

21st century - phenomena

- Industry 3.0 ---> Industry 4.0
- Artificial intelligence (AI)
- Automation
- Digitalization
- Communication technology
- Internet and social media
- Globalization and free trade
- Internationalization



21st century - Industry 4.0

- **10%** of global manufacturer are **Industry 4.0 champions**
- **2/3** of manufacturers have just **started** the journey
- **People** are at the centre of the digital transformation



21st century - Industry 4.0

- **Disappearing jobs** (during 10-20 years, 10% disappear, 35% substantially change)
- **New types of jobs** will appear
- **People oriented jobs** (new opportunities)
- **Renewed set of skills**



21st century - challenges

Generation Z (1997+)

- Technology inherent to their daily lives
- Computer literate - optimized internet, social media, apps
- **Unlimited** amount of **content** and options but **limited time**
- Raised to understand **how the world works**



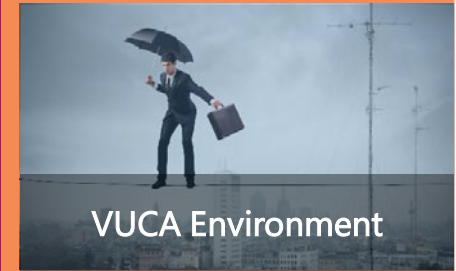
21st century - challenges

- **Multitasking**
- **Split attention**
- Continuous **partial attention** (Linda Stone)
- Shortening **attention span**
- **Lower retention** of knowledge
- **Superficial** or **passive** style of working
- Lack of **critical analysis**





21st century challenges



21st century - skills needed



21st century - skills needed

- Computer literacy and automation, use of robots, electrification, new technologies, digitalization
- Foreign languages
- Soft skills
 - Communication
 - Cooperation
 - Information management
 - Critical thinking
 - Problem solving
 - Flexibility, willingness for life-long learning
 - Personal responsibility and ethics standards



ŠKODA AUTO University



- **Private** institution established in 2000
- The only higher education institution in the Czech Republic that was **founded by a large multinational industrial company** – ŠKODA AUTO a.s. (VW Group)
- **Study program board** represented by both **academicians and professionals**
- Business administration study programmes
- National and **international accreditation** (ACBSP)
- Obligatory **internship** in 5th semester of bachelor's study
- **STUDY&WORK** - dual study program
- **Internationalization** – numerous opportunities for **internships and study abroad**



ŠAVŠ – language dept. (KJPIK)

Bachelor's

- **Mandatory - English**
 - *5 modules*
 - *240 contact lessons*
- **Mandatory elective**
 - German
 - Russian
 - Spanish
 - Chinese
 - Czech for Foreigners
 - *5 modules*
 - *168 contact lessons*
- **Electives**
 - Business communications skills

Master's

- **Mandatory English/German**
 - *3 modules*
 - *144 contact lessons*
- **Electives**
 - Academic Writing



Needs analysis – 2006

• Respondents

- 41 bachelor's study students of the 6th semester after their internship
- 28 students of combined study form
- 25 student supervisors

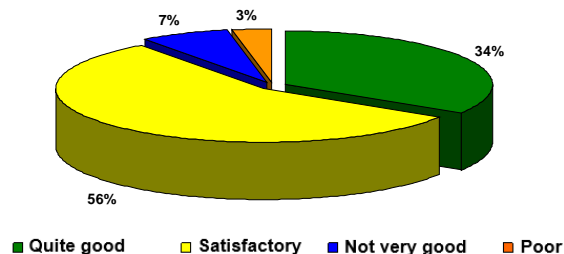
• Aims

- To find out student language competences in relation to their work performance
- To adjust curricula and course models appropriately

