

Annotated Bibliography

In general, the literature supports the idea that microfinance training can empower clients of microfinance institutions and help them become self-reliant. Examples of effective pedagogy and content to include in training programs is discussed below.

Evidence Gap Map

<https://www.financedigitalafrica.org/evidence-gap-map/>

This interactive EGM matrix of 14 digital finance product categories, 28 design and delivery categories and 10 outcome categories contains 55 impact studies. A [supporting methodology document](#) is also provided.

Tools:

<https://juntosglobal.com/our-solution/>

Case study:

<https://www.cgap.org/sites/default/files/Working-Paper-Juntos-Finanzas-A-Case-Study-Oct-2015.pdf>

<https://www.arifu.com/>

Summaries of digital finance studies:

<https://www.financedigitalafrica.org/blog/2018/10/digital-savings-what-do-we-know-about-the-impact-on-clients/>

<https://nextbillion.net/digital-finance-low-income-insights/>

[Increasing Digital Savings and Borrowing Activity with Interactive SMS: Evidence from an experiment with the MPAWA savings and loan mobile money product in Tanzania](#)

This working paper describes an experiment that leveraged interactive SMS and behavioral economics principles to develop and test new learning content designed to encourage account activity by Tanzanian farmers using M-PAWA.

Non Traditional / Behavioral Microfinance training programs Heuristics and Rules of Thumb

Practices in Effective Financial Capability Interventions (need to read)

<https://centerforfinancialinclusionblog.files.wordpress.com/2016/04/a-change-in-behavior-final.pdf>

The Power of Heuristics. (Need to read)

http://www.ideas42.org/wp-content/uploads/2015/05/ideas42_The-Power-of-Heuristics-2014-1.pdf

THE FINANCIAL HEURISTICS TRAINING: A proven mobile-based tool for teaching business lessons that stick. Accessed at:

http://www.ideas42.org/wp-content/uploads/2018/08/Ideas42_ProjectBrief_FinHeuristics_3.pdf

Tested in India, the Philippines, and the Dominican Republic, “rules of thumb” had a greater effect on changing business practices than traditional training. Heuristics led to improvements in business practice. Mobile-phone based training can increase access.

Fernandes, D., Lynch, J.G., Netemeyer, R.G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science*. 60(8):1861-2109.

DOI:<https://pubsonline.informs.org/doi/abs/10.1287/mnsc.2013.1849>.

A call for a reduced role for financial education that may increase knowledge generally but does not lead to a change in business practices. The authors suggest a real but narrower role for “just-in-time” financial education tied to specific behaviors it intends to help.

Drexler, Alejandro, Greg Fischer and Antoinette Schoar. 2014. "Keeping It Simple: Financial Literacy and Rules of Thumb." *American Economic Journal: Applied Economics*, 6(2):1-31.

Conducted an RCT to compare a standard accounting training with a simplified, rule-of-thumb-based program. The rule-of-thumb training significantly improved business practices and revenues compared to the control group. It showed even more impact over the standard training for clients that started out with lower skills or poor financial practices. Authors concluded that simplifying training programs and using

'rules-of-thumb' might improve their effectiveness for less educated and skilled individuals.

"Research in cognitive psychology offers additional evidence that simpler rules and less feedback may be preferable in certain learning environments... the trend in business and financial literacy training appears to have been toward increasing complexity. In the context of Dominican micro-entrepreneurs, our results suggest that optimality may lie in the direction of simplification."

Blog summary of the paper:

<https://www.poverty-action.org/study/small-and-medium-enterprise-financing-and-mentoring-services-emerging-markets-dominican>

Maddox, W.T., Love, B.C., Glass, B.D., Filoteo, J.V. (2008). When more is less: Feedback effects in perceptual category learning. *Cognition*, 108(2): 578-589. Accessed at:

<https://www.sciencedirect.com/science/article/pii/S0010027708000826?via%3Dihub>

Aiming for a complete understanding of specific content (such as accounting or business planning) is actually less actionable than information distilled into simple rules of thumb, or "heuristics."

Traditional Microfinance training programs

Brooks, W., Kevin, D., and Johnson, T.R. (2017.) Mentors or Teachers? Microenterprise Training in Kenya. *American Economic Journal: Applied Economics*, 10 (4): 196-221. DOI: 10.1257/app.20170042.

