Indexing In Action
Strategies for Engaging Students

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Next Gen Personal Finance
Maine Jump$tart Conference 2019
“I tell people investing should be dull. It shouldn't be exciting. Investing should be more like watching paint dry or watching grass grow.”

Prof. Paul Samuelson
I'm starting a mutual fund for investors who aren't bright enough to know their alternatives.

It must be a huge market. Otherwise most people would invest in index funds.

What's an index fund?

Ouch, ouch! You're making me wag too hard!
• Content
  ○ Explain what an index fund is
  ○ Understand why index funds are a popular choice for new investors
  ○ Review the fine print of making an index fund investment
• Teaching
  ○ Experience/reflect on five different resources to teach students about index funds
Two Hats
● **Buying a Stock**  
  ○ You buy 1 share of 1.5 billion shares

● **Value of Your Shares**  
  ○ \((\text{Current stock price}) \times \text{(\# of shares you buy)}\)

● **How You Make Money**  
  ○ Receive dividends of ~ $1.00 per share per year  
  ○ Sell your share at a higher price than you bought it

● **What is the risk that comes with owning a stock?**
What happens when Lebron James asks Warren Buffett an investing question?

1. What terms would your students struggle with in this video?
2. How does he describe index funds?

bit.ly/LebronInvest
Activity: What is the S&P 500?

bit.ly/SP500Map1

FinViz.com

3 Things You Notice?

Activity: Stock Prices and Industries in the S&P 500
How is investing like M&Ms?

A. Individual M&Ms

B. Send someone to store to get the right colors for you

C. Buy a bulk case of M&Ms

Match the term with the letter that best describes it:
• Index funds
• Stocks
• Active mutual funds

Source: Bogleheads blog
1. Students given a slip of paper with company name and performance on it
2. Form a group of 2 and asked a series of questions
3. Form a group of 6 and asked a series of questions
4. Form a line from lowest return to highest return...then the “big reveal”

Activity: Let’s Make a Mutual Fund
Over a recent 15 year period, what percent of professionals investing in large companies "beat the market?"
Who’s Winning: Active vs. Passive?

SPIVA U.S. Scorecard

REPORTS

Report 1: Percentage of U.S. Equity Funds Outperformed by Benchmarks

<table>
<thead>
<tr>
<th>FUND CATEGORY</th>
<th>COMPARISON INDEX</th>
<th>1-YEAR (%)</th>
<th>3-YEAR (%)</th>
<th>5-YEAR (%)</th>
<th>10-YEAR (%)</th>
<th>15-YEAR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Domestic Funds</td>
<td>S&amp;P Composite 1500</td>
<td>57.98</td>
<td>82.12</td>
<td>80.13</td>
<td>85.93</td>
<td>83.76</td>
</tr>
<tr>
<td>All Large-Cap Funds</td>
<td>S&amp;P 500</td>
<td><strong>63.46</strong></td>
<td><strong>78.64</strong></td>
<td><strong>76.49</strong></td>
<td><strong>89.15</strong></td>
<td><strong>92.43</strong></td>
</tr>
</tbody>
</table>

Mid-Year 2018
In December 2008, new Morningstar data shows, only 19.8 percent of mutual fund assets in the U.S. were in index funds.

Ten years later, the proportion had almost doubled, to 38.7 percent.

-NY Times (February 22, 2019)
An index fund does not pick and choose its investments, but instead holds all of the **stocks** or **bonds** on an index.

So what’s an index? Basically, it is a **list of investments**. For example, the S&P 500 is a roster of the 500 largest U.S. companies with publicly traded shares.
Let’s Reflect

● What was one aspect of the instruction that you have seen that was effective?

● What is one specific customization that you would make for one of these resources? Why?
Types of Mutual Funds

Mutual Funds

Passive Funds
“Match the market”
- Stock
- Bonds

Active Funds
“Beat the market”
- Stock
- Bonds
How To Find

Where Can I Find Investing Resources on NGPF Website?

www.ngpf.org
**Reading the Fine Print**

**Investing in an Index Fund**

**Step 1:**
- What’s the index that you are investing in?
- Who manages the fund?
Step 2:

- What are the fees on a mutual fund called?
- What is the cost of this fund (in percent)?
Reading the Fine Print
Investing in an Index Fund

Step 3:

- What are the fund returns compared to the benchmark over the past 5 years?
- Agree or disagree: Vanguard 500 Fund is a low-risk way to invest in stocks.

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### Domestic stock fund | Investor Shares

| Fund | Expense ratio | Turnover | Total returns
|------|--------------|----------|----------------

**Total returns**

<table>
<thead>
<tr>
<th>Period</th>
<th>One year</th>
<th>Three years</th>
<th>Five years</th>
<th>Ten years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4.46%</td>
<td>12.08%</td>
<td>17.71%</td>
<td>13.91%</td>
</tr>
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The performance data above represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, and shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, call 800-345-7550.

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**Top sector holdings (as of 12/31/2017)**

- Information Tech: 21.9%
- Industrials: 10.7%
- Healthcare: 10.1%
- Energy: 8.3%
- Communication Services: 6.5%
- Utilities: 2.4%
- Technology: 11.0%
- Real Estate: 2.7%

Sector categories are based on the Global Industry Classification Standard (GICS®), defined for the “Other” category of equity, which includes issuers that have not been classified by a GICS® classification or that have an alternative reporting period.
### Average annual performance—quarter end

<table>
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<tr>
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<th>Vanguard 500 Index Fund Inv</th>
<th>Rydex S&amp;P 500 Fund Class A</th>
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<tbody>
<tr>
<td>YTD</td>
<td>-4.52%</td>
<td>-6.01%</td>
</tr>
<tr>
<td>YTD as-of date</td>
<td>12/31/2018</td>
<td>12/31/2018</td>
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<td>10-year</td>
<td>12.97%</td>
<td>10.77%</td>
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<td>1-, 3-, 5-, 10-year as-of date</td>
<td>12/31/2018</td>
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Why You Better Read The Fine Print!

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If you invested $1,000.... $3,386 $2,781
Why the big difference in performance?

<table>
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<th>Fund overview</th>
<th>Vanguard 500 Index Fund Inv</th>
<th>Rydex S&amp;P 500 Fund Class A</th>
</tr>
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<tr>
<td>Symbol</td>
<td>VFINX</td>
<td>RYSOX</td>
</tr>
<tr>
<td>Asset class</td>
<td>Stock</td>
<td>Stock</td>
</tr>
<tr>
<td>Category</td>
<td>Large Blend</td>
<td>Large Blend</td>
</tr>
<tr>
<td>Risk potential</td>
<td>![Risk Level 4]</td>
<td></td>
</tr>
<tr>
<td>Expense ratio</td>
<td>0.14%</td>
<td>1.58%</td>
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Which is the LEAST diversified?

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<tr>
<th></th>
<th>Vanguard Total Stock Mkt. Index</th>
<th>Vanguard 500 Index</th>
<th>Vanguard Info Tech. Index</th>
<th>Vanguard Total Int’l Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stocks</td>
<td>3508</td>
<td>509</td>
<td>323</td>
<td>6374</td>
</tr>
<tr>
<td>Region</td>
<td>Domestic</td>
<td>Domestic</td>
<td>Domestic</td>
<td>Foreign</td>
</tr>
<tr>
<td>10 Yr. Avg. Annual Return</td>
<td>10.97%</td>
<td>10.84%</td>
<td>15.82%</td>
<td>5.06%</td>
</tr>
<tr>
<td>Risk potential (5 = risky)</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
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