



GOVERNO DE  
PORTUGAL

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

## FÓRUM ESTATÍSTICO

**Uma forma eletrónica de apresentação de dados: o exemplo do REBIDES**

**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA

**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA



GOVERNO DE  
**PORTUGAL**

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

# Introdução

<http://www.dgeec.mec.pt/np4/EstatDocentes/>

[Página Inicial](#) [Contactos](#) [Ligações](#) [Pedido de Informação](#)



DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA

[DGEEC](#) [Estatísticas](#) [Bases de Dados](#) [Estudos](#) [Parcerias](#) [Inquéritos](#) [Indicadores](#) [Sistemas e Tecnologias](#)

[Educação Pré-escolar,  
Ensino Básico e Secundário](#)

[Ensino Superior](#)

[Ciência, Tecnologia e  
Inovação](#)

[Sociedade da Informação \(pt  
| en\)](#)

[Inicial](#) / [Estatísticas](#) / [Ensino Superior](#) / [Docentes](#)

## Docentes

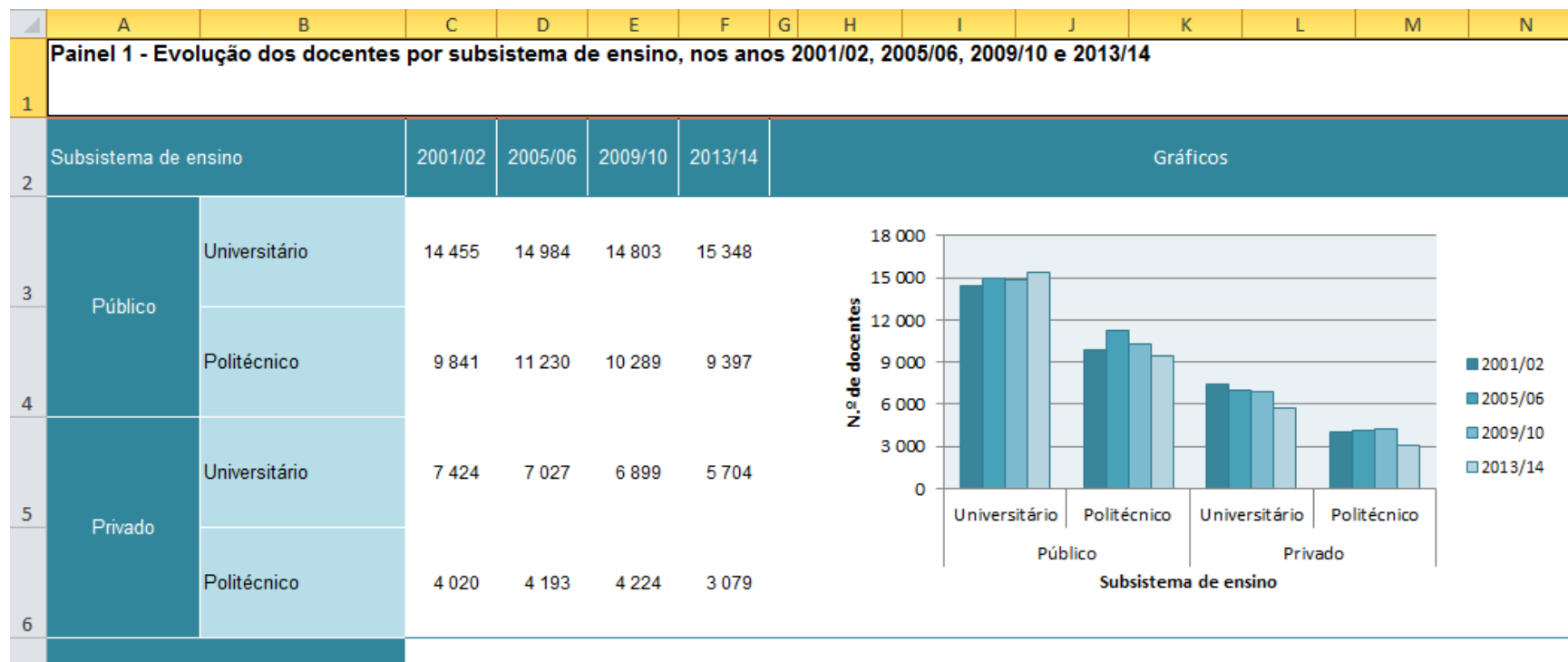
2013/2014

- [Docentes do Ensino Superior \[2001/2002 a 2013/2014\] \(NOVO\) \[XLS\] \[ODS\]](#)
- [Docentes do Ensino Superior \(NOVO\) – Apresentação WEB](#)

[http://www.dgeec.mec.pt/np4/EstatDocentes/%7B\\$clientServletPath%7D/?newsId=138&fileName=DGEEC\\_DSEE\\_DEES\\_2014\\_Docentes\\_2013\\_14.xls](http://www.dgeec.mec.pt/np4/EstatDocentes/%7B$clientServletPath%7D/?newsId=138&fileName=DGEEC_DSEE_DEES_2014_Docentes_2013_14.xls)

