

---

This is an electronic reprint of the original article.  
This reprint may differ from the original in pagination and typographic detail.

Pietikäinen, P. S.; Karinen, R. S.

## Experiences of academic advising at Master's level in multicultural groups

*Published in:*

Proceedings of the 45th SEFI Annual Conference 2017 - Education Excellence for Sustainability, SEFI 2017

Published: 01/01/2017

*Document Version*

Peer reviewed version

*Published under the following license:*

Unspecified

*Please cite the original version:*

Pietikäinen, P. S., & Karinen, R. S. (2017). Experiences of academic advising at Master's level in multicultural groups. In *Proceedings of the 45th SEFI Annual Conference 2017 - Education Excellence for Sustainability, SEFI 2017* (pp. 811-818). SEFI Société Européenne pour la Formation des Ingénieurs.

---

This material is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.

## **Experiences of academic advising at Master's level in multicultural groups**

**P. S. Pietikäinen<sup>1</sup>**

University lecturer  
Aalto University, CHEM  
Espoo, Finland

E-mail: [pirjo.pietikainen@aalto.fi](mailto:pirjo.pietikainen@aalto.fi)

**R. S. Karinen**

University lecturer  
Aalto University, CHEM  
Espoo, Finland

E-mail: [reetta.karinen@aalto.fi](mailto:reetta.karinen@aalto.fi)

### **ABSTRACT**

This work deals with academic advising in the Master's level studies in the Master's Programme in Chemical, Biochemical and Materials Engineering in Aalto University where one third of students entering the Master's level take their Bachelor's degree outside our university either in Finland or abroad. Surveys among the students and the academic advisors were performed in order to find out the common practises, experiences and expectations of the current state of the academic advising in our Master's degree programs. It was found out that the students are offered academic advising but all students don't take advantage of it. The students are mostly expecting the academic advisors to support them in the planning their studies, finding Master's thesis positions and topics and finding their professional strengths. The results of this study are used to further develop the academic advising practises in our school.

Conference Key Areas: Attractiveness of Engineering Education, Engineering Education Research, Curriculum Development

Keywords: Academic advising, Tutoring, Student support

### **INTRODUCTION**

Academic advising is a concept that has many names and its content can vary from university to university. It is also referred as tutoring and academic mentoring.

---

<sup>1</sup> Corresponding Author  
P.S. Pietikäinen  
[pirjo.pietikainen@aalto.fi](mailto:pirjo.pietikainen@aalto.fi)

Academic advisors can be either administrators, for example planning officers, or professors or lecturers who teach and also have role as an advisor. The role of the professor or lecturer is more like supporting career planning and enhancing students' integration into academic community. Meanwhile the administrators help with various kinds of practicalities from filling of all papers required in the beginning of studies to reminding of important deadlines and following study success. [1-3]

Academic advising is exchange of information and knowledge and it aims to support the students to find their identity in studies and career. [4] It has been underlined that successful academic advising plays a significant role in socializing the students into the academic community, helping their professional development and even improving study retention. [5-6] The tutors should also be active listeners and have respect and empathy for the students in addition to having friendly and supportive attitude. [7]

The prevention of the student drop-out is an important aspect to handle by the academic advisors. It has been observed that the contact of the academic advisor has a big role in reducing the drop-outs and improving student retention. [8] On the basis of these observations methods for detecting and picking the possible drop-outs have been proposed to guide tutors to contact students at risk and also software for this has been implemented. [9]

### **1.1 Academic advising process in Aalto University School of Chemical Engineering**

In Aalto University, effort has been put in developing academic advising procedures at both Bachelor's and Master's level. In this paper, we are focusing on Master's level academic advising in our recently renewed degree program.

In this context the academic advising means the tutoring of students by professors and lecturers and it includes guiding of the students to help them to develop and achieve their educational, professional and personal goals. Our planning officers organize the selection of academic advisors and group the students in each major. In addition the planning officers help the students in practical matters related to studies.

One academic advisor is appointed to group of 5-7 Master students. The students meet their academic advisor during their orientation week in the very beginning of their studies. After this, each academic advisor has their freedom to organize the academic advising process as they choose and a guideline is given to ensure that each academic advisor knows how to proceed.

The main aims of the academic advising in our school are to engage the students to the academic community, support the fluent study progress by guiding and motivating the students and generally give the students the feeling that the staff and school care about them and the study progress of each student. Academic advising is most intense in the beginning of the studies but it lasts all the way through the Master's degree which is scheduled for two years in our university.