RCT. Localized specific information increases profit while general info like how to do bookkeeping doesn't.

Lack of managerial capital, skill and know-how of how to run a business.

Formal business classes have had limited impact on entrepreneurs (Blattman and Ralston 2015 and McKenzie and Woodruff 2014.) McKenzie and woodruff warn that while training on managerial capital do change business practices, they do not translate into any impact on revenue and profit.

Formal business training generates a statistically insignificant 1% increase in profit relative to the control. “While we find no evidence that profits change, we do find short run changes in business practices.”

Effect of mentorship is concentrated among business owners who more frequently utilize the market to purchase inventory. For those who don't purchase inventory at least once a week, there is no difference between mentorship, classes, or no treatment. This is true for very small businesses. They note it is possible formal business skills could be useful for people operating at a larger scale. (maybe flip their model! Mentor first, then provide business training as they grow and as it becomes more relevant. Just in time training. What about communities of practice? Or apprenticeships?)

Mentorship intervention: in-class training requires diagnosing what skills the entrepreneurs are missing, then designing a curriculum to effectively address those deficiencies. Their mentors are paid \$9.83/month (equivalent to about two days of profit). This model leverages social learning and learning through networks. “Leverage the skill of other individuals facing the same local economic conditions.” 1. Firms are capable of increasing profit through interaction with other firms. 2. Benefits are more if the mentor firm is more profitable.

Self taught business owners have a profit that is 83% of firms that learn from others. They also operate on a lower scale and are less likely to have employees.

RCT: control group, classroom group- four, two hour business classes taught by a university in Nairobi covering marketing, accounting, cost, inventory, and creation of business plan; and a mentor group where people were matched with a mentor who is a successful local business owner. Meetings were unstructured, but participants were given prompts they could use if they wanted like “think about challenges you faced this week. What was a time the mentor faced a similar challenge and how did she respond to it?” Mentorship increased profit compared to control, while in-class training had no statistical effect. Mentorship has the effect of connecting mentees with better suppliers.

Karlan, D.S., and Valdivia, M. Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions. (2006). Yale University Economic Growth Center Discussion Paper No. 941; Center for Global Development Working Paper No. 108. Available at SSRN: <https://ssrn.com/abstract=920487>.

RCT. Treatment program: 30-60 minute sessions weekly on entrepreneurship training, plus making required loan and savings account deposit. Control- weekly meetings to make loan and required savings payments.

Benefits to clients in the treatment group: improved business knowledge, practice, and revenue.

Benefits to institution: Higher loan repayment and more client retention rates (although some dropped out of the treatment group because it was required, the net positive benefits were deemed worth this effect). Another possibility is that business increases enough for clients that they “graduate” to larger formal banks, though this is not what happened in the short time frame of the study.

The average client are women, relatively young, have little formal education, and have an average loan size of \$203 and personal savings of \$233.

Pedagogy- discussion with clients, short exercises (no individual consulting)

Content: General business skills and strategy training, not client-specific problem-solving.

In Lima- Clients are more advanced, have a 90% literacy rate, and have a secondary education. The training is more detailed in a two part program. Module 1, “Training for Success,” consists of 15 sessions that introduce the topics of business administration and marketing. The module also includes review sessions and a business game that participants play in several sessions. Module 2, “Business and Family: Costs and Finances,” consists of 10 sessions that explain how to separate business and home finances. Every session of these two modules included worksheets on the topics taught for the clients to practice and review at the meetings or at home.

Module 1: Training for Success		Module 2: The Business and the Family: Costs and Finances	
Session	Title	Session	Title
1	Training for Success	1	The Business and the Family
2	What is a business?	2	Income, Costs, and Profit
3	How does a business work?	3	My Costs of Production and Operating Resources
4	The Market	4	How Do I Calculate the Cost of Production of My Product?
5	Who are my customers?	5	Prices and Price Equilibrium
6	Who are my competitors?	6	How to Make a Good Price Decision
7	Review Session 1	7	The Registers and Controls in My Business
8	Business game: Module 1	8	The Growth of My Business
9	My business' position in the market	9	Will I Be Able to Pay My Loan?
10	Product and Price Commercial Strategy	10	Taxes
11	Marketplace and Promotion Commercial Strategy		
12	My Commercial Plan		
13	Review Session 2		
14	Business Game: Module 2		
15	Business Game: Module 3		

The average bank that implemented this program only advanced 3.5 sessions per loan cycle over 12 meeting cycles. After 24 months since program launch, only half reached the 17th session out of 22. This was considered normal.

