



EDUA 5730 Expeditionary Learning for Inclusive Education

Overview

This course offers an introduction to Expeditionary Learning as an inclusive, interdisciplinary problem-based approach to education. Through an examination of current practices in interdisciplinary teaching and learning, both best practices and exclusionary practices are analyzed and the expeditionary model is developed.

Contact Information

Instructor: Glenys MacLeod
Inclusive Education,
Educational Administration, Foundations and Psychology,
Faculty of Education,
University of Manitoba,
Winnipeg, MB, Canada, R3T 2N2

Office:
Telephone: 204-837-7243 (24 hour voice mail)

Email: ummacle2@myumanitoba.ca
Office Hours: by appointment only
Websites: www.expeditionarymath.com

Class Location

Room 318, Faculty of Education

Class Dates

Monday, September 10, 2018 through Monday, December 3, 2018

Class Time

5:30 to 8:15pm

Learning Resources

Required Texts

MacLeod, G. (2017) *Expeditionary Learning Course Handbook*

On-line Resources

www.expeditionarymath.com

Optional Resources

Alvarado, A. and Herr, P. (2003). *Inquiry-Based Learning Using Everyday Objects*
Hands on instructional strategies that promote active learning in grade 3-8.
California: Corwin Press, Inc.

Judson, G. (2017). *A Walking Curriculum: Evoking wonder and developing a sense of place*. UBC: ImaginED

Kolb, D. (1984). *Experiential Learning; Experience as the source of learning and Development*. New Jersey: Prentice-Hall, Inc.

Martinez, S. and Stager, G. (2013). *Invent to Learn*. Torrance, CA:Constructing Modern Knowledge Press.

Roberts, J. (2012). *Beyond Learning by Doing; Theoretical currents in experiential education*. New York: Routledge

Washor, E. and Mojkowski, C. (2013). *Leaving to Learn; How out of school learning increases student engagement and reduces dropout rates*. Portsmouth: Heinemann.

Additional Readings and Resources

Additional readings and resources will be distributed in class or provided as on-line links.

Access to a Computer and the Internet

Access to a computer connected to the Internet is mandatory for this course. If you do not have your own computer or access to the Internet at home, please research the alternatives on-campus. Please note the on-campus computer labs listed below.

For information about the Faculty of Education computer lab contact:

<http://umanitoba.ca/education/edlab/index.html>

For information about other U of M computer labs contact:

<http://umanitoba.ca/about/map/lib/compindex.shtml>

Information about other on-campus computer labs also is posted outside the Education Computer Lab in Room 330.

Course Requirements

Class Presence and Participation

Students are expected to participate in all class activities, group work, and cooperative learning assignments.

Writing Style

Student papers must be typed and follow APA format. However, some assignments (e.g., PowerPoint presentations, diaries, journals, lesson plans, curriculum, projects, etc.) that are not consistent APA style guidelines are excluded from this requirement.

Person First Language

During discussions and in all assignments, please be conscious of the language you use to refer to individuals who are considered to have impairments. These individuals are people first, and should not be identified primarily through their labels. For example, you should refer to “students with disabilities” as opposed to “the disabled” and so on.

Access and Accommodations

Students who require accommodations for full participation in the class should contact one of the instructors prior to the course or meet with an instructor during our first class.

Maps of the university: <http://www.umanitoba.ca/maps>

Privacy Rights

Practical assignments that include information about colleagues or students or samples of their work must respect the privacy rights of the people involved. To do this, block out all identifying information (such as the names, addresses, and phone numbers of students, educators, parents, schools, school divisions, etc.) or use pseudonyms. In addition, do not leave student work samples or other identifying materials in public places (e.g., forgotten

at the copier or fax machine, in an open file on a desk or counter, etc.). In submitting assignments from a remote location (i.e., by mail, fax, e-mail, or through an intermediary), it is your responsibility to exercise due diligence to ensure the security of the submitted materials. In general, treat student work samples, test results, observational records, and other personal information with a high degree of professional discretion and an absolute respect for privacy.