Characteristic for our Master's study program is that approximately two thirds of the students come from the Bachelor's study program of our university and the rest come from other universities. Especially the international students entering the Master's program need different kind of guidance for the culture of the country and the university. The student groups for the academic advising are therefore organized so that they include both students from our own Bachelor's program as well as from other universities and countries so that the students can also act as peer mentors in the learning community for each other within the groups.

## 1.2 Scope of the study

The first strong motivation to look at academic advising just now is that our current Master's programs have been run for two years since the renewal of the curriculum and it is good find out how the process actually works. The other issue that motivates this research is the fact that our university introduces tuition fees next fall. Thus it is of mutual interest of both students and staff to make the study path of each student even more effective and promote the retention of their studies and we consider that the academic advising can have an essential role here. In addition, the Master's level studies is planned for two years which requires that the start of studies should be efficient already from the first study period and the follow-up of the students is to be used as tool to encourage them to proceed in their studies as planned. Furthermore, the principles of academic advising for our school have been rewritten during 2016 and therefore this study is conducted to see how these practices new have been implemented.

## 2 METHODOLOGY

The focus of this research is the process of academic advising at our school from the perspective of all the actors i.e. the academic advisors, the students and the planning officers. A questionnaire (Tables 1 and 2) among both students and academic advisors was carried out in January 2017 to study their experiences and expectations on the current system. Anonymous web based forms were used in this study. The invitation was sent to all professors and lecturers who have been nominated as academic advisors in our Master's programs on years 2015 and 2016. Students selected to this study were students of two majors who started their Master's studies in 2015 and 2016. This means that both first and second year students were included in the study. The questionnaire consisted of both multiple choice questions and open-ended questions which made it possible to get rich descriptions in order to formulate understanding the researched area/field. [10]

*Table 1.* Questionnaire for students

no	Question
1	How many times have you acted as an academic advisor of a student group at Aalto CHEM?
2	What is your major?
3	Do you know who your academic advisor is? (Yes/No)
4	How many times have you met with your academic advisor with your group?
5	How many times have you met with your academic advisor individually?
6	Is the academic advising meeting your expectations? (Yes/No)
7	Explain and define your previous answer. What expectations do you have?
8	Is your academic advisor easily available? (Yes/No/I haven't contacted)
9	Do you feel that your academic advisor is interested in your development as a professional? (Yes/No/I don't know)
10	Do you think that meeting with your academic advisor is useful? (Yes/No/I don't know)
11	Why?
12	Evaluate the following statements (A lot/somewhat/Not at all)
	My advisor was prepared for my appointment
	My advisor listened to my concerns
	My advisor seemed genuinely interested in me

	My advisor is helpful in discussing my career plans and goals
	Overall, my advisor is a good source for academic advice about my university
13	Which topics have you discussed with your academic advisor?
14	Which topics do you wish to discuss with your academic advisor?
15	How often do you wish to meet with your academic advisor?
16	Any other comments on academic advising?

*Table 2.* Questionnaire for academic advisers

no	Question
1	How many times have you acted as an academic advisor of a student group at Aalto CHEM? (once/twice/three times/more)
2	How have you contacted your first year master student group during this academic year? (in the orientation/ group in a separate meeting/ personal meetings/ by e-mail/ chat in the corridors/ in the lectures)
3	If you have you met the students, how many times?
4	If you have you met the students, how many times?
5	Is it easy to agree on the meeting times?
6	Have the students participated in the group meetings?
7	Have you got enough support for advising the students?
8	If not, what kind of support do you wish?
9	Have you done any cooperation with another academic advisors? (no/ I have discussed about the topic with others/ I have had joint meetings with other advising groups/ something else)
10	Do you feel confident when acting as an academic advisor? (yes/somewhat/no)
11	How rewarding do you find the experience of being an academic advisor? (1-5, not rewarding at all-very rewarding)
12	How do you rate the effectiveness of academic advising process at Aalto CHEM? (1-5, not effective at all-very effective)
13	Students play an active role when meeting with their academic advisor. (1-5, strongly disagree-strongly agree)
14	What do you find to be the most rewarding aspect of academic advising?
15	What do you find to be the most frustrating or dissatisfying aspect of academic advising?
16	Any other aspects on academic advising at Aalto CHEM?