	A	B	C	D	E	F	G	H	I
	<b>Tabela 1 - Evolução dos docentes por subsistema de ensino e sexo, de 2001/02 a 2013/14</b>								
1									
2	Subsistema de ensino		Sexo	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
3	Público	Universitário	M	5 439	5 519	5 625	5 719	5 809	5 743
4			HM	14 455	14 521	14 590	14 858	14 984	14 738
5		Politécnico	M	4 432	4 483	4 610	4 833	5 423	5 145
6			HM	9 841	10 049	10 204	10 510	11 230	10 677
7		Total	<b>M</b>	<b>9 871</b>	<b>10 002</b>	<b>10 235</b>	<b>10 552</b>	<b>11 232</b>	<b>10 888</b>
8			<b>HM</b>	<b>24 296</b>	<b>24 570</b>	<b>24 794</b>	<b>25 368</b>	<b>26 214</b>	<b>25 415</b>
9	Privado	Universitário	M	2 696	2 755	2 802	2 733	2 716	2 565
10			HM	7 424	7 381	7 339	7 176	7 027	6 605
11		Politécnico	M	2 004	2 164	2 211	2 169	2 165	2 116
12			HM	4 020	4 240	4 269	4 229	4 193	4 049
13		Total	<b>M</b>	<b>4 700</b>	<b>4 919</b>	<b>5 013</b>	<b>4 902</b>	<b>4 881</b>	<b>4 681</b>
14			<b>HM</b>	<b>11 444</b>	<b>11 621</b>	<b>11 608</b>	<b>11 405</b>	<b>11 220</b>	<b>10 654</b>

[http://www.dgeec.mec.pt/np4/EstatDocentes/%7B\\$clientServletPath%7D/?newsId=138&fileName=DGEEC\\_DSEE\\_DEES\\_2014\\_Docentes\\_2013\\_14.xls](http://www.dgeec.mec.pt/np4/EstatDocentes/%7B$clientServletPath%7D/?newsId=138&fileName=DGEEC_DSEE_DEES_2014_Docentes_2013_14.xls)



**Painel 1**

<http://w3.dgeec.mec.pt/dsee/al20132014/docentes/>

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA

### Docentes no Ensino Superior

[Evolução do número de Docentes por tipo de ensino \(2001/02 – 2013/14\)](#)

[Painel 01](#)



[Evolução do número de Docentes por subsistema de ensino e grupo etário \(2001/02 – 2013/14\)](#)

[Painel 02](#)



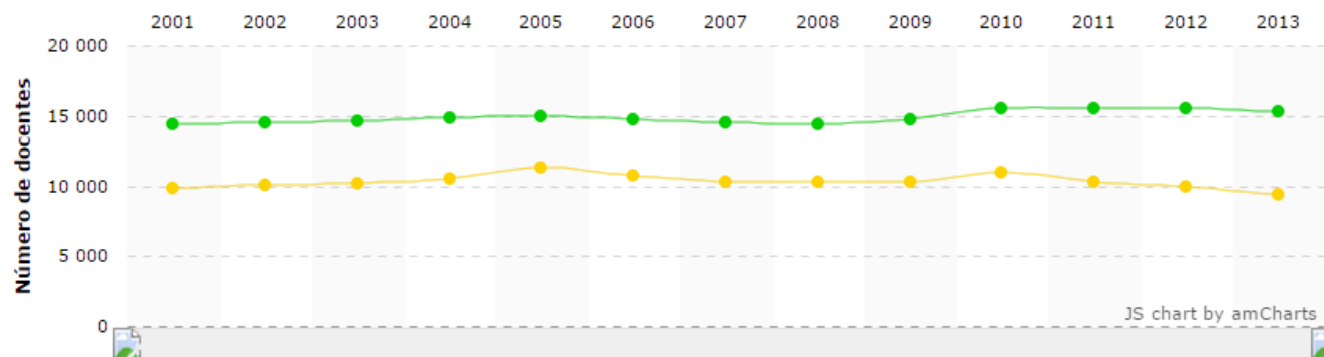
<http://w3.dgeec.mec.pt/dsee/al20132014/docentes/>

Painel 01

**Docentes no Ensino Superior**

**Evolução do número de Docentes no ensino público, por tipo de ensino (2001/02 – 2013/14)**

Tipo de ensino	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
<b>Universitário</b>	14 455	14 521	14 590	14 858	14 984	14 738	14 566	14 466	14 803	15 506	15 538	15 563	15 348
<b>Politécnico</b>	9 841	10 049	10 204	10 510	11 230	10 677	10 265	10 262	10 289	10 904	10 311	9 965	9 397