Academic Regulations

Please refer to the U of M Undergraduate Calendar at:

<http://crscalprod1.cc.umanitoba.ca/Catalog/ViewCatalog.aspx>

Attend, especially, to the following subsections of the section on General Academic Regulations: Personal Information (e.g., keep your mailing address, university email, and name up to date), Attendance and Withdrawal (e.g., miss a class only with permission, withdraw before voluntary withdrawal deadline), and Academic Integrity (e.g., know how to avoid plagiarism and impersonation).

Evaluation

Full attendance is mandatory. Marks may be deducted for non-attendance. The Faculty of Education also reserves the right to debar any student who misses more than three hours of class in a course without a legitimate excuse. All assignments must be completed to receive a grade in this course. Assignments with spelling or grammar errors will be returned for correction prior to being graded. Late assignments will be penalized unless an extension has been granted prior to the due date. There is no final exam. *Evaluative feedback may not be given prior to the voluntary withdrawal date.* It is your responsibility to retain a photo or electronic copy of ALL materials submitted to meet course requirements; in the event of loss or theft, a duplicate copy of materials is required.

Students must complete all assigned work and attend all classes to receive a final grade. Assignments may be submitted late only with the prior approval of the professors.

Letter Grade Values

A+ = 95-100%	B+ = 85-89%	C+ = 75-79%	D = 65-69%
A = 90-94%	B = 80-84%	C = 70-74%	F = below 65%

Unclaimed assignments will become the property of the Faculty of Education and will be subject to destruction by confidential shredding four months after the end of term.

Assignment: Due dates and weightings**Assignment # 1 (20%): An Interdisciplinary Point of View**

- Select 5 locations beyond your classroom (3 marks).
- Analyse each setting in terms of the potential mathematical, scientific, and humanities questions that exist there (7 marks).
- Connect each setting to specific curricular outcomes and the development of learning strategies (10 marks).

Due Monday, October 8, 2017

Assignment #2 (30%): Task Analysis

- Select 3 curricular outcomes, define and provide examples of successful student achievement of each outcome (5 marks).
- Create a task analysis in which you identify all the steps a learner may take to reach that outcome (15 marks).
- For each step discuss the challenges students may experience and suggest a mini lesson that supports learning (Tier 2 and Tier 3 Interventions) (10 marks).

Due Monday, November 19, 2017

Assignment # 3 (50%): Create an Expeditionary Learning experience for a given fictional class.

- Identify the anticipated learning outcomes for the expedition and briefly describe successful achievement of those outcomes (academic, social, emotional) (5 marks).
- Describe each stage of the process (Explore, Research, Develop, Create, Reason, Share, Connect, Reflect) (10 marks).
- Include appropriate mini lessons (Tier 2 and Tier 3 interventions), workshops and fieldwork locations to support the learning of key concepts and skills (15 marks).
- Include evidence of multiple means of presentation, multiple means of action and expression and multiple means of engagement (10 marks).

- Discuss how this expedition supports the development of social and academic inclusion of all learners (10 marks).

In Class Presentations.

Monday, November 26 and Monday, December 3

Syllabus Overview

Class 1. How can we get to inclusion from here?

1. Experience a Learning Adventure.
2. Describe the current state of instruction and recognize the need for a more inclusive approach.
3. Theoretical background of Inclusive Education including Universal Design for Learning and Response to Intervention, Tier1, Tier 2 and Tier 3 Interventions.
4. Differentiate between social inclusion and academic inclusion.
5. Define the goals of inclusive education.

Readings:

Expeditionary Learning Course Handbook - Preface

www.expeditionarymath.com

Class 2. What might we learn from engineering?