In order to be able to form the whole picture of academic advising three planning officers who has been involved in the academic advising process for couple of years were interviewed and the interviews were recorded. In the discussion they were asked to describe the present practices and analyze the academic advising process from their point of view. The researchers' role in the interviews could be somewhat biased since both are acquainted with the persons interviewed which leads easily to subjective interpretations of the answers.

Number of respondents was 15 (12 % of the invited) in the student survey and 9 within the teachers (26 % of the invited). The answers obtained were analyzed by the researchers individually and the final result was formed based on this. Qualitative methods were chosen [11] because the restricted number of the persons taking part in this study. For the open questions a narrative analysis method was used.

### 3 RESULTS AND DISCUSSION

#### 3.1 Survey among the students

According to the survey, most of the students have met their academic advisor in a group meeting in the orientation. Thus it seems that the academic advising process starts efficiently and reaches the students in the very beginning of their studies. Some students reported that they had also had some private discussions with their academic advisors which indicates that the students know how to reach the academic advisors in case they have issues to discuss.

The students are expecting that academic advisors would support them in the planning of their studies, finding Master's thesis position and topics and finding their professional strengths and be available to give feedback and ask questions.

*"I would like the advisor to guide and support in finding my professional strengths."*

*"My expectations have been, that my advisor can be contacted if I need guiding in academic matters."*

*"Helping to find the master's thesis position/giving some more info about master's thesis or career options."*

However, most of the students feel that they can manage without any support from academic advisors, which indicates that the information related to the studies is easily available. This is also reflected in the reply of some students as they did not even know who their academic advisor is.

Academic advising is not compulsory part of the studies and it doesn't have a place in the timetable and therefore some of the students feel that it is not that important which is pointed out e.g. in the following response from a student:

*"Would be nice to see how it would be but usually there are too many other things going on to even remember that such a thing as academic advisor exists."*

*"I have not officially had a meeting with my tutor, but we have talked"*

On the other hand, the students pick their own specialization rather early in their studies and if the academic advisor is not involved in the study path of the student some students rather contact other staff than the academic advisor as stated in the following response. All in all, it is not a bad situation if the students know how to reach someone from the staff to support them.

*"I think I would prefer to ask help from professors from my own field than from my academic advisor."*

#### 3.2 Survey among the academic advisors

All the academic advisors reported that they have organised some meetings with their students and they feel that it is important to get to know the students. Thus it seems that people who act as academic advisors are committed to their duties and they know the practises and aims of academic advising in our school.

The academic advisors feel that their most important duties as academic advisors are to listen to the students and help them in their questions. They think that the most difficult is to find times for meetings with the students and get all the students to attend the meetings. It was especially pointed out that the domestic students who had background in the Bachelor's program of our university do not attend the organized meetings. This was reflected also in the survey among the students as some students

felt that there is no time for the meetings with the academic advisors or that the meetings are not important.

*“It seems that most of our old BSc students feel that they know what they are doing.”*

In addition, as the academic advisors are teaching the courses that the students take, many questions related to academic advising are handled in unofficial discussions after the lectures when the teacher is available.

*“They are also at my courses, it is easiest to ask if something needs resolving after the lectures.”*

The academic advisors replied that they feel confident to act as an academic advisor either because they have got enough support from organization or colleagues or they have so much experience after being here for a long time. This further indicates the commitment of the academic advisors in their duties. In addition, it seems that the support and guiding for the academic advisors is well handled. Finally, the academic advisors seem to feel that the system should be kept as flexible as possible which is nicely highlighted in the following quotation:

*“Please don't add any bureaucratic upper-level control into the process.”*

### **3.3 Survey among the planning officers**

The planning officers have the impression that the academic advising process starts well in the orientation week of new Master level students but after that it is very much dependent on the professor in charge of each major and individual academic advisors. The academic advising process could be more structured if there were at least a short educational meeting for all the academic advisors before the orientation week. At least the less experienced academic advisors could also benefit of a more structured, pre-planned academic advising. This could also make it easier for the academic advisors and the students to find common time that seemed to be one of the biggest challenges.

One thing mentioned in all of the interviews was that academic advising process as a part of educational duties should be more appreciated also at the university level. The professors who are responsible of each Master's major play here an important role by discussing about the importance of academic advising with all the teachers taking part in the process.

One important way to support students' studies is to follow their study success. It is good to discuss the studies even though everything seems to be fine. It is clearly seen that speaking about one's plans aloud clarifies them and it is especially important to find the weak points as early as possible to avoid drop-outs and prolonged studies. The planning officers play an important role since they have the access to student records and therefore are able to report about their study progress to academic advisors. It is a duty of every academic advisor to discuss with the students when they seem to have difficulties in obtaining enough credits and try to find the reasons for any delay as early as possible.