**Painel 01**

**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA



GOVERNO DE  
**PORTUGAL**

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

# Os gráficos - AmCharts



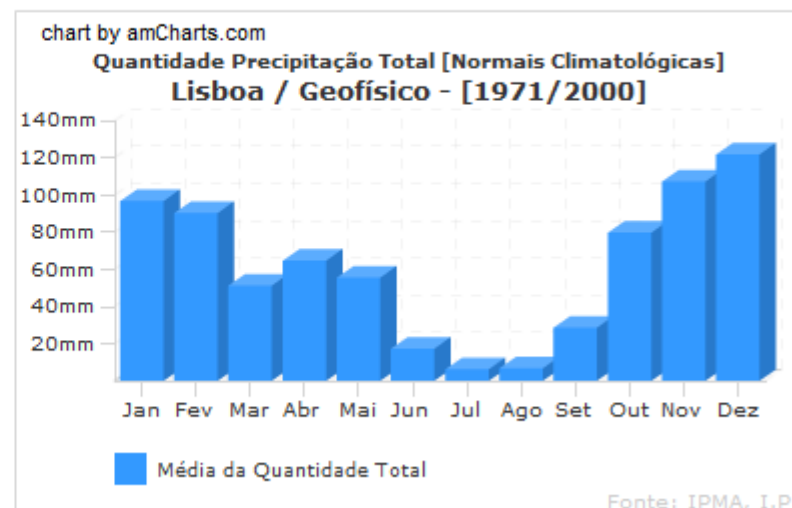
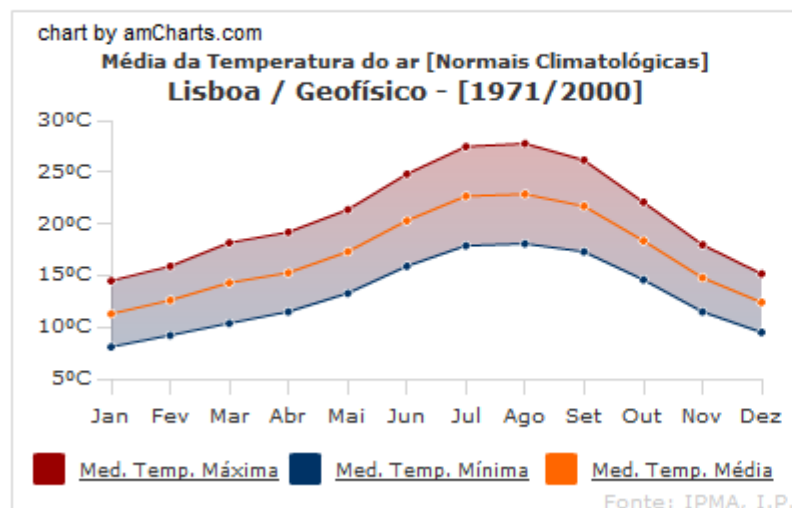
Primeira vez: 😊

<http://www.ipma.pt/pt/otempo/prev.localidade/index.jsp>



## Instituto português do mar e da atmosfera

As previsões disponibilizadas nesta área são, em regra, até ao terceiro dia e para as Capitais de Distrito elaboradas pelos meteorologistas do IPMA. A probabilidade de precipitação é apresentada para valores > 1mm



Para começar 😊

<http://www.amcharts.com/javascript-charts/>

AMCHARTS

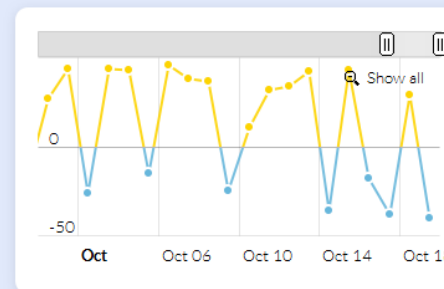
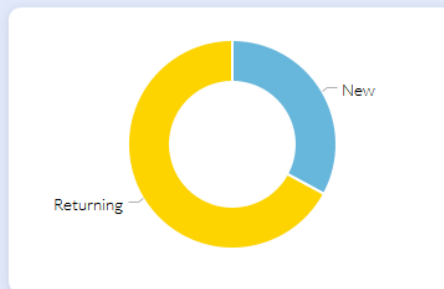
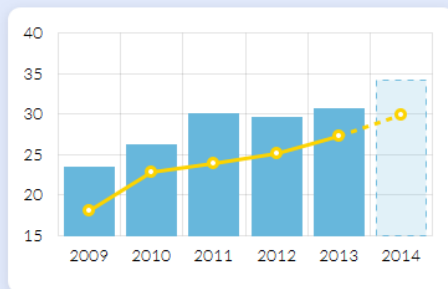
## Javascript Charts v3

We offer JavaScript/HTML5 charts for most of your needs. The set includes serial (column, bar, line, area, step line, step without risers, smoothed line, candlestick and ohlc graphs), pie/donut, radar/polar, y/scatter/bubble, Funnel/Pyramid charts and Angular Gauges. Our charts offer unmatched functionality and performance in a modern, standards compliant package. Our JS charting library is responsive and supported by touch/mobile devices.

