

SUSTAINABLE DEVELOPMENT GOALS



SDGs and Open Design: Inquiry Based Learning

Jenni Hayman, M.Ed, Doctoral Candidate
@jennihayman on Twitter
Email: jlhayman@asu.edu



Mentoring



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The Project



Public Domain by Jenni Hayman

Purpose of IBL, SDGs, and OER

- Learner engagement
- Localized, contextual, culturally specific
- Inclusive, flexible design
- Continuous improvement assessment model
- Connecting global learners and educators with each other
- Contributing to global success for everyone

Why IBL? (Inquiry Based Learning)



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Definitions of IBL

1. **Prince and Felder (2007) defined it as teaching that begins by ‘presenting students with a specific challenge, such as experimental data to interpret, a case study to analyze, or a complex real-world problem to solve’”**
2. “Justice et al. (2007, 202)...IBL refers to ‘a range of instructional practices that promote student learning through student-driven and instructor-guided investigations of student-centred questions’”
3. “Spronken-Smith et al. (2007) proposed the following as core elements of IBL: it should be driven by questions or problems; based on seeking new knowledge and understanding; and student-centred and -directed, with teachers acting as facilitators”

(Aditomo, Goodyear, Bliuc, & Ellis, 2013)

Phases of IBL

- Orientation
- Conceptualization
- Investigation
- Conclusion
- Discussion

(Pedaste, Maeots, Siiman, de Jong, van Risen, Kamp, Manoli, Zacharia, & Tsourlidaki, 2015)

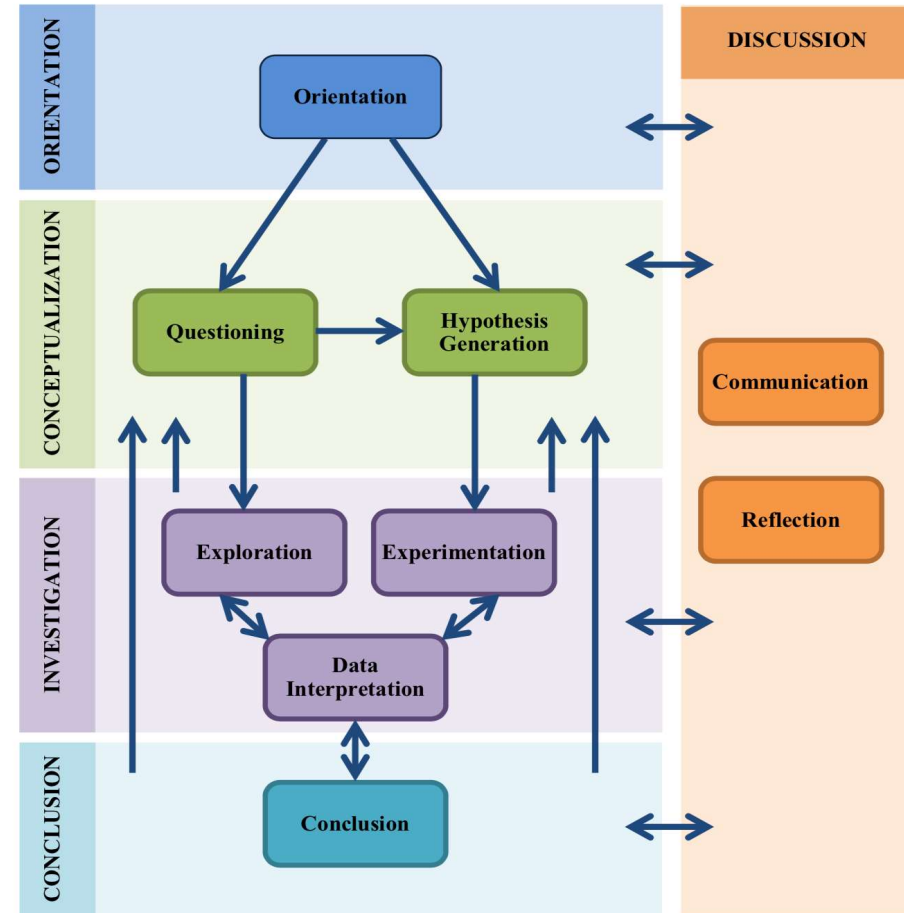


Fig. 3. Inquiry-based learning framework (general phases, sub-phases, and their relations).

Why SDGs?

SUSTAINABLE DEVELOPMENT GOAL 14

Conserve and sustainably use the oceans, seas and marine resources for sustainable development



14.1 - TARGET

By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.1.1 - INDICATOR

Index of coastal eutrophication and floating plastic debris density

14.2 - TARGET

By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

14.2.1 - INDICATOR

Proportion of national exclusive economic zones managed using ecosystem-based approaches

Why OER?

- Learner-led explorations of resources for their own learning – teach them to find and use OER
- Learner portfolios and longitudinal work can be easily shared
- Helps establish knowledge as a public good (both finding and sharing resources)

Open Design

- WordPress
- LearnPress
- H5P – assessment and design elements
- Google Docs
- No sign-in, no password, downloadable, editable, openly licensed formats
- Inclusive Design

Exploring the Resources

LD4OEP.org/blog

(Learning Design for Open Educational Practices)

Open Courses

Dialogue



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References

Aditomo, A., Goodyear, P., Bliuc, A.-M., & Ellis, R. A. (2013). Inquiry-based learning in higher education: principal forms, educational objectives, and disciplinary variations. *Studies in Higher Education*, 38(9), 1239-1258. <http://dx.doi.org/10.1080/03075079.2011.616584>

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