In Ayacucho, the client were only 85% literate, and only 30% completed secondary school. As such, the training program was grouped into 3 modules with topics less advanced than those taught in Lima and relied on visuals and lectures. Sessions were presented in 30 minute classes and did not used worksheets as in Lima.

Appendix A, Table 2: Business Training Sessions Presented in Lima

Module 1: Manage Your Business Money		Module 2: Increase Your Sales	
Session	Title	Session	Title
1	Separate Business and Personal Money	1	Know Your Customers
2	Use Business Loans for Your Business	2	Treat Your Customers Well
3	Calculating Profits	3	Sell to Different Kinds of Customers
4	Track, Plan and Invest Your Business Money	4	Improve Your Products and Services
5	Decide How to Use the Profits of the Business to Satisfy the Needs of the Business and Your Personal Needs	5	Sell New and Complementary Products and Services
6	Prevent Business Losses	6	Seize Opportunities to Sell
7	Manage Credit Sales	7	Sell Where Customers Buy the Most
8	Review of the Learning Sessions of "Manage Your Business Money"	8	Set the Right Price
		9	Promote Your Business With Good Selling Practices
		10	Plan for Increased Sales

Module 3: Plan for a Better Business	
Session	Title
1	Use Planning Steps to Grow Your Business
2	Examine How Your Business Is Doing
3	Decide How You Can Improve Your Business
4	Develop and Test New Business Ideas
5	Plan How Much to Make and Sell
6	Plan Business Costs
7	Plan for More Profit
8	Find Resources for Your Business
9	Prepare for Unexpected Events

“Useful things in program: separate money between business and household, reinvest profits in the business, maintain records of sales and expenses, and think proactively about new markets and opportunities for profits.”

-Emailed author for copy of baseline survey to possibly use in evaluation of MI program.

Henry S. (2006). Good practice in business development services: how do we enhance entrepreneurial skills in MFI clients? Rural Finance & Investment Learning Centre. Accessed: <http://www.ruralfinanceandinvestment.org/node/59>

Operational skills needed include accounting, finance, business planning, quality control, health and safety regulations, marketing and HR management. MFI’s will benefit from better loan repayments, portfolio quality, client retention, etc. This can be accomplished by providing appropriate support for operational skills. Non-financial services should include education and awareness, asset building, business training, networking, and mentoring.

- a) Education and awareness: financial education/literacy should be taught, including the knowledge, skills, and attitudes needed for earning, spending, saving, borrowing, and investing. Help clients make better financial choices in general. Improve confidence
- b) Assets- how to build a savings.
- c) Business training
 - i) Operational- accounting, marketing, inventory control, costing, pricing, sales forecasting
 - ii) Strategic- for mature entrepreneurs. Specific to their industry for Expansion, growth, and profitability opportunities.
- d) Networking- this might look like support groups or networks.
- e) Mentoring- one-on-one or group sessions. Mentoring gives start up businesses an opportunity to work with more established businesses.

Other ideas: network and interact with other local businesses. The Networking Cafe hold quarterly meetings. Meetings are 1.5-2 hrs. First half speaker second half interacting. Access to digital wallet. Hyperwallet.

Montgomery M., Morgan J., D’Onofrio S. (2010). Training Strategies: A Technical Note for Microfinance Associations. Accessed at: https://seepnetwork.org/files/galleries/152_TrainingStrategies_web.pdf

How to develop a training program (don’t rush!):

1. Understand the training market
 - a. Needs assessment is an essential first step. Who needs to be trained and what do they need to be trained in? What is the quality and availability of existing training options? This includes training the MFI currently offers, international curricula that could be adapted to local context, and other organizations that offer relevant training.
2. Evaluate capacity and strategic position of association
3. Formalize the training strategy
4. Implement the training strategy
5. Solicit feedback
6. Review and adapt strategy as needed

The MasterCard Foundation. (2011). Taking stock: Financial education initiatives for the poor synthesis report. Accessed at:

<https://www.findevgateway.org/library/taking-stock-financial-education-in-itiatives-poor>.

