Introduction

This report documents the research of SMS integrations for Educado. Three SMS providers are researched. For each provider the price per 1000 SMS messages as well as pros and cons for integrating the provider are described.

LabsMobile

LabsMobile offers SMS APIs for different purposes. Of most interest for Educado is the OTP API. The cost of sending 1000 SMS messages through Labs Mobile is...

- 13.15 € in Brazil
- 45,4 € in Denmark
- 75,3 € in The Netherlands
- Free verification of codes
- Min purchase of 10 USD / 9 EUR (Purchased packs last 18 months)
- Limited free trial

In terms of pros, LabsMobile offers a straightforward API suitable for one-time password (OTP) services. It includes endpoints such as sendCode, resendCode, validateCode, and checkCode, enabling us to manage verification workflows easily. Additionally, more APIs are available if greater customization is needed, and all functionality can be accessed via standard HTTP requests without the need for extra npm packages. LabsMobile's documentation is clear and offers code examples of integration in Node.js. The documentation for the OTP API and other APIs is available at:

▷ API OTP

Twilio

- SMS

Twilio offers an SMS API which is the most expensive option and has the following prices for sending 1000 SMS messages:

- 50 € in Denmark or Brazil
- 145 € in The Netherlands

- WhatsApp

Twilio also offers verification through WhatsApp. The advantage of this comes from the widespread use of WhatsApp in Brazil. The following price breakdown is from the reply mail from Twilio official email:

• \$89 (Twilio Verify costs \$50, WhatsApp fee costs \$39) regardless of country.

Integrating the provider's API requires an npm package (twilio). Additionally, the documentation is not as clear as for the other providers. The documentation is available at:

Verify | Twilio

Infobip

Infobip offers full SMS coverage in Brazil with a short timeframe for leasing a number, and includes a free trial period. The API includes an option for one time password (OTP), however this is in the form of a two factor authentication (2FA), which increases the complexity of the integration process for our goal.

The cost of sending 1000 SMS's through Infobip is as follows:

- €25 in Brazil
- €38 in Denmark
- €80 in Netherlands

(May also include hidden fees, as Infobip tells us we decide the SMS provider which can drive up costs)

To use Infobips API within java script, you need to install their SDK npm package <u>SDKs</u>. While this might simplify integration, it may also introduce additional load, increase bundle size, or include code that may not run on older devices, as it has not been tested.

Certain SMS providers can impact costs. Some offer additional features like automation and personalization. Large quantities of SMS might discount the price but sending them too frequently can increase the cost if not managed well.

Recommendation / LabsMobile

Based on the evaluation, LabsMobile provides the most straightforward and cost-effective option for Educado's OTP requirements. Its pricing is straight forward and generally lower than Twilio and Infobip across all tested regions, while still offering a clean API with well documented endpoints for code verification workflows. Unlike Infobip and Twilio, LabsMobile does not require installing additional SDKs, reducing integration complexity and avoiding potential compatibility issues on older devices.

Comparison Table

Twilio Whatsapp	LabsMobile	Infobip
€ 105 (with verification fee)	13.15 € Buy SMS at the Best Price Packs and Adaptable Rates	€25.00
	€45,4	€38.00
	€75,3	€80.00
- possibility to use pre-coded stuff - Doesn't need to be next to cell tower "e.g. 4g" - 100.5 € World Wide "both for Twilio and Meta" Verify Node.js Express Quickstart Twilio Verify API Twilio Verify WhatsApp Overview Twilio WhatsApp Messaging Pricing Twilio	Free trial No setup or maintenance fee Price pr sms seemingly only dependent on destination country (At least for Brazil, Denmark and Netherlands) Cheaper prices with higher quantity (scaling for future needs) - no verify fee Easy to use API for OTP. Has sendCode, resendCode, validateCode, checkCode endpoints. Other available	SMS coverage in Brazil. Has OTP in the form of 2FA. Includes build in verification of pin as a query parameter. Free trial Good trouble shooting steps
	Overview Twilio WhatsApp	Verify WhatsApp Overview Twilio WhatsApp WhatsApp Messaging resendCode, validateCode, checkCode endpoints.

	Twilio	Twilio Whatsapp	LabsMobile	Infobip
			customization is needed. Clear documentation No required npm package for OTP. Everything is accomplished through HTTP requests.	
Cons	High range prices Hard to read documentation on the webpage it says * Prices may change from time to time without notice. A failed message processing fee of \$0.001 per message	Requires a npm package (twilio) Hard to read documentation Having whatsapp account is essential Sending WhatsApp messages is cheap, but Twilio Verify is very expensive.	Min purchase of 10 USD / 9 EUR (Purchased packs last 18 months)	properly requires proprietary library SDKs More convoluted OTP setup.
Extra	- Pricing <u>link</u> services <u>link</u>	Requires preinstalled whatsapp		
Recommend ation	Very high prices, unnecessary for this type of project unless you want to complicate your life.	recommended if whatsapp is preferred over sms		Not recommended because of high price and OTP only included in 2FA.