses on two types of motivation: (1) intrinsic and extrinsic motivation and (2) performance and mastery motivation. Nuland clarifies that intrinsic and extrinsic motivation differ with the study environment of the student and that there is not one obvious way to stimulate behavior. Linnenbrink and Pintrich focus on goal theory to gain insight into performance and mastery motivation. Performance motivation mostly concerns the short term and is often seen in the first few years of studying. Mastery motivation, on the other hand, focuses on the long term and can be perceived in the final years of study (Harackiewicz et al. [1997, 2002]). Other indicators involved in the survey include doing "just enough," being aware of one's future, social checking, and experiencing educational challenge. From interviews, four different types of young people can be deduced: the Self-Conscious Generalist, the For-Convenience's-Sake Enjoyer of Life, the Acquiescent Follower, and the Status-Focused Future Thinker. Ordering these four types by educational type and gender, along with a profile illustrated by an individual example, constructs an image of where the different students can be found and how they can be optimally motivated.

This model of excellence can be used to recognize and identify students in groups or as individuals; it also offers concrete recommendations for each type of student so that student counselors can intervene to enhance the student's learning process and motivate the student to excel. The survey thus offers student counselors points of reference to interpret visible behaviors and attitudes, adapting counseling to these findings. The report closes with concrete recommendations to educational institutes on how to enhance excellence in students and what to do in the near future.

In terms of our research question, this survey offers insights about why the honors program might be interesting to students. The survey also covers a possible reason for educational success among some students and failure among others: when a student is fully able to state his own learning motivation, he has a better chance at educational success. The same insight can also be found in goal theory.

THE WOLFENSBERGER MODEL

In her model of excellence, Wolfensberger, without specifying a socioeconomic context, she links two aspects of education: "education and meetings" and "student and student life." "Education and meetings" centers on the contact between teacher and student, specifying three important conditions: learning and actualizing academic and professional competencies; creating a passionate community; and offering freedom within bounds. "Student and student life" defines four criteria that can potentially cause the student to excel: motivation and passion; analytical, creative, and practical cleverness; perseverance; and leadership. Students who meet these conditions and criteria are potentially able to achieve excellence. This model offers a point of reference for designing education, for creating an educational context, and for stimulating students. It is also possible to design a selection procedure within the framework of this model so that student counselors are better equipped to recruit and challenge students to participate in the honors program: students can be assessed for admission on the basis of the four criteria and the three conditions.

In the framework of our research question, this model allows us to look at students and the educational environment in a coherent way but does not offer enough insight into how students should be selected and counseled to facilitate full development. Within this model, a student should be or become interested in performance—in development of self and development in the workplace—which is a mastery goal, but how a student reaches this kind of performance is not considered in the model. The model nevertheless provides

SELECTING FOR HONORS PROGRAMS

important recommendations for teachers and institutions on how to enhance the education of potentially excellent students.

THE SCAGER MODEL

The third and last model was constructed by Scager and has as a point of departure the three-ring model by Renzulli. The three-ring model offers a possibility for sorting out indicators of "excellent professionals," a concept about which little other research is available. Scager replaces "above average ability" in Renzulli's model with "general intelligence" and replaces "task commitment" with "motivation" but continues to use the term "creativity." Scager uses earlier research to delineate and define the three indicators, at the same time adopting six characteristics (in the article called "talent factors") that are also available in the original model: intelligence, creative thinking, openness to experience, desire to learn, drive to excel, and persistence. Based on these talent factors, a questionnaire was constructed and distributed among 1,122 honors students. The results show that honors students, with the exception of "persistence," scored higher than non-honors students on all talent factors as well as on the entire profile. The most significant differences were found in "desire to learn," "drive to excel," and "creative thinking." "Intelligence" showed the least significant difference (which could make one wonder about using the GPA as an excluding criterion in selection). A striking difference with the U.S. is that in the Netherlands "desire to learn" scored higher than "drive to excel" (Scager) while in the U.S. it scored lower.