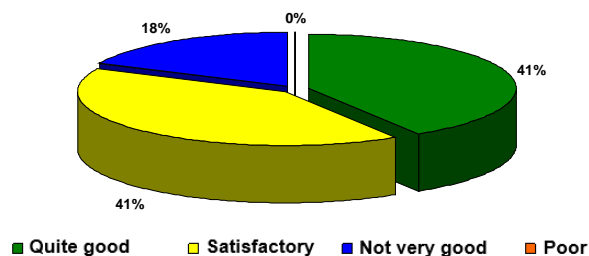


Needs analysis – 2006

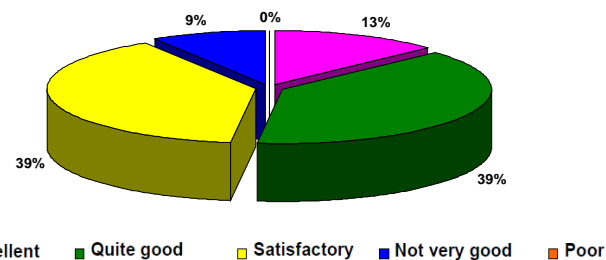
How do you **assess your/student language skills** during your practical training?



full-time



part-time

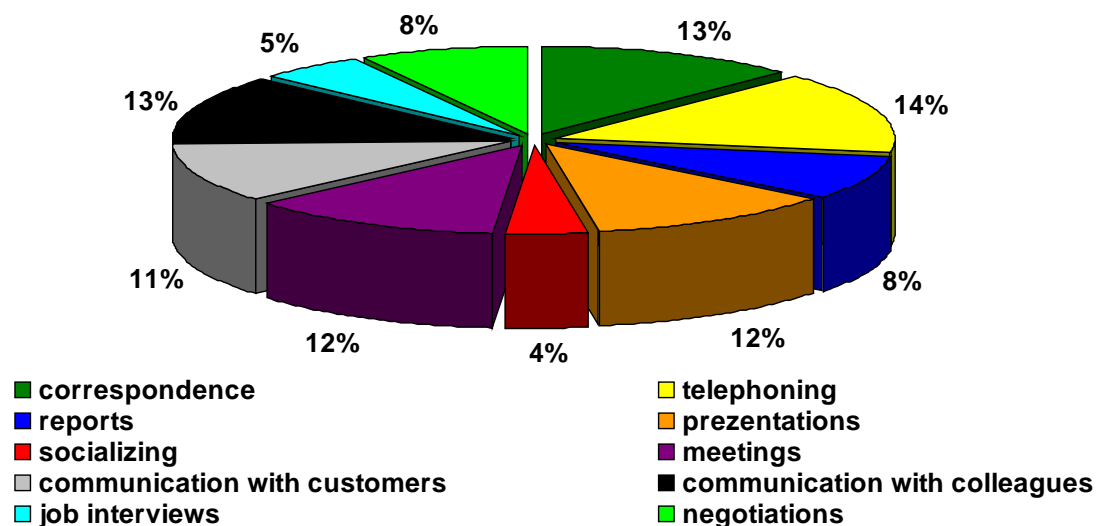


advisors



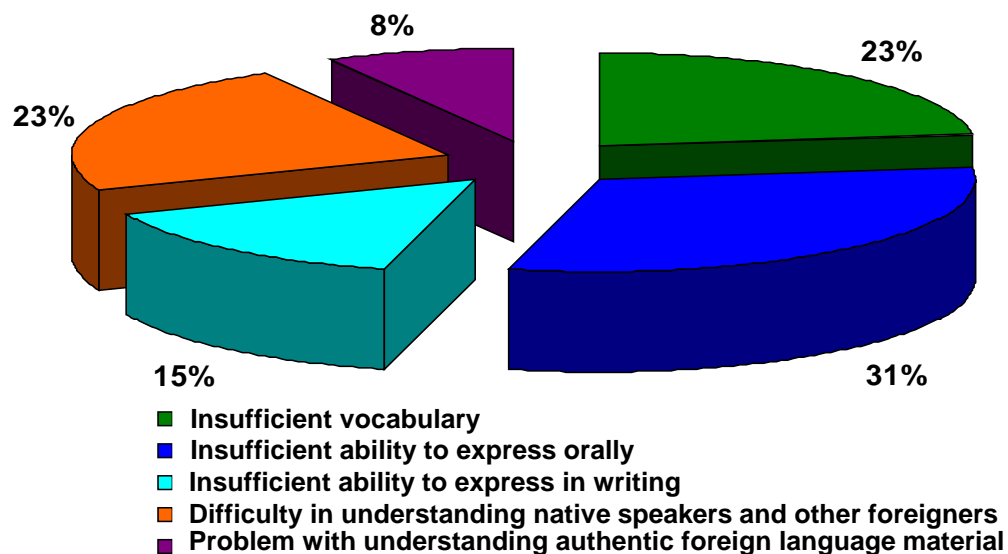
Needs analysis - 2006

What are your **language preferences** for lessons thinking about your future job?