This report summarizes findings from case studies of 12 diverse financial education programs. It examines various aspects of successful financial education programs including:

- Objectives of financial education such as consumer protection, product uptake and personal development of consumers;
- Target audience;
- Content and delivery channels;
- Achieving scale in financial education;
- Costs involved in financial education;
- Factors that help sustain financial education.

Microfinance in General and Poverty Reduction

Agbola, F. W., Acupan, A., & Mahmood, A. (2017). Does microfinance reduce poverty? New evidence from Northeastern Mindanao, the Philippines. *Journal of Rural Studies*, 50, 159-171.

A survey of 211 microfinance clients in the Philippines was conducted in 2017. Authors concluded that microfinance has a “mildly positive” impact on poverty reduction, on the basis that incomes and savings of microfinance clients were higher than non-client incomes and savings.

Cohen M., Stack K., McGuinness E. (2004). Financial Education: A win-win for clients and MFIs. Microfinance Opportunities “Putting Clients First”.

Accessed at:

http://www.ruralfinanceandinvestment.org/sites/default/files/1123071437399_Financial_Education_WinWin_Clients_MFIs.pdf

Financial education benefits clients by giving them: knowledge and skills to manage their money, capacity to use financial services effectively, increased self-esteem to achieve financial goals, and ability to demand better quality products from their financial institutions.

MFIs giving education benefit by: attracting more clients, retaining existing clients (not

losing them to another MFI), giving them a competitive edge, and giving them market info for use in improving the products they offer clients.

To design an effective program you must

1. Perform market research to learn what clients want in terms of training content and pedagogical methods.
2. Perform an HR assessment to see the skills of existing staff who will provide the training
3. Systematically incorporate results from the first two steps into the curriculum.

Market research should answer what to teach (content) and how to teach it (delivery). It might include interviews, discussions, games, simulations, positive deviant interviews, and participatory rapid appraisal exercises.

Market research done with support from Citigroup Foundation found consistent demand for money management, debt management, managing savings, financial negotiation skills, and how to use bank services. Pedagogy should be a learner-centered approach that employs adult learning principles.

McKenzie D., Woodruff C. (2015). Business practices in small firms in developing countries. National Bureau of Economic Research. Accessed at: <https://www.nber.org/papers/w21505.pdf>

Some people have argued that sound business practices are not necessary for new and small firms. This study shows that firms of all sizes are affected by the quality of the business practices they conduct. Those with better business practices experience better sales and profits, and more productivity. These practices lead to a greater likelihood the business will survive and grow. Better business practices does, generally speaking, lead to better business outcomes, even for small businesses.

Although much of the literature shows that training programs don't lead to significant improvement in business outcomes, McKenzie and Woodruff (2015) argue that this is because the training improves knowledge but not practice. They make a call for the need for training programs that truly impact behavior and change business practice. Translating training curriculum from simple knowledge to better practice is needed.

includes a scale to measure business practices clients participated in including marketing practices, inventory control practices, record-keeping practices, and financial planning.

Instructional Strategies

Karlan, D. Getting to the Top of Mind: How Reminders Increase Saving(2016). Management Science, Volume 62 No. 12 pp. 3393-3411 Joint with: Margaret McConnell, Sendhil Mullainathan, Jonathan Zinman.

Accessed at:

<http://deankarlan.com/wp-content/uploads/2018/05/Getting-to-Top-of-Mind.pdf>

Three experiments in Bolivia, Peru, and Philippines to see the effect of reminds on savings goals. Reminder treatment was randomly assigned. Getting reminders increases the likelihood of reaching a savings goals.

Karlan, D., Morten M., Zinman J. (2016). A Personal Touch: Text messaging for Loan Repayment. Behavioral Science and Policy, 1(2) pp. 31-39.

Accessed at:

<http://deankarlan.com/wp-content/uploads/2018/05/Personal-Touch.pdf>

Human interaction is critical in microfinance industry. Repeat borrowers responded well to the text messages, but first time borrowers did not.

