

IR's Dash to Develop Dashboards and Data Visualizations



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Temple At-A-Glance

Located in Philadelphia, PA

17 Schools/Colleges

5 Professional Schools

8 Campuses (including Rome & Japan)

500+ Academic Programs

39,000+ Students

Over 3,500 Faculty

Cohort size: Approximately 5,000 students

Introduction - Framework

Temple At-A-Glance

Intro - Framework

Content – Metric
Selection

Dashboard Design

Tools

Excel's Tech Tool Box

Demonstration – Temple
IRA Dashboard

Questions

- Dashboards vs. interactive & static reports
- IR's role in dashboard development
- Identify your audience
- Dashboard metrics tied to university policy

Content – Metric Selection

Temple At-A-Glance

Intro - Framework

Content – Metric Selection

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Demonstration – Temple IRA Dashboard

Questions

- De-mystifying metric types:
 - Operational – Merit Dashboard
 - Tactical
 - Strategic
- Longitudinal Trends
- Key Figures
- Indicators – Data and Information
 - Actionable indicators
 - Meet a threshold
 - Directional

Content – Metric Selection

Temple At-A-Glance

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Questions

Making sense of your dashboard



Dashboard Design

Temple At-A-Glance

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IRA Dashboard

Questions

- Dashboard essentials:
 - Navigation
 - Segmentation
 - Criteria selection

- Art of displaying data
 - Appropriate visual design
 - Images for segmented identification
 - Headers, signage and page space

Tools

Temple At-A-Glance

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IRA Dashboard

Questions

- Select a tool that works for you
 - Associated costs
 - Amendable based on user demand
 - Learning curve
- Excel
 - Functionality
 - Data connectivity
 - Customization
 - Internal and External sharing capabilities

Temple IRA Dashboard

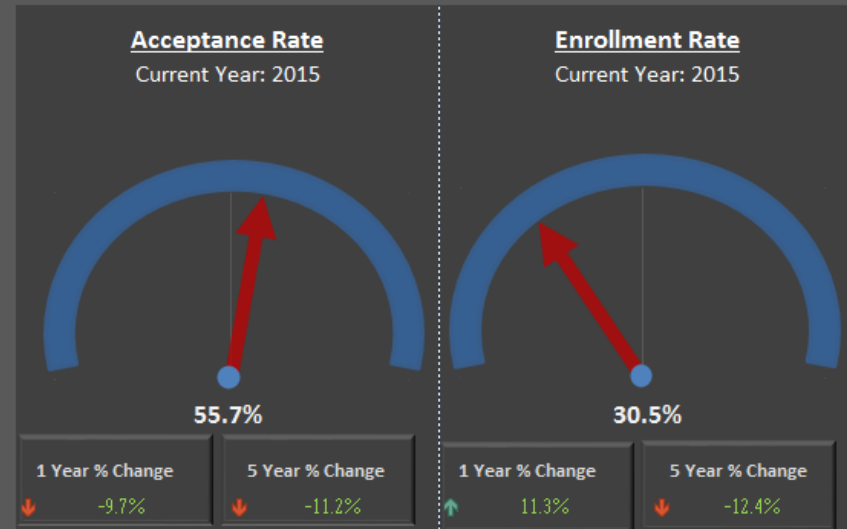
Temple University

Undergraduate
 Graduate/Profes

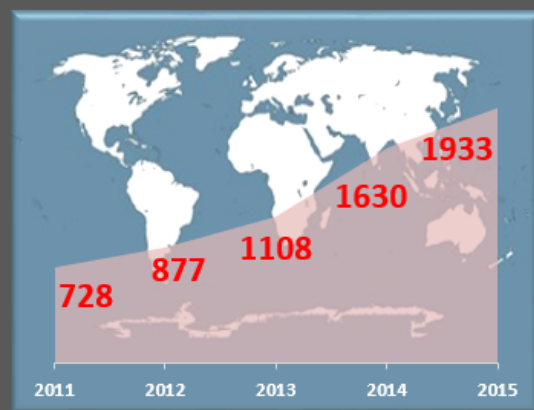
Enrollment Demographics - Current Status

Race/Ethnicity	Current Year: 2015	1 Year % Change	5 Year % Change	5 Year Trend
Asian	3015	↑ 4.1%	↑ 0.2%	
African-American	3730	↑ 0.8%	↓ -15.3%	
American Indian	40	↓ -13.0%	↓ -57.0%	
Hispanic/Latino	1728	↑ 6.4%	↑ 28.4%	
International	1933	↑ 18.6%	↑ 165.5%	
2+ Races	854	↑ 14.6%	↑ 114.6%	
Pacific Islander	29	↓ -14.7%	↑ 93.3%	
US Other/Unknown	1519	↑ 5.2%	↓ -33.6%	
White	15906	↓ -2.3%	↓ -12.9%	