Needs analysis - 2006

The area of student competence weaknesses I see in:



Needs analysis - 2016

- **Respondents**

- 72 master's degree students

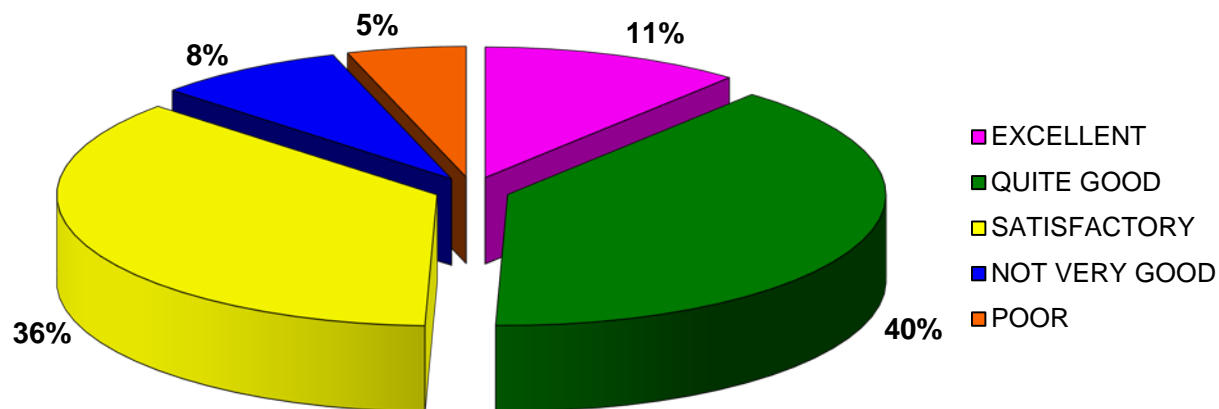
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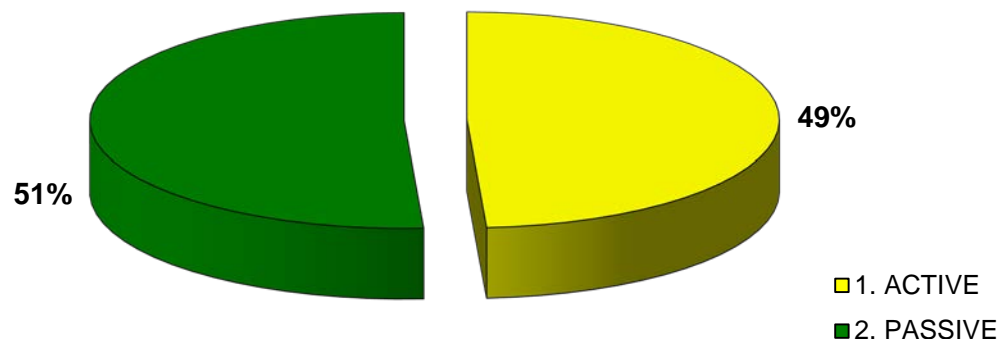
Needs analysis - 2016

How would you assess your foreign language skills during your internship?