DOWNLOAD



BUY \$





AMCHARTS

PRODUCTS

DEMOS

DOWNLOAD

BUY

SUPPORT

DOCS



LIVE EDITOR

CREATE  
CHARTS  
ONLINE








# Download

You can download and use all amCharts products for free. The only limitation of the free version is that a small link to this web site will be displayed in the top left corner of your charts. If you would like to use charts without this link, or you appreciate the software and would like to support its creators, [please purchase a commercial license](#).

Looking for commercial version downloads? [Go here](#).

JavaScript **CHARTS**Version 3.11.2 (October 7, 2014) [Change log](#)JavaScript **STOCK CHART**Version 3.11.2 (October 7, 2014) [Change log](#)

O ficheiro zip permite instalar todos os ficheiros para iniciar a produção dos gráficos desejados:

 amcharts	Pasta de ficheiros
 images	Pasta de ficheiros
 samples	Pasta de ficheiros
 changeLog.txt	Documento de texto
 index.html	Safari Document
 licence.txt	Documento de texto
 thirdPartySoftwareList.txt	Documento de texto

**Este diretório é a base de trabalho para os novos ficheiros**

**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA



GOVERNO DE  
**PORTUGAL**

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

# HTML

**<html>**

**<head>**

**</head>**

**<body>**

**</body>**

**</html>**

---

**<html>**

**<head>**

**</head>**

**<body>**

**Olá, a minha primeira página**

**</body>**

**</html>**

---

**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA

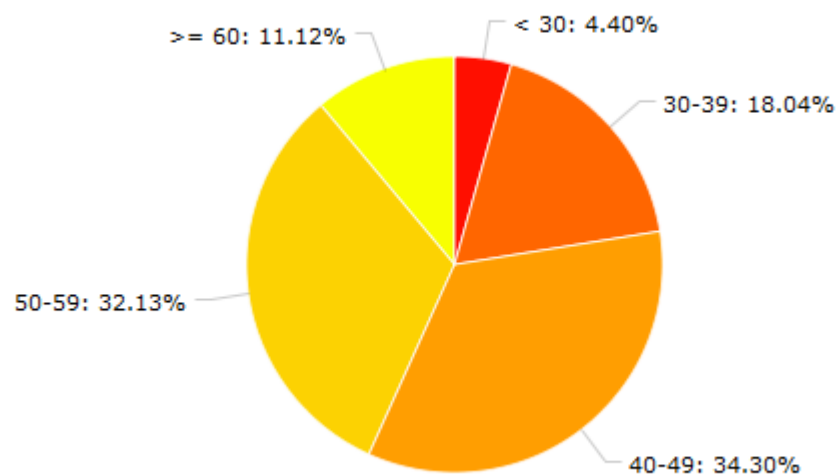


GOVERNO DE  
**PORTUGAL**

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

# HTML e AmCharts





```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
```

```
<html>
```

```
<head>
```

```
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
```

```
<title>amCharts examples</title>
```

```
<link rel="stylesheet" href="style.css" type="text/css">
```

```
<script src="amcharts/amcharts.js" type="text/javascript"></script>
```

```
<script src="amcharts/pie.js" type="text/javascript"></script>
```

```
<script type="text/javascript">
```

```
var chart;  
var legend;
```

```
var chartData = [{  
  GE: "< 30",  
  docentes: 676.0  
}, {  
  GE: "30-39",  
  docentes: 2769.0  
}, {  
  GE: "40-49",  
  docentes: 5265.0  
}, {  
  GE: "50-59",  
  docentes: 4932.0  
}, {  
  GE: ">= 60",  
  docentes: 1706.0  
}];
```

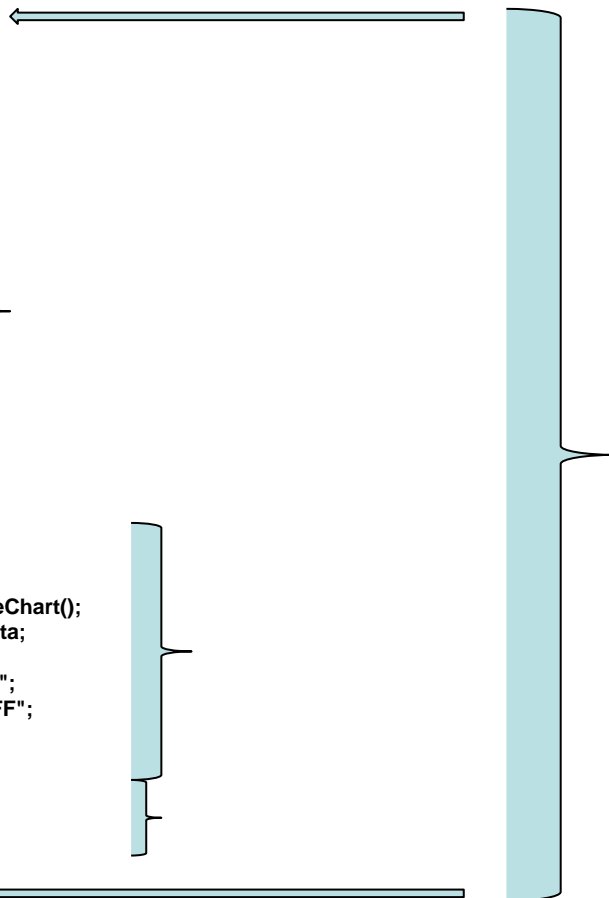
```
AmCharts.ready(function () {  
  // PIE CHART  
  chart = new AmCharts.AmPieChart();  
  chart.dataProvider = chartData;  
  chart.titleField = "GE";  
  chart.valueField = "docentes";  
  chart.outlineColor = "#FFFFFF";  
  chart.outlineAlpha = 0.8;  
  chart.outlineThickness = 1;
```

```
  // WRITE  
  chart.write("chartdiv");
```

```
});
```

```
</script>
```

```
</head>
```