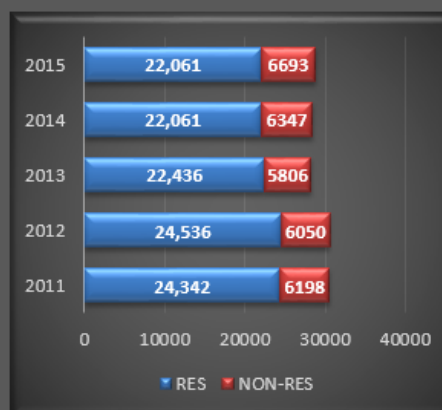
Undergraduate Admissions - Current Status



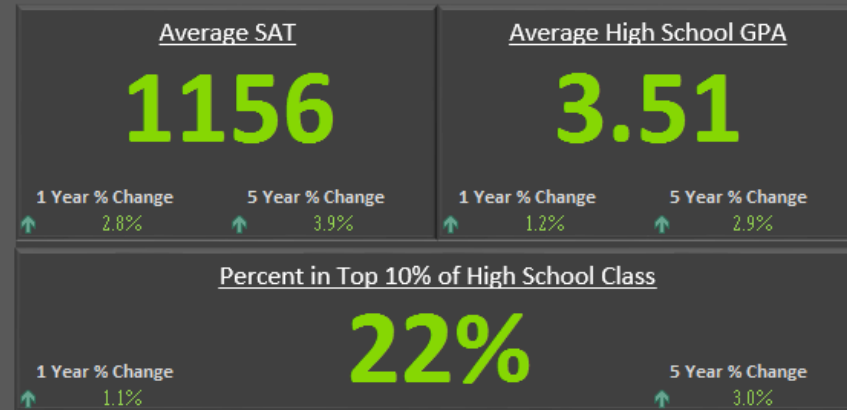
International Student Enrollment



Residency



Enrolled Freshmen



Excel's Tech Tool Box

- Developer Version

Temple At-A-Glance

Intro - Framework

Content – Metric Selection

Dashboard Design

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Excel's Tech Tool Box

Demonstration – Temple IRA Dashboard

Questions

- Data tab

METRIC	TOTAL		METRIC	RATE		METRIC	RATE
BC 2013 GR RES	86		BC 2011 ADMIT	0.514		BC 2013 MAST_PERCENT_GRE	0.013
BU 2013 GR RES	488		BU 2011 ADMIT	0.635		BU 2013 MAST_PERCENT_GRE	0.181
CA 2013 GR RES	16		CA 2011 ADMIT	0.674		CA 2013 MAST_PERCENT_GRE	0.733
CO 2013 GR RES	73		CO 2011 ADMIT	0.615		CO 2013 MAST_PERCENT_GRE	0.909
DN 2013 GR RES	273		ED 2011 ADMIT	0.589		CS 2013 MAST_PERCENT_GRE	0
ED 2013 GR RES	715		EN 2011 ADMIT	0.719		DN 2013 MAST_PERCENT_GRE	0
EN 2013 GR RES	57		HP 2011 ADMIT	0.561		ED 2013 MAST_PERCENT_GRE	0.385
HP 2013 GR RES	522		LA 2011 ADMIT	0.609		EN 2013 MAST_PERCENT_GRE	0.7

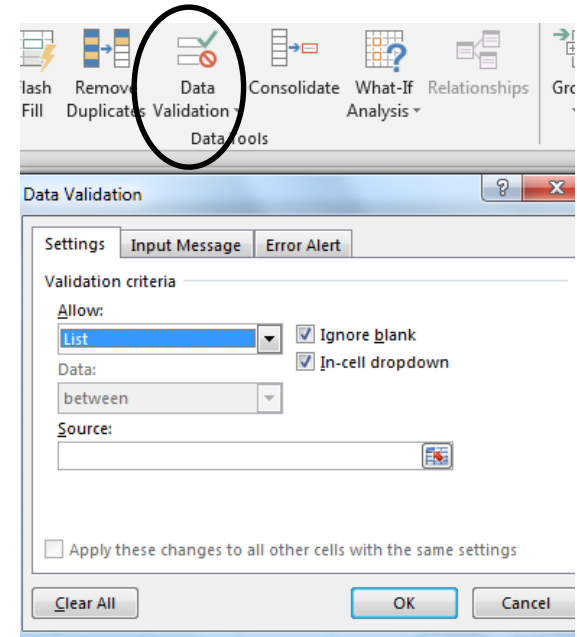
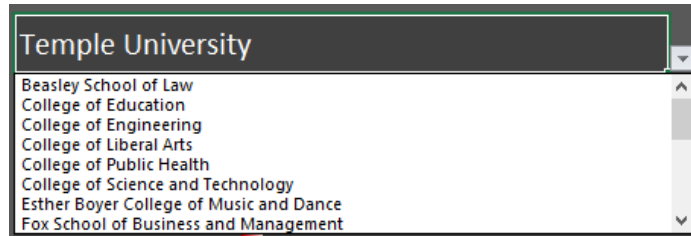
- Mechanics tab