Text messaging may be an efficient and inexpensive way to enhance existing bank–client relationships and improve timely loan repayment.

Research is still developing on how to best use Information and Communications Technology (ICT) for development (known as ICT4D), that is, how to harness digital technologies to advance socioeconomic development, international development, and human rights

Read Information and Communication Technology for Develop (ICT4D)

<https://www.taylorfrancis.com/books/9781317313571>

Bryan, C.J., Mazaar, N., Jamison, J., et al. (2017). Overcoming behavioral obstacles to escaping poverty. Behavioral Science and Policy. 3(1):81-91.

Raising interest rates does not lead to clients increasing their savings. However savings almost doubled when people could state their savings goals to a group, have their progress publicly monitored and rewarded in non-monetary ways (praise) at weekly meetings. Use cognitive aids to remind people of optimal behavior.

Instant gratification usually wins out over optimal long term choices. This is called present bias.

Dunlosky J., Rawson K.A., Marsh E.J., et al. (2013). Improving Students' Learning With Effective Learning Techniques: Promising Directions From Cognitive and Educational Psychology. Psychol Sci Public Interest. Jan;14(1):4-58. Doi: 10.1177/1529100612453266.

Reviewed 10 learning techniques. Most relevant summarized here

1. Elaborative interrogation: Prompting learners to generate an explanation for an explicitly stated fact. Enhances learning by supporting the integration of new info with prior knowledge. It helps learning activate schemata, and helps them organize new information. This method also facilitates retrieval.
 - a. Effective in individual learning or small groups.
 - b. Caution: effect of elaborative interrogation increase as prior knowledge increases.
 - c. Has only been applied to discrete units of factual information. Has been applied to retail, merchandising, and accounting (Dornisch M 2006. Facilitating learning from technology-enhanced text: effects of prompted elaborative interrogation.)
 - d. Moderate utility
2. Practice testing: enhances learning and retention. Might include actual or virtual flashcards (self testing), practice problems, or no stake tests. (digital or paper). Enhances retention by triggering elaborative retrieval processes. It may also improve how students mentally organize information.
 - a. Test formats: most research has used with cued recall of target info from memory, some showed benefits of free recalls, short answers, and fill in the black. Multiple choice has also shown benefits. Both recall and comprehension have shown benefits.
 - b. **High utility**
3. Distributed practice: distribute learning over time to benefit long term retention, instead of massing learning opportunities back to back or in close succession. Spacing effects- advantage of spaced over massed practice, and lag effects-advantage of spacing with longer lags over spacing with shorter lags.
 - a. Spaced practice (1 or 30 days between sessions) is superior to massed practice (0 days), with more benefit for 30 days than 1 day. (Bahrick, 1979)
 - b. Best when the lag between sessions is about 10-20% of desired retention interval. To remember something for 1 week, space 12-24 hours apart. For 5 years, space 6 to 12 months apart.
 - c. Older adults benefit from distributed practice as much as adults do.

- d. To encourage distributed practice, don't just lump material together, review previously covered material in subsequent units. It might increase friction, but don't group to-be-worked problems together, distribute them. Set up material so that it encourages distributed practice.
- e. High utility**
- 4. Interleaved practice; alternate practice of different kinds of items or problems (as opposed to blocked practice).
 - a. Interleaving can help students discriminate between the different kinds of problems so they know what technique to use. It can also promote organizational processing and item-specific processing.
 - b. Most promising applications are in math and algebraic skills, which is applicable to personal finance.
 - c. Adequate pre-training is a pre-req especially with less skilled students.
 - d. Mayfield and Chase (2002) study: taught algebra rules to students with poor math skills across 25 sessions. Review sessions (instead of introducing a single algebra rule) where the rule learned in the previous session was reviewed along with rules from earlier sessions results in better retention and performance.
 - i. Advice: after a topic or problem type has been introduced, practice should first focus on that particular problem. After the next kind of problem is introduced (during another lecture/sessions), that problem should first be practiced followed by extra practice that involved interleaving the current type with previous types from last session.
 - e. Moderate utility

<https://www.microfinanceopportunities.org/>

<http://responsiblefinance.worldbank.org/>

<https://www.findevgateway.org/> (do a search for financial education or business training here)

<https://www.centerforfinancialinclusion.org/>