

STUDENT-CENTERED LEARNING/ TRAINING AND QUALITY ASSURANCE IN HIGHER EDUCATION

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1. Introduction (1)

Paper objective

Strengthening the relevance and development some features of so called **student-centered learning**.

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Competency and other **major attributes** of the higher education **graduates** are **achievable**, **pedagogical** and **economic**, by **different methods**.

One important **learning method** is the so called **student-centered learning**.

The **student-centered learning/ training** could be characterized with respect to a **number of considerations**.

1. Introduction (2)

- Student learning is the results of curricular and co-curricular experiences designed to provide students with knowledge and skills [1].
 - Learning/ Study outcome is an objective result of certain teaching/study programme, the achievement of which by each learner or student is an. A specific feature of learning/study outcome is measurability [2].
 - **Student-centred learning** is an approach to education focusing on the needs of the students, rather than of teachers, administrators and others. This has many implications for the design of curriculum, course content, and interactivity.

Student-centred learning is focused on the student's needs, abilities, interests, and learning styles - student voice as central, with the teacher as a facilitator of learning.

Teacher-centred learning has the teacher at its centre with active role and students in a passive, receptive role.

Student-centred learning requires students to be active, responsible in their own learning [3].

1. Introduction (3)

- **Teacher-centered learning** [4, 5, 6]

- low level of student choice
- passive student (without role in learning)
- power of teacher (decisions)
- emphasis on learning the present subject only
- emphasis on receiving information
- teacher is the controller of activities
- extrinsic motivation (grades)
- individual learning and competition
- teacher responsible for assessment
- short-term perspective (emphasis on completing assigned work and learning for exams)
- the teacher is in front of the teaching classroom, while the students are listening
- students are working in worksheets created by the teacher
- students reading a whole group setting, the teacher is asking questions to the class.

1. Introduction (4)

- **Student-centered learning [4, 5, 6]**

- high level of student choice (what and how to learn)
- active student (responsible and active role, autonomy)
- power of student
- emphasis on integrating learning across the curriculum
- emphasis on enquiry-type activities
- teacher is a guide, mentor and facilitator of learning
- intrinsic motivation (curiosity)
- focus on cooperative learning
- learning can occur anywhere
- self and peer assessment more common
- long-life perspective (emphasis on life-long learning / deep learning and understanding)
- the teacher walks around, while students learn into groups
- students are working into groups, by their own choice of technology
- students working at their laptop individually, doing research

“Everyone could affect the learning of a student, so everyone should have a role” [5]

1. Introduction (5)

- **Student-centred learning** is about **helping students to discover** their own learning styles, to understand their motivation and to acquire effective skills that will be valuable throughout their lives.

Teachers need to help students set achievable goals, to work co-operatively in groups ... There are no "best practices" that apply at all times, in all places, with all students ... [7]

- **Student-centered methods** have repeatedly been shown to be superior to the traditional teacher-centered approach to instruction, a conclusion that applies whether the assessed outcome is **short-term mastery, long-term retention** ...[8]



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2. Development matters (1)

Actual state of student-centered learning/ training applications represents a base to strengthen some matters associated to the perspective of the considered method, as follows.

- **Communication**

- **Direct communication** between **teachers** and **students** should be based on **respect, openness, flexibility and promptitude, relaxed and friendly atmosphere, and interactivity**, involving each student, not just a simple exposure. **Case studies** and **simple examples** should be treated, making **correlations with real life** and the other subjects.
- **The student** should be encouraged **to respond to questions**, but also to be confident **to ask for more explanations**, and **to express new views**.
- **Online environment** becomes of significant value, as well. Technology could help students to express easily and to be more responsible, with the help of some specific tools, such as: **discussion forums; internal e-mail; chat, including video chat; file transfer**.

2. Development matters (2)

- **Academic staff**

- **Teachers** should be **models** for **students**, regarding their **competence**, but also as **human Beings**. They should explain in clear words and good correlations, even about complex things.
- It is also beneficial to have **teachers** from **industrial areas or research**, who could present the **matters related to their practice**, and **facilitate visits to companies**.

- **Online platform**

- **Online platform** should include all the courses, tutorials, applications, homeworks, etc., **depending on every student's curricula**, but also information about the subjects, the requirements of the exams, projects etc.
- It should have **several features**: possibility of **downloading the courses**, and **uploading documents**; **calendar** with marked deadlines; **timetable of the current semester**; possibility of **viewing their academic situation**; information about the location of faculties and classrooms; news from teachers, etc.



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2. Development matters (3)

- **University website**

Official website of the university should be **very accurate**, with the **newest possible information** for students and others, presented in an **attractive** and **friendly** way, in the **national** and **foreign language(s)**. Here, it is important to find pieces of information about: **every faculty** and **department**; **subjects**; **news**; **contact details** of the university staff; **accommodation**, etc.