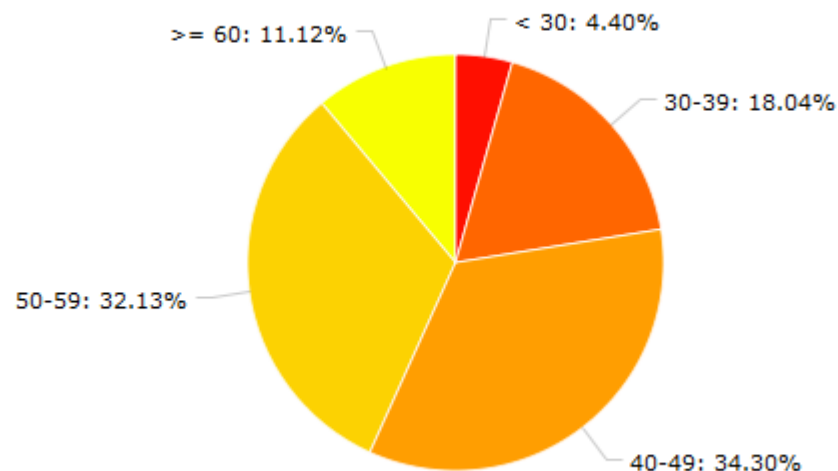


```
<body>
```

```
  <div id="chartdiv" style="width: 100%; height: 400px;"></div>
```

```
</body>
```

























```
</html>
```



## Como progredir?

- **Experimentar os exemplos no diretório “samples”**
- **Abrir com o “notepad”**
- **Alterar os parâmetros na função  
AmCharts.ready(function () ...**
- **... e podem abrir os painéis da apresentação do  
Rebides para ver os parâmetros que usámos. No  
browser, pedir para ver o código fonte.**