In the framework of our research question, this model refines the talent factors that can be configured for students. By naming and describing six indicators, thoroughly supported by models from the educational sciences, this model gives us more specific grounds on which to evaluate the students regardless of academic discipline. It is still unclear, though, whether the resulting profile of the excellent professional will be valid in the workplace. This model will require that teachers, based on their experience in the workplace, determine whether the six indicators form a basis for educational and professional success. The manner of developing the required types and levels of skills is not yet clear, and perhaps looking at the educational process from a long-term as well as short-term student perspective is a solution here.

Each of the three models offers insight into the concept of excellence and ways to implement it in education. The three models are completely different in focus, though: Schuurman et al. consider previous education and student personality; Wolfensberger emphasizes students and their study environment; and Scager stresses excellence in education and professionalism in the workplace. The models nevertheless overlap in several respects: the Wolfensberger model presents the complexity of the links between the study environment, teacher, and student; the Schuurman model of excellence presents four types of students that fit partly into Wolfensberger's "student and student life" and thus offers an opportunity to be more exact in the selection and counseling of students interested in joining the honors program. Moving from the model "excellence in education" to the "excellent professional," Scager provides an important model of talent factors, about which a lot of theoretical as well as practical literature is available, but additional research will be required to validate the significance of these talent factors in the workplace. The Scager and Schuurman models enable us to enhance the Wolfensberger model into one that provides wide opportunities for selection of students and for feedback from the workplace.

CONCLUSION

Our research question was: "Which factors are sufficient for making a reliable prognosis for professional excellence, and how can these factors be used to further develop recruitment for honors programs?" We can now indicate that three factors-personal characteristics, motivation, and study environment-are probably the most important indicators for professional excellence. Personal characteristics are defined by the six talent factors Scager identified: intelligence, creative thinking, openness to experience, desire to learn, drive to excel and persistence. Criterion for admission to the honors program would be evidence of these talent factors, in a specific and highscoring manner, depending on the student's discipline. Motivation should be considered from a long-term point of view; students setting mastery goals for themselves eventually have a better chance of educational success than students setting performance goals. The combination of personal characteristics and motivation requires an environment that stimulates students to excel by leading them from performance to mastery goals and from learning for the sake of grades to learning for the sake of the process while practicing and learning from feedback. In the Communities of Learning and Communities of Practice lie the best opportunities to give meaning to the students' education. They offer an environment in which student and teacher can confront each other and in which learning in education and learning in the workplace meet each other.

For the second part of the research question, the model for excellence by Schuurman offers a good point of departure in refining our recruitment and selection process as do Wolfensberger's discussion of "student and student life" and Scager's focus on motivation and talent factors. Within this context, GPA is less important because any causality between GPA and educational success has not been substantially proved. Research needs to focus more on

SELECTING FOR HONORS PROGRAMS

motivation, goal theory, the starting points the Schuurman model offers for exceptional students, and the six talent factors defined by Scager. Most curricula focus on competencies specific to their intended profession, such as knowledge, skills, and the development of a professional attitude whereas the honors programs at the Universities of Applied Sciences focus especially on professional attitude, making knowledge and skills development the students' responsibility and thus following the life-long-learning principle. Thus, there is a strong difference in focus between honors programs and the regular disciplines in Universities of Applied Sciences.

What skills then should teachers have at their disposal when looking to improve the recruitment and selection process and its linkage to "education and meetings"? The simplicity and clarity of Jay Freyman's remarks—along with Schuurman's models, Wolfensbergers's coherence, Scager's talent factors, and the lived experience of our teachers—can allow us to design courses that help teachers select and counsel students. However, we still need further investigation of which indicators, in what relationship to each other, predict and produce success in the workplace. Universities of Applied Sciences claim to educate "excellent professionals" through student profiles, and we need to support these profiles with sufficient data.

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240

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