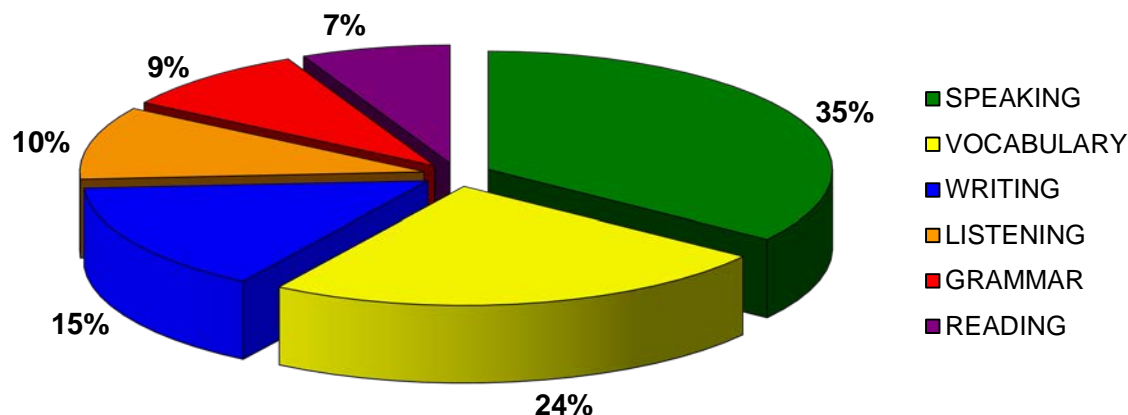
Needs analysis - 2016

In case of a need to communicate in a foreign language, is your attitude rather **active** or **passive**?



Needs analysis - 2016

What are the **priorities** to learn in classes as for your **language skills** and competences?



Needs analysis – JEUL project

‘Entrepreneurial Universities’: 9 HEIs/institutions from Italy, Vietnam, China, UK, Lithuania, Czech Republic 2017-2020

- to establish lasting **cooperation between HEIs and private sector**
 - to improve the **quality of higher education** and enhance its **relevance for the labour market** and society
 - to gain understanding of the **needs of enterprises**
 - to identify the needed **skills of graduates**
 - to **revise the curricula** accordingly
 - to modernize **teaching and learning methods**
-



Gaps identified - Vietnam

- **soft skills** (communication, problem solving, leadership, cooperation)
- **Internet security** knowledge
- certain up-to date **technical** knowledge and skills
- professional **writing literacy**
- practical **corporate experience** (internships)
- **practical skills** to complement theoretical knowledge
- developing **entrepreneurial spirit** of students
- **university collaboration and student team projects**



Gaps identified - China

- **practical skills** to complement theoretical knowledge
- **soft skills** (communication, problem solving, leadership, cooperation, pressure tolerance)
- practical **corporate experience** (internships)
- developing **entrepreneurial spirit** of students
- **university collaboration and student team projects**
- social responsibility / business ethics



Needs analysis - **implications**

- **cooperative** learning and **interactive** methods
- **task/competence-based** approach (CLIL)
- **critical thinking** and Bloom's **learning objectives**
- learner **autonomy** and own **responsibility**
- internal **motivation** and **life-long learning**

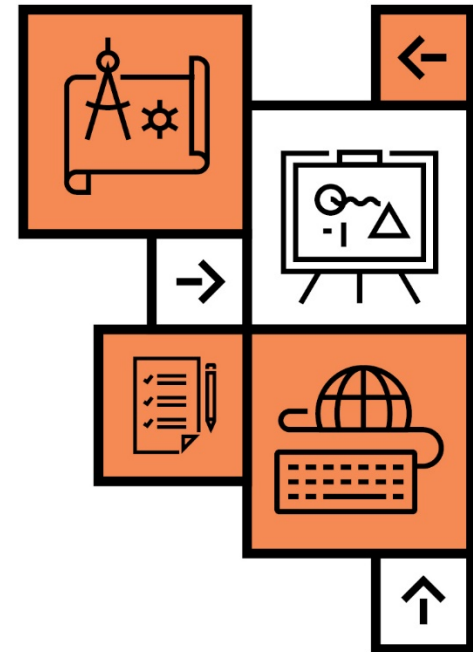


ŠAVŠ – teaching model

- 21st century key **skills** and competences
- Actual **topics** and study materials
- Challenging **tasks**
- Adjusted **requirements**
- Well-defined **learning outcomes**
- Appropriate **assessment** methods
- Balance between **home study** and **in-class time**