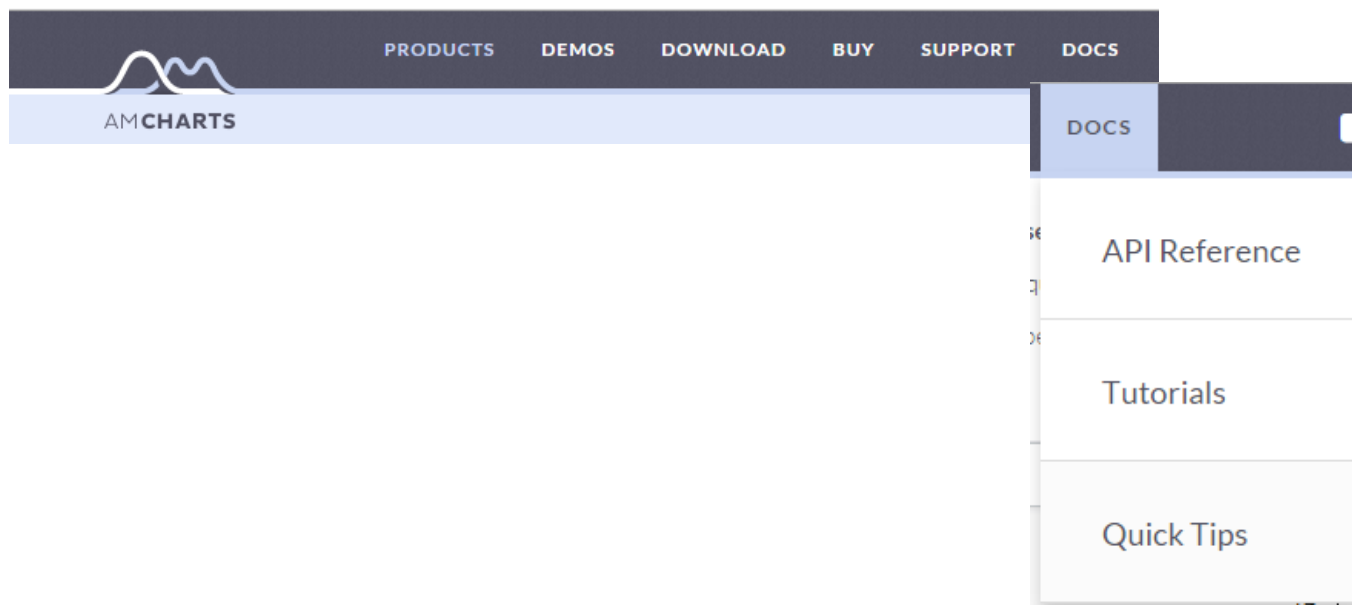
### images

-  \_exporting\_to\_multiple\_formats.html
-  \_exporting\_to\_png.html
-  \_JSON\_angularGauge.html
-  \_JSON\_areaStacked.html
-  \_JSON\_barAndLineMix.html
-  \_JSON\_lineWithFilledValueRanges.html
-  \_JSON\_lineWithScrollAndZoom.html
-  \_JSON\_lineWithTrendLines.html
-  \_JSON\_pieWithLegend.html
-  \_JSON\_radarSimple.html
-  \_JSON\_usingDifferentLanguage.html
-  \_JSON\_xyBubbleWithZoom.html
-  \_JSON\_xyWithGuides.html
-  \_usingThemes.html
-  angularGauge.html
-  angularGaugeWithTwoAxes.html
-  area100PercentStacked.html
-  areaStacked.html
-  areaWithTimeBasedData.html
-  bar3D.html
-  barAndLineMix.html
-  barClustered.html
-  barFloating.html
-  barStacked.html

## Como progredir?

### Site da AMCharts

- <http://www.amcharts.com/javascript-charts/>



# Como progredir?

## Quick Tips

PRODUCTS DEMOS DOWNLOAD BUY SUPPORT DOCS [LIVE EDITOR](#) [CREATE CHARTS ONLINE](#)

### Quick Tips

Welcome to amCharts Quick Tips section!

We're using this page to post all the quick demos and tips that we create daily.

Make sure you check back often, or better yet, subscribe to our [Quick Tips RSS feed](#).

All Types

- Toggle alpha of map group item [Permanent link - Oct 17, 2014](#)
- Custom hardcoded items in chart legend [Permanent link - Oct 14, 2014](#)
- Custom images on value axis labels [Permanent link - Oct 10, 2014](#)
- Linking pie chart with column chart for drill-down data display [Permanent link - Oct 10, 2014](#)**
- Automatic legend value width for pie chart

Result JavaScript HTML CSS [Edit in JSFiddle](#)

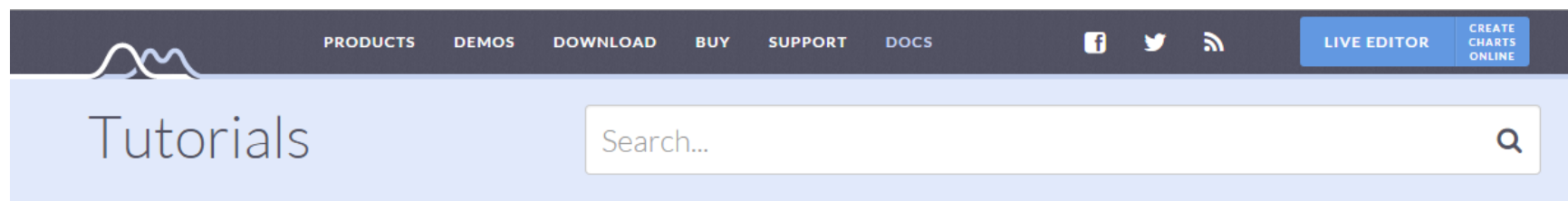
JS chart by amCharts

**All departments**

Department	Value
1	7
2	8
3	3
4	12
5	6
6	3
7	6
8	7
9	9
10	3
11	3
12	9

# Como progredir?

## Tutorials



The screenshot shows the top navigation bar of the Jscodesktop website. It includes a dark blue header with a white wave logo on the left, followed by navigation links: PRODUCTS, DEMOS, DOWNLOAD, BUY, SUPPORT, and DOCS. On the right side of the header are social media icons for Facebook, Twitter, and RSS, and two buttons: 'LIVE EDITOR' and 'CREATE CHARTS ONLINE'. Below the header is a light blue banner with the word 'Tutorials' on the left and a search input field with the placeholder text 'Search...' and a magnifying glass icon on the right.