1. Review examples of problem solving; the Apollo missions, the construction of the Brooklyn bridge, the Chilean mine rescue to;
 - a. Develop a timeline from problem to solution,
 - b. Categorize the stages according to purpose, process, action and result,

c. Link these stages to the stages of Expeditionary Learning

2. Define the stages of Expeditionary Learning and the roles of the student and teacher in each

Readings:

Expeditionary Learning Course Handbook – Learning Strategies pg. 9 - 42

Class 3. What do we know already about great teaching and learning?

1. Traditional instruction
2. Constructivist pedagogy
3. Problem Based Learning
4. Inquiry
5. Place-based Education

Readings:

Expeditionary Learning Course Handbook – Research Findings pg. 53 - 72

Buck Institute Problem-based Learning, <http://bie.org/>

Dewey, J. (1910). *Experience and Education*

Knapp, C. E. (1996). Just beyond the classroom: Community adventures for interdisciplinary learning. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 388 485)

Strong-Wilson t. & Ellis J. (2007) Children and Place: Reggio Emilia's Environment As Third Teacher. [Electronic Version] *Theory Into Practice*, 46(1), pp. 40-47.

Class 4. What elements can we combine to build an inclusive pedagogy?

1. Expeditionary Learning
 - a) What does expeditionary learning look like? (more examples)

- b) Define the role of the teacher and that of the student,
- c) Questioning the learning community, are all learners included through the instructional practices, as well as socially and emotionally belonging to the group?
- d) Meta-analysis of the research evidence supporting the expeditionary approach and the research evidence that discounts this approach.
- e) What factors from both the traditional and the constructivist approaches are found in Expeditionary Learning?

2. Lesson comparison

- a) What does the same learning outcome look like when taught through different pedagogical approaches?

Traditional Teacher Centered

Constructivist Student Centered

Problem-based

Inquiry

Place-based

- b) At which moment in each lesson do learners fall out? (multiple entry points, multiple means of representations, multiple means of action and expression, multiple means of engagement) Where and when are the Guidelines for UDL not being met?
- c) The need for Universal Programming; RTI, Tier 1, Tier 2 and Tier 3.

Readings:

National Center on Response to Intervention (2010). Essential Components of RTI-A Closer look at response to intervention. Retrieved from;
<http://www.rti4success.org/resource/essential-components-rti-closer-look-response-intervention>

Class 5. What can we learn when we live it together?

Students will participate in an interdisciplinary Learning Expedition away from the university.

Students will select one of the following expeditions;

1. Are Zoos Ethical?

In this expedition students will visit the Assiniboine Park Zoo to gather evidence to support their arguments for or against keeping animals in zoos.

2. Who Eats?

In this expedition students will volunteer at Winnipeg Harvest gathering information about hourly wages, the costs and amount of food needed to feed a family. A second stop at the grocery store allows students to continue to investigate how much food money can buy.

3. Home Depot

In this expedition students travel to the Home Depot to design a fully accessible tree fort for a young family. Students will design and determine the amount and cost of the required materials including boards, shingles, paint, nails and the necessary tools.

Readings:

Expeditionary Learning Course Handbook – Examples pg. 83 - 106

Class 6. An Analysis of the Learning Expedition

Retrace the events, develop a timeline of learning,

1. Identify specific curricular outcomes, (Instructional Practices)
 - a) What prior knowledge is required?
 - b) What new understanding did students develop during the process?
 - c) What new connections did students identify?

2. What is the role of the teacher? (Systems and Structures)

- a) Which questions from the teacher to the students had the greatest impact on their learning?
 - b) Tier 2 and Tier 3 Interventions
3. What is the role of the student? (Social and Emotional Learning)
- a) What actions are we asking the student to complete? How do these connect to the curricular outcome and the desired learning behaviours?
 - b) What questions from the students to each other, to themselves and to the teacher had the great impact on their learning?
4. A model for inclusion?
- a) Evaluate the experience in terms of the social and academic inclusion of all learners.
 - b) Describe the benefits of the interdisciplinary approach and individual student strengths

Readings:

Outward Bound <http://www.outwardbound.org/>

Transcribed notes from the expedition

Class 8. Learning Environments

1. The Physical Environment
2. The Social / Emotional environment

Readings:

Expeditionary Learning Course Handbook – Fieldwork, Mini-lessons and Workshops pg. 43 - 50

Class 9. How can we prepare for authentic, student led, learning when we don't yet know where it's going to take us?