- **Assessments / Assignments / Feedback**

In order to observe the **evolution of students**, the **teacher could test continuously** their level of understanding and the ways of improving the activity, using the following tools: **class assignments**; **internet assignments**; **feedback for improving the activity**.

- **Teamwork**

Teamwork is a key point to focus on, because most of the time, after graduation, persons work into groups, with people they do not know. It is important to make them understand that you can obtain better results working with somebody else; the progress is more relevant with more people involved. Of course, **teamwork does not exclude individual work**.

2. Development matters (4)

- ***International environment***

International multi-cultural diversity gives the opportunity to work and know foreign students and teachers, to improve their level of foreign languages, and to learn more about other cultures. A good improvement in the universities' curricula, especially on the level of master programs, would be to introduce much more **subjects in foreign languages**.

- ***Special workplaces***

It is essentially to have places, inside the university area, where the students could work for their projects, both individual and with their teams. This involves having: open laboratories; wireless internet; small rooms for group meeting with sockets and writing board; large spaces with tables, benches, and sockets.

- ***Accommodation***

Good accommodation could be a stimulant for students. If they have their nice place, a quiet and an attractive corridor, they will be definitely tempted to study more.

3. Study Case (1)

An example of a **stimulating academic environment** in favor of **quality assurance and student-centered learning** is the **Linköping University, LiU**, and, in particular, its **Institute of Technology, LiTH**, from Sweden [9].

LiU is dedicated toward developing **models for student-centered learning**, with approaches such as problem-based learning and project orientation, ongoing dialogue with industry and society at large.

- ***Counseling students***

This is about **how to take care of students**, especially in their first study year. There is a limit of students being accepted to LiU programs, and the students have to work hard to be successful. If a student has a **successful first year**, then he/she will have much bigger chances to get a Bachelor degree after 3 years or a **Master degree** after 5 years.

Fresh students, in their first study semester, have a **class mate**, an **older student**, who helps them to know the university, how to study and other necessary information. The class mate is responsible for about 30 students being in a class, and is paid by the university.

3. Study Case (2)

Students' results are checked after the first semester, and after 3 semesters. In case of low, bad result in what the student has done in his/her studies, the student counselors will do study planning to help students.

Student unions receive financial aid from the university, as well, to get involved when the new students arrive to the university in August, for their first year.

- ***Problem Based Learning***

The **problem-based learning, PBL**, is a method that assumes to **find ways to motivate and stimulate students** to be curious to know more about an issue.

PBL has been introduced in Sweden in 1986 on the Health Sciences in Linköping. The reason was **to renew the teaching methods of the courses**, so that students would then collaborate in groups. This method is used very much at the University's Hospital and in the psychology program.

3. Study Case (3)

- **Questionnaire to students**

After the result of 2008 survey, LiTH has been focused on some areas, to take specific measures.

(1) Feedback from teachers regarding student performance

A workshop on the subject of the examination process was provided for teachers at LiTH in 2009. The aim was to ensure that the **examination process is legally secure, clear in form and a useful tool for assessment and learning**, where feedback to the student is a part of the learning.

(2) Relevance of education to future working life

Every program committee will submit, at an agreed time, a **Where the education leads** which will include former students' accounts of their working lives after graduation and/or the results of alumni surveys. At the program committee level, the course will be analyzed in order to ensure that connections to working life are made clearer.

3. Study Case (4)

(3) Study plans and discussions

Evaluation shows that the reception has significantly increased the opportunity to give students the answers to questions of a more general nature and in that way to give a better service and provide a place for those students who need a longer discussion with the counselor.

(4) Information or discussion regarding study or work practice abroad

A **timetable** for the provision of information regarding study abroad has been developed.

The work is underway to improve the information on study periods abroad on the LiTH web pages.

4. Conclusions

- The system based on **teacher-centered learning** has the **teachers with a full control** of the class: they transmit information and take most of the decisions, students having a passive role in learning. As a result, the **motivation of students is extrinsic, like grades.**
 - The **student-centered learning** has appeared, on the international level, to be a **much better approach to students.** More and more teachers and universities are starting to implement this method for some noticeable reasons: **students are having an active role in learning and they are more responsible,** they are having the option of making choices, the teacher being like a guide and a facilitator of learning. This way, **the motivation is intrinsic, such as curiosity.**
 - There are still **obstacles in large developing this system,** related to resources, conservative attitude of academic staff and students, etc. The case study has highlighted that a **student-centered learning/teaching system can bring a continuous progress** not only during the university studies, but also to workplaces and society, in general. Therefore, even it is hard to implement a student-centered learning system, involving time and financial efforts, **it is important to take into consideration the benefits on long term: students' increased levels of performance and creativity after the graduation, their increased employability, the possibility to adapt easily in the labour market, etc.**



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