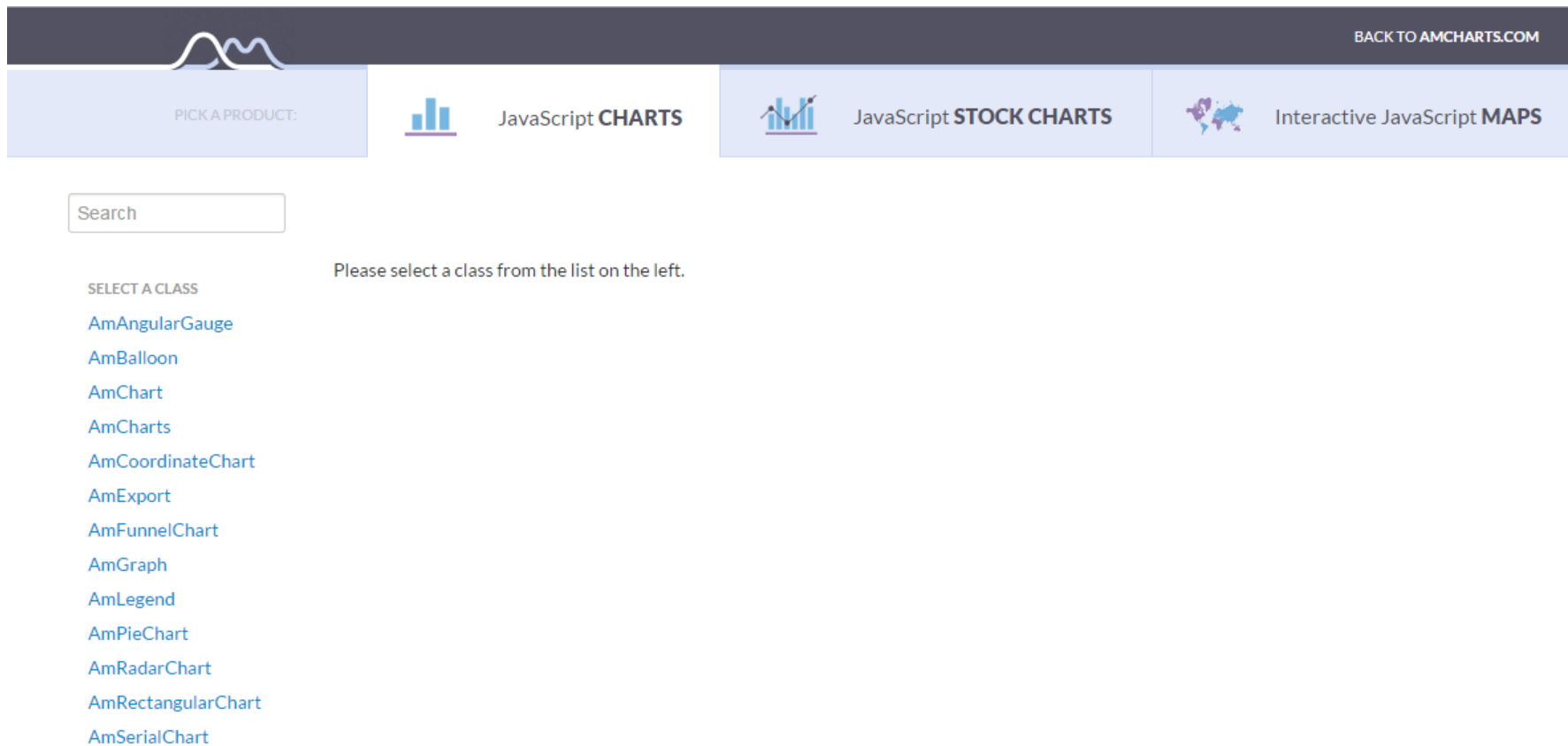


### Javascript Charts

- Fitting pie charts into small containers
- amCharts meets requireJS
- Your first chart with amCharts
- Loading external data
- Interacting between JavaScript Charts and JavaScript Maps
- Using PHP to hook up charts to MySQL data base
- Time series chart – the great advantages of parsing dates
- Formatting dates
- Non-English months / weekdays
- Putting a legend outside the chart area
- Creating Sparkline / Micro Charts
- Live-editing Chart Data
- Showing only one balloon for all graphs
- Displaying bullets on specified points only
- Replacing axis labels with arbitrary text
- Filling area between two lines
- Multi-segmented line graph
- Combined stacked line/area graphs with non-stacked ones
- User defined min/max values of Value Axis
- Multiple value axes on XY chart
- Drill-down column chart
- Marking weekends or filling single series background
- Multiple data sets with regular charts
- Vertical or horizontal lines or fills
- Handling mouse events on line graph
- Updating balloon (tool-tip) text on the fly

# Como progredir?

## API (Application Programming Interface)



The screenshot shows the top navigation bar of the AmCharts website. It features a dark grey header with the AmCharts logo (a white wave) on the left and a "BACK TO AMCHARTS.COM" link on the right. Below the header is a light blue navigation bar with three main categories: "PICK A PRODUCT:" (with a search icon), "JavaScript CHARTS" (with a bar chart icon), and "JavaScript STOCK CHARTS" (with a line and bar chart icon). To the right of these is a link for "Interactive JavaScript MAPS" (with a world map icon). Below the navigation bar is a search input field with the placeholder text "Search". To the right of the search field is a message: "Please select a class from the list on the left." Below this message is a list of class names under the heading "SELECT A CLASS".

BACK TO AMCHARTS.COM

PICK A PRODUCT:

JavaScript **CHARTS**

JavaScript **STOCK CHARTS**

Interactive JavaScript **MAPS**

Search

Please select a class from the list on the left.