1. What do students need to know and do to complete a task?
 - a. Memorization tasks
 - b. Procedures without connections tasks
 - c. Procedures with connections tasks
 - d. Word problem solving
 - e. Constructivist problem solving
 - f. Expeditionary experience

2. Assessment of students conceptual and procedural knowledge, before, during and after an expedition

At which moments will students with learning and behaviour concerns become excluded?

3. Develop a scaffolding from the task analysis to support all learnings (RTI Tier 1, Tier 2 and Tier 3 supports).

Readings:

Expeditionary Learning Course Handbook – Learning Trajectories pg. 73 - 82

Universal Design for Learning <http://www.udlcenter.org/>

Manitoba Curriculum Guides

Class 10. Planning a Learning Expedition

1. Assessment of the current level of student achievement, student interest, talents and strengths, areas for growth, (review current assessment policies and options)
2. Learning environments, (visit logistics and learning potential study)
3. Setting goals; Curricular outcomes to target, content knowledge outcomes, problem solving skills to target, learning behaviors to target,
4. Materials to be made available, knowledge of and availability,

5. Task analysis and scaffold development,
6. Data collection, how will we know students have been successful? When students are working on different learning outcomes how will we manage the assessments?
7. Timeline planning; workshops, mini lessons and field work.

Class 11. Planning a Learning Expedition

Examine the role of the teacher in;

1. Questioning;

- a. For teacher understanding of student thinking,
- b. For the teacher to support the student in clarifying their own thinking,
- c. To assess and self-assess
- d. For the teacher and student to plan next steps together,

2. Mini Lessons

- a. Identifying curricular outcomes,
- b. Using the task analysis to develop a scaffolding,
- c. Teach specific concepts,
- d. To assess students understanding,
- e. A more focussed intervention, identifying need, developing the intervention, next steps)

3. Field Work

- a. Planning, organizing and carrying out an expedition,
- b. Maintaining focus,
- c. Flexibility

4. Workshops

- a. Supporting student teams,
- b. Assessment and planning,
- c. Creating a culture of community, inquiry and innovation

Readings:

Expeditionary Learning Course Handbook – Ideas to Try pg. 107 - 128

Class 12 and 13. Presentations

Assignment # 1 (20%): An Interdisciplinary Point of View

- Select 5 locations beyond your classroom (3 marks).
- Analyse each setting in terms of the potential mathematical, scientific, and humanities questions that exist there (7 marks).
- Connect each setting to specific curricular outcomes and the development of learning strategies (10 marks).

An Interdisciplinary Point of View				Total /20
	1	2	3	4
Locations			5 locations are selected but the possibility of exclusions exists.	5 practical locations are selected. The locations will welcome all learners.
Questions	The questions are surface questions which will require fact-based answers.	The questions relate to the context.	The questions are contextualized, and open to broader implication.	The questions are contextualized, posed without assumptions, directly apply to one another and open to broader implication.
Curricular outcomes	Curricular outcomes are identified.		The curricular outcomes are matched to this context and to one subject area.	Links between the curricular outcomes, the context and the other questions is evident. The predicted solution requires more than one subject area.
Learning behaviours	Learning behaviours are identified.	The desired learning behaviours are matched to the subject areas.	Links between the desired learning behaviours and the context are evident.	Links between the desired learning behaviours and the context are evident. Connections between the subject areas and the learning behaviours are evident.

Assignment #2 (30%): Task Analysis

- Select 3 curricular outcomes, define and provide examples of successful student achievement of each outcome (5 marks).
- Create a task analysis in which you identify all the steps a learner may take to reach that outcome (15 marks).
- For each step discuss the challenges students may experience and suggest a mini lesson that supports learning (Tier 2 and Tier 3 Interventions) (10 marks).

