

Micro-Loans

Overview: Students design spreadsheets to explore/understand money management and simple accounting by looking at micro-loans. This is one segment of an overall unit (8 weeks) that requires using the MYP design cycle to create a product (in this case a spreadsheet) to aid in some community/service activity.

Grade: 10, Computer Technology

Significant Concept: Understanding requires investigating

Topic: Microloans

Estimated duration: 1+ week

Area of Interaction: Community and Service

Essential skills: Using the MYP design cycle (Investigate, Design, Plan, Create, Evaluate)
Designing spreadsheets – calculation and logic formulas, conditional formatting

Background required: Basic concept of a function and some algebra (grade 9 maths)

Resources/ Materials: Each student has access to a computer with spreadsheet (e.g., Excel)
Optional/Inspiration: Global Issues: MYP Project Planner 3 (Unit 5 on Global trade and development)

Outline:

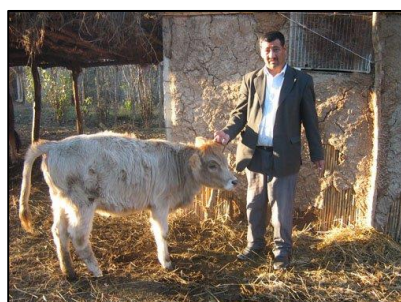
1. Have students discuss the needs of a business (e.g., starting capital, a product/service, suppliers, customers, income). Compile a list of local businesses to aid in the discussion. Many students will think “big” – Apple, McDonald’s, etc.
2. How are business needs different for the impoverished? Discuss micro-loans. Use the Compass to guide discussion around the implications of poverty. The “typical” business model doesn’t work for a person living on only a few dollars per day.
 - N** – simple, local resources are often appropriate (small carbon footprint)
 - E** – high interest rates not appropriate
 - W** – not charity (must be repaid), sense of ownership, pride, personal investment
 - S** – someone who “has” makes a meaningful contribution to someone who “has not”, loan recipient provides some service to their own community, and knows their own needs best
3. Build a basic money flow spreadsheet with income, outputs and other money related variables, and consider what-if scenarios to understand money going in and out of a system. Use www.Kiva.com as an example with relatively small amounts of money and low interest rates. Build student understanding of social responsibility and the Community and Service context for spreadsheets.

Later: Students will design their own spreadsheet to address a local community/service need (not necessarily dealing with money).

Possibilities for product development might include:

- Organizing an athletics event (with up-to-the-minute data and no delay before the awards ceremony)
- Theatre production expenses and profits (“seed capital” from the school budget, box office sales, etc.; might consider multi-user access such as Google docs)
- Inventory tracking at the school store (reduce frustration, streamline workload, improve timing of purchases), making use of an old unused computer.
- An idea that comes out of a business plan the student develops

Use the Compass to assess needs and benefits as part of the design cycle and draw out synergies between the Compass points.



What the compass does:

- Balances thinking to avoid strict focus on money
- Explore differences between needs of different people
- Encourages benefits of microloans vs charity
- Provides a tool for students to evaluate their own projects