SELECT A CLASS

- [AmAngularGauge](#)
- [AmBalloon](#)
- [AmChart](#)
- [AmCharts](#)
- [AmCoordinateChart](#)
- [AmExport](#)
- [AmFunnelChart](#)
- [AmGraph](#)
- [AmLegend](#)
- [AmPieChart](#)
- [AmRadarChart](#)
- [AmRectangularChart](#)
- [AmSerialChart](#)



**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA



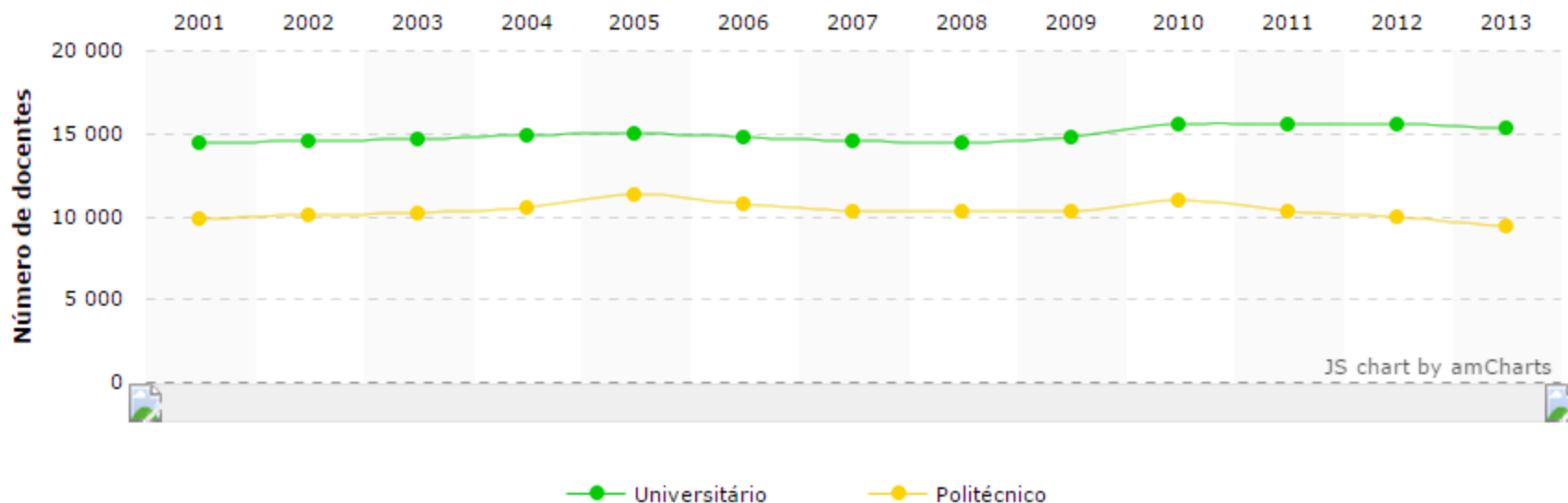
GOVERNO DE  
**PORTUGAL**

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

# HTML e AmCharts - Tables

**Evolução do número de Docentes no ensino público, por tipo de ensino (2001/02 – 2013/14)**

Tipo de ensino	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
<b>Universitário</b>	14 455	14 521	14 590	14 858	14 984	14 738	14 566	14 466	14 803	15 506	15 538	15 563	15 348
<b>Politécnico</b>	9 841	10 049	10 204	10 510	11 230	10 677	10 265	10 262	10 289	10 904	10 311	9 965	9 397



```

<html>
<body>
<table border = "1">
  <tr>
    <th>Tipo de ensino</th>
    <th>2001/02</th>
    <th>2002/03</th>
    <th>...</th>
    <th>2013/14</th>
  </tr>
  <tr>
    <td>Universitário</td>
    <td>14 455</td>
    <td>14 521</td>
    <td>...</td>
    <td>15 348</td>
  </tr>
  <tr>
    <td>Politécnico</td>
    <td>9 841</td>
    <td>10 049</td>
    <td>...</td>
    <td>9 397</td>
  </tr>
</table>
</body>
</html>

```

Tipo de ensino	2001/02	2002/03	...	2013/14
Universitário	14 455	14 521	...	15 348
Politécnico	9 841	10 049	...	9 397

The <td> tag defines a standard cell in an HTML table.

An HTML table has two kinds of cells:

Header cells - contains header information (created with the <th> element)

Standard cells - contains data (created with the <td> element)

The text in <th> elements are bold and centered by default.

The text in <td> elements are regular and left-aligned by default.

The <tr> tag defines a row in an HTML table.

A <tr> element contains one or more <th> or <td> elements.

<http://www.w3schools.com/tags/>  
<http://www.csstablegenerator.com>

**DGEEC**

DIREÇÃO-GERAL DE ESTATÍSTICAS  
DA EDUCAÇÃO E CIÊNCIA



GOVERNO DE  
**PORTUGAL**

MINISTÉRIO DA EDUCAÇÃO  
E CIÊNCIA

**Obrigado pela vossa atenção! 😊**