Assignment # 2 Task Analysis			Total / 30
	1/2	3/4	5/6
Curricular Outcomes	1 curricular outcome is selected.	2 curricular outcomes are selected.	3 curricular outcomes are selected.
Successful Student Achievement	The example shows a solution but the criteria is not met.	The example meets some of the criteria for the outcome.	The example meets all the criteria of the outcome.
Task Analysis	The analysis shows few of the required steps. It offers only one learning path.	The analysis shows most of the required steps. It offers only one learning path.	The analysis shows all required prior knowledge, steps are presented in sequential order and allow for various learning paths.
Potential challenges	Some misunderstandings are presented.	The potential challenges presented are incomplete and offer only one student viewpoint.	Misconceptions/ misunderstandings, from multiple viewpoints, for each step are identified
Mini Lessons	The mini lesson is matched to the more global curricular outcome. It is too broad.	The mini lesson is matched to the small step need but does not allow all learners to enter and reach the goal.	The mini lesson is well matched to the small step need. It addresses the unique challenges of different learners. The mini lesson offers multiple perspectives.

Assignment # 3 (40%): Create an Expeditionary Learning experience for a given fictional class. Identify the anticipated learning outcomes for the expedition and briefly describe successful achievement of those outcomes (academic, social, emotional) (5 marks).

- Describe each stage of the process (Explore, Research, Develop, Create, Reason, Share, Connect, Reflect) (10 marks).
- Include appropriate mini lessons (Tier 2 and Tier 3 interventions), workshops and fieldwork locations to support the learning of key concepts and skills (15 marks).
- Include evidence of multiple means of presentation, multiple means of action and expression and multiple means of engagement (10 marks).
- Discuss how this expedition supports the development of social, emotional, and academic inclusion of all learners (10 marks).

An Expeditionary Learning Experience				Total /40
	1/2	3/4	5/6	7/8
The Learning Process	The descriptions are incomplete. The story of the expedition is unclear and difficult to follow.	The process follows a straight path. The movements of the teacher and students from one step to the next are rigid.	The process follows a more relaxed path. Examples of student learning at each stage are provided.	Descriptions are complete, each stage is well defined and includes examples of student learning and decision making. Links between the stages are evident. Students and teachers move seamlessly between the stages and together decide the next step.
Mini Lessons	The mini lesson is broad and unfocussed.	The mini lesson is focused on a specific concept.	The mini lesson is matched to the small step needed but does not allow all learners to enter and reach the goal.	The mini lesson is well matched to the small step needed. It addresses the unique challenges of different learners. The mini lesson offers multiple perspectives.
Field work	Field work is teacher led.	Field work is co led by teachers and students. Students stand on the edge of the problematic situation.	Field work is student led. Students enter the problematic situation. The location is well suited to the problem.	Field work is student led. Locations and activities support the path towards a solution. Students experience the problematic situation from multiple perspectives.
Workshops	The workshops are teacher led.	The workshops have a narrow focus	Student and teacher roles with in the workshop are described. Each student has a role to play on their team.	Student and teacher roles within the workshop are evident. Opportunities for student collaboration are established. The outcome of the workshop supports the goal of the process.
Learning Outcomes	The learning outcomes are vague and not relevant to current levels of student performance.	The selected learning outcomes are well chosen for the current level of student performance. Mini lessons are used to support the learning of these outcomes.	The selected outcomes are relevant to students and meet their current level of performance. Connections between mini lessons and workshops are defined.	The selected learning outcomes are relevant to the students. They are well matched to the student's current levels and offer a right fit challenge. Connections between the workshops, mini lessons and fieldwork are well defined.
Inclusion	Aspects of the learning experience are inaccessible for learners.	Different learning activities are available for different learners.	All students can find and entry point and an appropriate learning challenge. Elements of UDL are identified.	All students are contributing to the shared learning of the group. All students are included in the academic and social learning activities. Inclusion is valued.