Module 1: MANAGEMENT	COURSE REQUIREMENTS	READING	LISTENING	WRITING	SPEAKING	Assess ment
Topics: MANAGERS AND MOTIVATION (4 units) RECRUITMENT (2 units) DIVERSITY MANAGEMENT (4 units)	PROGRESSIVE ASSESSMENT	In-class: free-resource texts, final test	In-class: free-source topical audio/videos,	In-class: argumentation essay,	In-class: argumentation, impromptu talks, presentations, group debates, simulations, participation, activity and cooperation	40%
		Self-study: Textbook, final vocabulary test	Self-study: Movie analysis, textbook, final vocabulary test	Self-study: critical incident analyses, final vocabulary test	Self-study:	
	INDIVIDUAL REFLECTION	In-class:	In-class:	In-class:	In-class: presentation	15%
		Self-study: own-choice module related expert text	Self-study:	Self-study: summary - 280 words	Self-study:	
	JOB APPLICATION PACKAGE	In-class:	In-class:	In-class: motivation letter, email	In-class: discussions, impromptu presentations,	15%
		Self-study: Textbook, internet resources	Self-study: Textbook, internet resources	Self-study: Individual Ppt,	Self-study: elevator pitch	
	BOOK REVIEW AND ROUND TABLE DEFENSE	In-class:	In-class:	In-class:	In-class: Round table defense	30%
		Self-study: Own-choice motivational book	Self-study:	Self-study: Book review	Self-study:	
Teaching methods		Content analyses, Peer reading, assembled studies	Individual, peer listening	Individual, peer writing, team work	Individual communication skills (verbal, oral), team work, experiential learning	
Learning outcomes		understands...	understands...	is able...	is able...	

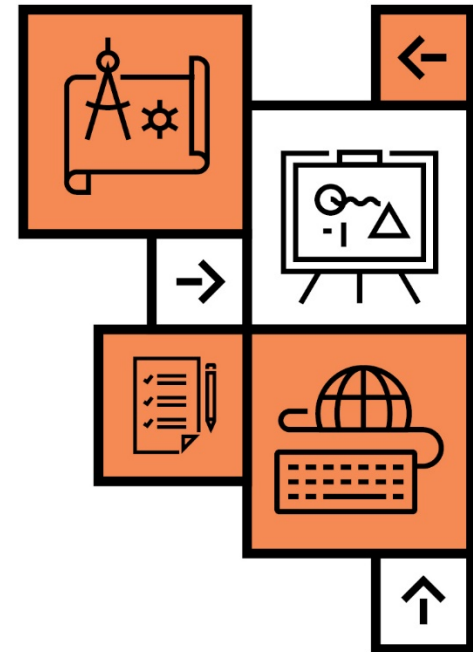


Thank you for attention

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Sieglová, D. & I. Kocurová-Giurgiu (2018). **Teaching the 21st Century Student: Methods and Activities through Critical Thinking and Interaction**. Eva Rozkotova Publishers. ISBN 978-3-946915-22-5

Sieglová, D. (2019). **Konec školní nudy: Didaktické metody pro 21. století**. Praha: Grada. ISBN 978-80-271-2254-7

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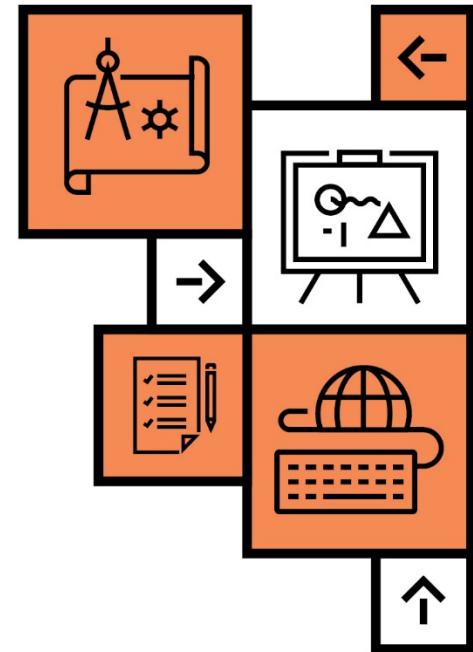
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Discussion