A2 =VLOOKUP('Access and Quality'!B6,'School X Ref'!A2:B26,2,FALSE)

School Code	LEVEL	Category	2011	2012	2013	2014	2015	2016	
EN	UG	ASN	170	178	175	190	197	240	
	UG	AFA	165	169	171	172	200	193	
Student_Level	UG	AI	3	3	2	1	1	2	Interr
UG	UG	HISP	42	53	70	86	87	85	
TRUE	UG	INTL	64	75	121	165	203	245	
	UG	MULT	10	18	21	34	48	42	64 (5.1
Current_year	UG	PI	1	1	3	3	3	0	
2016	UG	UNK	80	77	74	83	94	83	
	UG	WH	576	704	781	871	943	1016	
	UG	TOTAL ENROLLMENT	1111	1278	1418	1605	1776	1906	

Excel's Tech Tool Box

- Criteria selection dropdown box



- VLOOKUPS

- Syntax: =VLOOKUP (value, table, col_index, [range_lookup])

- Example: `=IFERROR(VLOOKUP(A2 & " "&D$1&" "&$B2&" "&$C2,ENROLLMENT_DATA,2,FALSE),)`

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Excel's Tech Tool Box

- VBA

Undergraduate

Graduate/Prof

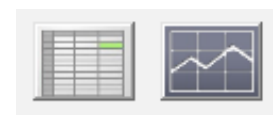
- Hiding columns

```
Working - AQI for Decentralized Budgeting Template (2016)-master.xls
Worksheet

Private Sub OptionButton1_Click()
    Range("I:L").EntireColumn.Hidden = False
    Range("N:Q").EntireColumn.Hidden = True
End Sub

Private Sub OptionButton2_Click()
    Range("I:L").EntireColumn.Hidden = True
    Range("N:Q").EntireColumn.Hidden = False
End Sub
```

- Hiding charts



```
Private Sub Image1_Click()

ActiveSheet.ChartObjects("Chart 1").Visible = True
Range("B8").Value = "Enrollment Demographics - Longitudinal Chart"

Private Sub Image2_Click()

ActiveSheet.ChartObjects("Chart 1").Visible = False
Range("b8").Value = "Enrollment Demographics - Current Status"
```

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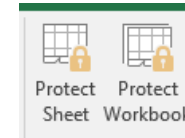
Excel's Tech Tool Box

Demonstration – Temple IRA Dashboard

Questions

Excel's Tech Tool Box

- Password protect workbook



- Setting scroll area:

```
Application.Worksheets("Access and Quality").ScrollArea = "A1:S37"  
Application.Worksheets("Student Success").ScrollArea = "A1:V48"  
Application.Worksheets("Faculty and Teaching").ScrollArea = "A1:R55"
```

- Authorization to create new sheets:

```
Private Sub Workbook_NewSheet(ByVal Sh As Object)  
With Application  
Application.ScreenUpdating = False  
Application.DisplayAlerts = False  
Sh.Delete  
Application.DisplayAlerts = True  
Application.ScreenUpdating = True  
End With  
MsgBox "Not Authorized to create new sheets", vbExclamation, "FYI"  
End Sub
```

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■ Open Prompt:

```
Private Sub UserForm_Activate()  
Application.Wait (Now + TimeValue("00:00:01"))  
UserForm1.Label1.Caption = "Loading Data..."  
UserForm1.Repaint  
Application.Wait (Now + TimeValue("00:00:01"))  
UserForm1.Label1.Caption = "Creating Forms..."  
UserForm1.Repaint  
Application.Wait (Now + TimeValue("00:00:01"))  
UserForm1.Label1.Caption = "Opening..."  
UserForm1.Repaint  
Application.Wait (Now + TimeValue("00:00:01"))  
Unload UserForm1  
End Sub  
  
Private Sub UserForm_Click()  
  
End Sub  
  
Private Sub UserForm_Initialize()  
HideTitleBar Me  
With Me  
.StartupPosition = 0  
.Left = Application.Left + (0.5 * Application.Width) - (0.5 * .Width)  
.Top = Application.Top + (0.5 * Application.Height) - (0.5 * .Height)  
End With  
End Sub
```

■ Close Prompt:

```
Private Sub Workbook_BeforeClose(Cancel As Boolean)  
Dim wrkbk As Workbook  
Dim wrksh As Worksheet  
Dim prev As Window  
  
Set prev = ActiveWindow  
  
For Each wrkbk In Workbooks  
For Each wrksh In wrkbk.Worksheets  
wrksh.Activate  
ActiveWindow.DisplayHeadings = True  
Application.DisplayFormulaBar = True  
Application.ExecuteExcel4Macro "SHOW.TOOLBAR(""Ribbon"",True)"  
Next wrksh  
Next wrkbk  
Application.ErrorCheckingOptions.BackgroundChecking = True  
ActiveWorkbook.Saved = True  
MsgBox "Click OK to continue closing this file. Changes will not be saved."  
  
End Sub
```

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Questions