

ADDING VALUE TO OPEN AND DISTANCE LEARNING IN GEOGRAPHY WITH AN INQUIRY-BASED APPROACH

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Abstract

This paper reviews and unpacks the characteristics of an inquiry-based learning (IBL) approach and its advantages within an open and distance learning (ODL) context. After a theoretical orientation of what IBL entails, some examples of IBL within the ODL context are briefly reviewed. The focus is on undergraduate modules in the Department of Geography at Unisa, as well as the undergraduate programme in environmental management being coordinated by this department. The benefits and challenges of using IBL for students and lecturers are highlighted, with specific reference to the ODL context. The general observation is that adopting an IBL approach added significant value in the case of the examples dealt with in this paper. The paper provides some guidelines for implementing an IBL approach in undergraduate ODL courses. A reflection of what the future holds for IBL in terms of developments in the field of ICT concludes the paper.

Key Terms: Inquiry-based learning; Geography; Open and distance learning; Benefits and challenges; Implementation guidelines

Introduction

Inquiry-based learning (IBL) can be described as an approach that takes questioning as a point of departure rather than focusing on certain topics that need to be covered. This type of approach clearly links directly with a research orientation, and has the advantage of fostering closer links between teaching and research than might be achieved with traditional lecture-based teaching. In the open and distance learning (ODL) context, introducing inquiry-based learning, specifically in undergraduate studies, will assist in equipping graduates for the demands and complexities of the world of work in the 21st century. More examples of successful undergraduate ODL courses will also help to change the general perception that ODL courses are of a more theoretical nature and that ODL graduates still need to get practical experience somewhere else (Barasa 2011) .

Aim and rationale

This paper begins by arguing that IBL can add significant value to ODL offerings, and covers the essential characteristics and underpinnings of this teaching approach as its point of departure. Secondly, a range of examples are provided where IBL has been used in the ODL context, from embedded activities in study guides to degrees based on an inquiry approach – the focus is on modules/degrees associated with the Department of Geography at Unisa. Thirdly, the benefits and challenges of using IBL for students and lecturers are highlighted, with specific emphasis on the ODL context. The paper concludes with some guidelines for implementing an IBL approach in undergraduate ODL courses as well as a reflection of what the future holds in terms of developments in the field of ICTs. This paper is a response to the call by Spronken-Smith et al (2008) for more reporting on and sharing of experiences about experimentation with IBL.

Theoretical underpinnings

A too narrow definition of what IBL entails should preferably not be adopted. Following Spronken-Smith et al (2008), IBL should rather be regarded as a philosophical approach to teaching and learning which must have certain attributes, but may incorporate a range of characteristics where appropriate. In this regard the following should be considered: an active approach to learning; question-driven and/or research-focused; inductive approach to teaching; student/learner-centered with teacher as a facilitator; facilitated/scaffolded learning; and a constructivist approach. Additional attributes which may be included cover a range of possibilities, depending on course specifics such as outcomes but also on external issues such as industry demands. Although IBL can benefit from collaborative exercises by groups of students, this is not an essential feature, with individual IBL more appropriate in some instances. This makes IBL even more attractive from the point of view of ODL, where collaborative group work is not always feasible.

Review of IBL examples

Some IBL examples will be presented from the undergraduate Geography modules which the author helped to develop and taught over the past decade, as well as the Environmental Management Programme for which the author has been the coordinator over the same period. The examples will include a brief review of each of the following:

- IBL as a short in-study-guide activity – activities based on visits to a local stream/wetland (water resources study unit) and local waste disposal site (waste management study unit)
- IBL as a component of formative assessment – assignment based on analysing newspaper/magazine articles on nature tourism experiences in order to evaluate and classify them according to ecotourism criteria.

- IBL as a component of summative assessment – case study on a tourism experience as part of the exam paper, with evaluative questions
- IBL as a formative/summative portfolio exercise – portfolio development for a module on geography of tourism
- IBL as a degree programme – the Undergraduate Environmental Management Programme with its focus on delivering budding professionals in the field of environmental sustainability

Benefits and challenges of using IBL in an ODL context

This section will be covered from the perspective of first the lecturer and then the students. The content will be based on experience obtained over the past decade, as well as the responses of students.

Lecturer

A main benefit that has been experienced (corresponding to what is reported in the literature), is that incorporation of IBL leads to stronger teaching-research links, which is increasingly recognised as being very important (Healy 2005). Benefits are also realised in terms of gains in student engagement, including aspects such as better understanding, more enjoyment from learning, a definite sense of achievement and preparation for further study and improvement. To achieve this, however, requires lecturers who are focused on the needs of students.

Students

The literature provides increasing evidence that IBL more effectively engages students in their achievement of a variety of learning outcomes, than is the case with traditional teaching which is primarily based on the transfer of content. In this regard an improved sense of not only academic achievement but also the ability to graduate is noteworthy. In addition, improved perceptions, process skills, analytic abilities, critical thinking ability and creativity can also be pointed out (this corresponds to findings in studies listed by Prince & Felder (2006)).

Guidelines for implementation

This section is based on the practicalities associated with implementing IBL in the ODL context. Deductions are based on the experience gained by the author during the development and implementation of the IBL examples which have been dealt with in this paper. The emphasis will be on the type of IBL most suitable for the ODL context, some observations on how to navigate through the organisational structures during implementation, and lastly on the nitty-gritty of facilitating the learning process at grass-roots level.

Concluding remarks

The paper will conclude with a future perspective by critically evaluating how to take the IBL initiatives which have been mapped in this paper into the era where ICTs offer exciting possibilities and are increasingly becoming more available and more affordable.

References

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