The students discuss about the Master's Thesis positions also with the planning officers. Especially international students who are not familiar with our academic culture for example how to contact professors more easily contact the planning officers first. In addition, planning exchange studies is a topic that the planning officers are dealing with the students. This is naturally more typical for the domestic students who want to know how to find an appropriate university and what kind of courses would best fit their studies.

## 4 CONCLUSIONS

The academic advising at Master's level was totally renewed two years ago when also the majors were reorganized. One of our challenges is that departments of our school used to act individually and now they are merged together quite recently. This can be seen also as variation in the culture of academic advising as previously different departments had their own practices. Thus it seems that we don't have a common way to carry out the academic advising in our school and practicalities of academic advising vary from major to major. These differences can be diminished if the responsible professors would discuss and share the best practices. We do have a plan for academic advising but guiding and support of academic advisors is not organized.

All in all, it seems that students are offered the support from the academic advisors but all students are not utilizing this opportunity either because they feel that they don't need it or because they don't have enough information about the system. On the other hand, the students are in different position: some need the info on practical issues as they start their studies in a new university whereas the students who continue from our own Bachelor's program do not need that much support in the practical issues.

As a conclusion it can be said that the academic advising at our university works effectively since the teachers and the students felt that most of the students' needs were fulfilled. However, there are evidently also needs to improve process as the academic advising is an important process to support the students to proceed in their studies efficiently completing their studies in two years as required. Our results show that the selection of academic advisors and their guidance are not to be sneezed. Listening students' needs and expectations provide a good tool when planning the practicalities of academic advising. In the future some students are to pay tuition fees which can lay stronger pressure on all the processes within Aalto CHEM. The academic advising that is organized optimally is definitely an effective tool also here as facilitating the discussion between students and teaching personnel.

The results of this study are valuable feedback on the current state and they will be utilized in the further development of the academic advising issues in our school. The idea of more efficient student guiding has been implemented and some further developmental actions are needed to ensure the most efficient academic performance of the students as well as to enhance the integration and commitment of the students to become active part of our learning community.

## REFERENCES

- [1] Harvey, C., Mac A.C. (1991) Academic advising for international students, *Journal of multicultural counselling & development*, Vol 19, No 4, pp. 173-181.
- [2] Tuttle, K.N. (2000) Academic advising, *New directions of higher education*, No. 111, pp. 15-24.
- [3] Campbell, S.M., Nutt, C. (2008) Academic advising in the new global century: Supporting student engagement and learning outcomes achieving, *Peer review*, Winter, pp. 4-7.
- [4] Ismail, S., Ismail, S. (2017) Agent-mediated academic advising system: Nodal approach on knowledge management system towards achieving students'



graduate-on-time, Proceedings of the 11th International Conference on Ubiquitous Information Management and Communication, IMCOM 2017, Beppu, Japan, 102.

- [5] Hale, M.D., Graham, D.L., Johnson, D.M. (2009) Are students more satisfied with academic advising when there is congruence between current and preferred advising styles?, *College student journal*, Vol 43, No. 2, pp. 313-324.
- [6] McCavit, K., Zellner, N.E.B. (2016) Persistence of physics and engineering students via peer mentoring, active learning, and intentional advising, *European Journal of Physics*, Vol. 37, No. 6, pp. 1-9.
- [7] Jiménez, S., Juárez-Ramírez, R., Castillo, V.H., Ramírez-Noriega, A. (2017) Integrating affective learning into intelligent tutoring systems, *Universal Access in the Information Society*. doi:10.1007/s10209-017-0524-1.
- [8] Nelson K.J., Quinn, C., Marrington, A., Clarke, J.A. (2012) Good practice for enhancing the engagement and success of commencing students, *Higher Education*, Vol. 63, No. 1, pp. 83-96.
- [9] Burgos, C., Campanario, M.L., de la Peña, D., Lara, J.A., Lizcano, D., Martínez, M.A. (2017) Data mining for modeling students' performance: A tutoring action plan to prevent academic dropout, *Computers & Electrical Engineering*, in press.
- [10] Creswell, J.W. (1998) *Qualitative inquiry and research design, Choosing among five traditions*, Thousand oaks, Sage publications.
- [11] Creswell, J.W. (2009) *Research design. Qualitative, quantitative, and mixed methods approached*, Third edition, Sage Publications Inc.