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## Innovative impact

Student support has a crucial importance in all educational settings. This vital significance has a real meaning especially for ODL. ODL can only be achieved by independent learning and independent learning can only be achieved by the learner autonomy. Then, what kind of student support empower learner autonomy in ODL?

# Use of Sensitive Search for Student Support in ODL

## Introduction

Information economy, internationalization, emerging new jobs and advancing digital technologies necessitated the reshaping of the human profile needed for the 21st century. Unlike the human profile skills needed in the last century; skills of life-long learning, self-learning, information access and use, foreign language, digital citizenship, adapting to changing conditions and following the ever-updated information have become more important. These new skills have led to the rise of new learner groups. At global scale, these potential new learner groups differ by their age, gender, culture, language, level of education, occupation and need. All these factors are remarkably differentiating and diversifying the student profiles. These students' needs also vary considerably. These factors lead student support services, as an indispensable part of the open and distance education services, to become increasingly diversified, sophisticated and difficult.

Due to the nature of the learning process, student support has a crucial importance in all instruction settings. This vital significance has a real meaning for ODL settings compared to traditional educational institutions.

Student support services have been widely understood as institutional structures that interested in routine processes at traditional educational institutions. Teacher-centered education was one of the important reasons for this situation. In these systems, the problems of the students were not very important. However, today's educational institutions place great emphasis on student support services. Because the understanding of education has gained a student-centered approach.

Supporting self-learning in open and distance education is crucial both for lowering the dropout rates and the sustainability and improvement of the system. There are quite rich facilities and opportunities like forums, text-video chat, video conference and different kinds of social media for student support today. But in practice it is still a problem how to use current technologies for student support in open and distance education.

ODL can only be achieved by the individual's self-study and independent learning. And independent learning can only be achieved by the learner autonomy (Moore, 1972). Then, what kind of student support and student support services empower learner autonomy in media-rich electronic learning environments, blended educational systems and ODL?

### **Comparable examples**

Rapidly advancing information technologies have created innovative student support tools that support learning autonomy and independent learning in online learning environments. The prominence of these technologies are semantic web, labeling technologies, sensitive search, meta-data supported frequently asked question systems and learning analytics.

### **References**

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### ***What Kind of Student Support Service Empower ODL***

Use of traditional methods such as individual counselling and orientation have some important disadvantages for large scale institution. Information technology plays a critical role to cope with large numbers in ODL. This situation also applies to student support systems. But, moving traditional methods to digital may not yield successful results in student support systems. For example, use of social media in individual counselling can cause important communication problems between the student and the consultant. For this reason, it is necessary to find more effective ways in the digitalization of the student support services than the traditional understanding. In other words, we need new kind of student support services to empower ODL.

The importance of learning autonomy should be recognized first before setting innovative student support methods. Autonomy in education views the purpose of teaching as helping learners attain ideal individual learning behavior. This approach targets learner practice-focused, independence and responsibility as essential parts of learning processes (Boud, 2012; Xu, 2013). In this context, some innovative digital student methods that also support learning autonomy stands out. These technologies are semantic web, labeling technologies, sensitive search, meta-data supported frequently asked question systems and learning analytics.

### ***Use of Sensitive Search for Student Support in ODL***

Online learning environments have potential to provide unlimited information to learners with an extended flexibility. However, this flexibility provided by Web-based learning environments may cause navigation problems for learners because flexibility increases complexity. To help users, search engines that gather and present all the results obtained from various databases, search engines, and even from many search engines have been developed. In addition, different strategies and techniques such as sensitive search developed to find information via these search tools. However, the use of these technologies is very inadequate in online learning environments and student support platforms. Most of university Web sites and learning platforms including student support pages lacks sensitive search technologies and even search features.

Search engines uses ranking algorithms to rank the relevance of documents with respect to the query input by users (Guo, Gao, Wang, Deng & He, 2017). In different cases, these ranking algorithms provide results which strongly conform to previous search-related behaviour by users. Thus, sensitive search guide learner in complex learning environment, taking advantage of the learners' previous experiences.

Sensitive search feature can help the learner saving time to study more effective and targeted in online learning environments. These

factors are critical for ODL students with their own learning responsibilities.

## Conclusion

Changing learning environments in digital age required changing student support methods and understanding. Learner autonomy and independent learning are key topics for innovative solutions for student support especially in ODL. One of the innovative solution in online learning environments is sensitive search technology.

Sensitive search technology has potential to support learning faster, more effective and more focused in complex online learning environment, taking advantage of the learners' previous experiences. In this context it is possible to improve suggestions for practical and future research.

In practice two suggestion have critical importance. First, Web site of ODL providing institutions can be supported by sensitive search. This will reduce disorientation of learners and support clear and effective learner navigation. Second, sensitive search components of learning management systems and content management systems can be used effectively in practice. Thus, use and improvement of such apps may be spread. For future research, effects of sensitive search on navigational performance, disorientation and cognitive overload can be investigated.