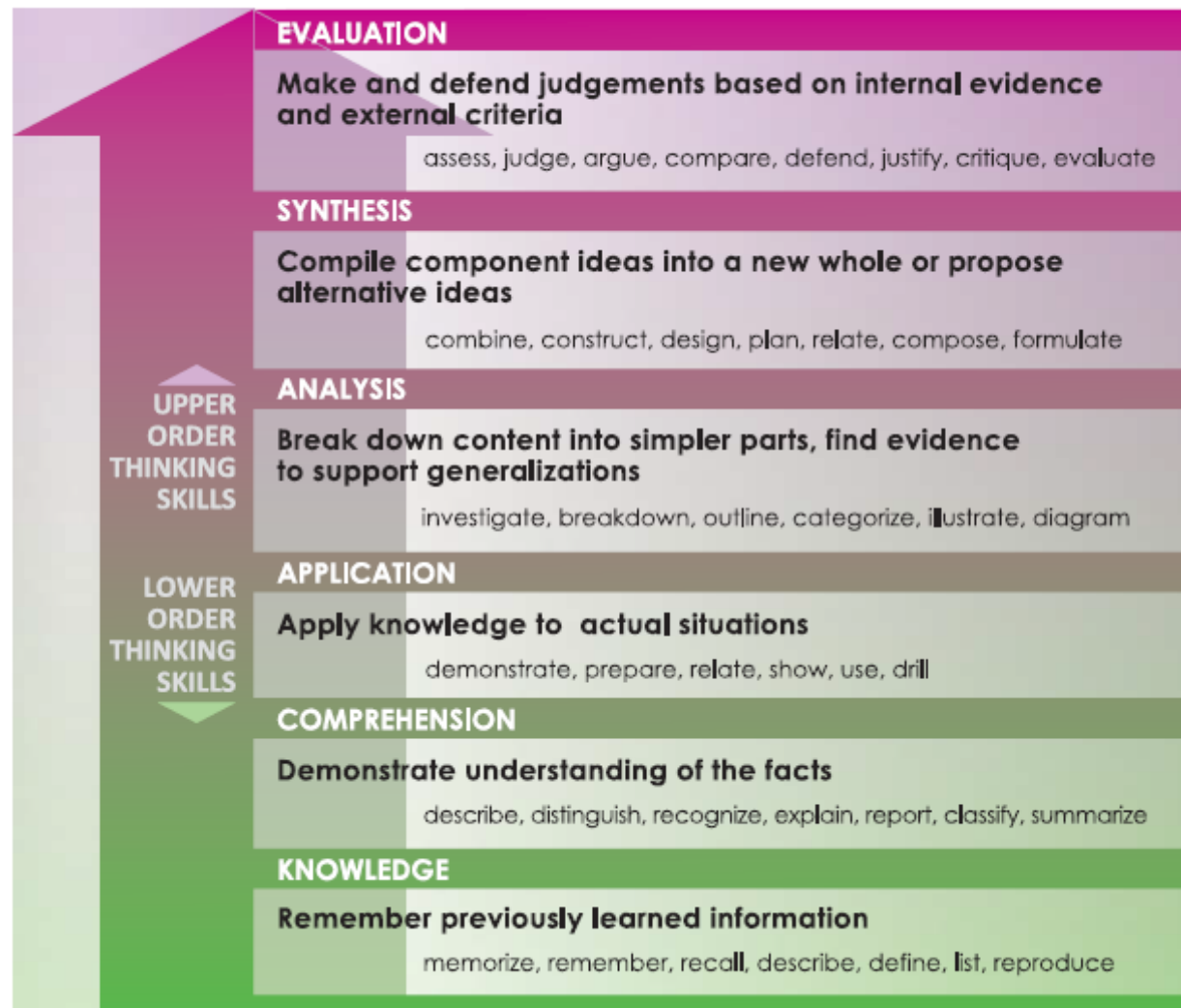
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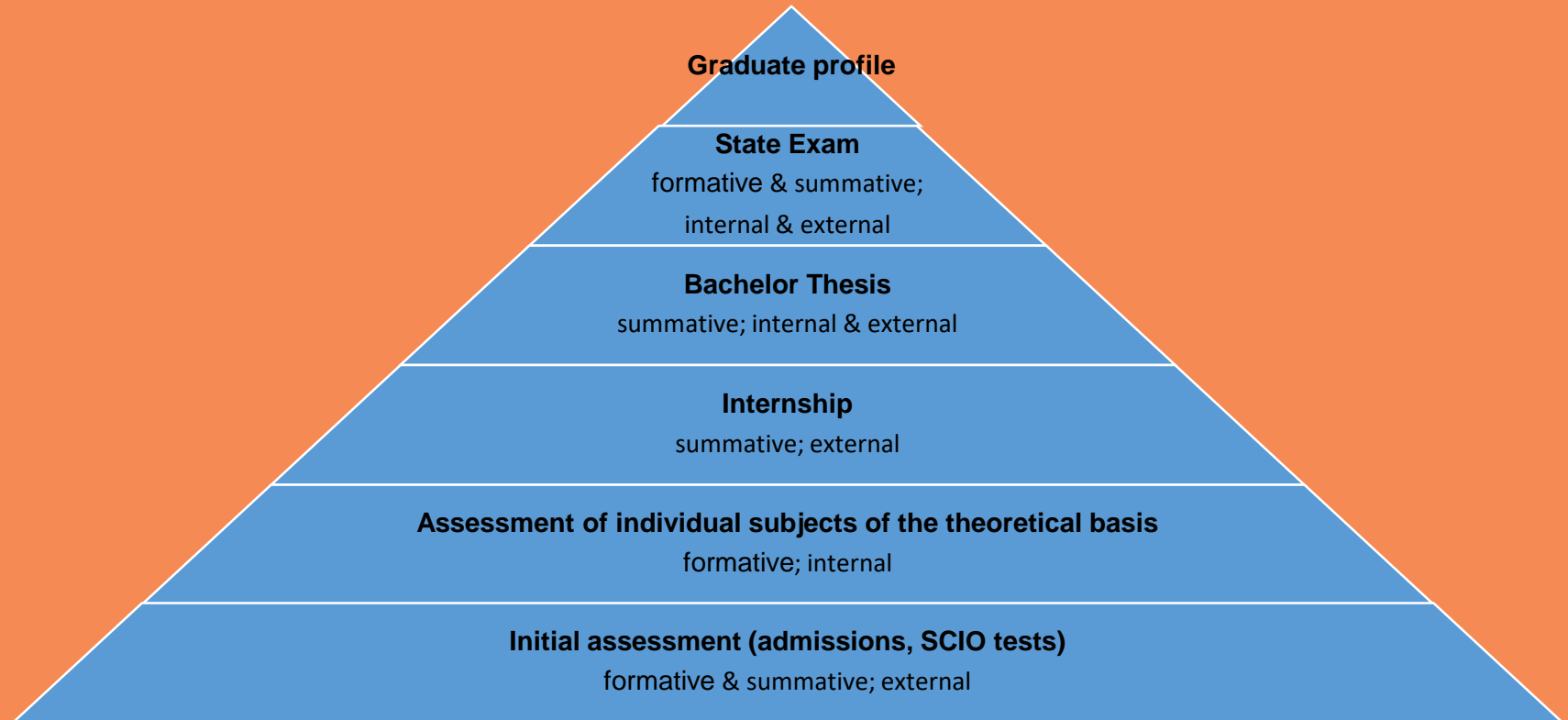
Applying Bloom's taxonomy of educational objectives



BLOOM'S TAXONOMY OF LEARNING OBJECTIVES



Bachelor degree program – process to achieve student learning objectives



Master degree program – process to achieve student learning objectives

