Why higher education should encourage learner-centered education

Lucas M. Jeno

Department of Biology, University of Bergen, Norway

Introduction

Traditionally, higher education has had a teacher-centered education, as opposed to learner-centered education. Furthermore, an learner-centered education is associated with more active students, while teacher-centered education is associated with passive students (Gibbs, 2009).

bioCEED-Centre of Excellence in Biology Education merges the strengths of Biology education, education unit, and societal stakeholders, in order to provide a new perspective on learning and teaching. Societal changes provides new challenges on how we educate students, and students should thus possess general biological knowledge, vocational training, and self-regulatory skills in order to meet future demands. bioCEED proposes a reciprocal relation between content knowledge, societal relevance, and practical skills. Further, bioCEED seek to expand and revolutionize the biology education in response to changes in society, and scientific demands for higher education.

Theory

An educational process should be guided by an well established framework, not a-theoretical. According to a Self-Determination Theory (SDT) perspective on human motivation and learning, students´ flourish under conditions in which they are intrinsically motivated and autonomous motivated. SDT assumes that satisfaction of the basic psychological needs for autonomy, competence, and relatedness is a pre-requisite for intrinsic motivation and psychological well-being (Ryan & Deci, 2000). Learning activities should be moderately challenging, and resolved around students´ interest. Furthermore, teachers are encouraged to try to understand the students´ internal from of reference, and provide them with choice. This will support students´ basic psychological needs. which is associated with higher academic performance, less dropout and deeper conceptual learning. Hence, we integrate such an perspective in our work and teaching.

Discussion

Educational research have found that students benefits when learning is active as opposed to passive. Previous studies have found support for such relations, underscoring the importance of expanding research to higher education in Norway (Jeno & Diseth, 2014).

Current work within bioCEED seeks to elaborate and expand on such research with an active learner framework.

Further, by reducing lectures by 20% , digitalizing education, and making room for active teaching practices such as team-based learning, more practical skill development, and research-based teaching, integrating E-learning such as Apps and blogs, bioCEED is implementing an active framework. Furthermore, bioCEED seeks to elaborate and expand on assessment methods and evaluation.

However, there are several fallacies that must be considered. Firstly, its important that teachers are incorporated in the decision-making process. According to SDT, neglecting teachers´ perspective is likely to undermine their motivation for teaching (Ryan & Deci, 2000). Secondly, active learning is in sharp contrast to surface learning. Accordingly, the assessment methods (e. g. written exams) should be reconsidered. Lastly, educational changes should be driven from top-down, and bottom-up. Both students´, teachers, administration, and workplaces should be incorporated in the process. Failure for support might be detrimental for effective change. We are currently administering a national survey assessing both teachers, students, administration and workplaces perspective towards biology education. The survey is guide by SDT´s perspective and pilot-tests show promising results. The results may be an important step towards integrated all aspects of education, meanwhile being guided by research-based teaching.

Conclusions

There are several important conclusive points worth mentioning.

Firstly, there is a need for a change in higher education and how we educate students. Future demands require a rethinking of education and skills. Secondly, such a change should be research-based and empirically driven. Finally, in order to meet future demands in a knowledge society, students are recommended to be more proactive and self-regulative. Consequently, we suggest a shift from teacher,- to learner-centered education, and a professionalization and pedagogicalization of the teaching staff. An important step is rewarding teaching in line with research, and integrating students, teachers, and societies needs in the education.

References

Gibbs, G. (2009). Developing students as learners - varied phenomena, varied contexts and a developmental trajectory for the whole endeavor. *Journal of Learning Development in Higher Education*(1), 1-12.

Jeno, L. M., & Diseth, Å. (2014). A self-determination theory perspective on autonomy support, autonomous self-regulation, and perceived school performance. *Reflecting Education, 9*(1), 1-20.

Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist, 55*(1), 68-78. doi:10.1037110003-066X.55.1.68.